Finiteness, coordination and agreement in Northern Jê

Rafael Nonato

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Abstract

Clause finiteness in the Northern Jê languages (a branch of Jê, Brazil) has been associated with the obligatory use of left periphery modality particles, a nominative-accusative case frame and underived main verb forms. In this paper, I add a fourth element: subject agreement. These languages do not display agreement between verbs and their subjects, though. The kind of agreement I discuss here is anticipatory subject agreement between switch-reference marking clause coordinating conjunctions and the subject of the following clause.

keywords: Finiteness; Northern Jê; coordination; agreement; conjunction agreement; switch-reference

1 Introduction

Ritter & Wiltschko (2008) propose that, across languages, finite clauses are headed by a functional projection Infl that plays the role of a deictic anchor between clause and utterance situation. Whereas in English this anchoring is in terms of tense, Ritter & Wiltschko argue that, in Halkomelem (Salish), it is in terms of location and, in Blackfoot (Algonquian), in terms of participants. In Nonato (2014), I argue that finite clauses in Kĩsêdjê (Jê, Brazil) are headed by left periphery clitic particles that anchor the reference world to the event world in terms of modality and that these particles license nominative case. Bardagil & Groothuis (2023) extend my account of finiteness and case licensing to Kĩsêdjê's sister languages in the Northern Jê branch.

Besides deictic anchoring and case licensing, in many languages finiteness is associated with subject agreement. In this paper, I show that this association is also true, though not trivially so, in the Northern Jê languages. In these languages we do not see agreement between verbs and their subjects. Rather, Northern Jê languages display subject agreement on coordinating conjunctions used to combine finite clauses.

When non-finite clauses are coordinated, coordinating conjunctions only mark switch-reference (Jacobsen 1967), that is, they only indicate whether the preceding and following clauses share the same subject (SS) or have different subjects (DS). On the other hand, when finite clauses are coordinated, conjunctions do not only mark switch-reference, but may also agree with the following subject (anticipatory agreement, as found in many languages from the Central Highlands of Papua New Guinea, see McCarthy 1965; Reesnik 1983; Vincent & Vincent 1962)[1] and, in some cases, may also partly mirror the modality of the coordinated clauses.

In Nonato (2014) I only briefly describe this pattern in Section 4.3.1.2 and Appendix 2.9.1. In **non24**, I flesh out that description and survey the other languages in the Northern Jê branch. Here I reconsider the surveyed data terms

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1. The existence of agreement that crosses clause boundaries is a challenge to formal approaches, but it is a well established fact in the descriptive literature on switch-reference. The nomenclature is not homogeneous, nor the nature of the switch-reference marking morpheme, which is often described as verbal morphology: "Every dependent clause predicate contains a secondary subject person marker, which marks the subject of the following verb—i.e., of the verb in the next clause, whether dependent or independent." (McCarthy 1965:60); "In other languages the medial verb signals both subject of the clause in which it occurs and the anticipatory subject." (Reesnik 1983:219); "The anticipatory subject indicator occurring with medial verbs indicates the person and number of the subject to follow." (Vincent & Vincent 1962:16)

of the finiteness of the involved clauses. In a nutshell, as represented in Figure 1, when finite clauses are coordinated, DS conjunctions agree in person with the following subject. If the following subject is third person, the form of the conjunction also mirrors the future/non-future distinction primarily encoded by the left periphery modality particles.
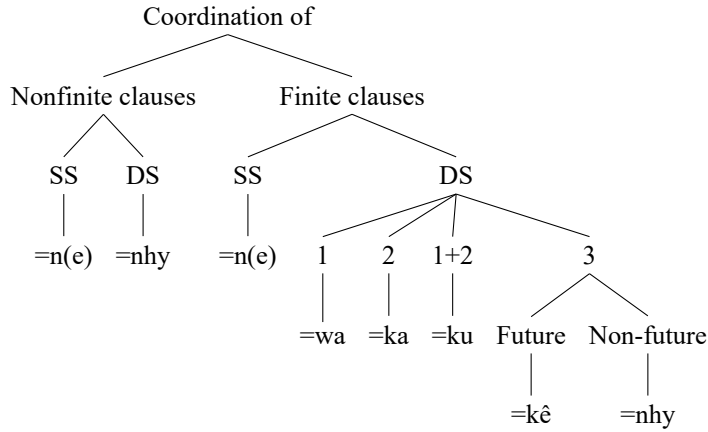
Figure 1: The form of the coordinating conjunction in Kĩsêdjê

2   The Northern Jê languages

The Northern Jê languages are a branch of the Jê family, Macro-Jê stock (Rodrigues 1999). They are spoken in the Brazilian states of Maranhão, Pará, Tocantins and Mato Grosso. Six out of the seven Northern Jê languages listed by Rodrigues (1999) are considered here: Kĩsêdjê, Apinajé, Mẽbêngôkre and three Eastern Timbira languages: Canela Apãniekrá, Krahô and Parkatêjê. Due to preferences expressed by the native speakers, the languages known at the time of Rodrigues's overview as Suyá and Kayapó are currently referred to as Kĩsêdjê and Mẽbêngôkre. A close relative of Kĩsêdjê, Tapayuna, is not separately considered here because the existing sources (Camargo 2010, 2015) do not address clause coordination. Finally, one language classified by Rodrigues (1999) as Northern Jê, Panará, is not included here. Panará does not feature a comparable system of clause coordination. In fact, it has been classified outside the Northern Jê branch in more recent work (Nikulin & Salanova 2019:535).

