



INTERCLAUSAL INTEGRATION AND (ANTI-)FINITENESS IN CHÁCOBO (PANO) SPEECH

INTEGRAÇÃO INTERCLAUSAL E (ANTI-)FINITUDE NA FALA CHÁCOBO (PANO)

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Abstract: This paper provides a description of finiteness and its relationship to cross-clausal integration in Chácobo (southern Pano, Bolivia). Cross-clausal integration refers to the degree to which combined clauses share participants (e.g. same subject) or share T(ense)-A(spect)-M(odal)-E(videntiality) information. With respect to finiteness, in the canonical case, a finite clause expresses the referent or TAME categories which scopes over the less finite clause, where such categories are left unexpressed (e.g. in participial adverbial clauses). I provide a survey of finiteness in Chácobo and then I relate it to patterns of inter-clausal integration in natural speech.

Keywords: clause-linkage; Chácobo.

Resumo: Este artigo fornece uma descrição da finitude e sua relação com a integração cruzada em Chácobo (sul de Pano, Bolívia). A integração de cláusulas cruzadas refere-se ao grau em que as cláusulas combinadas compartilham participantes (por exemplo, o mesmo sujeito) ou compartilham informações de T(empo)-A(specto)-M(odalidade)-E(videncialidade). Com relação à finitude, no caso canônico, uma cláusula finita expressa o referente ou as categorias TAME englobadas pela cláusula menos finita, onde essas categorias não são expressas (por exemplo, em cláusulas adverbiais participiais). Apresento um estudo da finitude no Chacobo e, em seguida, relaciono-o aos padrões de integração interclausal na fala natural.

Palavras-chave: vinculação de cláusulas; Chácobo.

1. INTRODUCTION

The notion of finiteness has not played an important part in the description of Chácobo (Prost 1965, 1967; Córdoba et al. 2012; Tallman 2018), nor in Pano languages generally (Loos 1999; Fleck 2013). In the context of a description of dependent clauses in Chácobo, Tallman (2024a, b) follows Givón (2001) in treating finiteness as a graded phenomena, and Bickel (2010) in treating relative finiteness as a diagnostic relevant to the coordination-subordination distinction. Tallman shows that the distinction between coordination and subordination is not motivated in Chácobo without suppressing some of the diagnostics that have been rallied for such a distinction. In the latter study, finiteness simply varies as a function of how many restrictions on T(ense)-A(spect)-M(odality)-E(videntiality) categories there are on a given dependent clause. For example, purpose clauses marked with =tí are less finite than different-subject clauses marked with =kí

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because the former allows less TAME categories in its clause than the former. The latter study assumes that finiteness should be understood as a unidimensional scale, whereon clause-types can be assigned a determinative ranking. The same study ignored what was frequent or common in natural speech and focused entirely on coding *possibilities* with respect to finiteness. Here, I will take a different perspective focusing on the frequency of coded finiteness variables over combined clauses in natural speech (see Gast & Jędrzejowski 2022 for a relevant discussion of the distinction between grammar and corpus based typology).

In this paper I am concerned with the relationship between cross-clausal integration and the markers of finiteness in natural speech in the language. Cross-clausal integration refers to the degree to which combined or adjacent clauses display referential and temporal coherence (Givón 2001; Green 2014). In Givón (2001), temporal coherence covers tense, aspect and modality. In this study I expand the notion of finiteness in cross-clausal integration to cover associated motion (Guillaume 2016) and evidential marking (Aikhenvald 2004).

The relationship between cross-clausal integration and finiteness is operationalized as follows: for two linked clauses X and Y, clause X is more finite than combined clause Y to the extent that X expresses a referent or TAME information that scopes over Y, but which is not overtly marked in the latter. For example, in the example in (1) there are two dependent clauses (marked off by ‘DEP’ below).

1. <jatsi quihá caxo nanē ja nianíquē amacasina rēchoxmatí>

[hátsi kiá ka=şó] _{DEP}	[nani há
[then REPORT go=PRIOR:SA]	[bii 3
nia=ní=ki] _{MAIN}	... [ri-tʃoş=ma=tí] _{DEP}
throw.out=REMPST=DECL:PST]	... [nose-hit=CAUS=NMLZ:PURP]

‘So, after he (Nahuapaxahua) went, he threw the bii fruit down to let it (the bii fruit) hit him (the Tapir) in the nose.’
(TXT 781:0066)

The first dependent clause *hatsi kiá kaşó* ‘and so it is said that he went’ shares its subject participant referent “Nahuapaxahua” expressed by *ha* ‘third person singular’ in the main clause. The main clause shares its temporal remoteness and tense information marked by =*ní* ‘remote past’ with that of the first dependent clause as well. Neither the subject nor the temporal information are overtly expressed in the first clause. The main clause shares both its subject (Nahuapaxahua), its object (the bii fruit), and its temporal information (remote past) with the second dependent clause *ri-tʃoş=ma=tí* ‘cause something to hit someone in the nose.’ In terms of referential and temporal expression the main clause headed by *nia* ‘throw’ behaves more canonically like the finite clause in the clausal combination because it codes information which scopes over dependent clauses where that information is not directly expressed. The dependent clauses can be regarded as reduced and, therefore, less finite, compared to the main clause in the sense that they inherit information (such as subject, tense, or aspect), which they do not encode, but which are overtly encoded only in the main clause.

Note, however, that it is in principle possible for the variables of interclausal coherence to not all point in the same direction with regards to which clause is the finite one for a given token of linked clauses. A unidimensional notion of “finiteness” (Hopper & Traugott 2003: 175), presupposed in Tallman (2024a), makes us expect that for any two clauses that combine, there is a single most finite clause to which the overt expression of semantic and pragmatic information is attracted (see discussion in Givón 2001: Ch. 18). Such a tendency in natural speech might plausibly serve as the sustenance or perhaps

the catalyst for the maintenance or the evolution of hard grammatical restrictions against the overt expression of referents or TAME categories in so-called non-finite clauses. However, a question arises as to how strong such clustering tendencies are in natural speech for clause-types that do not (yet) have such grammaticized restrictions against overt marking in certain clauses. For instance, clause combinations could display patterns where one piece of information is overtly expressed in clause A shared but left covert in clause B, and another piece of information overtly marked in clause B shared, but shared and left covert in clause A. Below, I provide some examples of this in natural speech. I refer to such patterns as ANTI-FINITE (see Section 3 for further explanation).

