



**A BRIEF DESCRIPTION AND ANALYSIS OF TENSE, FINITENESS,
AND VERBAL EMBEDDING STRATEGIES IN KADIWÉU**

**UNA BREVE DESCRIPCIÓN Y ANÁLISIS DE LOS TIEMPOS, LA FINITUD
Y LAS ESTRATEGIAS DE INCRUSTACIÓN VERBAL EN KADIWÉU**

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Resumo: Neste artigo, apresentamos uma descrição das diferentes estratégias de subordinação verbal em Kadiwéu e sugerimos uma estrutura sintática do CP. Embora o verbo seja marcado por pessoa nas orações matrizes e subordinadas, tempo não é marcado no verbo. Contudo, complementizadores podem ser marcados por tempo. Curiosamente, o Kadiwéu, assim como o dinamarquês e outras línguas, permite o empilhamento de complementizadores. Assim, em um CP adverbial que contém sujeito topicalizado, o complementador *nige/naGa* pode coocorrer com o complementizador *me*. Os dados do Kadiwéu vêm da Plataforma Tycho Brahe da Universidade de Campinas, Brasil, e de dados elicitados ou publicados.

Palavras-chave: tempo; orações subordinadas; empilhamento de complementizadores; finitude.

Resumen: En este artículo presentamos una descripción de las diferentes estrategias de subordinación verbal en Kadiwéu y sugerimos una estructura sintáctica del CP. Aunque el verbo está marcado por persona en la matriz y en las cláusulas subordinadas, el tiempo no está marcado en el verbo. Sin embargo, los complementadores pueden quedar marcados por el tiempo. Curiosamente, Kadiwéu, al igual que el danés y otras lenguas, permite el apilamiento de complementadores. Por lo tanto, en un CP adverbial que contiene un sujeto tópico, el complementador *nige/naGa* puede coexistir con el complementador *me*. Los datos de Kadiwéu provienen de la Plataforma TychoBrahe de la Universidad de Campinas, Brasil, y de datos obtenidos o publicados.

Palabras clave: tiempo; cláusulas subordinadas; apilamiento de complementadores; finitud.

1. INTRODUCTION

As opposed to many languages of the lowlands in South America (see Campbell 2012), which show clause nominalization in embedding, Kadiwéu (ISO 639-3: kbc) has overt clause subordination markers (i.e. complementizers). Kadiwéu has different complementizers for different kinds of embedding, as it will be shown. We describe embedding regarding finite and nonfinite clauses and we propose an analysis in the viewpoint of Rizzi's cartographic hypothesis.

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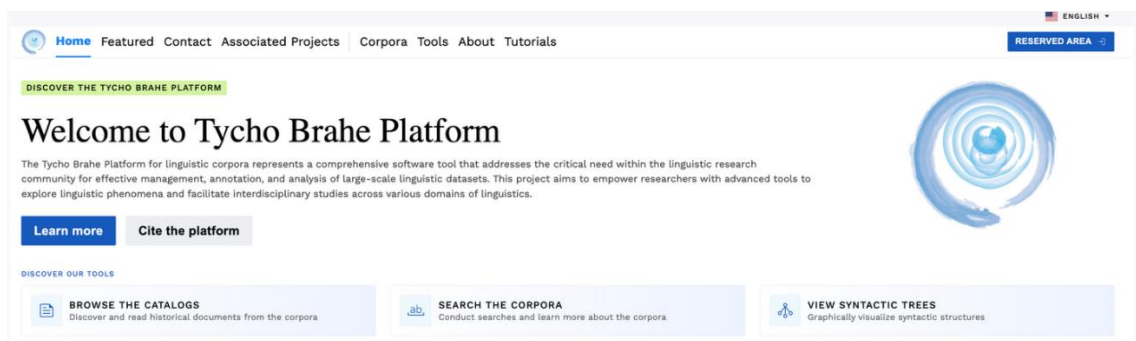
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According to this proposal, the C-projection can be split in layers, as argued by Rizzi (1997) for languages like Italian: a “Force” complementizer selects for a declarative, interrogative or an exclamative sentence while the “Fin” layer expresses the finitude of the clause. Force and Fin can be separated by Topic and Focus phrases. In this framework, we observe the following order of heads: Top Foc Fin. Moreover, Topic is recursive.

