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# The decline of Jê ergativity

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Abstract: In this paper I discuss the diachrony of case marking alignment in Jê languages (Brazil). Jê languages conform a medium-sized family with a rich pattern of case marking: an accusative-ergative alignment split, which is a by-product of nominalization strategies, and a split-S pattern in the accusative portion of the case marking split. The one exception is Panará, a polysynthetic language where case marking is uniformly ergative. In this paper I lay out empirical evidence for a general decline of ergative case marking in the Northern Jê branch, and I put forward that this is a consequence of a progressive shift in the functional load of case exponence towards clausal position, resulting in a decline of morphological case marking, namely a loss of morphological marking, and a conflation of ergative and nominative case marking. Lastly, I argue that in Panará a true alignment shift occurred, giving rise to a new sort of ergative case marking.

**Keywords:** syntax, case, ergativity, Amazonian languages

### 1. Introduction

The Jê languages form a modest-sized family of languages spoken in eastern Brazil. Generally considered split accusative-ergative languages, the analysis of case assignment in Jê reveals that ergative case marking is restricted to a "long form" of the verb, associated with embedded clauses and analysed as being nominal (Urban 1985; Salanova 2007; Nonato 2014; Bardagil 2018). A different, verbal form of the verb that is associated to main clauses correlates with a nominative-accusative case marking with a marked nominative in all Jê languages but one, Panará (Northern Jê).

Jê languages are traditionally divided into three branches (Davis 1966; Rodrigues 1999), namely Southern Jê, Central Jê, and Northern Jê, as shown in Figure (1)<sup>1</sup>.

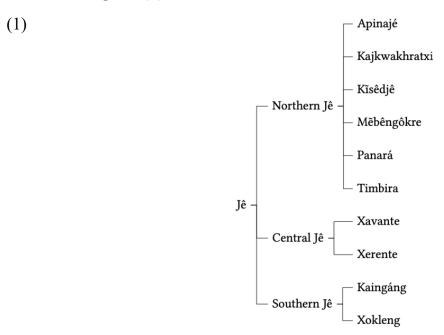


Figure 1. The Jê family.

This paper reports the results of a comparative study on the morphosyntactic correlates of case in the Jê family. The results show that the ergative case present in the family, associated with nominal clausal environments, is in the process of vanishing in the Northern Jê branch. Apinajé-Mēbêngôkre from the sub-branch, where Evidence morphological exponence of case has become restricted to case syncretism in pronominal paradigms, and from the Kîsêdjê-Kajkwakhratxi subbranch, where ergative case morphology has effectively collapsed with nominative case morphology, illustrates the decline of ergative morphology in Northern Jê languages. Inside of this branch, I argue that the process went one step further in Panará, where the ubiquitous ergative (Queixalós 2013) ancestral to the family vanished when nominalizations ceased to be the strategy for the formation of embedded clauses. This paper also aims to identify the shared innovations in the

A recent classification proposal however proposes to place Panará outside of the Northern Jê languages (Nikulin 2020). Kĩsêdjê was traditioanlly known as Suyá by westerners, and Kajkwakhratxi as Tapayuna.

domain of case marking in the Jê family as a contribution to the identification of more narrow subgroupings within the Northern branch.

### 1.1. Some preliminaries

One of the traits of the case systems of Jê languages is the templatic nature of the clause. There is a strict correspondence between the case that a nominal bears and the clausal positions in which it is licensed, typically with a position for a TAME (Tense Aspect Mood Evidentiality) particle, sketched in (2).

### (2) The Jê clause

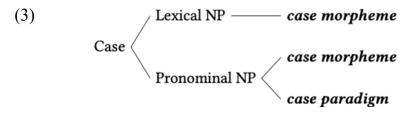
From right to left, we find the verb in its strictly final position preceded by bound pronominal clitics, corresponding to absolutive and accusative pronouns across the family<sup>2</sup>. To the left of this small verb complex is a preverbal area with its own internal configuration, going from left to right: a position for internal argument noun phrases, a position for strong pronouns (nominative or ergative), a position for TAME elements and, on the left edge of the clause, the position of noun phrases doubled for emphatic effects, in which pronouns surface case-marked for ergative or nominative.

The verb, virtually always the last element in the clause, is preceded by the internal argument, which is itself preceded by the external argument in the templatic clause structure. Case positions are a typical Jê trait, as is the existence of case-specific pronominal paradigms.

The aim of this paper is to examine the patterns of ergative case marking in the Jê family. For this purpose, I will focus on a triple distinction with regards to the morphosyntax of case marking. For lexical

<sup>&</sup>lt;sup>2</sup> In this paper I use "clitic" not as as a distinct morphosyntactic category, but as a descriptive cover term for a series of word-like elements that are phonologically attached to a host, including not only pronominal clitics but also modal clitics and adpositional clitics, in the case of Panará.

or non-pronominal noun phrases, I will document the presence or absence of a case-marking morpheme. For pronominal noun phrases, I will pay attention to whether a case-marking morpheme is present or absent, and also whether there are multiple series of case-dedicated pronoun paradigms. This is sketched in (3).



### 2. Case marking in the Jê languages

In this section I describe the overt manifestation of case in the Jê languages. I start by reviewing case marking in Southern Jê languages (2.1), and I continue with Central Jê (2.2), especially Xavante, working my way up to a description of case marking in Northern Jê languages (2.3), which includes a novel approach to agreement and case morphology in Panará (2.3.6). After this overview, I present a detailed summary of case marking in Jê languages, and discuss the consequences of this comparison for our knowledge of case in the Jê family<sup>3</sup>.

When reproducing data from secondary sources, I maintain the transcription provided by the original author. This can range from phonetic or phonological transcription to any version of existing or adapted orthography conventions for the language in question. Data collected by the author, for Panará and Měbêngôkre, are written in the current orthography of these languages.

Jê languages typically present a split intransitive pattern, in which unergative intransitive verbs tend to have nominative case marking on the single argument, and unaccusative verbs present instead absolutive marking. The reader should keep this in mind, as the weight of the paper is on the morphological marking of case, rather than on alignment patterns.

This section contains a condensed version of Bardagil (2018: ch. 3).

#### 2.1. Southern Jê

The Southern Jê branch is composed of two extant languages, Xokleng and Kaingang, and an extinct language, Ingain († early 20th century) (Rodrigues 1999; Van der Voort & Ribeiro 2010). In this section I present a picture of the morphosyntax of case for the Southern Jê languages Kaingang and Xokleng from the descriptions in the available sources.

In Southern Jê languages, active main clauses present a verbal form of the verb, and their arguments are marked for case on an accusative alignment. Stative main clauses present a long form of the verb, and the marking of arguments is ergative. Embedded clauses consistently present the same ergative properties of stative clauses.

As is common in the family, main clauses are strictly verb final in Southern Jê. Although there are a few elements that can occur in the postverbal position, these are very restricted. In Xokleng, they are limited to what Urban (1985) calls *postverbal predicating particles*, which encode aspect (active and stative for Urban), and the first and second person pronominal enclitics that appear between the verb and the aspectual particle when non-focus (4).