I attempt to investigate the intersection between markers of finite status (subject expression, TAME expression) and interclausal coherence in natural speech, partially building on the methodology in Green (2014). The goal is to see to what degree candidate finiteness markers cluster around a most finite clause in actual discourse. They would do this through token-based covariation in the expression of categories. For example, if one clause overtly expresses the subject shared across two clauses, then it is more likely that a temporal marker will do so as well. The study is relevant to claims about how syntactic constraints evolve from properties of discourse and rhetorical structure (Du Bois 2003; Givón 2012) and how speech-community-specific rhetorical patterns (e.g. Woodbury 1985) might prevent the evolution of sharp distinctions in finiteness across clause-types, despite competing functional pressures. Thus, in contrast to Cristofaro (2007), who rejects finiteness as such, I consider it worth exploring how a finiteness distinction may or may not emerge as a meaningful language-specific pattern which organizes interclausal coherence.

In the service of investigating finiteness in natural speech, I coded clause combinations where at least one of the clauses was a dependent clause. A clause is defined as dependent if it is not accepted as a valid chunk of discourse on its own without a main clause. For instance, in elicitation Chácobo reject a same subject clause as a complete utterance without another independent clause to which they associate in discourse.² I coded 240 such clauses from natural speech, focusing on texts that are primarily monologic as dependent clauses are more frequent there. I coded such clause combinations for whether they share subject and TAME information and for how this information is coded in each clause. The data and relevant code are found in the Supplementary materials to this paper (Tallman 2025).

Section 1 provides a basic background of the Chácobo language and introduces the clause-types relevant for this study. Chácobo clause-types can most easily be classified according by overt clause-type markers, and I identify 29 clause-types (both independent and dependent) on this basis. Section 2 and 3 is concerned with properties relevant to interclausal coherence that are built-in to the grammar of certain clause-type markers. For example, same-subject clauses necessarily display interclausal coherence with the clauses they combine with because they require an identical subject to be present in an adjacent clause.

Section 3 discusses the terminology which is relevant for understanding patterns of clausal integration as they relate to finiteness in this study. Section 4 describes temporal distance markers. Section 5 discusses subject expression and sharing in clausal combinations. Section 6 concerns reportative marking. Section 7 provides a summary of the study and discusses challenges for future research.

² I do not use the same free occurrence test as a criterion for assessing finiteness in this paper and so the distinction between dependent and independent clauses is logically distinct from the distinction finite and nonfinite clauses.

2. BACKGROUND ON CHÁCOBO LANGUAGE

Chácobo is a southern Pano language of the northern Bolivian Amazon. The language is spoken by approximately 1500 people on the Geneshuaya, Ivon, Benicito and Yata rivers. In general, Chácobo is still learnt by children as their first language. Spanish is learnt as a second language. Data for the study were gathered from 2010 until 2022, based on approximately 24 hours of data transcribed from natural speech (Tallman 2018).

A brief typological overview is in order. Chácobo has a relatively small segmental inventory with 15 consonants (t, p, β, r, ts, tʃ, h, ʔ, m, n, w, j, s, ʃ, ʂ) and 4 vowels (ɨ, i, o, a) and a contrastive privative tone system – (L)H vs. Ø. Syllables in Chácobo are either marked as containing a single high tone (realized as rising) or as toneless. Chácobo is dependent marking and noun phrases display an ergative alignment. First and second person pronouns display an accusative alignment. The ergative marking of an A noun phrase argument does not occur clause-finally. Ergative, genitive, and instrumental case categories in Chácobo are realized with a floating high tone docked to the final syllable of a noun phrase (Tallman 2018 for details; Tallman & Elias-Ulloa 2020 for a phonetic study)

Clause-type markers can be divided into verbal and nonverbal predicate types. All clauses are marked with a clause-type marker as in *ʂo* in 2 which marks declarative non-verbal predicates and *ki* in 3 which marks declarative past tense verbal predicates.

2. yóβi ʂo honi
 shaman **DECL** man
 ‘The man is a shaman’
3. honi= yóβi tsáya=**ki**
 man=ERG shaman see=**DECL:PAST**
 ‘The/a man saw the/a shaman’

Clause-type markers code illocutionary force (declarative, imperative, interrogative, and reportative) and, for some markers, tense (past, nonpast), associated motion, and mirativity. Tallman (2018) describes these markers as obligatory in verbal predicate constructions as sentences without them are rejected in elicitation. However, in natural speech they are occasionally elided as discussed in section 4.

Table 3 summarises the independent clause types in Chácobo by their marker, the order of subject and predicate, the form of the clause-type marker, the illocutionary force of the clause-type marker and TAME distinctions also coded by the clause-type marker.³

³ Note in this paper, I include associated motion as a TAME category.

Table 1. Clause-type constructions and clause-type marker for independent clauses in Chácobo

Verbal	Order	Ergative case	Form	Illocutionary fore	TAME
Nonverbal	predicate-subject	No	šo	declarative	
			ki	declarative	future
			ní	interrogative	
			kiá	reportative	
Verbal	subject-predicate	Yes	ki	declarative	past
			ʔá	interrogative	past
			ʔá kiá	reportative	past
			wí	imperative	
			pá	imperative	mirative
			tá	imperative	do & go
Verbal	predicate-subject	No	ki	declarative	anterior
			ki	declarative	non-past
			ʔá	interrogative	past
			ʔaí~ ʔi ní	interrogative	non-past
			ʔi kiá	reportative	non-past

A few analytic points are in order. As is illustrated in 2 and 3, nonverbal predicate constructions display a predicate-subject order and verbal predicate constructions display a subject-predicate order. Tallman (2018) describes a construction-type which mixes verbal and nonverbal predicate constructions. It is verbal in the sense that it has a verb, but does not mark case, and displays a predicate-subject order as with non-verbal predicate constructions. An example is provided in 4.