Kadiwéu is a Guaikurúan language spoken in the Mato Grosso do Sul State, Brazil. This is the only language of this family spoken in this country. The other Guaikurúan languages are spoken in Argentina and Paraguay, and they are Toba, Pilagá, and Mocoví. These languages belong to a different sub-branch of the family (see Ceria & Sandalo 1995, Viegas Barros 2013).

The data for this study is mainly from the Tycho Brahe Platform (UNICAMP, available at <<https://www.tycho.iel.unicamp.br/home>>), but data from published sources were also used as well as data from elicitation with speakers from the Alves de Barros Village, Mato Grosso do Sul, Brazil, by one of the author of this paper.

The Tycho Brahe Platform is the set of fully online tools and is a pioneer in its application to languages originating in South America (Veronesi & Galves 2024). Its web-based interface allows immediate dissemination to indigenous communities, in addition to allowing the creation of significantly larger corpora than was previously possible.³ The Kadiwéu corpus (9496 words) at the Tycho Brahe Platform contains original narratives (Sandalo et al 2024). Since the Visualizer tools and the Search tool are open, one can check our analysis against the data. There follows a view of the platform page showing the available tools.



2. AN OVERVIEW OF THE KADIWÉU LANGUAGE

The constituent order in this language is SOV if the object is a first or second person (Sandalo 2023b). Otherwise, the word order is free (Sandalo 1997), therefore in (1a), other constituent orders are also possible. Kadiwéu allows subject and object drop, however. So, many times the arguments of the verb are not overtly present in the sentence, as the examples show along this paper.⁴

³ As mentioned by an anonymous reviewer, “it is currently in vogue to speak of ‘big data,’ especially large corpora of the sort available for English and Portuguese but unlikely to be available for Native languages of South America”. The Tycho Brahe Platform for Indigenous languages of Brazil (FAPESP Project 22/09158-5), however, assumes a diametrically opposite position that contests the obligation of ‘big data’ to constitute corpora of languages usable in research. For languages in danger of extinction, in particular, large corpora cannot be constituted, and this would exclude them from these types of projects. According to the view of the Tycho Brahe Platform, annotation added to texts makes them relevant for research and applications for educational and social purposes.

⁴ The following is a list of the abbreviations used: VB = verb, VBAPL = verb marked by an applicative morpheme, N = noun, N\$ = possessed noun, D = pronoun and numeral classifiers, Q = quantifier, WPRO = relative pronoun, WADV = interrogative word (wh), EV = evidential, T = tense/aspect, C = complementizer, CT = complementizer and tense, NPR = proper noun, NEG = negative word, ADV = adverb, ADJ = adjective. 1 = first person, 2 = second person, 3 = third person, APPL = Applicative, CL = numeral classifier, DIR = directional, DEM = demonstrative, DET = determiner, EMP = emphasis, EV = evidential (hearsay), F = feminine, Hon = honorific, INTR = intransitivizer morpheme, INV = inverse,

(1) Kadiwéu constituent order (from Sandalo 2023b)

- (a) Goti yemaa Ecode
 Goti y-emaan Ecode
 Goti 3SUBJ-love Ecode
 NPR VB NPR
 ‘Goti loves Ecode/Ecode loves Goti’
- (b) Goti akaami Gademaani
 Goti akaami Ga-d-emaan-i
 Goti akaami 2PLOBJ-INV-love-2OBJPL
 NPR 2PRO VB
 ‘Goti loves you’
- (c) ee akaami Gademaani
 ee akaami Ga-d-emaan-i
 1PRO 2PRO 2PLOBJ-INV-love-2OBJPL
 PRO PRO VB
 ‘I love you’
- (d) akaami ee ademaani
 akaami ee a-d-emaan-i
 2PRO 1PRO 2SUBJ-INV-love-2SUBJPL
 PRO PRO VB
 ‘You love me’

The verb in main and embedded clauses is marked by person and number in Kadiwéu but it is not marked by tense/aspect. Tense is expressed by free functional words in main clauses, and, although the verb is not marked by tense/aspect, complementizers can be (see section 2).

The verb can agree with the subject and the object but subject and object agreement markers are in complementary distribution respecting the 2>1>3 person hierarchy in Kadiwéu (see Nevins & Sandalo 2011 for a detailed description), as opposed to the other languages from the same family in which subject and object markers co-occur marking companion arguments (see example (2) below from Mocoví). To sum up, whereas in Kadiwéu the prefixes and suffixes both index the features of one and the same argument (see the agreement morpheme patterns in examples (1) from Kadiwéu) – hence they should be analyzed as circumfixes in this language –, in Mocoví prefixes and suffixes index the features of different arguments and should be analyzed as a combination of individual suffixes and prefixes (see Sandalo 2023 for a detailed comparison between the two languages).