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(4) a. t\tilde{e} = n\tilde{u} = m\tilde{u}

go.ACT= 1SG.NOM= ACT

'I went.' (Urban 1985: 169)
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b. tẽ =mã =mũ
go.ACT= 2SG.NOM= ACT
'You went.' (Urban 1985: 169)
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c. ti pɛ̃nũ =nũ =mũ 3SG shoot= 1SG.NOM= ACT 'I shot him.' (Urban 1985: 170)

Subject noun phrases, on the other hand, either focus or non-focus, "can never occur in postverbal position" (Urban 1985) and occur instead preverbally, illustrated in (5a). Similarly, object noun phrases always appear in a preverbal position (5b). The same pattern also holds for Kaingang (6).

- (5) a. konnen të wu të mu man DEF 3SG.NOM go.ACT ACT 'The man went.' (Urban 1985: 170)
  - ti tõ ẽ kuyan tẽ kupe wã
    3sg his body wash stative
    'He is washing his body.' (Urban 1985: 172)
- - b. Ũnsĩ vỹ krẽkufár juján.
    boy NOM fish catch
    'The boy caught fish.' (Nascimento 2013: 7)

Noun phrases are marked for case in a pattern that correlates with the postverbal aspectual markers present in the clause. Active clauses present a verbal form of the verb, and the case marking pattern is nominative-accusative. Stative clauses present a nominal form of the verb that correlates with an ergative-absolutive case marking on the arguments.

The nominative marker never appears on the internal object of a transitive clause. As mentioned above, first and second person appear as pronominal enclitics when the noun phrase is not focused. When the first or second person nominative noun phrase is focused, the nominative marker behaves like the third person  $w\tilde{u}$  marker, appearing in the preverbal area.

Besides the nominative marker itself, in Xokleng a nominative pattern of case marking is also indexed on the paradigm of pronouns that cross-reference the arguments in the clause. Nominative arguments use a different pronominal paradigm from the one used with accusative arguments.

Contrary to the case marking pattern in active clauses, stative intransitive clauses lack both the nominative pronominal paradigm and the nominative marker on their single argument (7). Stative transitive clauses present a marker  $t\tilde{s}$  that presents an ergative pattern.

(7) ti tẽŋ wã.
3SG go.STV STV
'He went.' (Urban 1985: 170)

In Southern Jê, embedded clauses with stative aspect must present the nominal form of the verb, and the case marking follows an ergative pattern, as described by Urban (1985:179) for Xokleng (8). In Kaingang the same distribution is attested (9).

- (8) a. [ti tawi kũ ] mã ti weŋ tẽ
  3SG arrive.SG.STV CNJ 2SG.NOM 3SG see.ACT IMP
  'When he arrives, you are going to see him.' (Urban 1985: 179)
  - b. [ẽ tố uyol tãn kolkũ] tã tawin tế
     COREF. ERG tapir kill after 3SG.NOM arrive IMP
     'After he kills the tapir, he is going to arrive.' (Urban 1985: 179)
- (9) a. [gĩr vẽnhvãg mũ] vỹ prẽr
   boy run.LG ASP NOM shout
   'The boy that ran shouted.' (Tabosa & Santos 2013b: 302)
  - b. [pỹn tỹ mĩg prãg mũ] vỹ pẽngre tãnh snake ERG jaguar bite.LG ASP NOM chicken kill
    'The snake that bit a jaguar killed a chicken.' (Tabosa & Santos 2013b: 302)

Table 1 presents the two paradigms of pronouns in Xokleng. For Urban, Xokleng presents one set of pronouns and one set of nominative markers that inflect for person. Here I adopt Wiesemann's (1986) view of both systems as pronominal in nature, for the sake of cohesion with the descriptions in the rest of the chapter. The form called *absolutive* has the wider grammatical distribution, appearing as the object of adpositions and as the base that is marked with case morphology for accusative and ergative. Nominative pronouns show a different form.

	ABSOLUTIVE	NOMINATIVE	
1SG	<b>ẽ</b> ñ	nũ	
2SG	a	mã	
3SG.M	ti	tã wũ	
3SG.F	di	tã wũ	
1PL	ãŋ	nã	
2PL	ahã	Mã	
3PL	ວŋ	wũ	

Table 3. Xokleng pronoun paradigms.

Adapted from Urban (1985) and Gakran (2005).

Conversely, Kaingang exhibits just one pronominal paradigm. There is one invariable nominative marker  $v\tilde{y}$ , cognate of Xokleng third person  $w\tilde{u}$  (Wiesemann 1978: 211), which marks pronouns independently of their person features (10), as well as lexical noun phrases (11).

- (10) ?ẽg vỹ tapa kri nãgtĩ, fòg nỹ kỹmỹ.

  1PL NOM plank ADES lie white lie-down sleep

  'We sleep on bed, and non-Indians also sleep in beds.' (Wiesemann 1972: 104)
- (11) a. Kasor vỹ ter.

  dog NOM die.SG

  'The dog died.' (D'Angelis 2004: 74)
  - b. Kófa ag vỹ vãfy hynhan tĩ.old.man PL NOM braided make HAB'The old men are braiding baskets.' (D'Angelis 2004: 75)

#### 2.2. Central Jê

The Central branch of the Jê family is composed of two extant languages, Xavante and Xerente, and two extinct languages, Akroá († mid-19th century) and Xakriabá († 1864) (Rodrigues 1999; Van der Voort & Ribeiro 2010). The most complete description of a Central Jê language is Estevam (2011) for the morhosyntax of Xavante. The structure of Xavante sentences is similar to Southern Jê languages, with a quite strict verb final order and different paradigms of pronominal forms, some of which

cliticize on the verb (12). For these morphemes, second and third person present syncretism, which Estevam glosses as HTO "heterophoric," maintained here.

- (12) a. Wa ab?rui-pese.

  1.NOM be.annoyed-complete

  'I'm very annoyed.' (Estevam 2011: 187)
  - b. Wa tāma ti= ña.1.NOM 3SG.DAT 3.ABS= say'I said it to him.' (Estevam 2011: 174)
  - c. Te za ti= wĩ.

    HTO PROSP 3.ABS= kill

    'He's going to kill him.' (Estevam 2011: 174)

Unlike the Southern Jê languages Xokleng and Kaingang (§2.1), in Estevam's description of Xavante there is no case marking morphology on lexical noun phrases. The only morphological manifestation of case is in the choice of pronominal paradigms. In (13), the same first person pronoun cross-references the single argument of intransitive verbs and the external argument of transitive verbs, in a nominative pattern. A second paradigm cross-references the internal argument of transitive verbs and postpositional objects.

- (13) a. Wa wi.

  1 NOM arrive

  'I have arrived.' (Estevam 2011: 205)
  - b. Wa za ti= ö. 1NOM PROSP 3ACC= take 'I will take it.' (Estevam 2011: 177)

In contrast to the previous examples, in aorist, negative, imperative and embedded clauses a different case marking pattern emerges. The verb appears in a non-verbal form (Estevam 1009, 2011) and the case marking is not the nominative-accusative seen above, but rather a different pronominal system is used for the ergative argument (15a). Instead of the nominative paradigm to which first person wa belongs, we find an absolutive paradigm (first person  $\tilde{u}$ ) that cross-references the single

argument of intransitive verbs (14a) and the internal argument of transitive verbs. A separate paradigm of personal pronouns is used for the external argument of transitive verbs (15).

