

MARKING OF DEONTIC MODALITY IN PARESI

A MARCAÇÃO DA MODALIDADE DEÔNTICA NO PARESI

LA MARCACIÓN DE LA MODALIDAD DEÔNTICA EN PARESI

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ABSTRACT: In this article, we present a description and analysis of the *maika* particle in Paresi, an indigenous language spoken by approximately 3000 people in the state of Mato Grosso. Our research was based on data taken from texts or given by consultants who were Paresi native speakers. Our theoretical framework consisted on the studies of Brennan (1993), Hacquard (2006, 2010), Palmer (1986), von Fintel (2006), Pires de Oliveira and Rech (2016) and Rech and Varaschin (2017, forthcoming). We found out Paresi presents distinct markers for deontic and epistemic modalities. These are expressed through the particles: *maika* and *kala*, respectively. Our analysis, still in an initial stage, indicates *maika* corresponds to a particle that indicates *ought-to-be* deontic modality, when it occurs with the second person; and *ought-to-do*, when it occurs with the third person.

KEYWORDS: Paresi. Deontic modality. Syntax. Semantics.

RESUMO: Neste artigo, apresentamos uma descrição e análise da partícula *maika* em Paresi, uma língua indígena falada por aproximadamente 3000 pessoas no estado do Mato Grosso. Nossa pesquisa teve por base dados retirados de textos ou elaborados por consultores falantes nativos do Paresi. Nosso aporte teórico foi os estudos de Brennan (1993), Hacquard (2006, 2010), Palmer (1986), von Fintel (2006), Pires de Oliveira e Rech (2016) e Rech e Varaschin (2017, no prelo). Constatamos que o Paresi apresenta marcações distintas para as modalidades deôntica e epistêmica. Estas são expressas através de partículas: *maika* e *kala*, respectivamente. Nossa análise, ainda em etapa inicial, sinaliza que *maika* corresponde a uma partícula indicadora de modalidade deôntica do tipo *ought-to-be*, quando ocorre com segunda pessoa; e *ought-to-do*, quando ocorre com terceira pessoa.

PALAVRAS-CHAVE: Paresi. Modalidade deôntica. Sintaxe. Semântica.

RESUMEN: En este artículo, presentamos una descripción y análisis de la partícula *maika* en Paresi, una lengua indígena hablada por aproximadamente 3000 personas en el Estado de Mato Grosso. Nuestra investigación tuvo como base datos recopilados de textos o elaborados por consultores hablantes nativos del Paresi. El aporte teórico fue los estudios de Brennan (1993), Hacquard

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(2006, 2010), Palmer (1986), von Stechow (2006), Pires de Oliveira y Rech (2016) y Rech y Varaschin (2017, en prensa). Constatamos que el Paresi presenta marcas distintas para las modalidades deónica y epistémica. Estas se expresan a través de partículas: *maika* y *kala*, respectivamente. Nuestro análisis, aún en etapa inicial, señala que *maika* corresponde a una partícula indicadora de modalidad deónica del tipo *ought-to-be*, cuando ocurre con segunda persona; y *ought-to-do*, cuando ocurre con tercera persona.

PALABRAS CLAVE: Paresi. Modalidad deónica. Sintaxis. Semántica.

1 INTRODUCTION

The goal of this article is to describe and analyze the uses of the *maika* particle in Paresi. This language belongs to the Arawak family and is spoken in Mato Grosso by approximately 3000 people. The Paresi data were either taken from a text database or elicited from Paresi native speaker consultants.¹ We show some evidence that *maika* is a marking of deontic modality in Paresi. The description of deontic modality in Paresi will give the basis for testing, in future works, hypotheses about modality and agentivity, such as the hypothesis of Pires de Oliveira and Rech (2016). According to Pires de Oliveira and Rech (2016), deontics need to check the agentivity [+Ag] feature against one of the participants of the event to which the modals are relativized.