(2) Agreement in Mocoví (from Grondona 1998)

- (a) s-ecaG
 1SUBJ-cut
 VB
 ‘I cut it’
- (b) s-ecaG-er
 1SUBJ-cut-3OBJPL
 VB
 ‘I cut them’

M= masculine, N= nominalizer, SUBJ = subject person agreement, SUBJPL = plural agreement with subject, OBJ = object person agreement, OBJPL = plural agreement with object, PL = plural, PLOBJ = portmanteau object agreement/person and number, PLSUBJ = portmanteau subject agreement/person and number, POSS = possessive, PRO = free pronoun, REL = relative complementizer, V = verb, T = tense, VP = verbal phrase. For a discussion on POS tagging in Kadiwéu, see Sandalo & Galves (2023). We use Kadiwéu orthography, except for voiced uvular stops, in which we use G rather than ~~g~~. The morphemic annotation follows the Leipzig format, but the last line of our example annotations shows the Tycho Brahe POS tags. We thank Vanda Pires and Hilário Silva for data consulting.

The verb is also marked by an inverse morpheme, as in (1b-d), (labelled as “theme” by Sandalo 1997) if the object is a first or second person (see Nevins & Sandalo 2011 and Sandalo 2023b for discussion).

The verb can be also marked by applicative morphemes to license indirect arguments (3). The language has no adpositions. Sandalo (1997) labelled these morphemes as semantic role markers. There are also directionals that add motion to the verb (4).

- | | | | | |
|-----|---|---------------------------|--|--------------------------|
| (3) | jajigotGawa
j-ajigo-taGawa
1SUBJ-give-2APPL
VB
'I give you some cow meat' | waca
waca
waca
N | liboole
l-iboole
3POSS-meat
N\$ | (Data from Sandalo 1997) |
|-----|---|---------------------------|--|--------------------------|

- | | | |
|-----|---|--------------------------|
| (4) | jigowiwetijo
j-igowiwe-tijo
1SUBJ-smile-DIR
VB
'I go forward smiling' | (Data from Sandalo 1997) |
|-----|---|--------------------------|

As already mentioned, the verb in Kadiwéu is not inflected for tense but for person. The person inflection appears in main and all embedded clauses, or even on auxiliary verbs (see discussion in section 2).

Since the morphology of the verb has no tense marker, and all verbs and auxiliary are marked by person, there is no morphological distinction between finite and non-finite verbs. There are syntactic ways to distinguish tensed and untensed clauses, however: control sentences cannot take a tense functional word, but non-controlled tensed embedded clauses can (see section 2 below for a detailed discussion on Tense).

Kadiwéu has two different negation markers for main and embedded clauses, as described in Sandalo (1997). And this is independent evidence to differentiate main and embedded clauses in Kadiwéu. According to Sandalo (1997), one is *aG-*, which attaches to the verb of the main clause and has scope over the main clause exclusively (5); the second negative marker, *daGa*, follows a complementizer and has scope over the subordinate clause (6). Kadiwéu has three complementizer words (*me*, *nige* and *naGa*) that will be approached in the next section. The complement clauses are marked within [] and complementizers are in bold.

- | | | | | |
|-----|--|--|--|---------------------------|
| (5) | Pedro
Pedro
Pedro
NPRO
'Pedro does not want to hunt' | ayemaa
aG-y-emaan
NEG-3SUBJ-want
NEG+VB | [me dawii]
me d-awii
me INV-hunt
C VB | (Data from Sandalo 2023a) |
|-----|--|--|--|---------------------------|

- | | | | | | |
|-----|---------------------------------|------------------------------------|---------------------------------|--|---------------------------|
| (6) | Pedro
Pedro
Pedro
NPRO | eeta
ee-ta
say-APPL
VBAPL | Ecode
Ecode
Ecode
NPRO | [me me C C
daGa daGa NEG NEG
dinoojeteta d-nooje-teta INV-buy-APPL
domoojia domoojia car N] | (Data from Sandalo 2023a) |
|-----|---------------------------------|------------------------------------|---------------------------------|--|---------------------------|

The sentence below, (7), shows that, even if the embedded sentence is in the first position, a negative word for embedded clauses appears following the complementizer. The negative word never precedes a complementizer, neither *nige/naGa* or *me*. Therefore, it is not a matter of linearity but of a structural constraint.

