

# The relational morpheme of Brazilian languages as an impoverished agreement marker\*

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**Abstract:** This paper analyzes the morphology and syntax of structures that contain a morpheme identified as relational in the literature of Brazilian languages. This paper focus on data from Kadiwéu, a Waikurúian language, but the findings can arguably be extended to other South American languages. In Waikurúian languages, this morpheme can be reconstructed back to Proto-Waikurú as noted in Ceria & Sandalo (1995). This work argues that this is actually an impoverished agreement morpheme when there is double agreement in TP.

**Keywords:** agreement, underspecification, dislocation, inverse voice

## 1 Introduction

Kadiwéu has agreement for external and internal arguments:<sup>1</sup>

**Table 1** Agreement

	<b>ERGATIVE</b>	<b>ABSOLUTIVE</b>
1SG	j-	i-
2SG	a-...-i	Ga-
3SG	y- ~ w-	---
1PL	j-...-Ga	Go-
2PL	a-...-I	Ga-...-i
3PL	n-...Ga	---

Direct arguments, however, are in complementary distribution. There is a person hierarchy, 2>1>3, that defines the argument that is morphologically marked. Thus, if the object is third-person, a transitive verb agrees with the external argument regardless of the person of the subject:<sup>2</sup>

- (1) j-ema:n  
1ERG-want/love  
'I love him/her.'

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<sup>1</sup> Kadiwéu does not have case morphology, but it has an ergative agreement system: the object of transitives is marked the same as the subject of unaccusatives and antipassives, and transitive subjects (as well as unergative subjects) have a special marker. Moreover, the language has antipassives, which further indicates that this is an ergative language.

<sup>2</sup> The following abbreviations are used in Kadiwéu examples in this work: 1 = first person, 2 = second person, 3 = third person, ERG = transitive subject agreement, ABS = absolutive agreement, PL = plural, SG = singular, POSS=possessive, REL=relational, NEG= negation, OBL=oblique argument, APPL=applicative, PRO=pronoun, SUBJ= subject, and OBJ- object.

- (2) y-ema:n  
3ERG-want/love  
'He/She loves him/her'

However, a verb agrees with the object if this is first or second-person and the subject is third-person. But second-person has precedence over first-person. So, wherever there is a second person argument, the verb agrees with it:

- (3) Ga-d:-eman-i  
2ABS-REL-want/love-PL  
'I/he loves you'

- (4) a-d:-eman-i  
1ERG-REL-want/love-PL  
'You love me'

Furthermore, the so-called relational, *d:-* in Kadiwéu, must be present, regardless of the agreeing argument if the internal argument is first or second-person.<sup>3</sup>

Rodrigues (1953), working with similar facts in Tupi-Guaranian languages, identified this morpheme as a 'contiguity relational prefix', which indicates that the argument of a given lexical head comes immediately before it. In fact, in Kadiwéu, the person of the object affects agreement, as seen above, as well as constituent order, as can be seen in the data below. First/second person internal arguments must precede the verb but third person internal arguments follow it. So, the internal argument is fronted in the same cases in which the relational is marked in Kadiwéu.

- (5) Goti            aqa:m-i            Ga-d:-am:an-i  
Goti            2PRO-PL            2ABS-REL-want/love-pl  
'Goti loves you.'

- (6) aqa:m-i        e:            a-d:-am:an-i  
2PRO-PL        1PRO        1ERG-REL-want/love-pl  
'You love me.'

- (7) Goti            y-ema:n            ekode  
Goti            1ERG-want/love    ekode  
'Goti loves Ekode.'

This work argues that the so-called relational morpheme is actually a reflex of a direct-inverse alignment system well known from American Indian languages such as Algonquian languages (Oxford 2014). And second, the *d:-* morpheme is actually *v* agreement, whereas person agreement is INFL agreement. Finally, I argue that impoverishment rules account for the person underspecification of *d:-*.

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<sup>3</sup> The *d:-* morpheme has been glossed as *theme* by Ceria & Sandalo (1995) and Sandalo (1997).

## 2 REL and internal argument raising

Kadiwéu does not have many adverbs. Most of the notions expressed via adverbs in languages such as English are expressed via predicates in this language, but there are at least three VP adverbs: *ejime* ‘perhaps’, *jaG* ‘already’, and *eG* ‘still’. These adverbs have exactly the same placement concerning all the data discussed below.

