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Figure 1. An Ayoreo woman in the period of the first contact with Western people (1952)

1. Introduction²

The present paper will address linguistic taboos in Ayoreo, a Zamucoan language spoken in the Chaco area of southeastern Bolivia and northern Paraguay. According to the 2012 census of the respective countries, there were 2,189 Ayoreo in Bolivia (INE 2015) and 2,461 in Paraguay (DGEEC 2014), a total of 4,650 people, almost all of them fluent in their language. The term Ayoreo is a plural form of the word ayorei (M.SG.FF), ayore (M.SG. BF; F.SG.BF/FF) 'human being', 'real person', as opposed to outsiders (Ciucci 2016: 33).3 The Zamucoan family also includes Chamacoco, spoken by about 2,000 people in northern Paraguay, and tOld Zamuco, an extinct language documented by the Jesuits in the 18th century (Chomé 1958 [ante 1745]; Ciucci 2018, forthcoming). The Ayoreo had the first stable contact with Western culture in 1947, but were affected by previous contact with Jesuit missionaries. Indeed, a number of their ancestors had lived for a while in the Jesuit Missions of Chiquitos in southeastern Bolivia (see Fischermann 1988, 1996; Combès 2009), where Old Zamuco was the second language after Chiquitano, the lingua franca of those missions. Ayoreo and Old Zamuco share most of their

lexicon (Kelm 1964), which shows remarkable differences from that of Chamacoco (Bertinetto 2014; Ciucci 2016). Recent research has shown that Ayoreo and Old Zamuco share some cultural similarities (Ciucci 2019), but also that Old Zamuco and Chamacoco have at times common morphological features not found in Ayoreo (Ciucci & Bertinetto 2015; 2017). Existing contributions on the Ayoreo language include dictionaries (Barrios et al. 1995; Higham *et al.* 2000)⁴ and grammatical sketches (Morarie 1980; Bertinetto 2014). Ciucci (2016) is an analysis of the inflectional morphology of the language. There are many anthropological studies on the Ayoreo. Among them one can mention (without any pretense to be exhaustive): Zanardini 2003; Bórmida 2005; Pia 2006; Bessire 2014 and Otaegui 2014. An ongoing long-term project was the *Diccionario* antropológico ayoreo ('Ayoreo anthropological dictionary') by Erica Pia. This work systematised the data collected over many years of fieldwork by its author. Four volumes have appeared (Pia 2014, 2015, 2016, 2018) before Erica Pia's passing.

In addressing linguistic taboos, one has to distinguish between taboos motivated by religious beliefs (§2-5) and those motivated by social norms (§6-8). In Ayoreo religious

¹ We would like to express our gratitude to: Alexandra Y. Aikhenvald, Pier Marco Bertinetto, R.M.W. Dixon, Brigitta Flick, Cristina Menacho, Jolene Overall, Nicola Spiridonoff and Anne Storch. Figures 1, 15 and 18 come from the archive of the Evangelical mission in Santiago de Chiquitos, Bolivia. Figure 2 is by Joseph Smit (*Proceedings of the Zoological Society of London*, vol. 1866, plate XIII). All other figures are by Gabriella Erica Pia. Copyright has been given.

² Conventions. For an explanation of the grammatical features of Ayoreo nominals, see Bertinetto (2014) and Ciucci (2016). We will report the data in the standard Ayoreo orthography. We will not indicate the accent, since its transcription criteria are not uniform in literature. For the linguistic glosses of Ayoreo words, the reader can consult Bertinetto (2014) or Ciucci (2016). For ease of the reader we only mention here that Ayoreo nouns can mark the possessor, while nouns and adjectives have a suffix expressing gender, number and 'form'. Zamucoan nominals distinguish a 'base form', a 'full form' and an 'indeterminate form'. The citation form is generally the full form (FF), which in the singular often coincides with the base form (BF).

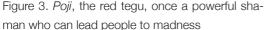
³ Sometimes the Ayoreo are referred to as *Ayoreode*. Both *ayoreo* and *ayoreode* are masculine plural forms. The former is the plural of the so-called base form, the latter the plural of the full form (see fn. 2).

⁴ Along with data from fieldwork, these dictionaries have been irreplaceable sources of information. As far as scientific names of plants and animals are concerned, the main reference has been Roskov *et al.* (2018).

view, words themselves can have magic power (Otaegui 2014). For this reason, sacred texts, such as narratives, songs and ritual formulas, are kept secret and regarded as dangerous. The main types of sacred, and thus prohibited, texts are myths, adode (M.PL.FF), and ritual formulas, sarode (M.PL.FF) (for other subtypes of religious texts, see Otaegui 2014). In this paper we will not address mythological narratives and ritual formulas, which have already been dealt with in Ciucci (2019). When addressing religious prohibitions, we will focus on single words or expressions. Breaking a religious



Figure 2. The small bird which originated from the powerful shaman *Asojna*





taboo is considered very dangerous for the individual and it can be dangerous for their community too. The concept of taboo/prohibition is generally expressed by the adjective *puyac* (M.SG.BF), base form of *puyai* (M.SG.FF) 'prohibited, forbidden'.⁵ It can refer to both the taboo/prohibition and, in the case of religious taboos, to the dangerous consequences implied by its violation. On the concept of *puyac*, see Otaegui (2011).

A caveat to consider is that Ayoreo culture is now changing dramatically, so that, although we refer to the traditional cultural situation, it would be far-fetched to assume that the current lifestyle of the Ayoreo is still a complete reflection of their traditional culture (the only exception being the few Ayoreo still living in the forest). As of now, many aspects of Ayoreo culture have been almost completely abandoned, and many elements of their traditional knowledge are at risk of getting lost forever.⁶

2. Religious linguistic taboos depending on the period of the year

The nouns of some animals cannot be uttered during the dry season (June-August in southeastern Bolivia), when they disappear. They are: *asojna* (F.SG.BF/FF) 'little nightjar' (Caprimulgus parvulus) (Fig. 2), potatai (M.SG.FF) 'scissor-tailed nightjar' (Hydropsalis torquata),

⁵ Since the noun phrase marked in base form carries out nominal predication, the base form *puyac* can be literally translated as 'it is prohibited/forbidden'.

⁶ For more information about the cultural situation of the Ayoreo at present, and the influence exerted by contact with Western people, see Bessire (2011, 2014). Otaegui (2014) offers interesting observations on the current way of life of an Ayoreo community in the Paraguayan Chaco.

potaquero (f.sg.bf/ff) 'rufous nightjar' (Caprimulgus rufus) and poji (M.SG.BF/FF), which is the black tegu (Tupinambis teguixin), or the red tegu (Salvator rufescens) (Fig. 3) in the southern part of the Chaco area inhabited by the Ayoreo. Asojna, potatai and potaquero are three nocturnal birds of the family Caprimulgidae. They migrate to the North during the dry season, but the Ayoreo believe that they are hiding in the trees. Poji is a type of lizard longer than one meter. These animals reappear shortly before the raining season; in particular the song of the asojna bird announces that rain will come soon. This taboo has religious motivation and breaking it can be dangerous. Also pronouncing similar words can cause problems: A group of Ayoreo was afraid when a woman referring to the trunk of a tree called *potac* (м.sg. вғ) (Bougainvillea praecox) (Figs. 4-5) pronounced the compound potac ero (potac + ero [f.sg.bf/ff] 'trunk'), which has the identical sequence of phonemes as potaquero 'rufous nightjar'. A potaquero bird sang immediately after, and this was unusual for a nocturnal bird, because it was afternoon. Despite the fact that the woman did not want to refer to the bird, this was considered a sign by the bird, who did not want to be named.