- (7) [nige daGaca likate] [nige etacilo ligeletedeloco]...
 nige daGa+a-ca l-ikate nige etacilo l-gele-te-teloco
 CT NEG+F+CL 3POSS-wound CT hole 3POSS-beely-HON-APPL
 CT NEG+D N\$ CT N N\$-HON-APPL
 ‘When one has no wounds, when one has a hole on the belly...’
 (Data from the Tycho Brahe Corpus)

In order to negate the main clause and the subordinate clause, both *aG* and *daGa* must be used, as seen in example (8) and shown by Sandalo (1997). Sandalo (2023a) claims that “negation is therefore another piece of evidence for the classification of a sentence as main or embedded, since main clauses take *aG*-, whereas embedded clauses take *daGa*.”

- (8) Pedro aGeeta Ecode [me daGa dinojeteta domoojia]
 Pedro aG-ee-ta Ecode me daGa d-nojete-ta. domoojia
 Pedro NEG-say-APPL Ecode C NEG INV-buy-APPL car
 NPRO NEG+VB NPRO C NEG VBAPL N
 ‘Pedro did not say to Ecode not to buy a car.’
 (Data from Sandalo 1997)

Serial verbs have just one T node, whereas main and complement clauses have two T nodes. Serial verbs are two verbs in sequence, and one is marked by an applicative morpheme in Kadiwéu since the applicative morpheme can license an indirect object. So, the second object of the structure is licensed as an indirect object (see Sandalo 1997 for discussion). It differs from regular indirect objects since there is argument sharing between the two verbs:

- (9) ja joleGatibige ejinaGa nemaGa
 jaG j-ole-Ga-tibege eji-na-Ga nemaGa
 T 1SUBJ-search-1SUBJPL-APPL 1SUBJ-report-1SUBJPL dead
 T VBAPL VB N\$
 ‘We search for (deads) we report the deads.’
 (Data from the Tycho Brahe Platform)

In section 3, we present data on Tense in Kadiwéu considering main and embedded clauses. Section 4 shows that complementizers can be stacked. Finally, section 5 offers proposal on Kadiwéu clausal periphery based on Rizzi’s (1997) cartographic approach.

3. TENSE AND EMBEDDED CLAUSES IN KADIWÉU

Tense/aspect and mood are marked by functional words in main clauses (10-11). These functional words can be cliticized to the verb in fast speech (cliticization is marked by the symbol +). In main clauses past is marked by the functional word *jaG* and future by *domaGa*.

- (10) oda ejiwajegi ja ecotece nimedaGa
 oda ejiwajegi jaG ecotece n-ime-daGa
 then kadiwéu past decide INTR-stay.overnight-N
 ADV N T VB N
 ‘Then the Kadiwéu group have decided staying overnight’
 (Data from the Tycho Brahe Platform)

- (11)
- | | | | |
|------|---------|--------|--------------------|
| oda | one | domaGa | ibedoteteci |
| oda | one | domaGa | i-bedo-te-teci |
| then | hearsay | future | 3SUBJ-hug-HON-APPL |
| ADV | EV | T | VB |
- ‘Then he is about to hug him.’

(Data from the Tycho Brahe Platform)

There is also a structure that seems to be a loan from Portuguese since it is common among young people, in which future is marked by means of an auxiliary verb plus the main verb (12). There is a semantic difference between the two constructions: whereas (11) means prospective/immediate future, (12) is future. By prospective/immediate future we mean likely to happen or expected to happen in a very short time period. Morphologically, the difference between a tense functional word and an auxiliary verb is the fact that an auxiliary verb is marked by person, whereas a tense functional word is uninflectable. Moreover, whereas a tense word can attach to a complementizer (see example 14), an auxiliary verb cannot and it is always preverbal.

- (12)
- | | | | |
|------|---------|----------|--------------------|
| oda | one | igo | ibedoteteci |
| oda | one | i-go | i-bedo-te-teci |
| then | hearsay | 3SUBJ-GO | 3SUBJ-hug-HON-APPL |
| ADV | EV | AUX | VB |
- ‘Then he will hug him.’

(Data elicited)

Main clauses not overtly marked by tense are interpreted as present or recent past tense.