- (14) a. Ĩĩ= ñĩb?rui õ di. 1SG.ABS= be.upset NEG EXPL 'I'm not annoyed.' (Estevam 2011: 188)
  - b. (\*Wa) îî= nhipi ô di za.
    1 1SG.ABS= cook.NF NEG AUX FUT
    'I will not cook.' (Estevam 2009: 5)
- (15) a. Te za ti= ö.

  HTO HTO 3SG.ABS= take

  'He will take it.' (Estevam 2011: 177)
  - b. Te öri õ di za.

    3SG.ERG take.NF NEG EXPL PROSP

    'He won't take it.' (Estevam 2011: 177)

In these non-verbal contexts, besides the absolutive and nominative forms presented above there is a morpheme te that marks ergative arguments in a function similar to Xokleng ergative  $t\tilde{s}$  (§2.1).

- (16) a. Ni?wa **te** ?ru-zani mono õ di.

  PRN.INDF ERG retreat-rage ITER NEG EXPL

  'I don't get angry with anyone.' (Estevam 2011: 52)
  - b. Warī na Ø te āma sõrēme õ di. tobacco INS 1SG ERG 3.preverb refuse NEG EXPL 'I haven't refused the tobacco.' (Estevam 2011: 62)

This ergative morpheme can also mark lexical noun phrases other than pronouns (17).

(17) Wapsã **te** îî= ?rãmi õ di. dog ERG 1SG.ABS= frighten NEG EXPL 'The dog didn't frighten me.' (Estevam 2011: 227)

The three pronominal paradigms of Xavante are presented in table 2, adapted from the forms in Estevam (2009, 2011).

	ABSOLUTIVE	NOMINATIVE	ERGATIVE
1SG	ĩĩ <b>-</b>	wa-	Ø-te
2SG	a(i)-	te	Ø-Ø
2SG.HON	a-	aa-	a-te
3SG	ti-/Ø	te-	Ø-te
3SG.HON		tã wũ	da-te
3SG.GNR	da-	ta	da-te
1PL	wa-	wa-	wa-te
2PL	a(i)-	mã	Ø-te
.HON	a-	mã	a-te
3PL	ti-/Ø	tã wũ	te-te/Ø-te
3PL.HON		tã wũ	da-te
3PL.GNR	da-	tã wũ	da-te

Table 2. Xavante pronoun paradigms.

Adapted from Estevam (2009, 2011).

Estevam (2011: 36) indicates that emphatic pronouns can appear in a position to the very left of the clause, duplicating a noun phrase already present in the clause (18).

- (18) a. Wahā, ĩĩ= wasutu di. 1SG.EMPH 1SG.ABS= be.tired IMPRS 'Me, I'm tired.' (Estevam 2011: 40)
  - b. Ãhãta, wahã wa za îĩ= mreme.

    DEM 1SG.EMPH 1SG.NOM FUT 1SG.ABS= speak

    'Then, me, I'm going to speak.' (Estevam 2011: 359)

The leftmost pronoun appears in what Estevam considers an emphatic form, apparently built from a paradigm that appears to be similar to the nominative. This noun phrase is reportedly marked with a prosodic boundary that separates it from the rest of the clause.

However, there is a slightly more internal position, still to the left of the clause but not in the prosidically dislocated leftmost area. In this position, a nominative pronoun can duplicate the argument already cross-referenced with the absolutive clitic, as can be seen in (18). The fact that we see double exponence of the same participant is not unusual, as Jê cliticization is usually triggered by dislocation or null anaphora. What is

worth noting is that the pronoun that occurs to the left of the TAME position, future za in (18b), surfaces with nominative case rather than absolutive. We will see that leftward positions are also connected to specific cases in Northern Jê languages.

#### 2.3. Northern Jê

Northern Jê languages present a strong correlation between the alignment of case marking and the presence of long or short forms of verbs as predicate heads, a pattern that we have already seen in the other two branches of the family.

### 2.3.1. Měbêngôkre

This subsection summarizes case marking in Měbêngôkre. For an extended description and analysis of the morphology, syntax and semantics of Měbêngôkre, see Reis Silva (2001) and Salanova (2007). Měbêngôkre presents a well-behaved instance of the Jê case marking split connected to two different forms of the verb, and is a good representative of the generalized patterns observed in the Northern branch.

Morphological case in Mēbêngôkre is only visible on pronouns. That is to say, case allomorphy is only manifested as the choice of pronominal paradigm: nominative, accusative, ergative or absolutive. Turning our attention to main clauses first, in embedded clauses verbs usually appear in short form. In the presence of a short form verb, the single argument in intransitive clauses is marked with nominative case (19a). Transitive clauses also have their external argument marked with nominative case, and their internal argument with accusative case (19b).

- (19) a. Ba keke.
  1SG.NOM laugh.SH
  'I laugh.'
  - b. Ba a= pumu. 1SG.NOM 2SG.ACC= see.SH 'I see you.'

As indicated by the notation in (19), nominative pronouns are strong pronominal phrases that stand by themselves in the clause and are prosodically separate from the predicate head. Conversely, accusative pronouns are prosodically weak and cliticize on the predicate head.

Turning now to embedded clauses, they deviate in two ways from main clauses. First, verbs in embedded clauses appear in their long form. Second, the case marking pattern in embedded clauses is ergative-absolutive. The single argument of intransitive verbs is cross-referenced with an absolutive clitic, close in form to the accusative paradigm, and the internal argument of transitive verbs is indexed with the same absolutive paradigm. The external argument, however, is not marked with a nominative pronoun, but with a different pronoun paradigm that, therefore, corresponds to an ergative paradigm. This is illustrated in (20).

- (20) a. [I= keket ] kêt. 1SG.ABS= laugh.LG NEG 'I don't laugh.'
  - b. [Ije a= pumuj ] kêt. 1SG.ERG 2SG.ABS= see.LG NEG 'I don't see you.'
  - c. Ba [ kute tep janhīnh ] pumu. 1SG.NOM 3SG.ERG fish fishing.LG see.SH 'I saw him catch fish.'

The paradigms for Mẽbêngôkre pronouns are given in table 3. Some syncretism is observed for first, second and third persons across the case paradigms. Absolutive and accusative are only distinguished in the third person, /ku/ for accusative case and /Ø/ for absolutive.

	NOMINATIVE	ACCUSATIVE	ABSOLUTIVE	ERGATIVE
1s <sub>G</sub>	ba	i	i	ije
2sg	ga	a	a	aje
3sg	Ø	ku	Ø	kute
1sg.incl	gu	(gu) ba	(gu) ba	gu baje
1PL	ba mẽ	mẽ i	mẽ i	mẽ ije
2 <sub>PL</sub>	ga mẽ	mẽ a	mẽ a	mẽ aje
3PL	mẽ	mẽ ku	mẽ	mẽ kute
1PL.INCL	gu mẽ	(gu) mẽ ba	(gu) mẽ ba	(gu) mẽ baje

Table 3: Mēbêngôkre pronoun paradigms.

Adapted from Reis Silva (2001) and Salanova (2007).

Main clauses with long form verbs are described as having a very specific meaning associated with them, namely "resultatives for verbs that involve a change of state; existential perfects; habituals or generics for verbs that denote plural activities" (Salanova 2017). The following example illustrates that, in addition to embedded clauses, main clauses can also appear with a long form verb and, when they do (21b), they also present ergative case marking.