The adverbs *ejime* ‘perhaps’, *jaG* ‘already’, and *eG* ‘still’ cannot intervene between the verb and a third-person internal argument. However, they can occur between the verb and a fronted first or second-person internal argument. Some examples follow.<sup>4</sup>

- (8) exabigo      jaG                      y-ema:n              ekode  
 exabigo      already                      3ERG-want/love      Ekode  
 ‘Exabigo already loves Ecode.’
- (9) \*exabigo      y-ema:n                      jaG                      ekode  
 exabigo      3ERG-want/love              already                      ekode  
 ‘Exabigo already loves Ecode.’
- (10) \*exabigo      jaG              aqa:mi      Ga-d:-ema:n  
 exabigo      already      2PRO      2ABS-REL-want/love  
 ‘Exabigo already loves you.’
- (11) exabigo      aqa:mi      jaG      Ga-d:-em:an  
 exabigo      2PRO      already      2ABS-REL-want/love  
 ‘Exabigo already loves you.’

The fact that an adverb can intervene between an argument and the verb when a first or second-person internal argument is fronted (as in 11) is evidence for this argument’s dislocation to outside vP.

It is important to mention that while a first/second direct internal argument cannot ever be final, a third person internal argument can occupy a preverbal position if it undergoes contrastive focalization. Note, however, that a preverbal focused object does not trigger agreement and the inverse morpheme does not appear:

- (12) exabigo              ecode              y-ema:n  
 exabigo              ecode              3ERG-want/love  
 Exabigo loves Ecode (not somebody else).’

In spite of the fact that *d:-* is not marked and in spite of the fact that agreement is not triggered, one could still question whether a third person in contrastive focus occupies the same position as the internal arguments discussed above. But negation shows that they are not the same. Note in the examples below that whereas a NEG morpheme appears after a fronted first or second-person, it appears before a focused third-person:<sup>5</sup>

<sup>4</sup> The adverb *jaG* is subject to some phonological rules: /G/ is deleted before a word that begins with a consonant, and its vowel undergoes harmony if the following word begins with a vowel.

<sup>5</sup> The negation morpheme undergoes the same phonological rules as *jaG*.

(13) e:            aqa:mi        aG        Ga-d:-ema:n-i  
       1PRO        2PRO        NEG     2ABS-REL-love/want-PL  
       ‘I don’t love you’

(14) \*ecabigo    ekode    aG        y-ema:n  
       ecabigo    ekode    NEG     3ERG-love/want  
       ‘Ecabigo doesn’t love Ecode’

(15) ecabigo    aG        ekode        y-ema:n  
       Ecabigo    NEG     Ekode        3ERG-love/want  
       ‘Ecabigo doesn’t love Ecode’

That is, if we assume a NegP, the position of the inverted first and second-person objects is higher than NegP, whereas the position of the focused object is lower. This higher position triggers agreement, but the lower one does not. One can assume that a dislocated first or second-person internal argument moves to TP while a focused third-person remains inside vP.

Additional evidence for the claim that a focused object and a first or second-person internal argument are not in the same position comes from the fact that there is no complementary distribution between a pre-verbal pronoun and a focused third person:

(16) aqa:mi        l-bole                    j-ola-taGa-dom-i  
       2PRO-PL    3POSS-meat        1ERG-give-2OBL-APPL-PL  
       ‘I give the meat to you (not something else)’

Note that indirect arguments can be fronted as in (16). But the morpheme *d:-* appears exclusively when a direct internal argument has been dislocated.

I propose that *d:-* is agreement with an internal argument that is fronted to TP. On this view, TP has a double specifier position and both trigger agreement. Notice that a focused internal argument that arguably occupies a vP specifier position does not trigger agreement.

One could suggest that *d:-* is actually a functional category to whose specifier the internal argument has raised. But the fact that an adverb intervenes between the internal argument and the *d:-*-verb cluster shows that this is not the case.

In the next section I show additional structures that need *d:-*.

### 3 Other fronting structures

In the previous section, I argued that *d:-* shows up when there is an internal argument fronted to TP. In all the cases above, the fronted internal argument is first or second-person. This is because Kadiwéu shows an inverse system in which first and second persons are dislocated to TP and trigger agreement (see Sandalo 2009).

The morpheme *d:-* also appears with more traditional structures in which an internal argument is fronted (such as unaccusative verbs):

(17) e:            i-d:-aqag-Ga  
       1PRO    1ABS-REL-squat-PL  
       ‘We squat.’