Embedded clauses are always introduced by a complementizer (in bold). Completive clauses, including control structures, are introduced by the complementizer *me* (see Sandalo 1997). In (13a), the embedded clause is tensed and thus marked by an auxiliary verb to express future tense.

(13) Completive Clauses

- (a)
- | | | | | |
|---------|----------------|-----------|------------|-----------------------|
| icoa | Goneleegiwadi | jonaGa | dinode | [me igotibece |
| icawa | Goneleegiwa-di | one+jaG | d-inode | me i-go-tibeci |
| M-CL-PL | man-PL | hearsay+T | INV-decide | C 3SUBJ-go-3SUBJPL |
| D | N | EV+T | VB | C AUX |
- iwiiGa]
i-wiiGa
3SUBJ-hunt
VB

‘Those men have decided that they will hunt’

(Data from the Tycho Brahe Platform)

- (b)
- | | | |
|----------------|------|--------------------|
| ayema | ica | [me diote] |
| aG-y-ema | i-ca | me d-iote |
| NEG-3SUBJ-want | M-CL | C INV-sleep |
| NEG+VB | D | C VB |
- ‘He does not want to sleep’

(Data from the Tycho Brahe Platform)

Control and tensed completive clauses differ only in the fact that control structures cannot be marked by a tense word (13b), whereas completive tensed clauses can.

In embedded tensed completive clauses, a tense morpheme (past or future) is reported to be adjoined to the left of the complementizer *me* in Sandalo (1997). Present tense has no overt marker.

- (14)
- | | | | |
|------------|---------------|------------|---------|
| yema: | [jame | yel:wadi | eGyadi] |
| y-ema: | jaG+me | y-el:wad | eGyadi |
| 3SUBJ-want | T+C | 3SUBJ-kill | monkey |
- ‘He wishes that he had killed a monkey.’

In recent field elicitation, however, some speakers said to prefer the C T order:

- (15)
- | | | | | |
|-----------|------------|-------------|-----|---------|
| nijienigi | yemaa | [me | ja | dotaGa] |
| nijienigi | y-emaa | me | jaG | dotaGa |
| healer | 3SUBJ-want | C | T | speak |
| N | VB | C | T | VB |
- ‘The healer wants to have spoken.’ (Data elicited)

The same order can also be found in the Bible.⁵ Note that in (16), tense is marked in the main and in the embedded clause:

- (16)
- | | | | | | |
|-------|-----|------------|-------------|--------|--------------------|
| codaa | ja | yowooGodi | [me | domaGa | onibeotibigege] |
| codaa | jaG | y-owooGodi | [me | domaGa | o-n-ibeo-tibigege] |
| and | T | 3SUBJ-know | C | T | PL-3SUBJ-wait-APPL |
| CONJ | T | VB | C | T | VB |
- ‘And he knew they would wait for it’.
(Data from the Kadiwéu New Testament, Wycliffe Bible Translators, 2010)

Relative clauses are also marked overtly for embedding. Restrictive relative clauses are also introduced by the complementizer *me*. But explicative relative clauses are introduced by *ane*:

- (17)
- Relative Clauses
- (a) Restrictive
- | | | | | | |
|------|--------|-------------|----------|-----------------|------------|
| ani | wetiGa | [me | iwaGadi] | eniteloco | iGonagi |
| a-ni | wetiGa | me | iwaGadi] | y-ani-teloco | i-Gonagi |
| F-CL | stone | C | iwaGadi | 3SUBJ-fall-APPL | 1POSS-foot |
| D | N | C | VB | VB | N\$ |
- ‘The stone that is heavy has fallen on my foot’
- (b) Explicative
- | | | | | | |
|------|--------|--------------|----------|-----------------|------------|
| ani | wetiGa | [ane | iwaGadi] | eniteloco | iGonagi |
| a-ni | wetiGa | [ane | iwaGadi] | y-ani-teloco | i-Gonagi |
| F-CL | stone | C | iwaGadi | 3SUBJ-fall-APPL | 1POSS-foot |
| D | N | C | VB | VB | N\$ |
- ‘A stone, that is heavy, has fallen on my foot’ (Data elicited)

Adverbial clauses are introduced by *nige* and *naGa*. The complementizers *nige* and *naGa* are tensed: *naGa* is past-tense (18) and *nige* is future (19), as shown by the minimal pair below (Sandalo 1997):