Though closely related, the Northern Jê languages are not mutually intelligible. Language boundaries align with ethnic groups, and the numbers of people in each ethnic group by the time the last census was carried out (the number of language speakers may be fewer, but not by much, these being vital languages) were: (i) Kĩsêdjê: 424 (Siasi/Sesai, 2014); (ii) Apinajé: 2277 (Siasi/Sesai, 2014); (iii) Mẽbêngôkre: 11675 (Siasi/Sesai, 2014); (iv) Canela Apãniekrá: 1076 (Siasi/Sesai, 2012); (v) Krahô: 2992 (Siasi/Sesai, 2014); and (vi) Parkatêjê: 646 (Siasi/Sesai, 2014).[2]

3   Finiteness

Extending Nonato (2014), Bardagil & Groothuis (2023) propose that finite clauses in the Northern Jê languages are headed by left periphery particles that anchor the clause to the utterance in terms of modality. That is to say, in Ritter & Wiltschko's (2008) terms, these particles instantiate Infl. Table 1 lists some of the particles documented for each language.

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2. source: https://pib.socioambiental.org/pt/Quadro_Geral_dos_Povos accessed on 06/20/2023.

Language	Particle	Meaning
Apinajé (Oliveira 2005:170)	na	realis
	kot	irrealis
Canela Apãniekrá (Alves 2004:89-91)	nẽ	non-future
	ha	irrealis
	pe	distant past
Kĩsêdjê (**non24**)	man	witnessed
	hẽn/n(a)/∅	factual non-future
	waj	inferential non-future
	arân	counterfactual
	kê	factual future
	kôt	inferential future
Krahô (Miranda 2014:286)	∅	realis
	ha	irrealis
Mẽbêngôkre (Salanova 2007:131)	nê	non-future
	dja	future/irrealis
	rãnh	counterfactual
	we	evidential
Parkatêjê (Ferreira 2003:119)	ka	future

Table 1: The Northern Jê left periphery particles

A few cognate sets can be distinguished: (i) *na* 'realis' (Apinajé), *nẽ* 'non-future' (Canela Apãniekrá), *na* 'factual non-future' (Kĩsêdjê), *nê* 'non-future' (Mẽbêngôkre); (ii) *kot* 'irrealis' (Apinajé), *ha* 'irrealis' (Canela Apãniekrá), *kôt* 'inferential future' (Kĩsêdjê), *ha* 'irrealis' (Krahô), *dja* 'future/irrealis' (Mẽbêngôkre) and *ka* 'future' (Parkatêjê); (iii) *waj* 'inferential non-future' (Kĩsêdjê) and *we* 'evidential' (Mẽbêngôkre); and (iv) *arân* 'counterfactual' (Kĩsêdjê) and *rãnh* 'counterfactual' (Mẽbêngôkre).

These particles precede the subject and follow an initial position reserved for information structure purposes, as in example (1). When the initial position is empty, for instance, because the clause doesn't have a focused or topicalized phrase, the particle is the first word of the clause, as in example (2). In this situation, following language-specific rules, a phonologically empty allomorph may be used. This is usually what happens in realis clauses with an empty first position, as in example (3).

(1) Mẽbêngôkre

Kukryt nẽ ba ku-bĩ.
tapir NFUT 1NOM 3-kill
'A tapir, I killed.' (Bardagil & Groothuis 2023:8, ex. 16a)

(2) Kĩsêdjê

Kôt ka thãmã
INFER.FUT 2NOM fall.SG
'You may fall.' (Field Notes, 11.07.03kw.029)

(3) Mẽbêngôkre

∅ Ba kukryt bĩ.
NFUT 1NOM tapir kill
'I killed a tapir.' (Bardagil & Groothuis 2023:8, ex. 16b)

Besides being inflected for modality, finite clauses distinguish themselves from non-finite clauses in verbal morphology and argument case. The main verb of a finite clause is underived and its arguments are marked as nominative-accusative,

as in example (4). The main verb of a non-finite clause is nominalized and its arguments are marked as ergative-absolutive, as in example (5).

(4)　Mẽbêngôkre
　　　Ga　nê　ga　ku-bĩ.
　　　2NOM　NFUT　2NOM　3-kill
　　　'You killed it.'　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　(Bardagil & Groothuis 2023:3, ex. 1a)

(5)　Mẽbêngôkre
　　　Ba　nê　ba　[aje　∅-bĩ-n　] pumũ.
　　　1NOM　NFUT　1NOM　2ERG　3-kill-NMLZ　see
　　　'I saw you kill it.'　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　(Bardagil & Groothuis 2023:3, ex. 1b)

In the Northern Jê languages, main clauses are finite and embedded clauses are non-finite. Apparently exceptional non-finite main clauses can be analyzed as non-finite clauses embedded by raising predicates like the negative existential *kêt* in example (6), a class which includes a null existential copula (Salanova 2007:120, who attributes that idea to Reis Silva 2001) which gives a perfective interpretation to clauses like (7).

(6)　Tep bit　nê　ba　[ja　krẽ-n　] kêt.
　　　fish only　NFUT　1NOM　DET eat-NMLZ　NEG
　　　'Only fish didn't I eat.'　　　　　　　　　　　　　　　　　　(Mẽbêngôkre, Bardagil & Groothuis 2023:9, ex. 25)

(7)　[ijɛ　a-bɯ-r　] ∅
　　　　1ERG　2-grab-NMLZ　COP
　　　'I have grabbed you.'　　　　　　　　　　　　　　　　　　　　　(Mẽbêngôkre, Salanova 2007:48, ex. 38a)

Now we will see how these three hallmarks of finiteness—left periphery modality particles, underived main verb form and nominative-accusative case—align with anticipatory subject agreement on clause coordinating conjunctions.

4　Clause coordination

I begin in section 4.1 by introducing clause coordination in Kĩsêdjê, as it is the most well described Northern Jê language in this respect. Then, in section 4.2, I review and discuss the available data for the other Northern Jê languages.