4. *yobi* *tsáya=ki* *honi*
 shaman see=DECL:NONPST man
 ‘The man has seen the shaman.’

Talman (2018) refers to these mixed constructions as C-SUBJ constructions, because the subject occurs directly after the ‘C’ (clause-type marker). A question arises as to whether they should be regarded as verbal predicate constructions without ergative case marking and with a predicate-subject order or as nonverbal predicate constructions with an embedded verbal predicate clause (see Salanova & Tallman 2020; Tallman 2021). Apart from highlighting a potential ambiguity that arises from Tallman’s (2018) classification of clauses into verbal predicate and non-verbal predicate, C-SUBJ constructions are relevant for the issue of finiteness because whether or not they license an overt subject is a matter of analysis. On a monoclausal analysis C-SUBJ clauses, the

verb has a subject. On a biclausal analysis, the subject is licensed in a higher nonverbal predicate construction (see Coon 2013 for relevant discussion in relation to ergativity).

5. Biclausal: [[shaman see]_{CLAUSE}=NONPST man]_{CLAUSE}
 Monoclausal: [shaman see =NONPST man]_{CLAUSE}

In this paper I assume they are monoclausal constructions, but future research might find that their biclausal status is relevant to cross-clausal integration.⁴ The relevant empirical facts are discussed in Tallman (2018) and Tallman (*submitted*). The evidential content of such reportative marked clauses passes a number of diagnostics for illocutionary status. More straightforwardly, however, the reportative marker occurs in the same structural position as the declarative and is mutually exclusive with it. It should be noted, however, that the reportative marker can occur optionally in clauses marked with declarative =*ki* and in many dependent clauses as well (Tallman 2024a), where it has a more modal-like semantics (Tallman 2018). One can see this from the presence of the reportative *kiá* found in 1 above *ri-tfoş=ma=tí* ‘to let someone/something hit someone in the nose.’

Dependent clauses in Chácobo can also be classified according to their clause-type marker. They vary in terms of whether they **impose** referential (dis)continuity with the subject of an adjacent clause or a near-adjacent main clause. They also vary in terms of what type of temporal relation they exhibit with respect to the clause they might be linked to. Finally, some of them can be regarded as nominalized clauses which are categorically flexible such that they can function as relative or adverbial clauses. The dependent clauses are listed in Table 2 below.

⁴ Another analytic issue concerns the status of evidential marking as illocutionary force rather than as modal. In the biclausal context the evidential marker is an illocutionary marker according to the known-falsity test and the cancellation test. In monoclausal contexts the reportative, does not pass the known-falsity test nor the cancellation test (Tallman 2018, Ch. 13, section 13.16.7).

Table 2. Dependent clauses in Chácobo organized by temporal relation to main clause, noun-modifying ability, and referential function.

Form of clause-type marker	Relation to head clause	Temporal relation	Noun modifying	Referential function
<i>ʔás(na)</i>	same S	Prior	No	no
<i>ʂó(na)</i>	same A	Prior	No	no
<i>ʔi(na)</i>	same S	Concurrent	no	no
<i>kí(na)</i>	same A	Concurrent	no	no
<i>ʼnoʂparí</i>	same A/S _{NVP}	Subsequent	no	no
<i>pama(ʔás)</i>	same S	interrupted event	no	no
<i>pama(ʂó)</i>	same A	interrupted event	no	no
<i>(asyndetic)</i>	same S/A	planned succession	no	no
<i>kí(no)</i>	different S/A	Prior	no	no
<i>ʼno</i>	different S/A	Concurrent	no	no
<i>ʼnoʂparíno</i>	different S/A	Subsequent	no	no
<i>ʔá(ka(to)/na)</i>	none	Anterior	yes	no
<i>ʔái(ka(to)/na)</i>	none	Imperfective	yes	yes (agentive)
<i>tí</i>	none	Purpose	no	yes (instrumental)

An example of a same-subject clause and a nominalized clause has already been provided in 1 above. An example of a different subject clause is provided in 6.

6. <mápëca ja huaqué tsi quihá bíi jabayoníquë>
[ma-pík-a ha wa=[kí]_{CL}]_{DEP} tsi kiá
head-open-TR 3 TR=PRIOR:D{S/A} LNK REPORT
[bii haβa=yo=ní=[ki]_{CL}]_{MAIN}
mosquito run=CMPL=REMPST=DECL:PST
‘After she (Ashina, the goddess of earth) opened it (the container) and the mosquitos all flew out (to bite the Chácobo).’

Nominalized clauses are also used for clause-linkage in Chácobo. The marker =*tí* ‘instrumental nominalizer’ derives an instrument from a verb but is also used in the construction of purpose clauses as in 1 above.

The Chácobo verb does not display agreement with its arguments. Independent and dependent clauses are not distinct in terms of case-marking. However, same-subject clauses cannot express an overt-subject. If the possibility of using TAME marking (Givón 2001; Cristofaro 2007) is used to measure finiteness, dependent clauses vary in terms of their finiteness as can be illustrated by their marking abilities summarized in Table 3 (see Tallman 2024a, b for details).