In Ayoreo mythology, almost all non-human entities (natural phenomena, plants, animals and objects) have come from an Ayoreo who, for different reasons, decided to turn into a given entity, and left magic ritual formulas (*sarode*) which can be employed by the Ayoreo (Figs. 6-7). When forms such as *asojna*, *potatai* and *potaquero* are uttered, there can be ambiguity between the common noun of the animal and the proper name of the mythological personage who originated them. Whenever necessary to disambiguate, we capitalise the initial letter of



Figures 4-5. *Potac* (Bougainvillea praecox), a plant of the Gran Chaco



these nouns in order to refer to the mythological character associated with it. Proper nouns are uninflectable and will not be glossed. Both *Asojna* and *Poji* were once powerful shamans (Pia 2014: 113-114), and the ritual formulas they gave the Ayoreo are among the most powerful and dangerous ones (Pia 2015: 47). *Asojna* (Pia 2014: 96-98, 2016: 46-48) was the first female shaman and one of the main figures of Ayoreo mythology. The story is that when she became evil, the community burned her, and dying she turned into an *asojna* bird. In Ayoreo mythology

Asojna was the first Ayoreo who died and turned into a natural entity (Fischermann 1988). In order to avoid the name of Asojna, she is often referred to with *chungupēre* (F.SG.BF/FF) 'small bird', being the small bird par excellence. According to other informants even the word *chungupēre* cannot be pronounced, and it is better to avoid any reference to Asojna during the dry season.

Potatai and Potaquero are minor figures, compared to Asojna and Poji. In mythology they are considered helpers of Asojna (Pia 2014: 96), and Potatai is sometimes considered her husband (Pia 2014: 58). Pia (2016: 86) mentions a myth which is particularly dangerous to narrate, about a fight between Asojna and Potatai. The latter was a good shaman, who helped Poji to become a powerful shaman (Pia 2018: 20-22).

In this group of animals, the *asojna* bird is the most important for Ayoreo religious beliefs. When the *asojna* bird comes back, it is still taboo to announce it: an old man of the tribe performs this task. This is because taboos weaken and can even disappear after a certain age. Indeed, the Ayoreo think that the danger connected with the violation of a taboo is much diminished for old people, who are destined to die relatively soon. Old men have to be very careful to listen to the first song of the *asojna* bird, but it is dangerous for young people or women to listen to it (Pia 2014: 98). When the *asojna* bird sings for the first time, an old man of the tribe announces:

(1) Eram-i e narare world-м.sg.ff already 3.speak 'The world has already spoken.' After the appearance of the *asojna* bird, it is allowed to pronounce again the name of the animals considered taboo, and the Ayoreo celebrate *Asojna*'s feast, which takes place during the passage from dry to wet season. It used to be the most important traditional Ayoreo celebration (for a description of it, see Fischermann 1988; Pia 2014: 96-115), until it was forbidden by the missionaries, so that it could only be celebrated in secret.⁷

One is not allowed to see the black or red tegu, *poji*, or pronounce its name during the winter, when this animal hides underground, because it is believed that *Poji* can substitute the soul of the person who is breaking the taboo with its own *Poji* soul, and drive them crazy until they die. The same happens if one discovers the eggs of this animal. In the rare case that someone survives, they can become a shaman. Shamans can heal this mental affliction of soul substitution by sucking the soul of *Poji* out of the person (Pia 2014: 67-68).

In addition to the prohibition of pronouncing the words *asojna*, *potatai*, *potaquero* and *poji*, there are some myths (*adode*) and ritual formulas (*sarode*), such as those referring to agriculture, that are taboo in some parts of the year.

3. The name of God and other religious taboos

The Ayoreo prefer not to pronounce the word *Dupade* 'God', because he is not only considered distant from their world, but is also a powerful and terrible divinity such that no shaman can cope with him, hence pronouncing his name can be dangerous. *Dupade* is considered the

⁷ Since the rufous nightjar, *potaquero*, appears slightly before the *asojna*, according to Fischermann (1988), it can happen that in case of need the feast is celebrated immediately after the first song of a *potaquero*.

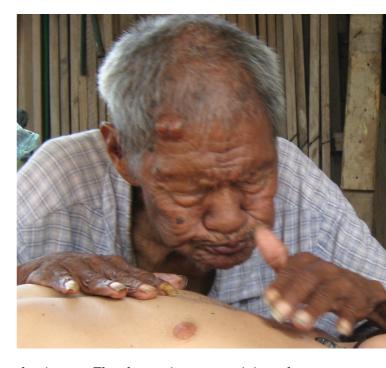
creator of the world. The concept of 'God', *Dupade*, is relatively new in Ayoreo culture. The word *Dupade* entered Ayoreo lexicon during contact with the Jesuits in the 18th century (see Combès 2009, Ciucci 2016: 432), and it corresponds to the form *Tupâde* found in Old Zamuco. The word is a borrowing from Old Chiquitano *Tupâs*, which comes from Guaraní *Tûpâ* (Montoya 1640: 323).

In Ayoreo mythology *Dupade* is frequently identified with Guede 'the sun' (Bórmida 2005). Syncretism between Guede, an important figure for the Ayoreo, and *Dupade* is possibly due to contact with the Jesuits. When later and Catholic missionaries Evangelical contacted the Ayoreo, they re-used the name Dupade to refer to the Christian god, so that now it is no longer a taboo to talk about Dupade if one is Christian. However 'believing' in Dupade rather than being afraid of him, as the missionaries intended, initially coincided with the breaking of a taboo, which caused some resistance towards Christianity. At the same time, the older Ayoreo regret that the younger generation, owing to the influence of the missionaries, has lost the fear of talking about things which were traditionally forbidden. Before Dupade, the main divinity for the Ayoreo was Asojna (see §2), who is perceived by the elders as closer to the Ayoreo mentality, and is more vindictive than the Christian god. The taboo concerning 'God' and its evolution over time, like other taboos we will discuss, shows a multilayered complexity derived from social change.

Pujopie (GF.F.SG.BF/FF) is the supernatural power of the shamans (Figs. 6-7). The myth of *Pujopie* is one of the strictest taboos. *Pujopie* was a mysterious being with the skin of a jaguar. It was chased and killed by



Figures 6-7. Samane, an Ayoreo shaman, blowing and reciting ritual formulas (sarode) during a healing session



the Ayoreo. The shamanic power originated from the blood spilled when *Pujopie* died. Not only is the myth extremely taboo, but it is also considered very dangerous to name *Pujopie*. Only shamans dare to



Figure 8. On important occasions, leaders used to wear a headband of jaguar skin with lots of feathers

Figure 9. *Pamoi*, a band used by Ayoreo men in order to sit



pronounce this word, since their power comes from *Pujopie*, so that there is no risk for them.