4.1　Clause coordination in Kĩsêdjê

Example (8) shows the coordination of 8 finite clauses in Kĩsêdjê. We know the clauses are finite because their subjects are marked as nominative and their clause-final verbs are in their underived form. The factual non-future modality of a sentence can be covert when its first position isn't filled, as in this example. Nonetheless, the non-future component of the clauses' modality is overtly marked on DS coordinating conjunctions that agree with upcoming third person subjects (=*nhy* '&.DS.3.NFUT', in b, d, f and g).

(8) Kĩsêdjê

   a. ∅   [Aj=i-kwâjê   thõ =ra   k⟨h⟩asák   ] =ne
      NFUT   PL=1-relative one =NOM ⟨3⟩be.bad   =&.SS
      'A relative_i of ours was bad and'

   b. [∅   anhi-khĩn-∅   khêt-∅   kanga   ] =nhy
        3NOM REFL-like-NMLZ not.be-NMLZ be.exhaustive =&.DS.3.NFUT
      'he_i never had fun and'

   c. [sikwãndy-jê =ra   ngájhôk   mã t⟨h⟩o   k⟨h⟩atho   ] =n
        young.men-PL =NOM village.plaza to ⟨3⟩with ⟨3⟩come.out   =&.SS
      'the young men_j brought him out towards the village plaza and'

   d. [∅   t⟨h⟩o   thẽ] =n   [∅   kh-wã k⟨h⟩apẽrẽ] =nhy
        3NOM ⟨3⟩with go   =&.SS   3NOM 3-to   ⟨3⟩talk   =&.DS.3.NFUT
      'they_j arrived with him and they_j scolded him and'

   e. [∅   anhi-khãm ∅-hwiasám   ] =ne [∅   ngô   khãm atá   ] =n
        3NOM REFL-in   3-be.ashamed =&.SS 3NOM water in   enter   =&.SS
      'he_i felt ashamed and he_i went into the river and

   f. [∅   s-ikwã   ] =nhy
        3NOM 3-remain.PL   =&.DS.3.NFUT
      'he_i remained there for a long time and

   g. [mẽ   =ra   t⟨h⟩o   k⟨h⟩atho   ] =nhy
        people =NOM ⟨3⟩with ⟨3⟩come.out   =&.DS.3.NFUT
      'people_k/j brought him out and

   h. [∅   ngõ   katwân khãm ndwântxi ro   k⟨h⟩atho.   ]
        3NOM water bottom in   turtle   with ⟨3⟩come.out
      'he_i brought a turtle from the river bottom.'

                    (Kĩsêdjê, ProDoclin, KS-20060211-MC-KS-narrativa_da_chegada)

Examples (9) and (10) constitute an almost minimal pair in terms of modality, with (9) in the factual future modality and (10) in the factual non-future modality. Since these sentences' first position is not filled, their modality particles are covert, but their value can be partly recovered from the form of the third-person agreeing DS conjunction =kê '&.DS.3.FUT' in (9) and =nhy '&.DS.3.NFUT' in (10).

(9) Kĩsêdjê

   ∅   [Akatxikhêt] =kê   [Khupyt   =ta   i-thõ   thok   ] =ne [t⟨h⟩o   thẽ]
   FUT   dawn   =&.DS.3.FUT   Howler.Monkey =NOM 1-brother wake.up   =&.SS   ⟨3⟩with go
   =kê   [thep jariri.   ]
   =&.DS.3.FUT   fish look.for
   'It will dawn, Howler Monkey will wake my brother up, will bring him along and they'll look for fish'
                    (Field Notes, 11.06.09mkw.029)

(10) Kĩsêdjê

   ∅   [Akatxikhêt] =nhy   [Khupyt   =ta   i-thõ   thok   ] =ne [t⟨h⟩o   thẽ]
   NFUT   dawn   =&.DS.3.NFUT   Howler.Monkey =NOM 1-brother wake.up   =&.SS   ⟨3⟩with go
   =nhy   [thep jariri.   ]
   =&.DS.3.NFUT   fish look.for
   'It dawned, Howler Monkey woke my brother up, brought him along and they fished.'
                    (Field Notes, 11.06.09mkw.030)

In (11) we see the coordination of two finite clauses that both have their first position filled by a focused phrase and whose modality must therefore be overtly expressed. The coordinating conjunction =*ne* '&.SS' in this example only marks that the clauses' subjects are identical. In (12) we see the coordination of three non-finite clauses with identical subjects. We know that the clauses are non-finite because their final verbs are nominalized and their subjects are marked as ergative. The coordinate complex is the single argument of the negative existential *khêt*. As in (11), since the clauses have identical subjects, the coordinating conjunction =*ne* '&.SS' only marks switch-reference.

(11) Kĩsêdjê

[[Mẽ   =ra   Kĩsêdjê kapẽrẽ   mba-j   khêt-∅   ] =ta patá mã=n   =ka   pâj   ] =ne
    people =ERG K.   language know-NMLZ NEG-NMLZ =DEF village to=NFUT =2NOM arrive =&.SS

  [wâtâ kapẽrẽ=n   =ka   s-arẽ?]
    what language=NFUT =2NOM 3-speak

'You arrived at a village where people do not speak Kĩsêdjê and (then) what language did you speak?'

(Field Notes, 08.04.25p.010)

(12) Kĩsêdjê

[[Nhy-ry   =ra   khôt ire   ∅-khôt i-mbra-j   kumen-∅   ] =ne
    be.so-NMLZ =DEF along 1ERG 3-along 1-walk.SG-NMLZ be.much-NMLZ =&.SS

  [ire   i-ndo ro   s-õmu-n   ] =ne [nhy-ry   ]] khêt thã wa   …
    1ERG 1-eye with 3-see-NMLZ =&.SS   be.so-NMLZ   NEG but 1NOM

'It is not the case that I followed these issues and saw it with my own eyes, but I …'

(ProDoclin, KS-20130128-RS-entrevista_mulheres2)

In (13) we see the coordination of two non-finite clauses with different subjects. The coordinate complex is the direct object of the verb *wymba* 'fear'. Since the coordinated clauses are non-finite, the conjunction =*nhy* '&.DS' only indicates that the subjects are different. Remember that when finite clauses are coordinated, =*nhy* indicates agreement with an upcoming third person subject in a non-future clause, as in (8). Conjunction agreement is ungrammatical when non-finite clauses are involved, as seen in (14), a minimally different ungrammatical version of (13).