The morpheme *d:-* shows up also with middle voice and with experiencer arguments of certain psych verbs. In these cases, there is a theme argument that is oblique (marked by an applicative in Kadiwéu):

(18) 1-am:oGo Ø-d:-acakon-te-wa n-apalite  
 3POSS-dust 3ABS-REL-crush-3OBL-APPL alienable-machete  
 ‘Flour was crushed by machete’

(19) i-d:-o:i-te-wa laqe:di  
 1ABS-REL-fear-3OBL-APPL snake  
 ‘He is afraid of snakes’

Belleti and Rizzi (1988) establish three classes of experiencer verbs in Italian in relation to the case an experiencer argument can take. For the first class, the *temere*-class, the experiencer takes the nominative case. The second class of verbs is the *preoccupare*-class, and the experiencer takes the accusative case. Finally, in the third class of psych verbs, the *piacere*-class, the experiencer arguments receive the dative case. Franco (2013) notes in Spanish an additional construction that singles out the theme as dative:

(20) Juani se divierte con Maria.  
 Juan CL amuse with Maria  
 ‘Juan has fun with Mary.’

Kadiwéu has some verbs that behave like the verbs pointed out by Franco. The theme is an oblique. Note that the experiencer argument is marked by *d:-*. Moreover, in Kadiwéu, the experiencer argument is absolutive, the same case as an object. Although further work is necessary, one can suppose that the theme has been generated as an internal argument and has moved to TP. So *d:-* is marked.

That is, there is plenty of descriptive evidence that *d:-* occurs if an internal argument is fronted to TP.

#### 4 Underspecified agreement

If *d:-* is indeed agreement, it agrees with very different persons. It is first-person in examples like (3) and third person in (19). How to group first and third persons, for instance, together?

The agreement morpheme that I propose gets the very same phonological form regardless of the person of the fronted internal argument.

Sandalo & Freitas (2014) noticed that Guarani has a more complex relational system. Guarani is a Tupi-Guaranian language spoken in the same areas as Kadiwéu is spoken. Guarani has a different relational morpheme that separates third-person arguments from the other arguments. So, the relational surfaces as *h-* or *r-*. Example (21) shows a third-person internal argument and the relational is *h-*, whereas (22) shows a non-third person argument and the relational is *r-*:

(21) che a-h-echa jaguar pe  
 1PRO 1SUBJ-REL-see dog the  
 ‘I see the dog.’

- (22) pe kuña che-**r**-echa  
 the woman 1OBJ-REL-see  
 ‘The woman sees me.’

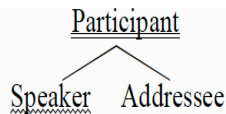
Sandalo & Freitas assume the Halle (1997) feature system and propose that *h*- is agreement with a [-participant] argument whereas *r*- marks agreement with a [+participant] argument.

- (23) Halle (1997)  
 a. [+Author,+Participant] = 1  
 b. [-Author,+Participant] = 2  
 c. [-Author,-Participant] = 3  
 d. [+Author,-Participant] = 1 exclusive

Therefore, in this view, the Guarani relational is underspecified for [author]. The relational of Kadiwéu is even more underspecified since it appears with any person internal argument.

Harley & Ritter (2002), among others, have argued that third-persons are non-person. They capture the insight by proposing a feature geometry tree for person features in which there is a node called Participant that has two dominated features: speaker (for first person) and addressee (for second person). Third person corresponds to the underspecification of the entire Participant node in this view. For them, third-person is person-less.

- (24) Harley & Ritter (2002)



Nevins (2007) argue that third-persons are not universally underspecified but there are rules that can derive person-less elements. Spanish, according to Nevins, has a rule of impoverishment of participant. In Spanish, two [-participant] adjacent elements trigger a dissimilative deletion rule and the most salient is deleted, generating a non-person clitic (Nevins 2007). The phenomenon discussed by Nevins can be seen in (25) and (26):

- (25) \*A Pedro, el premio, le lo dieron ayer.  
 to Pedro the prize 3DAT 3CL give yesterday  
 ‘To Peter, the prize, they gave it to him’

- (26) A Pedro, el premio, se lo dieron ayer.  
 to Pedro the prize IMP 3CL give yesterday  
 ‘To Peter, the prize, they gave it to him’

I propose that Kadiwéu is similar to Spanish in that Kadiwéu impoverishes two adjacent agreement markers. The agreement marker that refers to the internal argument is impoverished and the Participant node (if one accepts Harley & Ritter’s geometry) is delinked, generating a person-less agreement marker.

This generates what Rodrigues (1990:401) calls a relational morpheme: “...a relational prefix in transitive verbs refers to a 3rd person object”. In other words, he states that the relational is used in transitive verbs to refer to third person objects even when there is no third-person argument. In

my view, this is not an actual third-person agreement marker but rather a person-less agreement marker. It is like the impersonal clitic of Spanish in the sense that it does not carry any person feature and therefore occurs with any person internal argument.

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