Table 3. Tense-aspect-modality-evidentiality marking in Chácobo by clause-type

		PRIOR:SS	PRIOR:SA	CONCUR:SS	CONCUR:SA	SUBSEQ:SS/A	INTERRUPT:S	QUICK:SS/A	PRIOR:DS/A	CONCUR:DS/A	SUBSEQ:DS/A	NMLZ:AGT	NMD	NMLZ:PURP
ASPECT	HABITUAL	✓	✓	✗	✗	✗	✓	✓	✓	✗	✗	✓	✗	✗
	ALLDAY	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗
	PUNC	✗	✗	✗	✗	✗	✗	✓	✗	✗	✗	✓	✓	✓
	GO&DO	✓	✓	✓	✓	✓	✓	✗	✓	✓	✗	✓	✓	✗
TENSE/TIME	CRAS	✗	✗	✓	✓	✓	✓	✗	✗	✓	✓	✓	✗	✗
	RECPST	✓	✓	✗	✗	✗	✗	✗	✓	✗	✗	✗	✓	✗
	DISTPST	✓	✓	✗	✗	✗	✗	✗	✓	✗	✗	✗	✓	✗
	REMFUT	✗	✗	✓	✓	✗	✗	✗	✗	✗	✗	✓	✗	✗
MODALITY	CNTRFCT	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✗
	ABIL	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✗
	LIMIT	✗	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓
	DISTAL	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓
	ANXIETIVE	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓
	VOLITIVE	✗	✗	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✗
	Sum	9	9	9	9	8	8	7	1	9	8	1	1	4
									0			1	1	

It should be noted that some of the markers listed above are also disallowed in certain independent clauses as well. For instance, the future time markers =*fari*

‘tomorrow’ and =*sí* ‘remote future’ cannot co-occur with the clause-type markers that also encode past such as =*ki* ‘declarative, past’ or =*ʔá* ‘interrogative, past’. The past time markers =*ʔitá* ‘recent past’, =*yamít* ‘distant past’, =*ní* ‘remote past’ cannot combine with any non-past clause markers.

Apart from the few restrictions TAME marking (which are also present across independent clauses in any case), the only other two domains where dependent clauses might be considered less finite than independent clauses are in their lack of ability to mark illocutionary force (declarative, interrogative, imperative, reportative) and the fact that some of them ban the presence of subjects (A or S) forcing them to be coreferential with the main clause.

There are alternative constructions that can accommodate the fact that dependent clauses do not allow illocutionary marking, however.

Dependent clauses can appear in subject or predicate positions in non-verbal predicate constructions, where the illocutionary marking is expressed by the clause-type marker of the nonverbal predicate. For instance, one can combine illocutionary marking with an agentive clausal nominalization marked with =*ʔáina* by placing the relevant nominalized construction inside a nonverbal predicate construction marked with *ní* ‘interrogative’, a marker that is elsewhere reserved for nonverbal predicate constructions, as illustrated in 7 below. In this example, the NVP is in square brackets. The first position is filled by *okaroʔá* ‘in that way’, followed by the clause-type marker *ní*, followed by the nominalized clause *shinó ʔfotaʔaina* ‘monkey having sex’. The nominalized clause *ʃinó ʔfotaʔaina* contains *ʃinó* ‘monkey’ as the subject, and *ʔfota* ‘have sex’ as the verb.

7. <ocárohá ní shinó chotaháina i quiha jóni níquē>
 [oká=roʔá ní ʃinó ʔfota=ʔáina] i
 in.that.way=LIMITINTER monkeyhave.sex=NMLZ say
 kiá hóni =ní=ki
 REPORT man =REMPST=DECL:PST
 ‘Is it in that way that the monkey is having sex? The man said (it is said).’
 (TXT 0880:0011)

Furthermore, while illocutionary marking does not appear on dependent clauses (illocutionary markers occupy the same structural position as the same/different subject clause and nominalization markers), illocutionary force is extensible for dependent clauses (Bickel 2010), even if the clause does not have an explicit illocutionary marker in it, as discussed in Tallman (2024a). An example of this situation is provided in 8 below. The illocutionary marker =*ʔá* ‘past interrogative’ is extensible because it can either scope over only the main clause predicate as in the interpretation in (a) or interrogative illocutionary force can be applied to both the dependent clause and the main clause as in the interpretation in (b).

8. <chacho pixó tsi Gërë joni bá tsayahá?>
 ʔfatʃo pi=ʃó tsi hiri honi ʔá tsaya=ʔá
 pig eat=PRIOR:SA LNK Gere man PL:ERG see=INTER:PST
 (a) ‘After they_i ate pig, did the men_i see Gere?’
 (b) ‘Did they_i eat pig and did they_i speak to Gere?’

Furthermore, while it is true that same-subject clauses do not allow independent subjects, it should be pointed out that Chácobo allows dropping of overt third person arguments in main clauses as well (Tallman 2024a for discussion) and whether C-SUBJ clauses actually express their own subject arguments is a matter of analysis, as pointed

out above. Furthermore, different subject clauses require an overt subject, a condition not imposed on independent clauses.

Another criterion that is brought up in the context of finiteness is that of information structuring. Clauses which are less finite have less information structure coded syntactic positions available. For instance, a “first position” in a clause could be reserved for focus marked constituents. As discussed in Tallman (2018) and Tallman (2024a), first position in Chácobo, is marked for special information structure status (either focus or topic depending on the context, Tallman 2018, 2024a for discussion). First position can be discerned based on the relative position in relation to the linker *tsi*. Indeed, the function of *tsi* appears to mostly be to mark off first person from the rest of the clause. In Chácobo, some of the dependent clauses can have a first position independent of the main clause. An illustrative example is provided in 9 below, where *tsi* is found inside different subject clauses marked by *=no* ‘concurrent, different subject’ or *=kí* ‘prior, different subject’.

9. < játsi quihá pasómota jano tsi huěstí oxé no tsi bënë nihichá caqué tsi jahué baqué
 jamě áiquihá >
 hátsi kiá pasomóta há no **tsi** wistí
 then REPORT adolescent 3 CONCUR:DS/A LNK one
 oší no **tsi** bini níʔitʃá ka=kí
 moon/month SPAT LNK husband jungle:SPAT go=PRIOR:DS/A
 tsi hawí bakí hamí a=ikiá
 LNK 3SG:GEN boy 3-RFLX do=NONPST:REPORT
 ‘Then, when he (the boy) was larger, within one month, her_i husband went into the jungle,
 and then she_i (Ashina) killed his son.’ TXT 780:009

In other words, if the availability of syntactic positions dedicated to information structure is taken as a criterion for the relative finiteness of a clause, then dependent clauses are just as finite as independent ones in the language.