Something similar applies to *sumajningai* (M.SG.FF), which is a sentiment of courage mixed with anger and hostility, proper for a leader (Fig. 8). As is usual in Ayoreo mythology, *Sumajningai* was once a person, and he now gives courage to leaders. In the same way as not everybody can receive the shamanic power from *Pujopie*, not everybody can receive courage from *Sumajningai* in order to became a leader. It is dangerous to pronounce the name of *Sumajningai*: only leaders are not afraid of him.

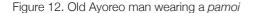
4. Objects

Some linguistic taboos concern the respectful attitude to be kept for some objects venerated in Ayoreo culture: the sacred stick used during *Asojna's* feast, and the so-called *pamoi* (Figs. 9 and 12).

Asojna's feast is the main celebration for the Ayoreo. Pia (2014: 96-115) provides a careful description of it. During the feast, the men perform a ritual hunt. When they come back to the camp, an old man hits the buttocks of each of them several times with a stick.8 This ritual marks the end of the privation associated with the dry season: until this moment the men have to fast and cannot drink during the feast. The moment the stick hits their buttocks also indicates the liberation from the consequences of their bad actions, be they voluntary or not. The stick is a sacred object that liberates the man from the power of *Asojna*, which is transferred to the stick. The stick is called najnurui (M.SG. FF), which is morphologically the masculine

⁸ According to other informants, the old man has to scratch the buttocks several times with the stick.





of *najnurua* (F.SG.FF), the plant from which the stick is made (*Capparis speciosa*, see Pia 2014: 57) (Figs. 10-11). It is 30-40 centimeters long, with a diameter of 4 centimeters. An elder scrapes eight to ten scratches horizontally around the stick to create stripes which are then colored alternately in green and white, imitating the tail of a *poji*, i.e. a black or red tegu (see §2).9 After making it, the stick is hidden under some leaves. At the end of the ritual, the stick is thrown far away from the camp by a young man. Since the stick is a very sacred object, men cannot pronounce bad words in the direction of the stick or make fun of it.





Figures 10-11. Fruit and flowers of Capparis speciosa

A pamoi (GF.M.SG.FF) (Figs. 9 and 12) is a band woven as a closed loop used by men to balance the weight of their body while sitting. Only mature men can make and wear it. Young men and women who use it will face severe pain. One cannot sleep with a pamoi under one's head, as if it were a pillow. If this rule is broken, the pamoi talks to him in his dreams with taboo words, that curse him and announce serious misfortunes. In this case the 'taboo' act of speech is performed by an object and is caused by an improper behaviour of a human who did not break any linguistic taboo, but is just the involuntary addressee of a taboo message.

⁹ According to other informants, the bark of the tree is not scratched, and an old man only makes some crosses above.

5. Cannibalism

The nomen agentis gunori (3.m.sg.ff) 'something, someone who bites, stings, eats' can be normally used, but its compound ayore gunori 'cannibal' (ayore [M.SG.BF] 'person' + gunori 'one who eats') is strongly taboo. According to the witnesses collected by Erica Pia, the Ayoreo used to practice ritual cannibalism (Pia 2014: 59; 2018: 64). Nowadays Ayoreo deny that cannibalism existed and condemn it. Indeed cannibalism is very far from the culture imposed by evangelisation, and even admitting that it used to take place in the past can lead to cultural and political conflicts. In addition, the few people who could have witnessed ritual cannibalism are now very old, considering that all informants who gave information on it were born around 1940 or before. For this reason, it is very difficult to find information on cannibalism, and it took years for Erica Pia to collect some data on it. Cannibalism was not a taboo historically. Indeed, according to the older informants who can remember it, cannibalism was considered a normal practice. It only became a taboo after contact with Western society, owing to the impact of missionaries. Cannibalism was necessary after a battle, because it had the function of avoiding the soul of the enemy to come back and look for revenge. When the enemy was killed, the blood was removed and the meat was roasted along with other food, so that it could be eaten, even up to 20 days later.

According to some informants there was a difference when the person killed was a 'white man', since killing a Westerner was more dangerous than killing an Ayoreo, owing to the risk of reprisals. After the killing of a white man, the Ayoreo drew a silhouette of

the dead person on the ground. The weapons used to kill him had to be burned in a turtle shell which represented the head of the dead person. The weapons were indeed considered impure, because they were stained with blood: if this ritual was not performed, the killer could get sick and die. The killer had to stay in the middle of the other men and tell several times how he had killed, and how brave he had been. According to an informant, the killer had to move with cadenced steps along the silhouette of the dead person depicted on the ground (the killed person could simply be represented as a rectangle). Then, the camp was moved to another place, possibly in order not to contract diseases and to avoid reprisals. However, since all informants were young when they saw (or listened to older people talking about) these ceremonies, it is not clear whether the whole ritual or parts of it were also performed after the killing of an Ayoreo. This is because this ceremony was abandoned long ago, so that only a handful of old informants know of its existence.

These rituals after the killing of a man were only for adult men, and were severely prohibited to women and children (Bertinetto, Ciucci & Pia 2010: 124-125). The elderly who know about cannibalism tend to justify it, telling that it was reciprocal among enemies, or that the Ayoreo did not eat the meat but just drank the blood, as in the Catholic mass. Despite the fact that the term for 'cannibal', ayore gunori, is taboo, cannibalism used to be a ritual necessity.

In one story collected by Erica Pia, being eaten is a punishment for a very evil person, *Chogaide*, who is condemned to death. He is tied and another Ayoreo group is contacted so that they can come to kill and eat him in the night. Then *Chogaide* manages to escape, with the help

of a friend, and disappears. The interesting fact is that this narrative seems to contain some references to the Jesuits: the character who condemns *Chogaide* could be identified with a Jesuit, while the group of people called to eat him could be the Zamucoan who still resisted evangelisation (from which today's Ayoreo descend). It is impossible to know whether this story originated from a real event, but the fact that it is not set in a mythological past invites the hypothesis that such an extreme form of punishment could have been used in the not too distant past.

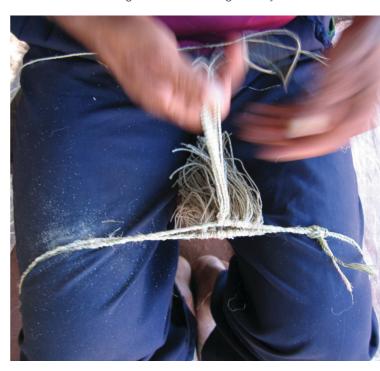
6. Taboos related to sex

Other linguistic taboos have social motivations, although they are related to forbidden behaviours which can have dangerous magic consequences, as narrated in many Ayoreo myths (not discussed here). In pre-contact Ayoreo society, there is a great degree of sexual freedom concerning heterosexual relationships before marriage (Fischermann 1988: 82; Pia 2016: 91). People can have many relationships according to their own pleasure. Generally the only rules are that: (i) only women have permission to woo men (not vice versa), (ii) the couple has to hide during sexual intercourse, and (iii) the woman does not have to remain pregnant.¹⁰ Despite such a high degree of freedom, talking about sex is taboo. Men cannot talk with women about sex: mentioning sex is taboo even between husband and wife. A man can only talk about sex with a very close male friend. For this reason we do not have much data on how they express the concept of



Figure 13. The *ayoi* was used by Ayoreo men to cover their genitals

Figure 14. The making of an ayoi



¹⁰ Children were buried alive when they were born from an unmarried woman, or from a married woman, if it was suspected that the husband was not the real father.