- (18)
- | | | | | | |
|-------|------------|-------|---------------|------------|----------|
| Pedro | yatemati | Ecode | [naGa | yoe | diimigi] |
| Pedro | y-atemati | Ecode | naGa | y-oen | diimigi |
| Pedro | 3SUBJ-tell | Ecode | CT | 3SUBJ-make | house |
| NPRO | VB | NPR | CT (PAST) | VB | N |
- ‘Pedro told/tells Ecode (the date) when he built a house/houses.’
- (19)
- | | | | | | |
|-------|------------|-------|---------------|------------|----------|
| Maria | yatemati | Ecode | [nige | yoe | diimigi] |
| Maria | y-atemati | Ecode | nige | y-oen | diimigi |
| Maria | 3SUBJ-tell | Ecode | CT | 3SUBJ-make | house |
| NPRO | VB | NPRO | CT (FUT) | VB | N |

⁵ The Kadiwéu Bible has been translated by Kadiwéu native speakers. One of the translators is Hilário Silva, who was consulted for the data verification for this work and to whom we are enormously grateful.

‘Maria told/tells Ecode (the date) when he will build a house.’

(Data from Sandalo 1997)

We will label *nige* and *naGa* as complementizers since they only appear in to introduce adverbial clauses. They never occur in main clauses. In the syntactic annotation, tensed *nige* and *naGa* complementizers are labelled as CT since they always include tense.

If one finds a fragment of a sentence that starts by these words they will be interpreted as a fragment missing the main clause:

- (20)
- | | |
|------|----------------------------|
| naGa | dinoetibigiwaji |
| naGa | d-n-oen-tibigiwaji |
| CT | INV-INTR-get.ready-3SUBJPL |
| CT | VB |
| | ‘When they were ready... |
| | ‘*They got ready’ |
- (Data elicited)

In order to get the reading ‘they got ready’ a tense marker rather than a tensed complementizer, appears:

- (21)
- | | |
|-----|----------------------------|
| ja | dinoetibigiwaj |
| jaG | d-n-oen-tibigiwaji |
| T | INV-INTR-get.ready-3SUBJPL |
| T | VB |
| | ‘They got ready’ |
- (Data elicited)

We therefore see that embedded clauses are evident, since they are all marked by complementizers. In the following section, we shall see that *me* plays other functions at well, which points to a very complex structure of the CP periphery.

4. FURTHER DATA CONCERNING *ME*

The complementizer *me* also appears in XP fronting and *wh*-questions. The example in (22) is an examples of fronting, and (23) is a *wh*-question. We understand left dislocation to the complementizer zone as a syntactic process where a phrasal element (like a noun phrase, adverb phrase, etc) is moved to the beginning of a clause to emphasize it. In Kadiwéu, topic and focus involve left dislocation to before complementizers. More than one topic is allowed. The topic is always old information within the context of speech, whereas focus is new information.⁶

- (22)
- | | | | | | |
|------|------|-----------|---------|-----------|---|
| [ica | noko | me | [daGaxa | me | diataka]] |
| i-ca | noko | me | daGaxa | me | d-ataka |
| M-CL | day | C | lots | C | INV-miss |
| D | N | C | Q | C | VB |
| the | day | that | lots | that | he missed him |
| | | | | | ‘The day that he missed him a lot’ |
| | | | | | Lit: ‘The day that a lot that he missed him.’ |

The data in (22) comes from the narrative *Neegi* (Tycho Brahe corpus). It tells us about a day in which the heroe, Neegi, wanted to meet his deseased companion. Thus, the constituent [*ica noko*] ‘the day’ is the topic of the narrative and of the clause, fronted, and the quantifier is focus (new information). Both the topic and the focus precede the complementizer *me*.

⁶ In Kadiwéu, contrastive focus does not involve fronting to before a complementizer word (see Sandalo 1999:34).