The evidence converges to suggest that overall, the distinction between dependent and independent clauses in terms of finiteness appears to be fairly weak in Chácobo. While arguments could be made for the nonfinite status of dependent clauses based on illocutionary marking, their ability to slot into nonverbal predicate constructions weakens this conclusion since it allows us to claim that they can be marked for illocutionary force, just not in the structural slot reserved for clause-types. Other arguments, presented by Nikolaeva (2007), for instance, concerning subject-licensing and switch-reference marking only apply to some of the dependent clauses and not in a consistent fashion. All other criteria are either nonapplicable (subject agreement, politeness marking), or the dependent and independent clauses are the same (information structure). In the case of tense, whether dependent clauses can have tense marking depends on whether temporal distance markers (also referred to as markers of ‘temporal remoteness’) are considered genuine tense markers (see Cable 2013, Tallman & Stout 2018), an issue that the literature on finiteness has apparently not addressed. A summary of the finiteness properties of dependent and independent clauses in Chácobo is provided in Table 4 based on the summary in Nikolaeva (2007).

Table 4. A summary of dependent and independent clauses in Chácobo based on finiteness criteria presented in Nikolaeva (2007)

	INDEPENDENT	DEPENDENT	
SUBJECT AGREEMENT	NA	NA	
POLITENESS MARKING	NA	NA	
ILLOCUTIONARY FORCE MARKING	Finite	nonfinite?	
SWITCH-REFERENCE MARKING	Finite	same-subject	finite
		different-subject	nonfinite
		nominalized/nominal modifier	finite
SUBJECT-LICENSING	Finite	same-subject	nonfinite
		different-subject	finite
		nominalized/nominal modifier	finite
INFORMATION STRUCTURING/MARKING	Finite	finite	
TENSE MARKING	Finite	finite	

Discrete structural properties do not neatly distinguish between finite and nonfinite clauses in Chácobo. But this does not necessarily mean that independent and dependent clauses necessarily behave similarly in discourse.⁵ In this paper I explore the possibility that, even in a language like Chácobo where the distinction between finite and nonfinite clauses is weak or nonexistent, we will find the distinction well represented in patterns of usage. In what follows I provide a more detailed description of tense marking and subject expression among other categories in order to point out that asymmetries in finiteness marking between these clause-types are quite prevalent in natural speech.

3. CODING ASSYMETRIES IN CLAUSE-COMBINATIONS

This section introduces a few important terminological conventions for the rest of the paper. This paper considers coding asymmetries in interclausal coherence. It approaches finiteness from the perspective of a relationship between two or more clauses, rather than the properties of a given clause in isolation, i.e. a data point is the combination

⁵ It also does not mean that the distinction between finite and nonfinite clauses is not valid in any given language. The fact that a distinction emerges in some languages but not another does not, in my view, mean that the patterns require no explanation for the languages where the distinction is motivated. Emergent, non-universal, patterns do not fall outside of scientific inquiry.

of clauses in a natural speech context. The relevant concepts for investigating finiteness in relation to interclausal coherence are provided below.

10. INTERCLAUSAL RELATIONS:
 - a. **BALANCED-SHARING:** Both clauses occur with an overt marker for a category, or the marker is present in neither clause for the relevant categories (e.g. both clauses are in the remote past and they both have a remote past marker).
 - b. **ASYMMETRICAL-SHARING:** One clause marks a category which expresses information which carries over to the next clause (e.g. a subject is overtly expressed as a pronoun or NP in an independent clause and a dependent clause shares the subject without expressing it).
 - c. **NON-SHARING:** The clauses do not share information for the relevant categories (e.g. they have different subjects)

In the balanced situation, neither clause is more or less finite with respect to the other for the finiteness marker. In the asymmetrical-sharing situation the clause which overtly expresses the grammatical category or referent which scopes over both clauses is the more finite one. Note that these concepts refer to actual tokens in natural speech and allow us to investigate tendencies related to finiteness beyond the grammatical constraints.⁶ It is perfectly possible in this approach for a dependent clause to be more finite than an independent clause it combines with. More generally, it is possible for one clause to be more finite with respect to one feature but less finite with respect to another feature in relation to another clause it combines with. I will refer to the latter pattern as **ANTI-FINITE** as it contradicts expectations that finiteness is a coherent grammatical category.

4. TEMPORAL DISTANCE

Some clause-type markers of independent clauses also code tense in the sense of grammaticalized markers that encode the relationship between utterance time and reference time (Klein 1994). Chácobo also has a set of **TEMPORAL DISTANCE MARKERS (TDM)** that display a mix of properties from tense, temporal frame adverbs and aspect (Tallman & Stout 2018 and Tallman 2018 for details). Without describing all the details, the most important tense-like property of temporal distance markers for this paper is that they display **discourse perseverance**. Discourse perseverance refers to the property whereby a temporal distance marker is repeated throughout relevant discourse redundantly across all independent clauses. Switching or removing the TDM does not occur in discourse lest the utterance be interpreted out-of-sequence. The following in 11 is an excerpt from a monologue about a series of events that occurred approximately two weeks prior to the time of the speech. The distant past marker =*yamí(t)* is repeated redundantly throughout the discourse similar to obligatory tense marking. For independent clauses one cannot drop a temporal discourse marker without coding an out-of-sequence event, an issue discussed extensively in Tallman & Stout (2016) and Tallman (2018).

⁶ A reviewer states that the patterns observed in this paper could arise in elicitation as well. This is a valid point and perhaps an elicitation methodology could be used to corroborate the findings from natural speech. Note, however, that the principle problem with elicitation is that, without specific care to avoid the contrary, the results would be heavily confounded by the form of the elicitation stimuli.