Figure 15. Although nudity was taboo, showing their breasts was not taboo for women, cf. Figure 1

'making sex'. In the same way, the man cannot explicitly ask a woman for sex. Among the Ayoreo it must be the woman who looks for the man. Sexual freedom ends with marriage. In the past, the only exception was a feast where married and unmarried people were free to have sexual intercourse with each other. Such a feast was prohibited by missionaries, but is still remembered by the elders, who tell about it with a wealth of detail and with much pleasure.

The Ayoreo cover their genitals, since showing them is taboo (Figs. 13-15). It is also forbidden for a man to look at a naked woman, unless they are married. This taboo is broken in the story of Isede, an evil shaman who was killed because he wanted to see the genitals of a group of women (Pia 2018: 24-25). For all of these reasons, Ayoreo tend to avoid naming sexual organs and private parts, which are referred to by the following words:

(2) ajero (3.f.sg.bf/ff) 'vulva'
aquedo (f.sg.bf/ff) 'penis'
gapudi (3.m.sg.ff), gaput (3.m.sg.bf) 'penis'
guite (3.f.sg.bf/ff) 'scrotum'
uchapie (3.f.sg.bf/ff) 'anus'

Garai (M.SG.FF) is an open space in the woods. It can also refer to the vulva, owing to the fact that Ayoreo women have no pubic hair. When garai is used with this meaning, it

¹¹ Although some informants consider this word slightly more polite than *aquedo*, it is still regarded as 'vulgar', being a taboo word. In Higham *et al.* (2000) the singular base form *gaput* is not reported, although they always also indicate masculine base forms. This possibly has to do with the social taboo concerning sex and genitalia.

¹² As already noted by Higham *et al.* (2000: 233), the first person singular of *guite* is *yite* (1s) 'my scrotum', similar to the first person singular of 'mother', *ite* (1s) 'my mother'. Contrary to the general rule, *ite* does not take the first person singular prefix *y*-. This permits the distinction of *yite* (1s) 'my scrotum' from *ite* (1s) 'my mother'. As shown by Ciucci & Bertinetto (2017: 309-310) some Zamucoan kinship terms can have prefixless first person singular for historical and pragmatic reasons, however, from a synchronic point of view, linguistic taboo is a clear obstacle to the regularisation of *ite* (1s) 'my mother'.

is clearly taboo. In order to avoid pronouncing these words, in myths sexual organs are often referred to as the 'hidden part', the 'intimate part' and so on, using relational nouns. An example of this is *ajei* (3.M.SG.FF), which means 'stomach, intestine' and also functions as a relational noun meaning 'inside of'. With the latter use, it can refer to a sexual organ. Another euphemism is the use of the relational noun *iquei* (3.M.SG.FF) 'ahead of, before'. This is shown in example (3), which comes from the above mentioned myth of *Isede*.

(3)

Chi ore ch-ajire ore ique-i

EVID 3PL 3-look 3PL 3.ahead_of-m.sg.ff

'They say that he looked at their vulva.'

Other expressions for 'vagina, vulva', which should be considered euphemisms, are:

- (i) disi garani, from disi 'child' (M.SG.BF/FF) and garani 'place of origin' (3.M.SG.FF), lit. 'place from where the child comes from';
- (ii) disi iriguidi, from disi 'child' (M.SG.BF/FF) and iriguidi (3.M.SG.FF) 'birthplace', lit. 'birthplace of the child'.

Another taboo related to the sexual sphere is menstruation. It is mostly taboo to mention menstruation and there is not even a specific word for this, but the plural of 'blood', diquiyode (GF.M.PL.FF), is used. While a woman is menstruating, she is considered unclean and has to remain hidden in the house. In this period the woman cannot have sex, and in case she has a relationship, she has to warn the man, so that he can stay away (4). Blood has to be collected

in a big leaf in order to be hidden and disposed of outside of the camp.

(4) Y-iy-ode deji yu 1sg-blood-m.pl.ff 3.exist 1sg 'I have my period.'

Also 'semen' / 'sperm' lacks a specific term. It is expressed by the plurale tantum irisode (M.PL), properly meaning 'milk' or 'sap, resin'. It goes without saying that, unless strictly necessary, it is prohibited to use irisode for 'semen, sperm'. Another word for 'semen, sperm' is adode, used in the taboo expression for 'ejaculation': adode (3.sperm.m.pl) jno (3.go), lit. 'the sperm goes'. What is morphologically the singular full form of adode, adi (3.m.sg.ff), has several meanings, including 'part', 'body part', 'possession', 'property', 'manner', 'way'. A hypothesis is that the sperm is seen as a set of 'parts' or entities 'belonging' to the man. However, the plural form adode itself is not taboo: it is the standard term for Ayoreo myths. In this sense, one could speculate that there is a connection between the taboo associated with Ayoreo myths, which must be kept secret, and the one associated with ejaculation. However, so far it has not been possible to find any confirmation for this hypothesis.

Some demonstrations of affections, such as kissing and hugging, are unknown to pre-contact Ayoreo culture. The Ayoreo language has no word for 'to kiss' or 'to hug'. Also oral sex is a new concept learned from Western society. This also has influenced linguistic taboos. The word *ipeyai* (3.M.SG.FF) 'what is sucked, licked' is a deverbal noun from the verb *chipese* (3) 'to suck, to lick'. Neither of these words was considered taboo, and they did not have any connection with sex. The 'introduc-

tion' of oral sex among Ayoreo has turned *ipeyai* into a very vulgar word, which one should never pronounce, alluding to 'what is sucked, licked' during a sexual relationship, that is the genitalia, a linguistic taboo.

During one of her many periods of fieldworks, Erica Pia met a very religious woman, who attended the church every day, wore long dresses in a tropical climate and would never pronounce a vulgar word. Erica Pia listened to the woman calling her dog "Ipeyai, Ipeyai, Ipeyai!". She was curious about the name of the dog and asked the woman what the meaning was. She replied that she did not know the meaning, because an Ayoreo employee of hers had given this name to the dog. Erica Pia then asked one of her main informants, Dijaide (†), who answered that the name had to do with the act of licking. To Pia, this looked like an appropriate name for a dog and mentioned this fact to a group of young Ayoreo, who laughed a lot, but refused to explain the reason. She again asked her main informant, who was embarrassed and hesitated before providing, after many evasive words, an explanation on how the word had changed meaning turning to be a vulgar and taboo word, since it had to do with oral sex. Indeed, the name ipeyai, without any sexual connotation, emerged in a myth collected by Erica Pia. Finally, after some talks with other informants, it became clear that the Ayoreo employee had chosen ipeyai out of revenge. In this case, speaking through animals by naming them avoids awkward social interaction, such as open critique. This is a little studied practice also found among Chamacoco speakers, as well as in some East African societies (Anne Storch, p.c.).

6.1 Insults related to sexual taboos

As in many other cultures where sex is a taboo, the sexual behaviour of an individual does affect their judgment by society. If this can lead to marginalisation in the most extreme cases, more often it offers ground for the elaboration of insults.