- (21) a. Krwỳj jã nẽ Ø mop krẽ.

  parakeet DEM NFUT 3SG.NOM malanga eat.SH

  'This parakeet ate the malanga.' (Salanova 2007: 105)
  - Krwỳj jã nẽ mop krẽn.
     parakeet DEM NFUT 3SG.ERG malanga eat.LG
     'This parakeet has eaten malanga (once in his life).' (Salanova 2007: 105)

# 2.3.2. Apinajé

This section covers case marking in Apinajé, considered to be the closest language to Mẽbêngôkre. Apinajé morphosyntax was first described by Ham (1961), although most of the data in this section are taken from Oliveira (2005).

Apinajé shows the verb-finality restriction typical of Jê languages that we have seen so far. The case marking morphology of Apinajé is also very similar to the Northern Jê pattern that Mẽbêngôkre exhibits (§2.3.1). In main clauses, a nominative pronominal paradigm cross-references both the single argument of intransitive verbs and the external argument of

transitive verbs (22a-b), with a series of accusative bound pronouns that index the internal object of transitive clauses (22c).

- (22) a. Na pa prĩgʌk-ti ən nipeč.
  real 1SG.NOM bacuri-AUG sweet make
  'I made some bacuri jam.' (Oliveira 2005: 218)
  - b. Pa mã tẽ.1SG.NOM away go'I'm going away.' (Ham 1961: 17)
  - c. Ic= pumu. 1SG.ACC= see 'Look at me.' (Ham 1961: 23)

Unlike pronouns, lexical noun phrases are not marked for case (23). Similarly to Mēbêngôkre, in Apinajé case only has morphological exponence on pronouns.

- (23) a. Na kop tem.

  REAL glass fall

  'The glass fell.' (Oliveira 2005: 369)
  - b. Na rop i= nja.

    REAL dog 1SG.ACC= bite

    'The dog bit me.' (Oliveira 2005: 382)

Ergative case is obligatorily present in embedded clauses in Apinajé (Oliveira 2005: 178). The external argument of a transitive verb is marked with a morpheme  $t\varepsilon$  on strong pronouns indexing speech act participants, and with a morpheme k > t on third persons ([apn-erg]).

- a. Na pa [ic- tε ra a mɔ̃ i= jabatpẽr] ket.
   REAL 1NOM 1 ERG PRF 2 DAT 1= think.about NEG
   'I don't think about you anymore.' (Oliveira 2005: 178)
  - b. num [ mẽ kɔt mẽ ɔ'bun ɔ ɔ̃]= 'čwən ja... then PL 3ERG PL 3SG.SEE.NF INS LOC= NMLZ DEF 'Then, those who were watching them, ...' (Oliveira 2005: 87)

Oliveira (2005) also shows instances of ergativity in main clauses. These are all cases in which the verb is in the non-finite form (25). As in

Mēbêngôkre, the connection between case marking alignment and clause type is also closely connected with the form of the verb.

(25) Ic- tε a= pubuni.
1- ERG 2SG.ABS= see.NF
'I know you.' (Oliveira 2005: 237)

The reconstruction in table 4 of the pronominal paradigms of Apinajé based on Ham (1961) and Oliveira (2005) shows that the pattern is very similar to that of Měbêngôkre, a system with different paradigms for accusative and absolutive, plus a nominative and an ergative.

	NOMINATIVE	ACCUSATIVE	ABSOLUTIVE	ERGATIVE
1sg	pa	i(C)	i(C)	icte
2sg	ka	a	a	ajε
3sg	Ø	ku	Ø	Ø

Table 4. Apinajé pronoun paradigms. Adapted from Ham (1961) and Oliveira (2005).

## 2.3.3. Kîsêdjê

This section presents an overview of the case marking patterns in Kĩsêdjê. The data discussed below are taken from Santos (1997) and Nonato (2014). Like the Northern Jê languages Mẽbêngôkre and Apinajé, in main clauses (26-27), a strong pronoun paradigm cross-references the single argument of intransitive verbs and the external argument of transitive verbs. A different bound pronoun cross-references the internal argument of transitive verbs (27).

- (26) hen 'wa 'twə
  FACT 1SG.NOM bathe
  'I took a bath.' (Santos 1997: 47)
- (27) hẽn 'wa 'pen kaso'so
  FACT 1SG.NOM mangaba suck
  'I sucked on a mangaba.' (Santos 1997: 110)

Kîsêdjê differs from Mēbêngôkre and Apinajé in that lexical noun phrases are marked with a dedicated nominative case morpheme ra (28).

- (28) a. Ø I= nã ra mbârâ.

  FACT 1SG= mother NOM cry

  'My mother cried.' (Nonato 2014: 3)
  - b. Hen Ø i= na (\*ra) mu. FACT 3SG.NOM 1SG= mother NOM see 'He saw my mother.' (Nonato 2014: 104)

In embedded clauses, the single argument of intransitive verbs and the internal argument of transitive verbs share a pronominal paradigm, and when cross-referenced by lexical noun phrases these appear morphologically unmarked (29-30). The external argument of transitive verbs appears marked for ergative case with pronominal arguments by a dedicated paradigm of strong pronouns (30). Nominative and accusative pronouns are ungrammatical in long form environments.

- (29) a. Ø Wa [a= them] mu. FUT 1SG.NOM 2SG.ABS= go.NF see 'I will see him go.' (Nonato 2014: 4)
  - b. \*Ø Wa [ ka them ] mu. FUT 1SG.NOM 2SG.NOM go.NF see Intended: 'I will see him go.' (Nonato 2014: 4)
- (30) a. Ø Ka [ire Ø= khuru ] mũ.

  FUT 2SG.NOM 1SG.ERG 3SG.ABS= eat.NF see

  'You are going to see me eat it.' (Nonato 2014: 4)
  - b. \*Ø Ka [ khu(ru) ] mũ.

    FUT 2SG.NOM 1SG.NOM 3SG.ACC eat.NF see

    Intended: 'You are going to see me eat it.' (Nonato 2014: 4)

With lexical noun phrases, however, upon closer examination of examples in Nonato (2014) and Santos (1997), there appears to be a previously unnattested switch back to a nominative-accusative alignment. The ergative morpheme re seen in ergative pronouns is in free variation with the nominative case marker ra (Nonato 2014: 104), and the alignment follows the same accusative pattern observed in short-form verbs (31).

- (31) a. ['bi'āka ra 'nōrō] 'kereBianka sleep.'Bianka didn't sleep.' (Santos 1997: 72)
  - b. [i're hwi'ngro janthoro] 'kere 1SG.ERG firewood hang.LG NEG 'I didn't hang the firewood.' (Santos 1997: 56)
  - c. Hen Ø [ i= nã {re/ra /\*Ø } Ø= khuru ] kham s= omu. FACT 3SG.NOM 1SG.NOM mother ERG NOM 3SG.ABS= eat.LG INES 3SG.ABS= see.SH 'He/she saw my mother eating.' (Nonato 2014: 104)

In Kîsêdjê, case is indexed on pronouns by means of four different paradigms, presented in table 5.