11. a. <ë biyóiméquë>
 í bi=yó=**yami(t)**=ki
 1SG grab=CMPL=**DISTPST**=DECL:PST
 ‘I gathered/grabbed everything.’
- b. <ë bihá ca ë ória bo ë chocoháyaméquë jënë páxa biyoxóna>
 í bi=?á ka í ória tʃoko-ʔa(k)=**yami(t)**=ki
 1SG grab=NMD:PST REL 1SG pot wash- TR=DISTPST=DECL:PST
 hiní páşa bi=yo=şóna
 water/chicha raw grab=CMPL=PRIOR:SA
 ‘When I grabbed it, I washed all the pots after I took all the chicha’

In elicitation contexts, dependent clauses can occur with temporal distance markers (but see the constraints listed in Table 3). When the temporal distance marker in a dependent clause is the same as that of the independent clause, the interpretation of the dependent clause is ambiguous between an out-of-sequence (perfect, past of the past) interpretation and an in-sequence one as illustrated in 12. Note this ambiguity is not present with adjacent independent clauses which have the same TDM.

12. şóbo tsáya=yami(t)=şó tsi táʃi tsaʔo=yami(t)=ki
 house see=RECPST=PRIOR:SA LNK Tashi sit=RECPST=DECL:PST
 ‘After he_i checked out the house (some weeks ago), Tashi_i sat down (some weeks ago).’
 (in-sequence)
 ‘He_i had already seen the house (a few weeks prior), when Tashi_i sat down (a few weeks ago).’ (out-of-sequence, past perfect reading)

The in-sequence reading for dependent clauses with TDMs is virtually absent in my corpora of natural speech, however, and TDMs in dependent clauses is also rare in general. An example is provided in 13.

13. <cahë já huaitaquë ... jaquirëquë tsi ... quiha xóbo qui ja joníquë>
 kaʔi há =wa=**ʔita**=kí ... hakirikí
 know/realize 3SG =TR=**RECPST**=PRIOR:D{S/A} ... then
 tsi şobo kí há ho=ní=ki
 LNK house DAT 3SG come=REMPST=DECL:PST
 ‘When she had realized (that the man_i was coming) and then, he_i arrived at the house.’
 (TXT 007:3.37)

While temporal distance marking *can* occur in dependent clauses, they clearly do not display discourse perseverance (redundant and overt expression) as they do with independent clauses. Dependent clauses usually receive their temporal distance interpretation from the TDM coded in an independent to which they are linked. This can be seen from *bi=?á* 11b in the sentence above. Thus, the strong tendency in discourse is for temporal distance to be **ASYMMETRICALLY SHARED** between a dependent clause and an independent clause such that the latter is more finite, despite this not being a strong grammatical constraint, the latter point being observable from elicitation. The results are summarized in Table 5. Table 6 shows dependent clauses in combination and that these are usually balanced with respect to TDM coding.

Table 5. TDM marking and sharing across clause combinations of dependent and independent clauses

BALANCED SHARING		67
ASYMMETRIC SHARING	CODED IN DEPENDENT	1
	CODED IN INDEPENDENT	93
NON-SHARING		2
Total		161

Table 6. TDM marking and sharing across clause combinations of two dependent clauses

BALANCED SHARING		71
ASYMMETRIC SHARING	CODED IN FIRST	0
	CODED IN SECOND	5
NON-SHARING		1
Total		77

5. SUBJECT EXPRESSION

As stated above, in Chácobo same-subject clauses cannot occur with subjects. In all independent clauses, subjects are optional in the third person. For instance, the following sentence can occur with or without an overt subject.

14. (ha) tsáʔo=ki
(3) sit=DECL:PST
'S/he sits down.'

The same is true of dependent clauses apart from same-subject clauses. Subjects are optionally expressed in them as illustrated in 15.⁷

15. (ha) tsáʔo=ʔá ka ...
(3) sit=NMD:ANT REL ...
'When s/he sat down ...'

In natural speech both patterns, with a dropped or overt subject, are attested for dependent clauses and independent clauses. An example where a subject does not appear in a dependent clause is provided in 16.

16. <yoshihá ca tsi quihá yoní mai choshí bétaxáquë>
yosi=ʔá ka tsi kiá yoni=
get.annoyed=NMD:ANT REL LNK REPORT Yoni=ERG
mai kofí= bí-taaş-á=ki
dirt hard=INSTR face=hit-TR=DECL:PST
'When (she_i) got annoyed, Yoni_i hit him (her_i younger brother) in the face with hard dirt.'
(TXT
2145:400)

⁷ Dropping an overt subject for different subject clauses is sometimes rejected in elicitation contexts.

This example displays assymetric sharing with respect to subject expression where the subject is expressed in the independent clause and shared with the dependent clause where it is not expressed. An example of a subject in an independent clause dropping is found in 17 below.

17. <huája ja há ca tsi téxě bo yóaníquě>
wáha ha =ʔá ka tíʃi bo
leave 3 =NMD:ANT REL other PL/ASSOC
yoa=ní=ki
tell=REMPST=DECL:PST
‘When he_i left, he_i said to the other ones.’ (TXT 008, 5:51)

Note that this sentence displays assymetric sharing in the reverse direction of the example in 16 above. The overtly expressed subject of the dependent clause is shared in the independent clause. In 17 above for example, the pronoun *ha* ‘third person’ codes the subject of the dependent clause *wáha ha ʔá=ka* ‘When he went out.’. This is the reverse pattern of what we should expect based on the assumption that independent clauses are always more finite than dependent ones. Furthermore, the assymetric sharing of the temporal distance markers contradicts the pattern of subject expression as *ní* ‘remote past’ is expressed in independent clause scoping over the dependent one. This is an anti-finite pattern because decoheres the notion of finiteness under the assumption that TDMs and overt subjects are markers of finiteness.

While most clause combinations are balanced, either because the subject is expressed in neither of them or because it is expressed in both of them, when there is assymetric sharing, there is a bias towards having the subject be expressed in the independent clause as is shown in Table 7 and Table 8. Note, however, that this bias is mostly due to same-subject clauses. There is little evidence yet for a strong tendency to express subjects in independent over dependent clauses when same-subject clauses are excluded. When same subject clauses are not considered there are 6 cases where the subject is in a dependent clause, and 10 cases where the subject is in the main clause, where there is a dependent-independent order in the clauses.