The fact of being paid for sex was unconceivable in traditional Ayoreo society, since sex must be something pleasant. Prostitution is an activity some Ayoreo began to practice only after contact with Western people. Since prostitution was a taboo, the Ayoreo do not have a proper word for 'prostitute'. A prostitute can be referred to as *cheque* (woman. F.SG.BF/FF) ducarane (rejected.f.sg.bf/ff) 'discarded woman', implying that she is a woman rejected by society. More often, the word used is dibe (F.SG.BF/ FF), properly 'fox'. Like all animals also the fox was once a person in Ayoreo mythology. Dibe 'fox' is found in several stories, where she is a woman who steals, deceives and has sex with many men. In some stories she simply liked to have sex with many men, while in others she is raped. The informants are embarrassed to talk about the sexual life of *Dibe*, and the noun dibe itself for 'prostitute' is a word normally avoided, both because sex is a taboo, and because the word is used as an insult. Since 'fox' is feminine in Ayoreo, the male of the fox is obtained by adding *choqui* (male.m.sg.bf/ff) to dibe: dibe choqui 'he-fox'. There is however a specific form for 'male prostitute' clearly related to dibe: dibai (M.SG.FF), which is also a taboo word.

Children can pay for the sexual misconduct of their parents. The expression *abi* bisideque (3.child.m.sg.ff of_no_value.m.sg.bf) literally 'the child has no value, the child is for fun', means that someone has no father. This is

a serious offence for both the person referred to as 'child' and the mother. Although this expression alludes to some sexual misconduct by the mother, the reason why she had no husband was secondary and she could not have been directly responsible for the lack of a man. A woman who gave birth to a baby in the forest absolutely needed to have a husband, who was necessary in order to look for food. In the past, if a woman had a child, but no husband, the baby was killed. A variant of this insult was *emi* (wind.м.sg.ff) *abi* (3.child.м.sg.ff) 'child of the wind'. The woman without husband is referred to as cheque (woman.f.sg.bf/ FF) ca (NEG), lit. 'woman no...'. The open-ended negation here indicates that the woman has no husband, and this fact itself shows how taboo the lack of a husband is. Pia (2018: 113-114) reports the myth of Cuco, a woman who gets pregnant without being married. For this reason, since she is breaking a social taboo and is afraid that her child will be an emi abi, a 'child of the wind', which means a terrible loss of her honour, she keeps her pregnancy secret and buries her baby alive after their birth. In this way, after a while, she can marry Tobejnai. Despite the baby being killed by the mother in this myth, more often it was a relative who killed the newborn. The lack of a husband was not the only reason for infanticide. Killing newborn babies was not uncommon among the Ayoreo, and, even when the woman was married, doubts about the paternity were solved by killing the baby (Pia 2015: 16-17), without any further implication for the woman. This generally happened with the firstborn, owing to the sexual freedom enjoyed by women before marriage.

Other words of insult concern the lack of sexual power in the man. (5) and (6) refer to an old man, but they are also used with a more offensive meaning, for a young man.

- (5) Choquijna-i que ch-ibote
 old_man-m.sg.ff neg 3-turn_back_and_forth

 d-acote go

 REFL-wife[F.SG.BF/FF] at_all
 - 'The old man cannot have sex with his wife at all.'
- (6) Choquijna cadata-i
 old_man[M.sg.BF] without_strength-M.sg.FF
 'Old man without strength', also 'impotent.'

7. Taboos related to names

When a child is born, it is generally named after an object or a natural entity, turning a common noun into a proper noun. ¹³ For instance, *Enojei*, an Ayoreo whose story is mentioned at the end of the present section, was named after *enojei* or *enuei* (M.SG.FF), which is the rope normally used to climb a tree to get honey. *Urui*, the name of *Enojei's* first son, literally means *urui* (M.SG.FF) 'dust, detritus'. These names refer to an event which has taken place during the pregnancy and the birth, or to a particular episode that occurred in the past to someone in the family. There is not necessarily a direct connection between the event and the child.

The name *Amatai* (Fig. 16), an informant of Erica Pia, means 'heap, what is heaped up' and is the deverbal noun from *chamata* (3) 'to heap up, to pile up, to gather'. This is because a friend of his father had a heap of feathers of

¹³ An exception is the name *Ejei*, derived from the homophonous interjection *ejei* 'quite so'.



Figure 16. Amatai, named after a heap of feathers

different colours from various birds, and the father, admiring it, said that when he should have a child, he would call him amatai (3.m.sg. FF) 'heap', in memory of those feathers. Since common nouns in Ayoreo are masculine or feminine, as a general rule, the gender of the baby must correspond with the linguistic gender of the noun. An Ayoreo woman called Adoi is a remarkable exception, because her name is an exception to this rule: adoi (M.SG. FF) is a masculine noun for a plant (Marsdenia paraguaiensis). Giving a girl a masculine name is considered inappropriate. In this very case, the choice of a masculine form had to do with exceptional circumstances: the life of the baby was saved by a missionary, who travelled with the mother of the girl to the camp. Owing to the lack of water at the camp, they were obliged to extract water from the plant called adoi. The fact that the missionary accepted to drink something unknown coming from the forest surprised the Ayoreo, and the girl was called Adoi. This is, however, an exception which confirms the rule. Another exception is a name which breaks the taboo about sex (§6):

one informant referred Erica Pia to a woman with the unusual Ayoreo name of $Aje(r)o\ Ca(r)$ ate, meaning 'red vulva' = $ajero\ (3.F.SG.BF/FF)$ 'vulva', carate (F.SG.BF/FF) 'red'. The informant pointed out that she had also been surprised to hear this name, because $ajero\$ should be avoided in a normal conversation, and had wondered why such a name had been chosen.

When Ayoreo want to avoid pronouncing the proper name of a person or a dangerous character in stories, they call him *Diseradi* or *Diseadi*. This name comes from *disi* (M.SG.BF/FF) 'child' and *ueradi* (M.SG.FF) 'beautiful, nice'. According to some informants, *Dupade* 'God' called *Diseradi* (lit. 'beautiful child') the people he created. *Diseradi* is used, for instance, instead of the name of a loved one who has died, or instead of the name of *Potatai*, a powerful mythological character, and a dangerous figure who was the husband or companion of *Asojna* (depending on the different version of the story) and turned into a nocturnal bird (see §2).