Paresi is a Brazilian indigenous language with a reasonable grammatical description compared to other indigenous languages (see Silva, 2009, 2013, and 2010 Brandão, 2014). Even so, much remains to be investigated. The studies of Paresi accessible to us do not describe, for example, the marking of deontic modality, which is the focus of our research in this article. Pires de Oliveira and Rech (2016) and Rech and Varaschin (2017, forthcoming), following Brennan (1993) and Hacquard (2006, 2010), assume there are two types of deontics: (i) *ought-to-do* deontics, where the obligation or permission falls on an event participant described by the VP, usually the subject of the sentence; and (ii) *ought-to-be* deontics, where the order/obligation falls on a speech event participant: the *addressee*. The participant of the event to which the modal is relativized checks the [+Ag] feature, thus licensing deontic interpretation in the low position (*ought-to-do*); or in the high position (*ought-to-be*). This proposal indicates the syntactic component determines, at least in part, the interpretation of the modal. Therefore, modality would correspond to a syntax-semantics interface phenomenon as Hacquard (2006, 2010) argues.

The study of modality in a language like Paresi, which displays a semantic alignment system marked by the distinction between agentive and non-agentive predicates, can shed light on the study of modals in Brazilian Portuguese (BP) and other nominative languages. According to Pires de Oliveira and Rech (2016), the predicate properties under the modal scope can interfere in the interpretation of the modal. In order to investigate this hypothesis in Paresi, it is necessary to first identify the deontic modality marking in that language and map the contexts in which it appears, our main goal in this article. Our theoretical basis for describing and analyzing *maika* as a deontic modality marker in Paresi is Palmer (1986), Brennan (1993), von Stechow (2006), Hacquard (2006, 2010) and Pires de Oliveira and Rech (2016).

The organization of the article is as follows: section 1 presents data from languages exhibiting different typologies – BP and Paresi – that support the proposal of Pires de Oliveira and Rech (2016) for the interpretation of deontics. In section 2, we present a description of *maika*, justifying our hypothesis that it is a particle (section 2.1) and corresponds to a deontic modality marker (section 2.2). Finally, section 3 provides some considerations about the use of the *maika* particle with verbs in the second and third persons.

¹ The database contains texts that were collected, transcribed and translated by Brandão and Paresi consultants during the period from 2006 to 2014. Some data with *maika* were elicited with Paresi native speakers consultants who worked as collaborators of the project "Modality deontic and control features in Portuguese and Paresi", Federal University of Pará (Document 012/2016).

2 AGENTIVE AND NON-AGENTIVE PREDICATES AND THE *OUGHT-TO-DO* DEONTIC INTERPRETATION

In Paresi, verbs can be classified according to verbal valency and subject thematic role. Regarding verbal valency, they can be intransitive, transitive or ditransitive. Regarding the thematic role of subjects, intransitive verbs can be classified as agentives or non-agentives depending on the type of person proclitic they take. The intransitive verbs are divided morphologically in the following: (i) some intransitive verbs take the same subject marking of transitive verbs (the proclitics of set A with the vowel a); (ii) while others take a different subject marking (the proclitics of set B).

	Set A	Set B
1sg	na =	no =
2sg	ha =	hi =
3sg	Ø =	Ø =
1pl	wa =	wi =
2pl	za =	xi =
3pl	Ø = ...-ha	Ø = ...-ha

Table 1: sets of proclitics in Paresi
Fonte: Brandão (2014, p. 81)

According to Brandão (2014), verbs that take the markers from set A are those whose participants are actors that perform the situation denoted by the predicate. Verbs taking set B markers are those whose participants are *undergoers*, i.e. they do not perform the event described by the predicate. Consider the following examples:

- (1) a. **na**=zawatya haira²
 1SG=throw ball
 'I threw the ball.' (E)³
 b. **na**=tona (argument of unergative verb)
 1SG=walk
 'I walked' (E)
- (2) **no**=waini-hena (argument of unaccusative verb)
 1SG=die-TRS
 'I will die.' (BRANDÃO, 2014, p. 24)

In Paresi, the case corresponding to the external argument of transitive verbs coincides with the case of proclitics that occur with mono-argument action verbs called unergatives, as seen in (1a-b). On the other hand, the case corresponding to the argument of an unaccusative predicate is distinct, as seen in (2).

It is important to note that the Paresi assigns different case marking to the pronouns that are attached to stative predicates, showing a difference within this class: some statives take proclitics from set A, while others take proclitics from set B. In the following examples, from Brandão (2014, p. 234-241), we can verify this contrast:

² AFF-Affective, BEN-Benefactive, COP-Copula, DEO-Deontic, ENF- Emphasis, EPIST-Epistemic, IFV-Imperfective, LOC-locativo, M-Masculine, NEG-Negation, NMLZ-Nominalizer, O-Object, PERF-Perfective, PL-Plural, SG-Singular, TOP-Topic, TRS-Transitional, VM-Middle Voice.