Table 7. Subject expression and sharing across clause combinations of dependent and independent clauses with dependent-independent order

		WITH SAME-SUBJECT MARKER	WITHOUT SAME-SUBJECT MARKER
BALANCED SHARING		57	41
ASYMMETRIC SHARING	CODED IN DEPENDENT	6	6
	CODED IN INDEPENDENT	33	10
NON-SHARING		53	48
TOTAL		149	105

Table 8. Subject expression and sharing across clause combinations of dependent and independent clauses with independent-dependent order

		WITH SAME-SUBJECT MARKER	WITHOUT SAME-SUBJECT MARKER
BALANCED SHARING		2	2
ASYMMETRIC SHARING	CODED IN DEPENDENT	1	0
	CODED IN INDEPENDENT	3	1
NON-SHARING		10	6
TOTAL		16	9

When two dependent clauses are combined and there is assymetric sharing, the probability that the first or the second clause expresses the subject appears to be nearly the same based on the data gathered thus far as can be discerned from Table 9.

Table 9. Subject expression and sharing across clause combinations of two dependent clauses

		WITH SAME-SUBJECT MARKER	WITHOUT SAME-SUBJECT MARKER
BALANCED SHARING		42	19
ASYMMETRIC SHARING	CODED IN FIRST	9	2
	CODED IN SECOND	10	4
NON-SHARING		16	12
TOTAL		76	37

6. REPORTATIVE

In a clause combination the reportative can occur in both clauses, in neither clause, only in the dependent clause or only in the independent clause. An example where the reportative is found in both dependent and independent clauses is found in 18. The conjunction here is the marker =ʒó ‘prior, same A argument’.

18. <tócahua já huaqué tsi quihá ... náa caxaxó tsi quiha jato já quëyocaníquë>
[toka-wa ha =wa=kí tsi **kiá** ...
[do.so-TR 3 =TR=PRIOR:D{S/A} LNK **REPORT** ...
naa kaʒa]_{clause} =ʒó [tsi **kiá** hato há
this be.angry =PRIOR:SA LNK **REPORT** 3PL 3
kiyo=ká(n)=ní=ki]_{clause}
end=PL=REMPST=DECL:PST
‘When they (the Maina) did this (attacked the Chácobo), they (the Chácobo) got annoyed
and killed all of them (Maina).’ (TXT 008:318)

Another example with reportative markers found in dependent and independent clauses is found in 19 below where the conjunction is the different subject marker =*no* ‘concurrent, different subject’.

19. <jatsi quihá oi anomaria oino tsi quihá oi mishni ihino tsi quihá joni caníquë>
 hatsi **kiá** oi anomaria oí=no tsi
 then **REPORT** rain too.much rain=CONCUR:D{S/A} LNK
kiá oi miḡni i-ḡ-i=no tsi **kiá**
REPORT rain small be-EPEN-be=CONCUR:D{S/A} LNK **REPORT**
 hóni ka=ní=ki
 man go=REMPST=DECL:PST
 ‘Then it is said there was rain, a lot of rain and when there was a little rain, the man left.’
 (TXT 842:009)

The more common pattern is where the reportative is found in the independent clause and not in the dependent clause as in 20. We can say that reportative is assymmetrically shared in such a way that the independent clause is more finite with respect to this category.

20. <bii ja huahá ca niayáma tsi quiha já huaníquë>
 bii ha =wa=ḡá ka nía=yáma tsi **kiá**
 recieve 3 =TR=NMD:ANT REL throw=NEG LNK **REPORT**
 ha =wa=ní=ki
 3 =TR=REMPST=DECL:PST
 ‘When he_i recieved her (as a wife), he_i never left her (threw her away).’
 (TXT 008:281)

A rarer pattern is where there is assymmetric sharing with the reportative, but that where the reportative marker appears in the dependent clause and not in the independent clause. An example of such an anti-finite pattern is found in 21.

21. <játsi quihá baquishmarí tsayaháx ja caníquë>
 hatsi **kiá** bakiḡmarí tsaya=ḡáḡ ha
 then **REPORT** morning see=PRIOR:SS 3
 ka=ní=ki
 go=REMPST=DECL:PST
 ‘Then when (it is said) he_i saw it (the ground) in the morning, he_i left.’
 TXT 0012:18

The results for sharing across clause-combinations when one of the clauses is dependent and the other is independent is provided in Table 10. Unfortunately, data for when the dependent is last is too sparse at the moment to draw conclusions. Overall, the reportative is more attracted to independent clauses where it occurs. The finite pattern is much more prevalent than the anti-finite one.

Table 10. Reportative marking and sharing across clause combinations of dependent and independent clauses

		DEPENDENT FIRST	DEPENDENT LAST
BALANCED SHARING (UNMARKED)		74	6
BALANCED SHARING (MARKED)		6	0
ASYMMETRIC SHARING	CODED IN DEPENDENT	6	3
	CODED IN INDEPENDENT	55	5
NON-SHARING		8	2
Total		151	16

When both of the clauses are dependent, the majority pattern is still balanced. The data are overall too sparse at this point to conclude anything otherwise.

Table 11. Reportative marking and sharing across clause combinations of two dependent clauses

BALANCED SHARING (UNMARKED)		64
BALANCED SHARING (MARKED)		0
ASYMMETRIC SHARED	CODED IN FIRST	1
	CODED IN SECOND	7
NON-SHARING		5
Total		76

7. OTHER CATEGORIES

The coded data are currently too sparse to consider other categories that could be related to finiteness in the sense I have developed in this paper. I will limit this section to a few observations concerning tendencies with other aspectual categories or categories with aspectual flavors such as associated motion. It is beyond the scope of this paper to consider their frequencies in natural speech.

The completive marker =yó can occur in both dependent and independent clauses. There are no cases where the completive marker displays asymmetric sharing. If the completive meaning is present in a clause its marking is required. The example in 22 illustrates this point.