	ABSOLUTIVE	ACCUSATIVE	NOMINATIVE	ERGATIVE
1sg	i	i	wa	'ire
1 INCL	wa	wa	ku	'kware
2sg	a	a	ka	'kare
3sg	s/Ø	khu	Ø	'kôre

Table 5. Kîsêdjê pronoun paradigms. Adapted from Nonato (2014).

The exponence of case marking in Kĩsêdjê falls well within the tendencies seen so far in Jê languages in general, and Northern Jê in particular. Like in Mẽbêngôkre and Apinajé, the Kĩsêdjê accusative and absolutive clitics are differentiated in the third person. Unlike in Mẽbêngôkre and Apinajé, however, the alignment of case marking on lexical noun phrases is consistently accusative in clauses with long form verbs, considered non-finite forms, unlike that of pronouns, which present ergative alignment. This supposes a deviation from the Jê case marking tendency and introduces a hierarchy-based split within the split.

# 2.3.4. Kajkwakhratxi

A very close relative of Kĩsêdjê, Kajkwakhratxi (Tapayuna) is spoken in the Brazilian state of Mato Grosso. Kajkwakhratxi morphosyntax is described by Camargo (2015). It is a head-final language in which no participant phrase can appear in the post-verbal position. Kajkwakhratxi main clauses with short-form verbs present two pronominal paradigms in a nominative-accusative alignment. The internal object in transitive clauses is cross-referenced with an accusative pronominal clitic (32), while both the single argument of intransitive clauses and the external argument of transitive clauses are cross-referenced with a nominative strong pronoun paradigm.

- (32) a. nira -t i= wũ

  DET TOP 1SG.ACC= see.SH

  'He saw me.' (Camargo 2015: 110)
  - b. tew na wa ku= khrê fish TOP 1SG.NOM 3SG.ACC= eat.SH 'I ate *fish*.' (Camargo 2015: 170)

In verbal main clauses, lexical noun phrases are marked with the morpheme ra when they appear as the argument of intransitive clauses or the external argument of transitive clauses (33). Thus, ra acts as a nominative case marker and is consistent with the accusative alignment of the exponence of case on pronouns in short-verb clauses.

- (33) a. Nayara ra row kura
  Nayara NOM dog hit.SH
  'Nayara hit the dog.' (Camargo 2015: 192)
  - b. witsi ra thi caiman NOM die.SH 'The caiman died.' (Camargo 2015:85)

In Kajkwakhratxi, the nominal long form of the verb is obligatory in clauses with future tense, progressive aspect, and negation, clause-selecting predicates also in Kĩsêdjê (tense, aspect and negation) that require the verb to appear in its long form.

In clauses with long nominal verbs, the single argument of intransitive verbs and the internal argument of transitive verbs are cross-referenced with absolutive paradigm clitics (34), identical to accusative but for third person being  $/\emptyset$ / instead of /ku/ (34b)<sup>4</sup>.

```
(34) a. i= thew ket wa 
1sg.abs= go.lg neg fut 
'I don't go.' (Camargo 2015: 142)
```

b. itha -t Ø= wot kere

DEM TOP 3SG.ABS= arrive.LG NEG

'He didn't arrive.' (Camargo 2015: 126)

When a pronoun appears as the external argument of a transitive verb in its long form, it is marked with a  $r\varepsilon$  ergative morpheme that Camargo (2015) identifies as a postposition and attaches on the pronominal paradigm used in the accusative (35).

- (35) a. kukwəj na wewi ku **re** kere wa monkey TOP man 3SG.ERG EAT.LG FUT 'The monkey, the man will eat it.' (Camargo 2015: 122)
  - b. i re wîtʃi wîrî kere1SG.ERG caiman kill.LG NEG'I didn't kill a caiman.' (Camargo 2015: 191)

However, if an argument in a clause with a nominal long-form verb is not pronominal but instead a lexical noun phrase, the case marking is different. In that context, the single argument of intransitive verbs and the external argument of transitive verbs are both marked with the same nominative morpheme *ra* that marks nominative case on lexical noun phrases in short-verb clauses (36). That is, just as Kĩsêdjê, nominal verb clauses in Kajkwakhratxi have a hierarchical split case system, in which pronominals are marked for ergative and absolutive case, but nouns are marked for nominative and accusative.

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Rather than a classic short—long alternation, the verb *wat* 'to arrive' has a different form *wot* that is obligatory in future tense, progressive aspect and negation (Camargo 2015: 126).

- (36) a. Nayara **ra** kĩ kerere
  Nayara NOM happy NEG
  'Nayara is not happy.' (Camargo 2015: 80)
  - b. në pî hrō **ra** kuthã ku wã kawërë kere and then wife NOM ADVERS? 3SG DAT speak.LG NEG 'But his wife did't answer anything.' (Camargo 2015: 213)
  - c. në ni hwi ra ajtarëj kere and then tree NOM say NEG 'But the trees didn't say anything.' (Camargo 2015: 213)

Kajkwakhratxi pronouns present four different paradigms, summarized in table 6.

	ABSOLUTIVE	ACCUSATIVE	NOMINATIVE	ERGATIVE
1s <sub>G</sub>	i	i	wa	i re
1INCL	wa	wa	kowa	wa re
1EXCL	adʒi	adʒi	ajwa	adzi re
2sg	a	a	ka	a re
3sg	Ø	ku	Ø	ku re

Table 6. Kajkwakhratxi pronoun paradigms. Adapted from Camargo (2015).

In spite of undeniable similarities with Kĩsêdjê, the specific exponents of case in Kajkwakhratxi presents some idiosyncracies. Ergative pronouns are derived analytically, consisting of the accusative paradigm with the addition of an ergative morpheme  $r\varepsilon$ . Like in Kĩsêdjê, nominative case is also marked by a dedicated morpheme, which appears not only on pronouns but also on lexical noun phrases. As seen for Kĩsêdjê, the case marking in nominal long verb environments presents a split between pronouns and nouns.

#### 2.3.5. Timbira

In this section we turn our attention to the case marking patterns of Timbira. Even though the case system of the Timbira dialects presents clear similarities to the Northern Jê pattern that we examined for Měbêngôkre (§2.3.1), Apinajé (§2.3.2) and Kĩsêdjê (§2.3.3), there are also some differences that we will find again in Panará (§2.3.6).

The history of contact of the Timbira was lengthy and intermittent. Some Timbira groups contacted Western society in the 17th century, while the Parkatêjê underwent contact as recently as 1955 (ISA 2019). There are currently six peoples that consider themselves distinct within the Timbira group: Canela Apanyekrá, Canela Ramkokamekrá, Gavião Parkatêjê, Gavião Pykopjê, Krahô and Krinkatí. They live in the Brazilian states of Maranhão, Pará and Tocantins, in several indigenous lands. The morphosyntax of the Canela Apanyekrá variety was studied by Alves (2004), who subsequently researched diachronic aspects of the language with Spike Gildea. This section draws information from Alves (2004, 2010) and Alves & Gildea (2020). Glosses are adapted to the analysis of case marking explored here.