The traditional Ayoreo life in the Chaco was very dangerous and the death of a loved one was considered a likely occurrence at any moment. After the death of a relative or friend, the Ayoreo mourned for a short time, but then returned to their normal life, apparently forgetting what had happened, but avoiding pronouncing the name of the dead person. The fact that dead people are generally no longer mentioned has an important consequence for Ayoreo onomastics. Indeed the father changes his name after the birth of the first child: the new name consists in the name of the child, plus the teknonymic suffix -de (-ne depending on nasal harmony or on diatopic variation): e.g. Caitabi (proper name of the child) + $-de \rightarrow$ Caitabide lit. 'the father of Caitabi'; Sama + -ne \rightarrow

Samane lit. 'the father of Sama'. 14 If the first child dies, the father changes his name and assumes the name of the oldest child still living, followed by the usual suffix -de/-ne. The taboo concerning the names of dead people is not due to religious prohibition, as there are no dangerous consequences if such a name is pronounced, but these names are avoided so that grief and sorrow are not rekindled. The situation is different when also the parents of the dead have passed away. Around 1943-1944 some Western people were looking for the Ayoreo who had just attacked a local settlement. The attackers escaped, but the Western people thought that they came from an Ayoreo settlement, whose inhabitants actually had no responsibility in the attack. The camp underwent a reprisal in which many Ayoreo were killed. Among them there was Enojei, who died along with his daughter, killed by the same bullet, while trying to save her. The episode is well-known among the Ayoreo, and Enojei can be referred today as *Ca(r)itabide*, from *Ca(r)itabi*, the name of daughter who died with him, or as Ejeine, from the name of his son *Ejei* (who died many decades later). In this case, the temporal distance from the episode and the fact that there are no longer parents suffering for the loss of a son/daughter permits a linguistic use different from the norm. However, before being known as *Ejeine* or *Ca(r)itabi*, *Enojei* had been called after the name of his first son Urui, but he had changed his name into *Ejeine* after that *Urui* had been killed by a jaguar.

8. Linguistic purism

The resistance to lexical borrowing is a possible feature of Chaco languages (Campbell & Grondona 2012; Campbell 2013; Epps, forthcoming). This is also the case for Zamucoan. Despite Ciucci (2014) identifying a number of morphological borrowings owing to contact between Zamucoan and its neighbours, only a surprisingly low percentage of borrowed lexicon was ascertained. This is no longer the case in the Ebitoso dialect of Chamacoco, which, owing to the long contact with Spanish, has accepted a massive number of loanwords from Spanish. It is difficult to make a generalisation concerning resistance to lexical borrowing in Ayoreo, because contact with Spanish occurred very recently and could have affected Ayoreo communities located very far from each other in different ways. Contact with Western culture has implied new referents for which new words were necessary, so that in some cases Spanish words were introduced (7). However, as one can see from the glosses of ex. (7), the inflectional morphology of the language is still productive (see Ciucci 2016).¹⁵ By contrast, in the Ebitoso dialect of Chamacoco, Spanish loanwords are also used for referents which already had an indigenous word, and are accompanied with loss of inflectional morphology (Ciucci 2016: 517-566).

¹⁴ Alternatively, one can also say *Caitabi daye*, or *Sama daye*, where *daye* (3.m.sg.ff) is the term for 'father': this is a possessive noun phrase. The mother and the grandfathers are also referred to as 'the mother/grandfather/grandmother of' their first child/grandchild, but this is expressed by a possessive noun phrase. By contrast, in the case of 'father' the derivational suffix *-de/-ne* forms a new word.

¹⁵ Ayoreo nouns can express the person of the possessor, and always mark gender, number and noun form (see fn. 2).

(7)	a.	banana	(F.SG.BF/FF)	'banana'	(Spanish:	banana)
	b.	datorai or tractorai	(M.SG.FF)	'tractor'	(Spanish:	tractor)
	c.	ibentana	(3.f.sg.bf/ff)	'window'	(Spanish:	ventana)
	d.	icarpai	(3.m.sg.ff)	'tent'	(Spanish	carpa)
	e.	icomputadora	(3.f.sg.bf/ff)	'computer'	(Spanish	computadora)
	f.	imesa	(3.f.sg.bf/ff)	'table'	(Spanish	mesa)
	g.	iplata or iparata	(3.f.sg.bf/ff)	'money'	(Spanish	plata)
	h.	naranja	(f.sg.bf/ff)	'orange'	(Spanish	naranja)
	i.	trabajadi	(3.m.sg.ff)	'work'	(Spanish	trabajo)

There are however cases in which the Ayoreo use autochthonous forms or create new expressions in order to avoid foreign words. This is mostly observed among old people and is correlated with a high degree of knowledge of Ayoreo cultural tradition. For instance Orone, an old shaman and one of Erica Pia's main informants, rarely uses Spanish loanwords. Indeed the resistance to Spanish borrowing is considered proper of old people, while younger speakers are more prone to use Spanish loanwords. Such a puristic attitude is a reflection of the contrast between the Ayoreo 'the (real) people, the human beings' (cf. §1) and the so called *cojñone* (M.PL.FF), that is the "civilised" people, who do nonsense. The word cojñoi (M.SG.FF), cojñone (M.PL.FF) is the standard term for non-Ayoreo, but it has a negative connotation, similar to an insult, since cojñone are by definition stupid, so that, when the Ayoreo have a close friendship with non-Ayoreo people, the latter are not called cojñone, but ayoreo (M.PL.BF), ayoreode (M.PL.FF), that is they are also included in the set of the 'real people' and 'human beings'. One also has to consider that the elders feel the new Western culture as an imposition and a break of Ayoreo tradition, and during the first contacts

many former leaders, as well as other people who are now very old, opposed the missionaries and would have preferred to continue to live in isolation, had this been possible. In older generations, such a cultural attitude linguistically results in an aversion to accept Spanish forms.

In some cases, already extant words are also used to designate a new referent, for instance ore (3.F.SG.BF/FF) 'reflection', 'shadow', 'image' is also used to mean 'photography', and ojnai (M.SG.FF) 'thorn' for 'barbed wire'. In the Ayoreo spoken in Colonia Peralta (Paraguay) angoninguini (3.M.SG. FF) 'ear, ear canal' is used for 'mobile phone', aoi (3.m.sg.ff) 'skin' for 'book'. In other cases the diminutive is used with a new meaning: piogabi (M.SG.FF) 'match' (stick) is the diminutive of pioi (M.SG.FF) 'fire' and guedabi (M.SG.FF) 'clock' is the diminutive of guede 'sun'. The Ayoreo did not have pillows, but 'pillow' can be referred to by an Ayoreo word, ugutadi (3.m.sg.ff), originally meaning 'mortar' (a rectangular wooden bowl for grinding food and tobacco). This is due to the fact that old people used the mortar as a pillow. It was taboo for young people, who were told that they would go deaf and lose their teeth. There is also another form which according to some informants was more recently adopted for 'pillow': ugutade (3.F.SG.BF/FF). This is morphologically the feminine of ugutadi, but ugutade also means 'crutch'. There is an analogy between 'crutch', possibly the original meaning of the word, and 'pillow', because the first is a stick used by old people to lean on, and the second is used to lean the head on.

In other cases, the puristic attitude has produced new formations such as those in (8-10).

From a structural point of view, etarutepiedie 'container' and yote pioi 'alcoholic drink' (8) can be considered compounds. In (9) there are sequences of possessed plus possessor, while in (10) a sequence of noun plus adjective expresses a new referent. (9d) features 'spermatozoon', as indicated by a speaker with medical formation; it involves the use of *irisode* 'sperm, semen', a taboo word seen in §6.