³ The source of the Paresi database examples is specified by the following codes: T indicates that the examples are from texts, and E indicates that the examples were elaborated by Paresi's native speaker consultants.

- (3) A. **na**=waiye-in-hekola
 1SG = be.good-NMLZ-?
 'I'm prudent' (E)
- B. **na**=waiye-ze-hare
 1SG = ser.good-NMLZ-M
 'I'm a good person' (E)
- (4) A. **no**=waxirahare
 1SG = ser.feio
 'I'm ugly' (E)
- B. **in** = maira
 1SG = ter.medo
 'I have fear' (E)

The examples from (1) to (4) show the distribution of the grammatical case in Paresi cannot be explained by an opposition between the class of statives and the other aspectual classes (activities, accomplishments and achievements). Statives are marked by the [-dynamic] feature, and do not occur with pronouns with a case corresponding to agentive arguments; and other aspectual classes are marked with the [+dynamic] feature and occur with pronouns with an agentive case in the subject function. There are states that are subject to control, as mentioned by Parsons (1990), Basso and Ilari (2004) and Rech and Varaschin (forthcoming). We emphasize the case distribution system in Paresi presents evidence that the case marking is not arbitrary and also points out the importance of the semantic notion of agentivity/control for this system. This evidence can be seen in the occurrences of stative predicates with inflected pronouns in the case corresponding to agentive arguments, as seen in (3a-b), as well as in the case corresponding to non-agentive arguments, as in (4a-b).

In nominative languages, the stative predicates do not carry morphological marks that allow us to distinguish between controllable or uncontrollable subjects. It should be noted, however, that only part of the statives – those that occur with proclitics from set A in Paresi – occurs in the progressive form. Consider the following from Parsons (1990, p. 35):

- (5) John is being silly (... being a fool).

For the author, the occurrence of the progressive with *be silly* or *be a fool* shows these predicates exhibit eventivity properties in (5), referring to the way *John* acts in a particular situation, and not to a mark of his character. In this case, *John* behaves like a *fool* for carrying out one or more event(s), such as *telling jokes* or *insistently inviting a girl out*, in a particular situation, which can be *at a party*, for example. Therefore, the use of these predicates presupposes, in this context, an argument with agentive features. In Paresi, statives that take set A markers with a controlled subject may correspond to an incremental eventuality, which contains subevents that result in the manifestation of the property described by the stative predicate. This analysis is similar to the one proposed by Rothstein (2004) to account for the unaccusative achievements related to a movement toward a physical place, such as *arrive*, which combine with the progressive aspect and also result from sub-events performed by an agentive participant (see RECH; VARASCHIN, 2017).

The case marking on Paresi shows some predicates – unergatives, transitives, unaccusative *achievements* associated with displacement in space, and statives that can be controlled – describe events in which an agentive participant operates (directly or indirectly); while others – unaccusatives and statives which cannot be controllable – do not. Interestingly, the first matches predicates that license deontic interpretation of the kind *ought-to-do* (where the obligation or permission is subject-oriented) in BP, while others correspond to predicates that provide a restriction to this type of interpretation (see PIRES DE OLIVEIRA; RECH, 2016; RECH; VARASCHIN, 2017, forthcoming). Here are some examples from Portuguese:

- (6) A. Mariana deve trabalhar neste final de semana. ‘Mariana must work this weekend’
 (Mod_{Deontico})
 B. Mariana deve morrer neste final de semana. ‘Mariana must die this weekend’
 (Mod_{Deontico})

The sentence (6a) can be used in contexts in which the obligation is oriented to the subject of the sentence: the responsibility for the realization of the event falls on Mariana; or to the *addressee*, who must ensure that Mariana performs the event described in the sentence. In the first case, the modal *must* is classified as an *ought-to-do* deontic. According to Hacquard (2006), this type of deontic is relativized to the event described by the VP, having access to its participants – among them is the subject of the sentence, who allows its interpretation in a low position. In the second case, the modal corresponds to an *ought-to-be* deontic, being relativized to the speech event and its participants; it is therefore interpreted in a high position. The sentence (6b) does not allow these two interpretations for the deontic. Pires de Oliveira and Rech (2016), in an experimental study on the deontic, found BP speakers attribute to the deontic only the *ought to-be* interpretation, when this forms a sequence with a predicate like *die*. The deontic reading available for the sentence (6b) is one in which the order/obligation falls on the *addressee*, who must ensure the realization of the event.

