

Article

The **t-V-ce* System of the Carib Languages and the Kuikuro Resultative Participle

Gelsama Mara Ferreira Dos Santos ^{1,*}  and Bruna Franchetto ^{2,*} 

¹ Curso de Licenciatura Intercultural Indígena, Campus Binacional de Oiapoque, Federal University of Amapá, Oiapoque 68980-000, Brazil

² Department of Anthropology, National Museum, Federal University of Rio de Janeiro, Rio de Janeiro 20940-040, Brazil

* Correspondence: gelsama.santos@gmail.com (G.M.F.D.S.); bfranchetto@yahoo.com.br (B.F.)

Abstract: In the Kuikuro language (Upper Xingu Carib), the construction *tii-/t-verb-i/-ti/-si/-stress* is a reflex of the Carib proto-construction **t-V-ce*, often labeled as a ‘participle’. It is a morphological form composed of a prefix and a set of allomorphic suffixes that attach to transitive, intransitive, transitivized, or detransitivized verb stems. In this paper, the construction *tii-/t-verb-i/-ti/-si/-stress* is described and analyzed as a resultative denoting a grammatically represented result of an event that is the background of a subsequent foregrounded event. We argue that, in Kuikuro, the participial verb inflection has aspectual value and we define the construction *tii-/t-verb-i/-ti/-si/-stress* as participial resultative aspect. Unlike in English, in Kuikuro, an ergative language, the resultative participial forms of transitive and transitivized verb stems license their external arguments. A description of the morphosyntax, semantics, and uses of Kuikuro participial forms precedes a final theoretically based approach that departs from Embick’s analysis of English participles. Our proposal for the analysis of the resultative participles in Kuikuro emphasizes the importance of this phenomenon for a comparison inside the Carib family and for ergative languages regarding the relationship between transitive resultative participles and ergativity.

Keywords: Kuikuro; Cariban languages; participle; resultative



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1. Introduction

In Kuikuro, an ergative language, the reflex of the proto-construction **t-V-ce* (Gildea 1998) is a participial resultative aspect realized by a morphologically complex form, composed of a prefix and a set of allomorphic suffixes: *-tii-/t-verb-i/-ti/-si/-stress*. This paper describes and analyzes the morphosyntactic structure, uses, and meanings of this construction. Gildea (1998, p. 218), in his reconstruction of Carib proto-morphosyntax, describes the system **t-V-ce* as one of the possible origins of ergative constructions in Carib languages belonging to what the author calls the “Full Set II system”. The **t-V-ce* system displays different syntactic and semantic behaviors across Carib languages; this is observed, for instance, in the fact that different researchers use distinct glosses for the same morphemes, suggesting different analyses. The Kuikuro system has taken on unique features when compared with the patterns observed in the other languages of the family. We maintain the terms ‘participle’—glossed as PTCP—and ‘participial’, which have been traditionally applied to the study of Carib languages, to allow an easier comparison by linguists who study these languages.

Following this introduction, in Section 2, we provide a brief overview of the morphology and syntax of the Kuikuro language, necessary background to understand the data and our discussion. To enable a comparison with other Carib languages, Section 3 describes the **t-V-ce* construction in some northern languages of this family. Section 4 focuses on the main properties and peculiarities of the Kuikuro participial construction: its morphology, syntactic behavior, uses and meanings. We consider that the participial

verbal inflection is aspectual—the participial resultative aspect—given that its suffixal morphology occupies the position for aspectual inflection and its allomorphs are distributed in the morphological classes that determine the allomorphy of aspectual suffixes in general. In the same Section 4, we will show that participials have properties of a dependency relationship on the following clause. By denoting the state resulting from an eventuality, it concatenates background information with a main event in the foreground. We have tried to translate this dependency, in the examples offered throughout the text, through approximately equivalent forms in the target language (English).

These four sections open the way for Section 5, where we offer an empirically grounded analysis of the Kuikuro participial construction, a step further from its basic description, in the light of existing theoretical approaches. We will therefore return to the two points that seem to us to be the most relevant. The first one is the characterization of the *tü-/t-verb-i/-ti/-si/-stress* construction as a resultative participle. The second point is the main problem that the Kuikuro participles pose for linguistic theory: the resultative participles derived from transitive or transitivized verbs keep their external ergative argument. This uncommon phenomenon leads us to propose, in Section 6, a formal syntactic structural representation to account for the Kuikuro facts.