Main clauses present verbs in a short form, and case is indexed in the pronominal paradigm that is used. Nominative pronouns cross-reference the single arguments of intransitive verbs and the external arguments of transitive verbs (37). A separate accusative paradigm cross-references the internal object of transitive verbs (38).

```
(37) a. wa ma mɔ̃
1SG.NOM DIR go
'I'm going.' (Alves 2004: 67)
```

b. ka krε2SG.NOM sing'You sing/are singing.' (Alves 2010: 453)

```
(38) a. kahāj a= pə
woman 2SG.ACC= carry
'The woman carries you.' (Alves 2010: 453)
```

```
b. ka i= pupu
2SG.NOM 1SG.ACC= see
'You see me.' (Alves 2010: 452)
```

In a clause where the verb appears in the non-finite long form, case marking has an ergative pattern. Besides the rather straightforward cases of subordination, in Timbira the recent past also causes the verb to appear in its non-finite form and, consequently, the case marking pattern is ergative (39b).

- (39) a. wa kwər ke
  1SG.NOM manioc grate.SH
  'I'm grating manioc.' (Alves 2004: 21)
  - b. i te kwər ken 1SG.ABS ERG manioc grate.LG 'I grated manioc.' (Alves 2004: 21)

In the context of nominal long form verbs, single arguments of transitive verbs and internal arguments of transitive verbs pattern together in being cross-referenced with an absolutive pronominal clitic paradigm, and as lexical noun phrases they appear in a morphologically unmarked form. External arguments of transitive verbs are marked with an ergative morpheme  $t\varepsilon$ . In Timbira, the ergative morpheme marks lexical noun phrases as well as pronouns.

- (40) a. i= tfwər 1SG.ABS= bathe.NF 'I bathed.' (Alves 2010: 471)
  - b. ta tε kuhɨ pĩr.
    rain ERG fire extinguish.NF
    'The rain extinguished the fire.' (Alves 2004: 108)

Timbira has three different case-sensitive pronominal paradigms. Absolutive and accusative bound pronouns are distinguished in the third person, like they are in Měbêngôkre (table 3) and Apinajé (table 4). However, Timbira lacks a dedicated pronominal paradigm for ergative case. Instead, ergative case is marked on noun phrases with a dedicated morpheme  $t\varepsilon$ . In the case of pronominal ergatives, ergative morphology is affixed to a pronominal base that is identical to the absolutive pronoun in a predictable way.

	ABSOLUTIVE	ACCUSATIVE	NOMINATIVE
1sg	i	i	wa
1INCL	pa(?)	pa(?)	ku
2sg	a	a	ka
3sg	i(?)/h/Ø	ku	ke/Ø

Table 7. Timbira (Apanyekrá) pronoun paradigms. Adapted from Alves (2004, 2010).

Timbira presents a variation on the Northern Jê patterns of case marking. Accusative and ergative alignments are tied to the presence of finite and non-finite verbs in the clause, as is the norm in the entire family. In accusative alignment, case is marked on the pronominal paradigm. In ergative alignment, however, case marking resembles that of Kîsêdjê: there is an independent ergative morpheme that marks lexical noun phrases as well as pronouns. Unlike Kîsêdjê and Kajkwakhratxi, Timbira has no exponent of nominative case besides pronominal person-case syncretism.

Besides the ergative marker, the pronominal paradigms that cross-reference arguments also appear in an ergative pattern. The absolutive paradigm, with third person *i?*, doubles both the single argument of intransitive verbs and the internal argument of transitive verbs. In contrast, the external argument of transitive verbs is cross-referenced with the accusative paradigm, with third person *ku*.

#### 2.3.6. Panará

The case marking morphology of Panará was initially described by Dourado (2001, 2003, 2004). In what follows we will see that the characteristics of Panará morphological case depart from what we have seen so far. Unlike in all the other nine Jê languages, in Panará an ergative case marking is consistently present regardless of both clause type and verb form.

As opposed to the Jê languages previously examined in this chapter, Panará clauses are not subject to a constraint on verb-finality. The postverbal position is available to the single argument of intransitive verbs and the internal and external arguments of transitive verbs, with no prosodic marking of dislocation. In this section I offer a description of the exponence of case in Panará. For a detailed description of case exponence on the clitic series in the verbal complex, see Bardagil (2018).

In Panará, the case marking of core arguments is ergative. The single argument of an intransitive clause (*ka* in 41a) and the internal argument of a transitive clause (*inkje* in 41b) appear in a morphologically unmarked

form. As for the external argument of a transitive clause (ka in 41b), it appears with a  $/\tilde{e}/h\tilde{e}$  morpheme that marks ergative case.

- (41) a. Ka jy= a= tẽ. 2SG INTR= 2ABS= fall 'You fell down.'
  - b. Ka he ka= ra= sisyri inkje. 2SG ERG 2ERG= 1ABS= hit 1SG 'You hit me.'

Unlike the previously examined Northern Jê languages, Panará free pronouns are impervious to case. There is a single paradigm of prosodically strong pronouns (table 8) that remain morphologically unmarked in absolutive case and receive an additional ergative morpheme in ergative case. As seen in table 8, these pronouns do not present number syncretism but are instead inflected for dual and plural number by means of a suffix (*cf.* Bardagil, 2020).

The case marking pattern seen for pronouns in (41) also applies to lexical noun phrases (42), with an unmarked absolutive and an ergative marked with  $h\tilde{e}$ .

- (42) a. Jy= Ø= pôô kwakriti.

  INTR= 3SG.ABS= arrive spider-monkey

  'The spider-monkey arrived.'
  - b. Joopy **hē** ti= Ø= krē swasīrā.

    jaguar ERG 3SG.ERG= 3SG.ABS= eat w.l.peccary

    'The jaguar ate a white-lipped peccary.'

Marking of ergative case in transitive clauses is obligatory. With null anaphora, the case of the dropped noun phrase is recoverable from the pronominal clitics on the predicate head. In the case of nominals morphologically marked for dual or plural number, ergative case is not indexed with  $h\tilde{e}$ . Instead, an allomorph of number suffixes that indexes ergative case is used. The absolutive or morphologically unmarked forms are -ra 'dual' and  $-m\tilde{e}ra$  'plural' (43a). When number suffixes appear on an ergative argument, rather than \*- $(m\tilde{e})ra$   $h\tilde{e}$  they surface as  $-(m\tilde{e})ra$   $[(m\tilde{e})ra\eta]$  (43b).

- (43) a. Swankja-ra-mēra jy= ra= pôô. ancient-NMLZ-PL INTR= 3PL.ABS= arrive 'The ancients arrived.'
  - b. Swankja-ra-mērân nê= Ø= pari kjyti. ancient-NMLZ-PL.ERG 3PL.ERG= 3SG.ABS= kill.PLAC tapir 'The ancients killed tapir.'

In coordinated noun phrases, the ergative morpheme  $h\tilde{e}$  appears in a receiving-type unbalanced coordination construction. It attaches only once, at the end of the last coordinate term (44).

(44) Perankô mẽ Mĩkre hẽ ti= mẽ= Ø= kre kwy.
Perankô and Mĩkre ERG 3SG.ERG= DU= 3SG.ABS= cook manioc
'Perankô and Mĩkre cooked manioc.'

The case marking of arguments in Panará embedded clauses is identical to that of main clauses. The clitics that cross-reference the ergative and absolutive arguments, also present when argument noun phrases are omitted with null anaphora, display the same case value that is morphologically marked on the noun phrases.