(13) Kĩsêdjê

Hẽn =wa   i-mã [[i-hrõ ty-k   ] =nhy [ire   ∅-mbajkhêt-∅ khêt-∅   ]] wymba.
NFUT =1NOM 1-to   1-wife die-NMLZ =&.DS 1ERG 3-forget-NMLZ NEG-NMLZ   fear

'I am afraid that my wife dies and I can't forget her.'   (Field Notes, 11.06.29jt.032)

(14) Kĩsêdjê

*Hẽn =wa   i-mã [[i-hrõ ty-k   ] =wa   [(ire) ∅-mbajkhêt-∅ khêt-∅   ]] wymba.
NFUT =1NOM 1-to   1-wife die-NMLZ =&.DS.1   1ERG 3-forget-NMLZ NEG-NMLZ   fear

'I am afraid that my wife dies and I can't forget her.'   (Field Notes, 11.06.29jt.032′)

To round up the paradigm, we need to see a grammatical example (so, not 14) where a coordinating conjunction agrees with a non-third person subject. As is the case with third-person agreement, non-third person agreement only happens when the coordinated clauses are finite and have different subjects, as in (15). Coordinating conjunctions that agree with non-third person subjects, as =*ka* '&.DS.2' in (15), are homophonous with the equivalent nominative pronoun, which I take to suggest a historical origin for these forms.[3]

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3. An anonymous reviewer suggested that rather than explaining the homophony as historical, we could analyze anticipatory agreement in Northern Jê languages as raising of the subject pronoun to a left peripheral position, with both copies being pronounced in sentences like (15). If we assume this left peripheral position is missing from non-finite clauses, we can explain why agreement only happens when the coordinated clauses are finite. This is an interesting theory that must be fleshed out in future work. My goal with this paper is to establish the paradigms as clearly as possible and point out existing gaps in the dataset.

(15) Kĩsêdjê

[Ntôn =nda a-mã a-táktxê-rê   jarẽ] =ka   [nhum mã=n   =ka   hwĩnkhrã hrãmã?]
  N.   =NOM 2-to 2-sing-NMLZ teach =&.DS.2   who to=NFUT =2NOM shaker   ask

'Ntôni taught you your shout-song and (then) who did you ask for a shaker to?'

(Field Notes, 09.12.13jt.040)

So far, the only two examples I presented of a coordinating conjunction followed by a clause with a nominative non-third person subject had a phrase separating the conjunction from the subject: (11) and (15). They were pedagogically chosen so I could finish presenting the paradigm before discussing pronoun dropping. In more prosaic everyday examples, like (16), in which a nominative pronoun would otherwise immediately follow a coordinating conjunction, the pronoun must be dropped. Following **non24**, I strike out dropped pronouns.

(16) Kĩsêdjê

Athaj =na   [=wa   ngry-txi pĩ] =n   [=wa   t⟨h⟩o   mo.]
there =NFUT =1NOM beast-big kill.SG =&.SS =1NOM ⟨3⟩with go.PL

'I killed a big beast and brought it all the way there.'   (Nonato 2017:380, ex. 93)

In Nonato (2014:ch. 4), I derive pronoun dropping from a set of OT constraints that militate against sequences of clitics with similar features, a morphophonological sort of Obligatory Contour Principle. These constraints independently affect another type of clitic in Kĩsêdjê: plural clitics. In (17), the plural clitic bound to the subject pronoun and the one bound to the object pronoun are separated by a postposition phrase. In (18), there is no such intervenor and, therefore, a sequence of plural clitics is ungrammatical—the adverb *arâ* doesn't intervene as it must precede the subject plural clitic. Underlyingly, the sentence can contain a single plural clitic, meaning either (18b) or (18c), or two plural clitics, one of which is dropped, meaning (18d).

(17) Kĩsêdjê

Hẽn =wa   =aj ∅-khãm =aj s-õmu.
NFUT =1NOM =PL 3-in   =PL 3-see

'We've seen them there.'   (Field Notes, 12.08.11tjt.004)

(18) Kĩsêdjê

a. Hẽn =wa   arâ   (*=aj) =aj s-õmu.
   NFUT =1NOM already =PL   =PL 3-see

b. 'We've already seen him/her.'

c. 'I've already seen them.'

d. 'We've already seen them.'   (Field Notes, 12.07.24jt.003)

Clitic dropping only happens when the remaining clitic contains copies of the features of the dropped one, which applies to sequences of plural clitics and sequences of agreeing conjunctions and nominative pronouns, while leaving more distinct sequences of clitics unaffected. In order to account for the dropping pattern in sentences like (16), I assume in Nonato (2014) that there is covert feature agreement between SS conjunctions and following pronouns, which I argue is independently required for the computation of switch-reference.[4]

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4. An anonymous reviewer suggested I should address recent arguments against covert feature agreement such as Preminger's (2019). Preminger restricts his argument to "agreement that is null across the entire paradigm" (p. 11). Therefore, it would only apply to anticipatory subject agreement on Northern Jê clause coordinating conjunctions if we considered same-subject coordination and different-subject coordination to be separate paradigms. Even so, a case for null anticipatory agreement on same-subject conjunctions could still be built, just as Preminger reasons that clitic doubling constructions must involve null agreement. These considerations, however, don't directly bear on the main empirical statement this paper makes, namely, that overt anticipatory agreement is only found in switch-reference marking conjunctions in Northern Jê languages when finite clauses are being combined, and never when non-finite clause are being combined.