- (8) a. *etarutepiedie* (3.F.PL.FF) 'pants, tights' = *etarut* (3.M.SG.BF) 'part of the leg, between hip and knee', *pie* (F.SG.BF/FF) 'container'
 - b. yote pioi (M.SG.FF) 'alcoholic drink' = yote (M.SG.BF) 'water', pioi (M.SG.FF) 'fire'16
- (9) a. *daijnane gachide* 'ambulance' = *daijnane* (M.PL.FF) 'shaman', *gachide* (3.F.SG.BF/FF) 'pet' (lit. 'the pet of the shamans')¹⁷
 - b. *ejnaretade jnuto* 'ambulance' = *ejnaretade* (M.PL.FF) 'sick', *jnuto* (F.SG.BF/FF) 'carrier' (lit. 'the carrier of the sick')
 - c. *ejnaretade pie* 'ambulance' = *ejnaretade* (M.PL.FF) 'sick', *pie* (F.SG.BF/FF) 'means of transportation' (lit. 'means of transportation of the sick')
 - d. *irisode abidie* 'spermatozoon' = *irisode* (M.PL.FF) 'semen, sperm', *abidie* (3.F.PL) 'female child' (lit. 'the children of the sperm')
 - e. *naijnane iguijnai* 'hospital' = *naijnane* (M.PL.FF) 'shaman', *iguijnai* (3.M.SG.FF) 'house' (lit. 'house of the shamans')¹⁸
 - f. ojnane aquesungori 'pliers' = ojnane (M.PL.FF) 'barbed wire', aquesungori (M.SG.FF) 'who, what cuts'
 - g. $uguchade\ pi$ 'rucksack' = $uguchade\ (3.M.PL.FF)$ 'thing', $pi\ (3.M.SG.BF/FF)$ 'means of transportation' (lit. 'means of transportation of the things')
- (10) a. *cucha basui* 'airplane' = *cucha* (GF.M.SG.BF) 'thing', *basui* (M.SG.FF) 'fallen' (lit. 'fallen thing', *scil*. from the sky)
 - b. guebeque nanganatai 'gold' = guebeque (M.SG.BF) 'metal, iron', nanganatai (M.SG.FF) 'brilliant, shiny'
 - c. guebeque serērachui 'aluminium' = guebeque (M.SG.BF) 'metal, iron', serērachui (M.SG.FF) 'soft'
 - d. piago ajami 'window' = piago (M.SG.BF) 'door', ajami (M.SG.FF) 'small'

¹⁶ Unlike other neighbouring populations, Ayoreo did not make use of alcoholic drinks, so that this new concept is rendered by a compound. On compounds in Ayoreo, see Bertinetto (2014) and Ciucci (2016).

¹⁷ Gachide originally means 'domesticated animal, pet', which can also serve as means of tranportation.

¹⁸ Daijnane (9a) and naijnane (9e) are the same word, the only difference is the nasalization of the initial consonant, which is not obligatory.

In the documentation available, Ayoreo forms can often alternate with a Spanish loanword, for instance for *piogabi* 'match' (stick), naijnane iguijnai 'hospital' (9e) and guebeque nanganatai 'gold' (10b) also the Spanish words fósforo, hospital and oro, respectively, are found (Higham et al. 2000). As for uguchade pi 'rucksack' (9g), the younger speakers already use the Spanish mochila. Piago ajami 'window' (10d) can alternate with ibentana (7c), adaptation of Spanish ventana.

Finally, communication can involve social conventions in which the Ayoreo culture differs from that of Spanish speaking people. For instance, it is not considered convenient for young people to use the word yacaranguipis/ñacarañipis 'thank you'. Only people older than 40 normally thank someone, and not for small acts of courtesy. Spanish 'thank you' is normally rendered by the deverbal noun irasi (3.M.SG.FF) 'what one likes, liking' plus the person to whom one expresses gratitude (11) and the reason why one is grateful, introduced by the preposition ome. However, despite the pragmatic uses of (11) corresponding to those of Spanish gracias 'thank you', it is translated by the speakers as 'I am happy with you (for...)', because Spanish 'thank you' is considered too strong and is associated with a social taboo on many occasions.

(11) Y-irasique ua ome....

1sG-liking[M.SG.BF] 2sG for

'I am happy with you for...', lit. 'You are

my liking for...'

9. Conclusions

In this paper, we have analysed the linguistic taboos of the Ayoreo. Some of them originate from religious motivation, and breaking the taboo can be dangerous. For instance, the name of some animals associated with powerful mythological figures cannot be pronounced in the dry season, when these animals disappear (§2). Similarly rooted in religious beliefs is the fear of pronouncing the name of Dupade 'God' and Pujopie 'the shamanic power' (§3), as well as some taboos concerning specific objects of Ayoreo culture (§4). Nowadays Ayoreo do not practice cannibalism. In the past, however, cannibalism had a religious justification (§5). Such a topic is now so taboo that only old people seem to be aware of it, which is due to the influence of Western culture, where anthropophagy is strongly condemned. Social norms originate taboos concerning sex, onomastics and Spanish loanwords. Ayoreo culture allows remarkable sexual freedom before marriage. This is considered a normal fact of life: it is necessary for young people to vent their sexual desire, because it is believed that in this way there will be no desire for transgression after marriage. Despite the sexual freedom enjoyed by the Ayoreo for a part of their life, talking about sex is always taboo. This possibly has to do with the prohibition to have extra-conjugal relationships after marriage (§6). In this paper we have also shown how contact with Western culture has affected sexual behaviours and related linguistic taboos. Furthermore, we have dealt with some taboos having to do with proper nouns, in particular with the psychological need to forget people who died (§7), which imposes a change of name on the people. Finally, the Ayoreo are very attached to their culture, which is reflected, at least for the older generations, in the attempt to avoid Spanish borrowings. In §8 we have discussed the mechanism of lexical acculturation in Ayoreo. Even though some Spanish loanwords are now used in the language, particularly among younger generations, the fact that borrowed nouns show all Ayoreo grammatical categories indicates that inflectional morphology still remains productive.



Figure 18. Women and children in front of the church of Santiago de Chiquitos, Bolivia, immediately after their capture in 1952. All of their men had been killed.

Figure 17. Gabriella Erica Pia with Iquebi, who as a child was the first Ayoreo captured in Paraguay



Abbreviations

1, 2, 3 first person, second person, third person

BF base form
EVID evidential
EXIST existential
F feminine
FF full form

GF generic form (for unspecified possessor)

M masculineNEG negationPL pluralREFL reflexiveSG singular

References

- Barrios, Armindo, Domingo Bulfe & José Zanardini. 1995. *Ecos de la selva. Ayoreode Uruode*. Asunción: Centro de estudios Antropológicos de la Universidad Católica.
- Bertinetto, Pier Marco. 2014 [2009]. Ayoreo. In Mily Crevels & Pieter Muysken (eds.), Lenguas de Bolivia, Tomo 3: Oriente, pp. 369–413. La Paz: Plural Editores. English version [Ayoreo (Zamuco). A grammatical sketch, 2009] at: http://linguistica.sns.it/QLL/QLL09/Bertinetto_1.PDF (28 May, 2016.)
- Bertinetto, Pier Marco, Luca Ciucci & Gabriella Erica Pia. 2010. Inquadramento storico, etnografico e linguistico degli Ayoreo del Chaco. In Roberto Ajello, Pierangiolo Berrettoni, Franco Fanciullo, Giovanna Marotta & Filippo Motta (eds.), Quae omnia bella devoratis. Studi in memoria di Edoardo Vineis, pp. 109–146. Pisa: Edizioni ETS.