The examples in (45) illustrate the case marking alignment in relative clauses, identical to that of main clauses.

- (45) a. [Patty hẽ ti= Ø= pĩra swasĩrã] rê= Ø= ku= krẽ.

  Patty ERG 3SG.ERG= 3SG.ABS= kill peccary 1SG.ERG= 3SG.ABS= chew eat 'I ate the peccary that Patty killed.'
  - b. Ka hẽ ka= ra= pêê= Ø= pyri [issê rê= Ø= wajãra]. 2SG ERG 2SG.ERG= 1SG.ABS= MAL 3SG.ABS take bow 1SG.ERG= 3SG.ABS= make 'You stole from me the bow that I made.'

In complement clauses, which occupy the position of the internal argument in perception predicates, case marking is also ergative-absolutive (46).

- (46) a. Rê= s= ânpun [tep-antê jy= py= Ø= too] 1SG.ERG= 3SG.ABS= see FISH-NMLZ INTR= DIR= 3SG.ABS= leave 'I saw the fisherman go away.'
  - b. Rê= s= ânpun [pjoja hẽ ti= Ø= kuri kwansôpy].

    1SG.ERG= 3SG.ABS= see pacu ERG 3SG.ERG= 3SG.ABS= eat worm

    'I saw the pacu<sup>5</sup> eat a worm.'

Unlike the nine Jê languages seen previously, Panará arguments always receive ergative-absolutive case marking. In embedded clauses ergative is marked with dedicated case morphology, while absolutive is unmarked—just like in main clauses. From a Jêologist perspective, what is surprising is not that Panará embedded clauses have an ergative case marking, but rather that this is also the case in main clauses. This is one crucial characteristic that sets Panará apart from the rest of the languages in the family.

## 3. Morphosyntactic correlates of ergative case

One of the traits of the case systems of Jê languages is the templatic nature of the clause. There is a strict correspondence between the case that a nominal bears and the clausal positions in which it can appear. The Jê clausal configuration in (2) above is manifestly different from the non-verb-final structure of Panará clauses. However, in the classic Jê clause there is a suggestive correlate to the internal structure of the Panará verb complex, sketched in (47).

The Panará verb complex is a verb-final domain, just like the Jê clause. It presents absolutive pronominal clitics immediately to the left of the verb, preceded by a series of elements (incorporated postpositions, directionals, reflexives, among others), in turn preceded by the ergative and nominative pronominal clitics, to the left of which are also TAME morphemes, namely the modal clitics.

<sup>&</sup>lt;sup>5</sup> Several species of sweet-water fish that belong to the *Serrasalmidae* family.

Outside of that position there is a preverbal area, paired with a postverbal area also outside the scope of the verb package, where argument noun phrases appear and in which they are more often than not pro-dropped. In Panará, noun phrases appear to correspond to the most removed position in the Jê clausal template, the emphatic position where noun phrases always surface case-marked. Consider the sentences in (48).

- (48) a. Kaingang ti **tɔ̃** ãmɛ̃n lo tɛ̃n wã 3SG ERG path along go.STV STV 'He went along the path.' (Urban 1985: 172)
  - b. Xavante
    Ãhãta, wahã wa za ĩĩ= mreme.
    DEM 1SG.EMPH 1SG.NOM PROSP 1SG.ABS= speak
    'Then, me, I'm going to speak.' (Estevam 2011: 359)
  - c. Mēbêngôkre
    Ga në ba a= pumũ.
    2SG.NOM NFUT 1SG.NOM 2SG.ACC= see
    'I saw you.'
  - d. Panará
    (Inkjē hē) rê= k= ânpun (ka).
    1SG ERG 1SG.ERG= 2SG.ABS= SEE 2SG
    'I saw you.'

In Panará (48d) the pre- and postverbal positions are not assigned to either one of the arguments. In the language, we encounter verb-initial, verb-medial and verb-final configurations very often in both collected texts and during participant observation. The postverbal position is not a dedicated one, it appears to be a default position for argument noun phrases. As for the preverbal position, it is clearly not associated with any specific argument. It is more likely sensitive to discourse structure and information packaging. As it falls beyond the scope of this dissertation, Panará information structure is left as a matter to be investigated in further work.

One of the shared characteristics of all Jê languages, including Panará, is the fact that ergative case is consistently marked with more

morphological material than other cases, at least its competitor absolutive case, which is never marked. The various correlates of ergative case in Jê languages are quite diverse. Ergative case has different morphological exponents across the family, and the positioning of the ergative noun phrase in the clause is also subject to certain restrictions. These features are listed in (49).

- (49) *Correlates of Jê ergative case* 
  - Dedicated ergative pronoun
  - Ergative-marking morpheme
  - Templatic case positions in the clause
  - Accusative/ergative case-marking split

These patterns, summarized for all Jê languages in table 9, are each individually attested in at least one of the ten languages in the family.

	Pronoun	MORPHEME	CLAUSE ORDER	CASE SPLIT
Kaingang	X	✓	✓	✓
Xokleng	X	✓	✓	✓
Xavante	<b>✓</b>	<b>✓</b>	✓	<b>✓</b>
Xerente	<b>✓</b>	✓	✓	<b>✓</b>
Mẽbêngôkre	<b>✓</b>	Х	✓	<b>✓</b>
Apinajé	<b>✓</b>	X	✓	✓
Kĩsêdjê	X	$(\mathbf{X})$	✓	✓
Kaikwakhratxi	X	<b>(X</b> )	✓	✓
Timbira	X	<b>~</b>	✓	✓
Panará	X	✓	X	Х

Table 9. Exponents of ergative case in Jê languages.

The table above displays the presence or absence of ergative case syncretism in the pronominal paradigm, the existence of an independent ergative case-marking morpheme, and whether clause order assigns a dedicated position to the ergative constituent, as established in (3) above.

As discussed in §2.3.6, Panará is the only Jê language that marks ergative case uniformly, regardless of clause type and verb form. It is also the only language in which argument noun phrases are not positioned in the clause according to their case. Whereas in the rest of the family the

immediately preverbal position is shared by absolutive or accusative lexical noun phrases and the absolutive or accusative pronouns, the distribution of lexical and pronominal noun phrases in the clause does not follow from their case marking.

Ergative case morphology presents an interesting distribution. From a diachronic perspective, the availability of an autonomous ergative-marking morpheme is extremely widespread. Two languages that stand out particularly are Měbêngôkre and Apinajé. Both languages have dedicated ergative pronominal paradigms and lack an ergative morpheme that marks lexical noun phrases for case. This contrasts with the general pattern of marking every ergative noun phrase with an ergative morpheme, observed in the Southern, Central and Northern branches.

Finally, as seen earlier in this section, Panará is an atypical Jê language in that clauses have much less rigidity. Not only is the verb not restricted to a clause-final position, but case-marked noun phrases are also not bound to clausal positions tied to a specific case.

## 4. Decline and death of Jê ergative case

In this section I argue that the insights on the exponence of case in Jê languages gained in the previous sections support two hypotheses: (a) nominal ergative case is ancestral in the Jê family, and (b) Jê ergative case is in the process of being lost in the Northern branch.