In the interrogative sentence (23), there are two occurrences of *me* again: one preceding the interrogative word *iga* ‘what’ and another preceding the focus [leeGodi Pedro] ‘Pedro’s reason’⁷

- (23)
- | | | | | | | |
|-----------|--------------|-------|-----------|------------|------|----------|
| igame | leeGodi | Pedro | me | yoe | ica | diimigi? |
| iga+me | l-eeGodi | Pedro | me | y-oe | i-ca | diimigi |
| WH+C | 3POSS-reason | Pedro | C | 3SUBJ-make | M-CL | house |
| WADV+C | N\$ | NPRO | C | VB | D | N |
| what+that | reason | Pedro | that | he make | a | house |
- ‘Why did Pedro make a house?’
Lit. ‘What was Pedro’s reason to make a house?’ (Data from Sandalo1997)

It is interesting to note that *me* is recursive. In effect, the co-occurrence of two layers (or more) of complementizers *me* are common as illustrated in above with fronted topics and foci. But more than one topic is also possible. In (24), within a story of a deer that killed a hunter (*oticaGanigo nawikajete*, Tycho Brahe corpus), [*ica noko*] ‘the day’ and [*idiwa*] ‘he’ are both old information in this narrative:

- (24)
- | | | | | | |
|------|------|-----------|----------|-----------|-----------|
| ica | noko | me | idiwa | me | yeleo |
| i-ca | noko | me | i-di-wa | me | y-eleo |
| M-CL | day | C | M-CL-HON | C | 3SUBJ-die |
| D | N | C | D | C | VB |
| the | day | that | he | that | died |
- ‘The day that he died.’
Lit: ‘The day that he that died.’

When the tensed complementizers *nige* and *naGa* co-occur with *me*, they are always higher (that is, first). No other order was found in the entire corpus and a native speaker who is a graduate student in Linguistics at the University of Campinas, Brazil (personal communication), reported that this fact is true; that is, she provided an acceptability judgment that shows that while the stacked CT-C order is grammatical (25), the stacked C-CT order (26) is not.⁸

- (25)
- | | | | | |
|----------|---------------|-----------|-------------|-------------------------|
| niGica | [naGa | owidijegi | [me | ixomaGatedijo]] |
| nG-i-ca | naGa | owidijegi | me | i-xom-Ga-te-tijo |
| DEM-M-CL | CT | last time | C | 3SUBJ-cross-PL-HON-APPL |
| D | CT | ADV | C | VBAPL |
| he | when-past | last time | that | crossed |
- ‘When he crossed it for the last time...’
Lit: ‘He when last time that crossed it...’ (Data from the Tycho Platform)

⁷ Kadiwéu possessive phrases are formed by adding a possessive morpheme at the head of the phrase (possessed). The word order is free (possessor-possessed or vice-versa). The possessive morphemes are: *i-* 1person, *Gad* ‘second person’ and *l-* ‘3person’ (see Sandalo 1997).

⁸ According to Vanda Pires, a sentence like the one in (26) is common among Portuguese speakers speaking Kadiwéu. That is, it is a common mistake.

- (26) *niGica [me owidijegi [naGa ixomaGatedijo]]
 nG-i-ca me owidijegi naGa i-xom-Ga-te-tijo
 DEM-M-CL C last time CT 3SUBJ-cross-PL-HON-APPL
 D C ADV CT VBAPL
 he that last when crossed
 ‘He was the last one when they crossed it’
 (Data elicited, i.e. said by one of the authors of this paper)

The complementizer *nige* and *naGa* always initiate a new adverbial clause as observed in example (27) below. Thus, in the sentence (25), *niGica* ‘he’ (topic) is fronted before the complementizer CT and the adverb (focus) is fronted before the complementizer *me*. This is just one sole sentence. This kind of sentence (example 25) gives us a crucial information on the CP left periphery in Kadiwéu as it will be developed in the next section.

- (27) niGijo [naGa dopitedijo] [naGa igo] [naGa
 nG-i-jo naGa d-opil-te-tijo naGa i-go naGa
 DEM-M-CL CT INV-return-HON-DIR CT 3SUBJ-go CT
 D CT VB CT VB CT
 dopitedijo]
 d-opil-te-tijo
 INV-RETURN-HON-DIR
 VB
 ‘When he went back, when he went forth, when he went back’ (when he went back and forth and back’) (Data from the Tycho Brahe Corpus)

5. A SKETCH OF A CARTOGRAPHIC APPROACH OF THE LEFT-PERIPHERY OF KADIWEU

We have seen that the complementizer *me* could co-occur with the complementizers marked for Tense: *nige* and *naGa*. Additionally, it always occurs to the right of *nige/naGa*.

As mentioned before, according to Rizzi’s cartographic hypothesis, the syntactic structure of an embedded clause can be built of three layers: a “Force” layer that selects for a declarative, interrogative or an exclamative sentence while the “Fin” layer expresses the finitude of the clause. Force and Fin can be separated by Topic and Focus heads.