Due to the homophony, sentences where nothing intervenes between an overtly agreeing DS conjunction and a non-third person nominative pronoun, like (19), and the pronoun must therefore be dropped, could on first impression be described as clause juxtaposition. This is how I initially thought of such sentences, only changing my mind after I understood clitic dropping and the full paradigm of conjunction forms. These kinds of sentence have indeed been described as juxtaposition in Apinajé (Oliveira 2005:221), Mẽbêngôkre (Stout & Thomson 1974:8) and two varieties of Eastern Timbira: Canela Apãniekrá (Alves 2004:142-146) and Krahô (Miranda 2014:197).

(19) Kĩsêdjê

  [Hwara ro=n   =wa   rop   mũ] =ka   [~~=ka~~   khu-pĩ.]
    yesterday=NFUT =1NOM jaguar see   =&.DS.2   =2NOM 3-kill

  'Yesterday I saw the jaguar and you killed it.'   (Field Notes, 09.11.28jm.057)

These accounts do nonetheless describe DS clause coordination as switch-reference whenever the subject following the conjunction is third person, a situation in which, as we have seen, the conjunction is not homophonous with a subject pronoun. They also describe SS clause coordination as switch-reference. They don't investigate non-finite clause coordination or sentences where a phrase intervening between a conjunction and a subject pronoun could bleed pronoun dropping. Their main focus is on clause internal grammar, unlike Nonato (2014), which concentrates on clause combining. In spite of that, the diverse language exemplification they published, along with data from other publications, do provide a strong empirical basis for realizing that the Northern Jê languages share a complex clause coordination system like that described for Kĩsêdjê.

For example, with regard to pronoun dropping, in the Krahô sentence (20) the nominative pronominal subject of the last clause escapes dropping, as expected, since the adverb *ita katsuw* 'today' intervenes between the conjunction and the subject. The nominative pronominal subject of the middle clause is dropped, as expected, since it is adjacent to the conjunction.

(20) Krahô

  [[I-mã i-kʰra ∅-pə-m   ] ∅] wa   [~~wa~~ apu jət   mẽ piti põhɨ kʰu] nẽ [
    1-to 1-son 3-fall.down-NMLZ   COP &.DS.1   1NOM PROG potatos with only corn eat   &.SS

  ita katsuw wa   ra   i-təj arəjhɨ, wajĩ, kʰwər kʰu.]
  today   1NOM already 1-can rice   meat manioc eat

  'My son is born and I was only eating potatoes with corn and today I can already eat rice, meat and manioc.'
           (Miranda 2014:282, ex. 432a)

I have not been able to find more sentences like this in the available literature except for Kĩsêdjê. Other outstanding empirical gaps will be noted in the next section, suggesting questions that must await answers from fieldwork linguists.

4.2 Clause coordination in the Northern Jê languages

Table 2 lists the different forms of the coordinating conjunction in the Northern Jê languages. Its last line lists loosely reconstructed proto-forms, which I use in order to make reference to the cognate sets. Fields marked as [unknown] indicate that relevant data hasn't been found. In particular, examples with non-finite clause coordinating have only been found for Kĩsêdjê, Apinajé, Mẽbêngôkre and Krahô. Unfortunately, the Mẽbêngôkre examples come from a translation of the Bible, whose authorship the Wycliffe Bible Translators does not disclose, and which may not reflect naturalistic speech—if taken at face value, they mean Mẽbêngôkre has diverged from the common Northern Jê pattern, with DS coordinating conjunctions displaying anticipatory agreement throughout, independently of finiteness.

	SS	DS					
		Finite clauses					Non-finite clauses
					3rd		
		1st	2nd	1st+2nd	non-future	future	
Kĩsêdjê	n(e)	wa	ka	ku	nhy	kê	nhy
Apinajé	nẽ	pa	ka		ɲum	ke	ɲum
Mẽbêngôkre	nẽ	ba	ga	gu	nhym	gê	[same as finite clauses]
C. Apãniekrá	nẽ	wa	ka	ku	mã	ke	[unknown]
Krahô	nẽ	wa	ka	ku	mã	kê	mã
Parkatêjê	nɔ̃	wa	ka	ku	mɔ̃	[unknown]	[unknown]
Proto N. Jê	*ne	*pa	*ka	*ku	*nhym / *mã	*ke	*nhym / *mã

(E. Timbira brackets: C. Apãniekrá, Krahô, Parkatêjê)

Table 2: Forms of the clause coordinating conjunction in Northern Jê languages

Almost all conjunction forms are cognate among the languages. Conjunctions that agree with non-third person subjects are homophonous with nominative pronouns. Conjunctions that agree with third person subjects take one form when clauses are in a future modality and another when clauses are in a non-future modality. The former, *ke, is cognate with the third person nominative pronoun in Apinajé (Alves 2004:81). The latter is *mã in the Eastern Timbira languages and *nhym in the other languages. The *nhym/mã form is also used in non-agreeing contexts, namely, when non-finite clauses are coordinated. This follows the cross-linguistic tendency for lack of agreement to be identical with third person agreement.

Having already introduced the Northern Jê coordination paradigm with Kĩsêdjê data, we now turn to its sister languages, using a subset of the data presented in **non24**. For more examples, I refer to the original survey.

Let us begin by examining the coordination of clauses with third person subjects. When subjects are identical, the invariant conjunction form *ne is used, as seen between the third and fourth clauses in (21), in (23), (25) and (27). We are missing an example of this particular configuration in Mẽbêngôkre. When finite clauses with different subjects are coordinated, conjunctions followed by third person subjects take the form *nhym/mã whenever the clauses are inflected in a non-future modality. We see this form between the second and third clauses in (21), in (22), (24), (26) and (28).