The sentences of example (6) show the *ought-to-do* interpretation is not always available to the deontic. Pires de Oliveira and Rech (2016) and Rech and Varaschin (2017), assuming that modals are relativized to events (cf. Hacquard, 2006, 2010), propose the deontic must check the [+Ag] feature against one of the participants of the event to which it is relativized. According to these authors, the *ought-to-do* deontic interpretation requires the presence of an agentive participant in the low position (incorporating the event described in the VP), which is selected by unergative predicates and transitives, but not unaccusatives. This proposal explains the differences between (6a) and (6b), with respect to the *ought-to-do* deontic interpretation, since in (6b) the modal is relativized to an event described by unaccusative predicate; then, without an agentive participant.

The restriction on the deontic interpretation of *ought-to-do* type was also found in constructions with some stative predicates, precisely those which correspond to the ones marked by set B proclitics in Paresi. In the following examples, we introduce cases in which the modal *deve* (must) forms a sequence with statives that can be controlled in (7a), and that cannot be controlled, (7b-c):

- (7) a. Carlos deve ser cauteloso na reunião. ‘Carlos must be cautious in the meeting.’
 (√Ought-to-be/√Ought-to-do)
 b. Joana deve ser alta. ‘Joana must be tall.’
 (*Ought-to-be/*Ought-to-do)
 c. A protagonista da nova série deve ser alta. ‘The protagonist of the new series must be tall.’
 (√Ought-to-be/*Ought-to-do)

As Rech and Varaschin (forthcoming) point out, the stative *ser cauteloso* ‘be cautious’ is subject to control, as the argument of the predicate (*Carlos*) has control over the events that result in the state of *being cautious* (*the meeting*), such as: *analyzing the statements of the other members before making a proposal, weighing up before making a decision, calculating the risks of a negotiation, analyzing post and cons, etc.* Because *Carlos* has control over a set of events that cause the state *be cautious*, the deontic in (7a) can be interpreted in a low position as an *ought-to-do*. The *ought-to-be* interpretation is also available for (7a), addressee-oriented – a speech event participant – for ensuring the event described in the sentence: *Carlos be cautious at the meeting*. In the sentences (7b) and (7c), the modal predicate under the modal scope is not controllable; therefore, the restriction on deontic interpretation of the type *ought-to-do* was expected. It makes no sense giving an order or blaming someone for the manifestation of an uncontrollable property, such as *being tall*. (7b) does not admit any deontic interpretation not because of Joana (the subject of the sentence) or because some other person (a speech event participant – the *addressee*) has control over Joana’s height. The sentence in (7c) admits the *ought-to-be* deontic interpretation, because the DP, which contains the referent having the property of *being tall*, does not yet present a definite reference. In this case, the *addressee* receives the order to monitor the protagonist selection process, in such a way that the result is

the choice of a reference that already manifests the property *being tall*. He does not receive the order to monitor the property itself, which is not subject to monitoring.

According to what we have been arguing, the *ought-to-do* interpretation is only available to the modal when there is an agentive participant in the event described by VP, in order to check the [+Ag] feature of the deontic. Therefore, it is expected the *ought-to-do* deontic interpretation in constructions with unergatives and transitive predicates, but not unaccusatives or statives. Rech and Varaschin (2017) show, however, the modal can be interpreted as an *ought-to-do* deontic in constructions with unaccusative predicates. The authors argue *achievement* unaccusatives related to a movement toward a physical place, such as *to arrive*, *to get out*, *get in*, *appear*, and *disappear*, correspond to the culmination of events that can be controlled by a participant with the same reference of the unaccusative argument. Based on Rothstein (2004), the authors assume the event described by VP corresponds, in this case, to incremental structure whose unaccusative predicate describes the culmination point of a derived *accomplishment*. Therefore, in the preparatory phase of the event described in the VP, there is an agentive participant that can check the [+Ag] feature of the deontic, licensing thereby an interpretation of the *ought-to-do* type. This interpretation is not available in constructions with unaccusatives such as *being born*, *grow*, *fall*, *bloom*... because they describe events that cannot be controlled by a participant with the same reference of the unaccusative argument. The authors extend this proposal to stative predicates (RECH; VARASCHIN, forthcoming), which can also be subclassified into controllable and uncontrollable, as they signal the agentive and non-agentive case marking in Paresi.