- (28) Rizzi (1997)’s structure of the left periphery
 [ForceP Force [TopP* Top [FocP Foc [TopP* Top [FinP Fin [IP (Rizzi 1997: 297)

In these terms, we propose that *nige* and *naGa* always occupy Force, where they express the connection with the outside of the sentence, while the complementizer *me* can occupy different position in CP layer. It can be both in Force when the embedded clause is tensed, and in Fin in control structures. When in Force, Tense can adjoin to it (cf. example 14). Example (13b) has been repeated here as (29) to form a minimal pair with the data in (30):

- (29) yema [FinP ica [Fin me [IP diote]]]
 y-ema i-ca me d-iote
 3SUBJ-want M-CL C INV-sleep
 VB D C VB
 wants he to sleep
 ‘He wants to sleep’ (Data from the Tycho Brahe corpus)

- (30)
- | | | | | |
|--------------------------|-------------|------------------|--------------|-----------|
| yema | [ForceP ica | [Force me | [FinP [IP ja | diote] |
| y-ema | i-ca | me | jaG | d-iote |
| 3SUBJ-want | M-CL | C | T | INV-sleep |
| VB | D | C | T | VB |
| wants he | that | past | sleep | |
| 'He wants to have slept' | | | | |
- (Data elicited)

Moreover, the complementizer **me** lexicalizes other heads in the CP layer when XPs are fronted: Top and Foc. The data in (22) is repeated here as (31):

- (31)
- | | | | | | | |
|---|------|----------------|--------------|----------------|-----------|---------------|
| [TopP ica | noko | [Top me | [FocP daGaxa | [Foc me | [FinP [IP | dataka]]]] |
| i-ca | noko | me | daGaxa | me | | d-ataka |
| M-CL | day | C | lots | C | | INV-miss |
| D | N | C | Q | C | | VB |
| the | day | that | lots | that | | he missed him |
| 'The day that he missed him a lot' | | | | | | |
| Lit: The day that a lot that he missed him.' (Data from the Tycho Brahe corpus) | | | | | | |

According to Rizzi's proposal, TopP is recursive (marked by *), and indeed example (24) above shows the occurrence of more than one topic within the CP zone.

In the interrogative sentence seen before, repeated here as (31), we see that the wh-word *iga* is adjoined to **me** and the possessive nominal phrase [*leeGodi Pedro*] 'Pedro's reason' (see Sandalo 1997 for discussion on possessives) is fronted. We propose that the wh-word in in ForceP along with **me**, and the second **me** in Top, as represented in (33):

- (32)
- | | | | | |
|---|--------------|-----------------|------------|----------|
| igame | leeGodi | Pedro me | yoe | diimigi? |
| iga+me | l-eeGodi | Pedro me | y-oe | diimigi |
| WH+C | 3POSS-reason | Pedro C | 3SUBJ-make | house |
| WADV+C | N\$ | NPRO C | VB | N |
| 'Why did Pedro make a house? [lit. what was/is Pedro's reason to make a house?] | | | | |

- (33) [FORCEP [WNP [WH+C iga+me [TopP leeGodi Pedro [Top me [FinP [IP y-oe diimigi]]]]]]]⁹

6. FINAL REMARKS

This paper has presented finitude and embedding in Kadiwéu. It shows that as opposed to many Brazilian languages, it is possible to separate finite from infinitive clauses in spite of the fact that tense is not inflected in the verb. In main clauses, tense is marked by independent functional words. In embedded, non controlled clauses, tense can be adjoined to the complementizer (see 14) or be in situ (15-16). Complementizers that introduce adverbial clauses are intrinsically tensed. Moreover, complementizers can be stacked in the presence of fronted XPs. In this case, the recursive complementizer is always **me**. In this work we offered a preliminary analysis of the CP structure in Kadiwéu in the framework of Rizzi (1997)'s cartographic approach to the left periphery. According to this analysis, **nige/naGa** occupies Force, **me** occupies any of the nuclear positions in the CP layer and produces recursive CPs when it occupies Top or Foc with either **nige/naGa** or **me** in Force. More than one Top can occur showing that Top itself is recursive.

⁹ In this paper, we do not address the issue of the position of the verb in the sentence. Furthermore, in Kadiwéu interrogative sentences with argument function are expressed in a different way that will not be addressed here. These *structures* involve clefting (see Sandalo 1997).

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