(21) Apinajé

[Ne əbri] ɲum   [čε   wε   ∅   wa ma mɔ̃] ɲum
  CONJ then &.DS.3.NFUT   as.they.say as.they.say 3NOM DU away go   &.DS.3.NFUT

  [∅   kukõɲ ja ta   ] ne [∅   ∅-ɔ   mɔ̃.]
    3NOM gourd DEF chop.off   &.SS   3NOM 3-INST go

'Then they went to the garden, he took one gourd and brought it.'   (Oliveira 2005:312)

(22) Mẽbêngôkre

[Bir nẽ   mrù ga] nhüm   [∅   ku-krẽ.]
  B. NFUT meat bake   &.DS.3.NFUT   3NOM 3-eat

'Biri baked meat, but he ate it.'   (Stout & Thomson 1974:75)

(23) Canela Apãniekrá

[Ke   ha Alice poj] nε [ke   i-pupu.]
  3NOM IRR A.   arrive   &.SS   3NOM 1-see

'Alice will arrive and see me.'   (Alves 2004:143, ex. 875)

(24)   Canela Apãniekrá

[[I-tɛ   hũmrɛ pupu-n   ] ∅   ] mã   [ke̶   ma tɛ̃.]
   1-ERG man   see-NMLZ   COP   &.DS.3.NFUT   3NOM DIR go

'I saw the man and he went away.'   (Alves 2004:144, ex. 880)

(25)   Krahô

[Pe … ∅   aʔtɛ ajko h-ikʰwa   ] nɛ̃ [∅   apu   krɛ.]
   PST   3NOM only IPFV 3-lie.down   &.SS 3NOM PROG sing

'… He would lie down by himself and be singing.'   (Miranda 2014:267, ex. 416a)

(26)   Krahô

… [apu ajtwsə   ] mã   [kukʰrit, jãtsɨ,   karɛ   iʔ-təj ku-ku.   ]
      PROG fall.down.PL   &.DS.3.NFUT   tapir   forest.deer savanna.deer 3-must 3.ACC-eat

'(the tapir bean) is falling down and the tapir, the forest deer and the savannah deer must be eating them.'
                                                                    (Miranda 2014:186, ex. 328b)

(27)   Parkatêjê

[I-ntʃũm tɛ   mĩrɛ   kora-n   ] nɜ̃ [∅-tɛ   kukrit pĩ-r.   ]
   1-father ERG cayman kill-NMLZ   &.SS 3-ERG tapir kill-NMLZ

'My father killed caymans and killed tapir.'   (Ferreira 2003:183, ex. 349)

(28)   Parkatêjê

… [apu ∅-kɜ̃m nkrik   ] mɜ̃   [∅   aptɛ   h-aher.   …]
      PROG 3-in   be.angry   &.DS.3.NFUT   3NOM in.vain 3-approach

'… (the sun) is still angry and (the moon) tries to approach him …' (Ferreira 2003:268)

When finite clauses inflected in a future modality are coordinated, conjunctions followed by third person subjects take the form *ke. We see that form between the first and second clauses in (29) and (30), in (31) and (32). We are missing an example of this situation in Parkatêjê.

(29)   Apinajé

[Ãn pa   a-to   amũxu] kê   [apinhõ...   pôj] pa   [pa̶   kãm i-xkapɛ̃r...]
   ok 1NOM 2-with hide   &.DS.3.FUT   brother-in-law arrive &.DS.1 1NOM 3:to 1-speak

'I'll hide you, so that when your brother-in-law comes I'll talk to him...'   (Waller 1974:13, ex. 42)

(30)   Mẽbêngôkre

[Ku-bê nõ   ] gê   [∅   wãm   kò   ] ga   [ga̶   kãm tẽ.]
   3-of   lie.down   &.DS.3.FUT   3NOM however oscillate   &.DS.2 2NOM then go

'Lie down (hiding from him) so that when he goes away stumbling, you go away.'
                                                                    (Stout & Thomson 1974:81)

(31)   Canela Apãniekrá

[Wa   ha poj] ke   [Alice i-pupu.]
   1NOM IRR arrive &.DS.3.FUT   A.   1-see

'I will arrive and Alice will see me.'   (Alves 2004:145, ex. 888)

(32) Krahô

[Ke ha pɨ-je   mẽ h-ũmrɛ kujatɛ] ke   [∅   mẽ kʰij   tɔ.   ]
   3 IRR woman-PL PL 3-male order   &.DS.3.FUT   3NOM PL barbecue make

'The women will order that the men make the barbecue.'   (Miranda 2014:205, ex. 346a)

When finite clauses with identical non-third person subjects are coordinated, the invariant SS form *ne* is used, as seen in (33), (34), (35), (36), (37), and between the third and fourth clauses in (42). Nominative non-third person pronouns immediately following coordinating conjunctions in these clauses are dropped. We also see this configuration between the second and third clauses in (20), but as there the nominative non-third person pronoun doesn't immediately follow the conjunction, it isn't dropped.