22. <jatirohá nobá catë huëshayó jatiroha noba reloj tēsáyó noba xēta yoi tsēcáyó tsi quihá
 jihuimabacá huaniquē>
 hatiroʔá noba kati wif-a=yó hatiroʔá
 all 1PL:GEN back scratch-TR=CMPL all
 nobá reloj tīs-a=yó nobá şita yoi
 1PL:GEN watch loosen-TR=CMPL 1PL:GEN tooth poor
 tsik-a=yó tsi kiá hiwi mabaka=
 rip.out=CMPL LNK REPORT log dry=ERG
 =wa=ní=ki
 =TR=REMPST=DECL:PST
 ‘The dry log scratched his entire back, cut off his entire watch, and ripped out all of his
 teeth.’ (TXT 1004:39)

In contrast, it is typical for associated motion markers to display assymetric sharing across clauses (Tallman 2021). Chácobo has a rich inventory of associated motion markers. Guillaume (2008) describes AM markers as inflectional. If such a classification is valid, then perhaps the AM status of clauses should be considered in studies of finiteness. Interestingly, associated markers tend to display cross-clausal scope from left-to-right, regardless of the status of the clause they are in terms of (in)dependence. Because dependent-independent order is by far the most frequent, this means that AM markers tend to find themselves in anti-finite clausal combinations more often than the other markers. Some illustrative examples are provided in 23 and 24. In both of these cases there is an implied motion event associated with the content of the independent clause (underlined), which can be seen as directly coded in a dependent clause.

23. <jaquirëquë toá pani niabëriahá tsi jaquirëquë yoró toróco toá tsi xobo iníquë>
 hakirikí toa pani nia=**biria**=ʔá tsi
 then that palm throw.away=DO&COME:TR/PL=NMD:ANT LNK
 hakirikí yoró toroko toá tsi şobo i=ní=ki
 then twisted backwater there LNK house be=REMPST=DECL:PST
 ‘After throwing it in an area with palm leaves, (he came and arrived) and then arrived at a
 house there in backwater around a bend (in the river).’
 (TXT 0213:80-81)

24. <maxëní tapa mëräqui mi ... niabayahá ca mia yosanamayámaqui>
 maşiní tapa mīra=ki mi
 it.is.better almond search=CONCUR:SA 2SG
 nía=**baya**=ʔá ka mi-a
 throw=**DO&GO:TR/PL=NMD:ANT** REL 2SG-ACC
yosa-na=ma=yáma=ki
annoy-INTRC=CAUS=NEG=DECL:NONPST
 ‘Better that you leave (and go) them (here) to go look for almonds, so that they do not (go
 after you) annoying you.’ (TXT 2153:692)

Such observations, however, require more data to verify. AM marking is not as frequent as reportative and TDM marking in my corpus.

8. SUMMARY, DISCUSSION, AND CONCLUSION

This paper provides an overview of finiteness in Chácobo grammar in dependent and independent clauses. I noted that the distinction between independent and dependent clauses is weak in terms of finiteness, but that discourse patterns might actually show that there is a tendency for categories which are optionally coded to be attracted to independent clauses in their overt expression and conversely to be unexpressed in dependent clauses, which take their information from an independent clause they combine with. Overall, finite patterns are fairly common in natural speech. However, balanced and antifinite patterns are prevalent enough such that it would be a mistake to refer to the finiteness tendency as strong in Chácobo speech. An overall assessment of finiteness versus antifinite patterns in discourse can be provided by correlating the degree of aligned assymetric expression across subject expression, TDMs and reportative marking. The results of performing such calculations are provided in Table 12. The correlations are developed as follows: for a given clause and for a given category in combination with another clause, sharing and non-sharing are assigned the value 0, assymetric sharing but with the category expressed in that clause is assigned 1, and assymetric sharing but with the category expressed in the other clause is assigned -1. Then, we correlate the different categories with each other across the clauses using Kendall's tau (see Supplementary materials). If everytime a TDM marker is expressed in clause and scopes over another, a subject is expressed in the same clause and scopes over the second, then the value will be 1.

Table 12. Correlation matrix for the correlation of finiteness markers in natural speech

	CLAUSE-TYPE	TEMPORAL DISTANCE	SUBJECT	REPORTATIVE
CLAUSE-TYPE	1			
TEMPORAL DISTANCE	0.25	1		
SUBJECT	0.10	0.39	1	
REPORTATIVE	0.16	0.47	0.12	1

We note that the strongest correlations are between temporal distance marking and the subject and reportative marking respectively. This aligns with an intuition whereby tense is the strongest factor in producing finiteness patterns.

The current study is programmatic and meant to lay the basis for future studies that might investigate this topic with more languages and more categories to detect real cross-linguistic trends. One challenge to such a typological project would be in coding clause combinations in comparable genres and registers. Nevertheless, such a study might be valuable in that it could reveal the way in which finiteness distinctions emerge, are maintained or perhaps demolished due to discourse patterns. Also, the possibility and potential prevalence of antifinite patterns might provide a diagnostic tool for the exclusion of certain categories from the notion of finiteness. If a category (for example associated motion) does not pattern with other candidate finiteness relevant categories even in natural discourse, we might conclude that it is not relevant to studying finiteness in general.

Abbreviations

ABIL	abilitative	NMD	nominal modifying clause
ALLDAY	all day	NMLZ	nominalized
ANT	anterior	PL	plural
ANX	anxietive	PRIOR:D{A/S}	prior different
CAUS	causative	A/S	dependent clause
CMPL	completive	PRIOR:SA	prior same A subject dep. clause
CNTRFCT	counterfactual	PUNC	punctual
CONCUR	concurrent event	PURP	purpose
CRAS	crasternal future	PST	past tense
DAT	dative	RECPST	recent past
DISTAL	event distal from speaker	REL	relativizer
DECL	declarative	REMFUT	remote future
ERG	ergative	REMPST	remote past
HAB	habitual	REPORT	reportative
INTER	interrogative	RFLX	reflexive
INSTR	instrumental	TR	transitive
LIMIT 1	imitative	VOL	volitive
LNK	linker	3	third person singular

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