Our purpose in this article is to investigate a possible deontic modality marking in Paresi: the particle *maika*. If the hypothesis above is correct, not only for BP but also for other natural languages like Paresi, it is expected that a deontic reading oriented to the subject of the sentence takes place only with predicates that in Paresi take the set A proclitics. In the following sections, we analyze the particle *maika* in Paresi, arguing it expresses deontic modality. As mentioned in the introduction, the mapping of modality markers in Paresi is important to investigate, in that language, the hypothesis that the predicate under the scope of the modal has influence in its interpretation. That research will be possible only after advancing the knowledge on deontic modality in Paresi. With this article, we intend to contribute to this description.

2.1 DEONTIC MODALITY IN PARESI: THE CASE OF MAIKA

2.1 MORPHOSYNTAX OF THE MAIKA PARTICLE

According to Lyons (1977), the modality has its roots in modal logic within the philosophy of language, which relates it to the notions of necessity and possibility. The two main categories are the deontic and epistemic modalities. The deontic modality is more specifically related to the necessity and possibility of acts performed by morally responsible agents, being characterized by obligation and permission (LYONS, 1977; PALMER, 1986). The epistemic is related to the knowledge of the speaker in relation to a proposition (PALMER, 1986; KRATZER, 2012).

Van der Auwera and Ammann (2013) and Bybee et al. (1994) note there are distinct markings for the epistemic and deontic modalities in the languages investigated by them, unlike what occurs in languages such as BP, English, Italian and Spanish, where the same lexical item can express more than one type of modality. As examples of languages with different marking for epistemic and deontic modality, we can mention Paresi (BRANDÃO, 2014), Evenki (van der AUWERA; AMMANN, 2013), S'tat'imcets (MATTHEWSON et al., 2005), Gitksan (MATTHEWSON et al., 2013), Javanese (Vander Kloek, 2008) and Kakataibo (VALLE, 2015). One of the issues to be addressed in this article is the type of marking used to express deontic modality in Paresi.

According to van der Auwera and Ammann (2013) and Cinque (1999, 2006), the notion of modality can be expressed by affixes, by modal auxiliaries or by other types of markers, such as particles and adverbs. We hypothesize that the deontic modality in Paresi is marked by a particle, as we will argue throughout this subsection.

Particles correspond to phonologically independent morphemes without markings of nominal or verbal morphology (cf. ZWICKY, 1985). The fact that they do not take inflectional morphemes differentiates the particles of verbs, which can take person, valence

changing (causative, reciprocal, middle voice) and aspect morphemes. The behavior of the particles in relation to the inflection does not differentiate them, however, from the class of adverbs, which also does not occur with inflectional morphemes. According to Cruschina (2010), the main properties that allow distinguishing particles from adverbs in the natural languages are: (i) particles are functional words, belonging, therefore, to a closed class – the adverbs already correspond to an open class –; and (ii) particles cannot be coordinated, while adverbs may appear with another adverb in the sentence.

According to Brandão (2014), in Paresi these differences do not hold. Adverbs belong to a closed class in this language, similar to particles, and correspond to only one semantic type: temporal adverbs. These adverbs can occur in the initial position of the sentence, as in (8), or in the final position, as in (9):

- (8) **kalini** wi=wawa wi=tsaon-ita witso-ta
 today 1PL=alone 1PL=COP-IFV 1PL-ENF
 'Today we are alone' (BRANDÃO, 2014, p. 132)

- (9) maitsa ala maiha Ø=tyo-ita **kalini**
 NEG EPIST NEG 3SG=come-IFV today
 'I think that he will not come today' (E)

Particles may be associated with categories such as negation, modality, and aspect. It should be noted, in Paresi, no particle occurs at the end of the sentence, thus differentiating itself from adverbs. In the next section, we illustrate this use from examples with *maika*, which, according to our data, does not occur in the sentence-final position.

2.2 MAIKA MARKER OF DEONTIC MODALITY

The *maika* particle was first described as a polite suggestion marker by Brandão (2014). Our hypothesis is that this particle expresses deontic modality, with a use, preferably, as a directive, characterizing a performative speech act – with overt second-person marking. These properties are common to constructions in which there is a high deontic (ought-to-be type) and imperatives. What leads us to suppose that *maika* corresponds to a particle indicative of deontic modality – and not of imperative – that is, as well, its occurrence with the third person, with overt subject expressed by a noun phrase.