(33) Apinajé

[Kot pa-j   aroj kugɔ̃-n   pa] nẽ [~~pa~~ pɔ̃ɲ ∅-katõ-∅   pa] nẽ [~~pa~~ pɔ̃ɲ
   IRR 1NOM-IRR rice tresh-NMLZ finish &.SS 1NOM after 3-roast-NMLZ finish &.SS 1NOM after

ku-či] ɲum [∅   nõ   ] nẽ [∅   ∅-akrɨ.   ]
3.ACC-put &.DS.3 3NOM lie.down   &.SS 3NOM 3-get.cold

'I'll thresh the rice, roast it, put it on a flat surface, then it will sit there and cool off.'
                                                                (Oliveira 2005:259–260, ex. 90c)

(34) Mẽbêngôkre

[Ba   ku-bù] nẽ [~~ba~~ ku-ga   ] nẽ [~~ba~~ ku-krẽ.]
   1NOM 3.ACC-get &.SS 1NOM 3.ACC-bake &.SS 1NOM 3.ACC-eat

'I get it, I bake it and I eat it.'   (Stout & Thomson 1974:74)

(35) Canela Apãniekrá

[Wa   ha poj   ] nɛ [~~wa~~ a-pupu.   ]
   1NOM IRR arrive &.SS 1NOM 2.ACC-see

'I will arrive and see you.'   (Alves 2004:143, ex. 874)

(36) Krahô

[Wa   ha ramã mõ] nẽ [~~wa~~ areti   kʰãm nõ.   ] …
   1NOM IRR already go &.SS 1NOM hammock in   lie.down

'I will already go and lie down in the hammock.'   (Miranda 2014:251, ex. 392b)

(37) Parkatêjê

[I-tɛ   ∅-tɔ yatʃɨ kora-n   ] nɔ̃ [~~wa~~ amnẽ api-∅   mɔ̃ tẽ.]
   1-ERG 3-with deer kill-NMLZ &.SS 1NOM to.here return-NMLZ to go

'I killed deer and was returning here.'   (Ferreira 2003:183, ex. 350)

When non-finite clauses with identical non-third person subjects are coordinated, the invariant SS form *ne* is used, as seen between the second and third clauses of the coordinate direct object of the verb *prɔ̃m* 'to want' in (38), and in the coordinate direct object of the cognate verb *prãm* 'to want' in (39). Unlike the previous examples, these don't feature subject dropping, since dropping only applies to nominative pronouns. We are missing examples of this situation in Canela Apãniekrá, Krahô and Parkatêjê.

(38) Apinajé

Na   pa   iɲ-mɔ̃ [[i̶e̶-t̶ɛ̶   a-mẽ-n   ] ɲum [ma a-te-m   ] ne [a-tɛ   iɲ-mɔ̃ a-čujapro   ]]
REAL 1NOM 1-to   1-ERG 2-send-NMLZ   &.DS DIR 2-go-NMLZ   &.SS 2-ERG 1-to 2-buy.NMLZ

prɔ̃m nẽ
want &.SS

'I want to send you downtown so you can do some shopping for me.'   (Oliveira 2005:371)

(39) Mẽbêngôkre

[I-je   Metĩndjwỳnh kabẽn ja ma-r   ] kam ne ba [[i-je   a-kuka kônh i-kõnkrã-o
  1-ERG God   speech DEF know-NMLZ   in NFUT 1NOM   1-ERG 2-front in   1-knee-on

i-nhỹ-r   ] ne [i-je   a-mã a-rax jarẽ-nh   ]] prãm-∅   kêt.
1-sit-NMLZ   &.SS 1-ERG 2-to 2-be.big say-NMLZ   want-NMLZ NEG

'Knowing what God said, I do not want to kneel down in front of you and tell you that you are big.'
                                                  (Wycliffe Bible Translators 2012, Matthew 4:10)

Coordinating conjunctions that combine finite clauses with different subjects overtly agree with the subject that follows them. When it is third person, the conjunction form depends on the clauses' modality, as we've already seen. When the following subject is non-third person, the conjunction takes a form homophonous with the equivalent nominative pronoun, as we see between the second and third clauses in (29) and (30), in (40), (41), between the first and second clauses in (20), and between the first and second and second and third clauses in (42). Nominative subject pronouns immediately following conjunctions are dropped, as expected. We are missing examples where an intervening phrase separates a DS conjunction from a nominative pronominal subject, thus bleeding pronoun dropping, as in the Kĩsêdjê example (15).

(40) Canela Apãniekrá

[Ke ha a-mã h-ũte   ] ka   [k̶a̶ ha aku.]
  3 IRR 2-to 3.ACC-allow &.DS.2 2NOM IRR eat

'He will allow you to eat.'   (Alves 2004:136, ex. 834)

(41) Krahô

… nẽ [wa [a-wər   i-wrə-k   ] kakʰro   ] ka   [k̶a̶ apu i-tɔ hanẽ.]
   &   1NOM 2-towards 1-go.down-NMLZ   be.useless &.DS.2 2NOM PROG 1-with do

'And in spite of my coming down towards you, you are indeed doing this to me.'
                                                  (Miranda 2014:189, ex. 334a)

(42) Parkatêjê

[ʒe, ariri tɔk tɔ   ] wa   [w̶a̶ kaprën pɨ] ku   [k̶u̶   ku-ka   ] nɔ̃ [
  VOC again fire make   &.DS.1 1NOM turtle catch &.DS.1INCL 1INCL.NOM 3.ACC-bake   &.SS

k̶u̶   ∅-kapi.]
1INCL.NOM 3.ACC-taste

'Jê, make fire again, I catch the turtle, we will bake it and taste it.'   (Ferreira 2003:198, ex. 383)

Finally, let us look the coordination of non-finite clauses with different subjects, the second of which is non-third person. We see that between the first and second embedded clauses in (38) and in the coordinate direct objects of (43) and (44). In this configuration, no anticipatory agreement occurs, and the conjunction takes the form *nhym/mã*, which we've seen is used in DS finite clause coordination to agree with a following third person subject.