As seen earlier, the most reliable correlate of ergative case in Jê languages, minus Panará, is verb form. The short, verbal form of the verb requires nominative-accusative alignment in the clause, while the long, nominal form makes ergative-absolutive case marking obligatory. Outside of the clausal domain of a long verb, ergative-absolutive case marking is not licensed. The generalization, already pointed out by Salanova (2007), is that nounness is the source of ergative case. The case marking pattern on arguments of non-verbal predicates reinforces the notion that nominal environments are the source of ergative case in Měbêngôkre. In predicates headed by both nouns and adjectives, the selected argument is marked for

absolutive case instead of nominative (50), including inalienable possession (51).

- (50) a. I= pri-re. 1SG.ABS= child-DIM 'When I was a child.'
  - b. Mẽ i= kukama-re 'òr tẽ.
     PL 1ABS= forebear-DIM to come
     'He came to our forebears.' (Stout & Thomson 1971: 251)
- (51) a. I= prõ. 1SG.ABS= wife 'My wife.'
  - b. A= pro. 2SG.ABS =wife 'Your wife.'
  - c. Ø= pro. 3SG.ABS= wife 'His wife.'

Thus, nominals pattern with long verbs in their case marking properties and not with short verbs, which are not nominal but fully verbal and finite, and correlate with accusative case marking. For the present discussion it is not relevant to determine whether Jê long verbs are inflectable nominal forms (similar to participles or gerunds) or nominalizations generated by a derivational process. What is relevant is that they are nominal forms.

Jê ergativity is an instance of *ubiquitous ergativity* (Queixalós 2013: 11), namely a series of ergative-absolutive alignment patterns that are hugely pervasive crosslinguistically in specific morphosyntactic contexts, independently of the alignment that is observed in the organization of the clause in a given language. Among those is the presence of an ergative-absolutive alignment being triggered by a nominal predicate, which is common in the world's languages (Gildea 1997), including the alignment of nominal predicates in the Indo-European family (Alexiadou 2001). Queixalós points out that, as a predictable alignment pattern, ubiquitous ergativity in contexts such as nominal predicates is to an extent unrelated

to the alignment of other, more canonical areas of a given language's syntax.

In light of the case marking patterns in the Jê languages examined in sections 2 and 3, Jê ergative case stands as an instance of ubiquous ergativity: it is a morphological case received by the ergative argument in the presence of a nominal form of the verb. Panará aside, Jê languages do not present ergative case in non-nominal clausal contexts.

In Panará, the functional load of case morphology (52) is bigger than in the other Jê languages examined in this paper.

(52) **Functional load:** The degree to which differences in the grammar of case are distinguished solely by case morphology.

This has to do with one major difference in the morphosyntax of Panará with respect to the other Jê languages: the clausal ordering. In classic Jê syntax, position in the clause participates in the differentiation of case exponence of core arguments. Since case positions in the clause serve as an exponent of case, case morphology can (and does) erode without severe loss of morphosyntactic information.

I put forward that the ergative case present in the Jê family, associated with nominal clausal environments, is in the process of vanishing in the Northern Jê branch. Evidence from the Apinajé-Mẽbêngôkre sub-branch, where the morphological exponence of case has become restricted to case syncretism in pronominal paradigms, and from the Kĩsêdjê-Kajkwakhratxi sub-branch, where ergative case morphology has effectively collapsed with nominative case morphology, illustrates the decline of ergative morphology in Northern Jê languages. Among them, I would argue that the process went one step further in Panará, where the ubiquitous Jê ergative case system vanished when nominalizations ceased to be a strategy for the formation of embedded clauses.

The flexible order in Panará, however, places the duty of ergative exponence exclusively on case morphology. The reanalysis of the Jê clause into the polysynthetic Panará verb complex led to the loss of fixed

constituent order and case positions in modern Panará. A new, younger ergative case emerged to assume the role of case exponence, once case positions were lost. In Panará, ergative case does not correspond to the classic ergative case system in Jê. This is a brand new ergative case that presents different properties: it is present in main clauses, it has no case split, and is independent of the form of the verb.

Synchronically speaking, Panará ergative case is the equivalent of classic Jê nominative: it is a case assigned in the context of finite verbal predicates, just like classic Jê nominative is, and both cases are also the morphologically marked ones.

As has been observed cross-linguistically (Coon 2013), the emergence of an ergative category in a language is often accompanied with other typological changes in the syntax. In the case of Panará, the innovation of a new ergative case goes hand in hand with other Panará innovations: polysynthesis, and loss of verb finality. Diachronically, the loss of nominalized verbs in Panará triggered the loss of ubiquitous ergative case, whose functional load in Jê syntax led to the emergence of an ergative structural case in Panará. This, in turn, was a consequence of a reanalysis of the classic Jê verb final clause into a Panará polysynthetic verb complex.

Northern Jê languages are prone to extensive pleonastic and emphatic dislocations of noun phrases, as seen in section 2. This was no doubt also present in preceding developmental stages of Panará, until the tightly ordered elements in the Jê clause were restructured as a polysynthetic verb complex. The Panará verbal word shows bound morphology and incorporation of postpositions and nouns in the slots corresponding to the positions of pronouns, TAME morphemes and noun phrases in the verb-final clauses of other Jê languages.

In this major restructuring process of the sentence, Panará also lost the strategy of forming embedded clauses via nominalization: instead, embedded clauses became internally identical to main clauses. The result is the Panará that we observe today, a language with symmetrical ergative case marking in main and embedded clauses.

I would like to end this article on a diachronic note. The erosion of ergative case in Northern Jê languages can be used to group the languages of the family in a tree representation, seen in Figure 2. Besides Southern and Central Jê languages, in the upper half of the tree the Northern languages are placed according to the degree of decline of ergative case marking.

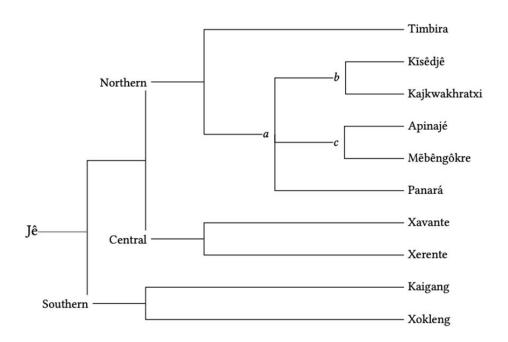


Figure 2. The patterns of ergative case marking in Jê languages.

The first division is between Timbira, with a solid retention of Jê ergative marking, and the languages in group a, with some degree of ergative case erosion. Within this group, b contains the Jê languages that display a partial loss of ergative case in embedded contexts, Kîsêdjê and Kajkwakhratxi. Group c is formed of the Jê languages that lost case marking on lexical NPs, and finally Panará is the language in which I have argued that Jê ergative case was lost (as did Jê nominative), followed by the emergence of a new ergative case with different properties.

The force driving the erosion of ergative case in Northern Jê languages appears to be the division of labour for its exponence between morphology and clausal position. In both the Mẽbêngôkre-Apinajé and Kĩsêdjê-Kajkwakhratxi complexes, case morphology has a low functional load; it

can stop marking case because clausal position is also an exponent of case. In Timbira, classic Jê ergative case is still going strong; however, the left periphery positions are only available to nominative strong pronouns, in the nominative-absolutive pattern (Alves & Gildea 2020).

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