The use of *maika* can express both obligation (10) and permission (11), as we see in the examples below with the second person. Example (11) was extracted from a conversation in which the speaker gave permission for the researcher to lay down in their hammock.

- (10) Context: Diana likes to eat chocolate all the time when she is on vacation.
 Then, Marina, Diana's mother, before going to work, gives the following instruction to the nanny:

maika makani weta taita chocolate Diana ana h=itsa
 DEO tomorrow early only chocolate Diana BEN 2SG=give
 'You must give chocolate to Diana only early in the morning/ Give chocolate to Diana only early in the morning'. (E)

- (11) Paula, **maika** h=ehokoty-*oa*
 Paula DEO 2SG=lie down-VM
 'Paula, you can lay down' (BRANDÃO, 2014, p.229)

Example (10) illustrates the use of *maika* as order/obligation, with subject expressed by second person proclitic (*h=*). This same proclitic appears in (11), in which *maika* assumes a connotation of permission. In both (10) and (11), the *maika* particle is employed as a directive; more specifically, it has a performative use, imposing an obligation or giving a permission to the addressee, which, in

these examples, is co-referential to the subject of the sentence. Considering, in these cases, the deontic modality – order/obligation and permission – is oriented to a participant of the speech event (the addressee) and is anchored in speech time, we associate these uses of *maika* with the high deontic (ought-to-be type). Note the occurrence in our data of *maika* with the second person in narratives about facts in the past, but only in passages with direct discourse, as in (12):

- (12) “**maika** x=itse-het-ene enomana FUNAI nali” Ø=neye
 DEO 2SG=give-PERF-3O BEN FUNAI LOC
 3SG=say
 “They said: ‘- You must give it to him at Funai’” (T)

In (12), as in examples (10) and (11), *maika* occurs with a second-person marking, with the obligation on the addressee. Since it is a performative act, the order time is either the moment of speech, as in (10) and (11), or the moment of speech reported in situations of direct speech, as in (12). We observe the information accessed for the interpretation of *maika* – with regards to the participant on which the modal orientation and the order time – are available in the speech event. Therefore, we have been associating *maika* with the high deontic interpretation (ought-to-be). It is important to note, however, the performative act is also associated with the imperative form. Thus, the performative use of *maika* alone is not enough for its classification as ought-to-be deontic. For this reason, we present below some properties of the imperative form in Paresi in contrast to the properties of *maika* particle.

The imperative is a kind of basic sentence (SADOCK; ZWICKY, 1985), which generally expresses a command, that is, imposes an obligation on the listener (von FINTEL; IATRIDOU, 2017). According to von Fintel and Iatridou (2017) and Alcázar and Saltarelli (2014), the imperative, in addition to expressing command, may have other uses considered weak, for example permission, request, demand, desire, plea, invitation, and advice. Other properties of imperatives in general are: i) to be associated with the present tense (moment of the speech) or future/irrealis; and ii) to be relativized to controllable events, requiring an agentive participant (ALCÁZAR; SALTARELLI, 2014).

In Paresi, semantically, sentences in the imperative are used to express obligation, permission, advice or invitation. In this language, the imperative is not morphologically marked, similar to English (BRANDÃO, 2014). In imperative sentences, as in example (13) below, the verb can occur with a second-person marker and without time or aspect markers, according to (13a); or it may occur with a second-person marker and transitional aspect marker (*-hena* – also used in the future), as (13b) and (13c). It should also be noted that these constructions have a distinct intonational pattern compared to declarative and interrogative sentences.

- (13) a. **ha**=fitya natyo, ama Kokote!
 2SG=plant 1SG mother Kokotero
 ‘Bury me, mother Kokotero!’ (BRANDÃO, 2014, p.400)
- b. **hi**=tsaone-**hena** atyo ali!
 2SG=stay-TRS TOP here
 ‘Stay here!’ (E)
- c. **za**=tseme-**hena**, ira zoima-nae!
 2SG=listen-TRS AFF children-PL
 ‘Listen, children!’ (BRANDÃO, 2014, p. 342)

In (13a), the verb *fitya* (bury) occurs with a second-person singular marker (*ha=*). In (13b) and (13c), the verbs *tyaona* (stay) and *tsema* (listen) display, in addition to the second person marker (singular *hi=* and plural *za=*), aspect marking (*-hena*).