(43) Apinajé

Na	pa	[[ic-tɛ	a-mɜ̃	a-ɲi-r	] ɲum	[a-tɛ	iɲ-mɜ̃	ša	n-ipe-č	]]	prɜ̃m	nẽ
REAL	1NOM	1-ERG	2-to	2-make-NMLZ	&.DS	2-ERG	1-to	tea	RP-make-NMLZ		want	&.SS

'I wish you would make me some tea.'   (Oliveira 2005:381)

(44) Apinajé

Pa	na	pa	[[ic-tɛ	a-mɜ̃	mebɔj	ɲõ-r	] ɲum	[a-tɛ	iɲ-mɜ̃	a-čujarẽ-n	]]	kačiw.
1EMPH	REAL	1NOM	1-ERG	2-to	something	give-NMLZ	&.DS	2-ERG	1-to	2-tell-NMLZ		intend

'I intend to give you something for you to tell me a story.'   (Oliveira 2005:371)

The fact that the coordinate complex is a verbal argument makes these very clear examples of non-finite clause coordination. Besides Kĩsêdjê and Apinajé, I have only found examples of this configuration in Mẽbêngôkre. However, unlike the previous examples, in (45) and (46) DS conjunctions do display agreement, taking forms homophonous with nominative pronouns. Either Mẽbêngôkre has diverged from the common Northern Jê pattern, or the data is flawed. I suspect the latter, but let us wait for further evidence, coming from more authoritative sources than an anonymous translation of the Bible.

(45) Mẽbêngôkre

… [[Me ku-te õ-bê a-mã ∅-arẽ-nh] ga [a-je katàt ∅-ma-r o a-tẽ-m]]
        PL 3-ERG one-of 2-to 3-say-NMLZ &.DS.2 2-ERG right 3-know-NMLZ INST 2-go-NMLZ

  mã.   …
  will.happen

'Someone will tell you and you will know it correctly.'   (Wycliffe Bible Translators 2012, Luke 1:4)

(46) Mẽbêngôkre

… [Nàr a-je ami-m me ∅-kukjê-r prãm] nhym [[me ku-te a-mã ami-jarẽ-nh] ga [
    or 2-ERG REFL-to PL 3-ask-NMLZ want &.DS PL 3-ERG 2-to REFL-say-NMLZ &.DS.2

  a-je amũ me-mã me ∅-arẽ-nh]] prãm. …
  2-ERG beyond PL-to PL 3-say-NMLZ want

'But you want to ask people about themselves and want them to speak to you about themselves so you speak about them to others'   (Wycliffe Bible Translators 2012, 1 Peter 4:15)

Though I have not found similarly clear examples of non-finite clause coordination in the Eastern Timbira languages, I did find some examples that suggest what would happen in this situation. In (47), even though the subject of the second clause is non-third person, the invariant form *nhym/mã* is used rather than an agreeing form homophonous with a nominative pronoun. This is expected if we account for main clauses with nominalized verbs and a perfective interpretation as being embedded by a null existential copula (Salanova 2007).

(47) Krahô

Ka	[[a-tɛ	mẽ	ikʰrɛ	kat	jahe-r	] mã	[i-tɛ	ta	nã	mẽ	a-kʰrãjpa-r.	]]	∅
2NOM	2-ERG	PL	house	wall	cover-NMLZ	&.DS	1-ERG	3	with	PL	2-help-NMLZ		COP

'You guys covered the wall of the house and I helped you with that.'   (Miranda 2014:186, ex. 328c)

In a superficially parallel example from Canela Apãniekrá (48), an agreeing conjunction is used. This example can be accounted for as the coordination of two finite clauses, each with its own null existential copula. Contrasting (48) and (47) in these terms is highly tentative. We would need to check whether both possibilities are grammatical within a single language, possibly corresponding to subtle aspectual differences.

(48) Canela Apãniekrá

[k̶a̶ [A-poj] ∅] wa [w̶a̶ [i-tɛ a-pupu-n] ∅.]
  2NOM 2-arrive.NMLZ COP &.DS.1 1NOM 1-ERG 2-see-NMLZ COP

'You arrived and I saw you.'   (Alves 2004:145, ex. 887)

We ca not discard the possibility that Canela Apãniekrá and Mẽbêngôkre do indeed display anticipatory agreement in non-finite clause coordinating, something akin to Portuguese agreeing infinitives. Evidence bearing on this question can be easily elicited with the help of the model sentences of the relevant contexts presented in this paper.

5 Conclusion

Finiteness in Northern Jê languages has been associated with inflection via left periphery particles that anchor clause to utterance in terms of modality, with verbal form and with argument case. In this paper, I add that clause finiteness in these languages is also associated with subject agreement, though not with the usual kind, in which a verb agrees with its subject. In the Northern Jê languages, coordinating conjunctions that combine finite clauses with different subjects anticipatorily agree with the subject of the clause that follows them.

On the other hand, if the combined clauses are non-finite, no agreement obtains. Clear reliable examples of non-finite clause coordination were given for Kĩsêdjê and Apinajé. Some examples of that configuration were found for Mẽbêngôkre, but they were not reliable, as their author could not be identified. Suggestive examples were found for the Eastern Timbira languages Canela Apãniekrá and Krahô, and none for Parkatêjê.

The relationship between coordinating conjunctions and finiteness in these languages goes beyond subject agreement, as conjunctions that agree with upcoming third person subjects also partly mirror the inflection of the combined finite clauses. This suggests that conjunction agreement is enabled by a syntactic relation between conjunctions and inflection, the nature of which should be investigated in future work.

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Glossary

&	chaining marker		INST	instrumental
1	first person		IPFV	imperfective
2	second person		IRR	irrealis
3	third person		NEG	negation
ACC	accusative		NFUT	non-future
CONJ	conjunction		NMLZ	nominalizer
COP	copula		NOM	nominative
DEF	definite		PL	plural
DET	determiner		PROG	progressive
DIR	direcional		PST	past
DS	different subject		REAL	realis
DU	dual		REFL	reflexive
EMPH	emphasis		RP	relational prefix
ERG	ergative		SG	singular
FUT	future		SS	same subject
INCL	inclusive		VOC	vocative
INFER	inferred			