- Bessire, Lucas. 2011. *Ujnarone chosite*: Ritual poesis, curing chants and becoming Ayoreo in the Gran Chaco. *Journal de la societé des américanistes* 97.1: 259–289.
- Bessire, Lucas. 2014. *Behold the black caiman: A chronicle of Ayoreo life*. Chicago: Chicago University Press.
- Bórmida, Marcelo. 2005 [1973-1979]. Ergon y mito. Una hermenéutica de la cultura material de los Ayoreo del Chaco Boreal (2 vols). *Archivos del Departamento de Antropología Cultural* 3.1–2. Buenos Aires: CIAFIC Ediciones.
- Campbell, Lyle. 2013. Language contact and linguistic change in the Chaco. *Revista Brasileira de Linguística Antropológica* 5.1: 259–292.
- Campbell, Lyle & Verónica Grondona. 2012.

 Languages of the Chaco and Southern
 Cone. In Lyle Campbell & Verónica
 Grondona (eds.), The Indigenous languages of South America. A Comprehensive
 Guide, pp. 625–668. Berlin: Mouton de Gruyter.
- Chomé, Ignace 1958 [ante 1745]. Arte de la lengua zamuca. Présentation de Suzanne Lussagnet. Journal de la Société des Américanistes de Paris 47: 121–178.
- Ciucci, Luca. 2014. Tracce di contatto tra la famiglia zamuco (ayoreo, chamacoco) e altre lingue del Chaco: prime prospezioni. Quaderni del Laboratorio di Linguistica della Scuola Normale Superiore di Pisa 13 n.s.

- Ciucci, Luca. 2016 [2013]. *Inflectional morphology in the Zamucoan languages*. Asunción: CEADUC. Biblioteca Paraguaya de Antropología, Vol. 103.
- Ciucci, Luca. 2018. Lexicography in the Eighteenthcentury Gran Chaco: the Old Zamuco Dictionary by Ignace Chomé. In Jaka Čibej, Vojko Gorjanc, Iztok Kosem & Simon Krek (eds.), Proceedings of the XVIII EURALEX International Congress: Lexicography in Global Contexts, pp. 439–451. Ljubljana: Ljubljana University Press.
- Ciucci, Luca. 2019. A culture of secrecy: the hidden narratives of the Ayoreo. In: Anne Storch, Andrea Hollington, Nico Nassenstein & Alexandra Y. Aikhenvald (eds.), Creativity in language: secret codes and special styles. A special issue of the International Journal of Language and Culture 6.1: 175–194.
- Ciucci, Luca (ed.). Forthcoming. *Ignace Chomé:* Vocabulario de la lengua zamuca Edición crítica y comentario lingüístico. Madrid/Frankfurt: Iberoamericana Verfuert Verlag.
- Ciucci, Luca & Pier Marco Bertinetto. 2015. A diachronic view of the Zamucoan verb inflection. *Folia Linguistica Historica* 36.1: 19–87.
- Ciucci, Luca & Pier Marco Bertinetto. 2017. Possessive inflection in Proto-Zamucoan: A reconstruction. *Diachronica* 34.3: 283–330.
- Combès, Isabelle. 2009. *Zamucos*. Cochabamba: Instituto de Misionerología.

- DGEEC 2014 = Dirección General de Estadística, Encuestas y Censos. *Pueblos Indígenas en el Paraguay. Resultados Finales de Población y Viviendas 2012.* Fernando de la Mora, Paraguay.
- Epps, Patience. Forthcoming. Amazonian linguistic diversity and its sociocultural correlates. In Mily Crevels, Jean-Marie Hombert & Pieter Muysken (eds.), Language Dispersal, Diversification, and Contact: A Global Perspective. Oxford: Oxford University Press.
- Fischermann, Bernd. 1988. Zur Weltsicht der Ayoréode Ostboliviens. Bonn, Rheinische Friedrich-Wilhelm-Universität: PhD thesis dissertation. [Spanish translation: La Cosmovisión de los Ayoréode del Chaco Boreal, manuscript]
- Fischermann, Bernd. 1996. Viviendo con los Pai. Las experiencias ayoreode con los jesuitas. In Eckart Kühne (ed.), Martin Schmid 1694-1772. Las misiones jesuíticas de Bolivia. pp. 47–54. Santa Cruz de la Sierra: Pro Helvetia.
- Higham, Alice, Maxine E. Morarie & Greta Paul. 2000. *Ayoré-English dictionary*. Sanford, FL: New Tribes Mission. 3 vols.
- INE 2015 = Instituto Nacional de Estadística. Censo de población y vivienda 2012. Bolivia. Características de la población. La Paz.
- Kelm, Heinz. 1964. Das Zamuco: eine lebende Sprache. *Anthropos* 59: 457–516, 770–842.

- Montoya, Antonio Ruiz de. 1640. *Arte, y boca-bulario de la lingua guarani*. Madrid: Juan Sanchez.
- Morarie, Maxine. 1980. *Simplified Ayoreo Grammar*. Cochabamba: Publicaciones Nueva Vida.
- Otaegui, Alfonso. 2011. Los ayoreos aterrorizados: una revisión del concepto de puyák en Bórmida y una relectura de Sebag. *Runa* 32.1: 9–26.
- Otaegui, Alfonso. 2014. Les chants de nostalgie et de tristesse ayoreo du Chaco Boreal paraguayen (une ethnographie des liens coupés).

 Paris, École des Hautes Études en Sciences Sociales: PhD dissertation.
- Pia, Gabriella Erica. 2006. La cultura material de los ayoreo y el arte rupestre de Bolivia y Paraguay. Asunción: Istituto Italo-Latino Americano. Cuadernos IILA, Serie Cooperación 32.
- Pia, Gabriella Erica. 2014. *Diccionario antro*pológico ayoreo. Parte primera: Ensayo introductivo. Pisa: Laboratorio di Linguistica della Scuola Normale Superiore.
- Pia, Gabriella Erica. 2015. *Diccionario antro- pológico ayoreo. Parte segunda: Abalanzarse Achuma*. Pisa: Laboratorio di Linguistica della Scuola Normale Superiore.
- Pia, Gabriella Erica. 2016. *Diccionario antro- pológico ayoreo. Parte tercera: Adecuado Adulto casado.* Pisa: Laboratorio di Linguistica della Scuola Normale Superiore.

- Pia, Gabriella Erica. 2018. Diccionario antropológico ayoreo. Parte cuarta: Aéreo - Agujero. Pisa: Laboratorio di Linguistica della Scuola Normale Superiore.
- Roskov Y., L. Abucay, T. Orrell, D. Nicolson, N. Bailly, P.M. Kirk, T. Bourgoin, R.E. DeWalt, W. Decock, A. De Wever, E. van Nieukerken, J. Zarucchi, L. Penev (eds.). 2018. Species 2000 & ITIS Catalogue of Life, 2018 Annual Checklist. Digital resource at www.catalogueoflife.org/annual-checklist/2018. Leiden: Species 2000, Naturalis.
- Zanardini, José. 2003. *Cultura del pueblo ayo*reo: manual para los docentes. Asunción: CEADUC.