Note that in Paresi, a context of obligation or permission involving a performative act can be expressed through an imperative sentence, as in (13); or a sentence with *maika*, as in examples from (10) to (12). The close relationship between the imperative and the deontic modality is pointed out in works such as Palmer (1986), Bybee et al. (1994), Portner (2007), Kaufmann (2012) and von Stechow and Iatridou (2017). According to Palmer (1986), the imperative resembles in many respects the deontic system, or rather a subsystem called a directive. What led us to rule out the hypothesis that *maika* would correspond to an imperative marker was its occurrence with the third person morpheme in our data, as shown in (14) sentences in the sequence.

There are two possible constructions to express obligatoriness with the verb in the third person in Paresi: (i) occurrence of *maika* with subject expressed by a noun phrase (NP) and the verb with the third person zero morpheme, according to (14a); and (ii) occurrence of *maika* with subject marked only through the third person zero morpheme; this case occurs when the referent corresponding to the subject has already been mentioned as an NP in speech, according to (14b):

- (14) a. **maika=ra baba Zatyamare** Ø=aitse-hena hozore [...], ama Kokote, Ø=nea
 DEO=AFF father Zatyamare 3SG=kill-TRS robalo mother Kokote 3SG= say
 ‘My father Zatyamare must kill robalo fish, my mother Kokotero’, she said” (Kokotero)
- b. eaotseta **maika** wakamo Ø=aitse-hena its=ene no=mani
 then DEO tuvira 3SG=kill-TRS give-3O 1SG=BEN
 ‘Then, he must kill tuvira fish and give me’ (Kokotero)

Example (14a) presents a syntactic construction in which the subject is expressed by a noun phrase (*baba Zatyamare*). In this sentence, the subject is postponed to the *maika* particle and placed before the verb. Whereas in (14b), the subject is marked by the morpheme zero of the third person, whose referent is recoverable in the context.

The uses of *maika* with the third person, besides leading us to discard the hypothesis that this particle is a marker of imperative, corroborate our analysis of *maika* as a marker of deontic modality. As we argued in section 1, the deontic modality may be associated with a performative speech act, which corresponds to an order or permission given to the addressee, as in examples from (10) to (12); or an assertion, when it corresponds to the report of an order/obligation or permission oriented to the subject of the sentence (participant of the event described in the VP), as in (14a-b). Imperative sentences do not correspond to assertions.

Our data indicate that *maika* occurs with the second person in performative sentences and with the third person in assertive sentences. This distribution reveals similarities between this particle and the deontic modals of BP, which may also be oriented to the addressee or to the subject of the sentence (third person). It is necessary to advance in the description of Paresi to make sure that *maika* corresponds, in fact, to a deontic modality marker that can be interpreted either in the high position (as an ought-to-be deontic) or in the low position (as an ought-to-do deontic). The data we have access so far indicate that our hypothesis is right. In order to make more precise considerations, an in-depth analysis of this particle is necessary, investigating its use in constructions with predicates that occur with proclitics of set A, which we will deal with in future researchers.

3 FINAL CONSIDERATIONS

In this paper, we present a description of *maika* as a particle that expresses an ought-to-be and ought-to-do deontic modality. Initially, we present the hypothesis of Pires de Oliveira and Rech (2016) that deontics need to check a [+Ag] feature against a participant of the event to which they are relativized. This hypothesis was motivated by Paresi and BP data.

In the sequence (section 2.2.1), we present morphosyntactic properties of *maika*, giving indications that it is a particle. In section 2.2.2, we argue that *maika* corresponds to an indicator of deontic modality in both performative acts and assertions. From the proposal of Hacquard (2006, 2010), we suppose that, in the first case, *maika* is relativized to the speech event – with orientation to the addressee, occurring with second person morpheme; in the second case, it is relativized to the event described by the VP – with orientation towards the subject, occurring with the third person.

From this preliminary analysis of the deontic modality in Paresi, we intend, in future research, to investigate the use of *maika* in constructions with predicates that occur with proclitics of set A and set B. Thus, we suppose it is possible to test the restriction of deontics of the ought-to-do type to non-agentive predicates. We hope that *maika* does not form a sequence with any non-agentive predicates in Paresi, as was the case for the ought-to-do deontics in BP (see PIRES DE OLIVEIRA; RECH, 2016).

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