2. The Kuikuro Language: An Overview

Kuikuro, one of the two main varieties of the Upper Xingu Carib Language (LKAX; Meira and Franchetto 2005), is spoken by approximately 800 people in eight villages in the region known as the Upper Xingu, where the headwaters of the Xingu River, one of the largest southern tributaries of the Amazon River, are located, at the edge of Southern Amazonia, Brazil. The Kuikuro people inhabit the southeastern region of the Xingu Indigenous Land (TIX), between the Culuene and Buriti rivers, where they have lived since at least the first half of the 18th century.

As an agglutinative, head final, and ergative-absolutive language (Maia et al. 2019, pp. 85–91), it is the most prototypical member of what Gildea (1998) calls a “Full Set II system” within the Cariban language family¹.

A unique set of person markers is prefixed as internal (absolutive) arguments to verbs, nouns, and postpositions, as shown in Table 1.

Table 1. Kuikuro pronominal prefixes.

Prefixed Pronominal Forms	Glosses
u-	1
e- (a-, o-)	2
i-, is-, inh-, Ø-	3
tis-, tsih-, tsih-, tinh-	1.3 (first person plural exclusive)
kuk-, ku-, k-	1.2 (first person dual inclusive)

2.1. The Basic Structure of the Kuikuro Sentence

The basic structure of the Kuikuro sentence can be represented as follows: [VP] (NP *heke*). [VP] represents the syntactic unit where the relation between a verbal head and its argument—morphologically unmarked intransitive S(ubject) or O(bject)—is established, with their strict order and adjacency. Moreover, [VP] is a prosodical unit with one main syntagmatic tonal accent that overrides the tonal accents of the nominal and verbal isolated words. This relation is just a case of the unity between any head (V, N, or P) and its argument, which results in a prosodical unit (da Silva and Franchetto 2011). [NP *heke*] represents the optional ergatively marked external argument of a transitive verb².

The basic word order in a sentence with an intransitive verb is SV (subject verb), as shown by examples 1 and 2.

Parallel to the formation of nominals, Tables 4 and 5 summarize the structure of verbal stems and words, respectively. Verbal stems (Table 4) are formed by an uncategorized lexical morpheme—the root—and a verbal categorizer (VBLZ), phonologically realized or not. In a verbal word (Table 5), the stem is followed by the obligatory inflectional morphemes for mood and aspect. Affixes in parentheses are not obligatory.

Table 4. The structure of the Kuikuro verbal stem.

Root	VBLZ
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Table 5. The structure of the Kuikuro verbal word⁴.

(Abs/Pers)	(DTR)	Root	VBLZ	(TR)	Mood	Aspect	(Number)	(FUT)
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Verbs can be underived (e.g., 15) or can result from denominal verbalization (e.g., 16).

- 15. *isiüنگiüli*
is-üنگiü-lü
3-sleep-PNCT
'He is sleeping'.
- 16. *aaјotüdagü*
a-ajo-tuN-tagü
2-lover-VBLZ-DUR
'You are having a love affair'.

In examples 17 and 18, the noun *ege*, 'laziness' takes the verbalizers *tsuN*, which forms intransitive verbs, and *tsi*, which forms transitive verbs, respectively (Franchetto 2006; dos Santos 2007).

- 17. *uegetsüdagü*
u-ege-tsuN-tagü
1-laziness-VBLZ-DUR
'I'm lazy'.
- 18. *uegetsitsagü ukatsu heke*
u-ege-tsi-tsagü u-katsu heke
1-laziness-VBLZ-DUR 1-work ERG
'My work is making me lazy'.

2.3. Valency Change

Valency changes are encoded by prefixes (detransitivizers), such as *-t-* in example 19, and suffixes (transitivizers or causatives), such as *-ne* in example 20; these occur immediately before or after the verbal root.

- 19. *utekugitsagü*
u-t-ekugi-tsagü
1-DTR-paint-DUR
'I'm painting myself'.
- 20. *tumuгу akanenügi iheke*
tu-mu-гу aka-ne-nügi i-heke
REFL-son-POSS sit-TR-PNCT 3-ERG
'He made his own son sit'.

2.4. Verbal Inflection

The structure of the verbal word in Table 5 shows that mood is expressed by bound morphemes immediately after the stem. The declarative mood is not phonologically realized. The overtly realized moods are imperative, hortative, imminent future, habitual, and hypothetical.

Following mood inflection, Kuikuro verbs are inflected for aspect. Tense is inferred contextually from the interaction between aspects, adverbs, epistemics, and deictics. The future verbal inflection (*-ingo*),⁵ which always occurs after the punctual aspect, could be considered as an expression of tense, but it expresses more than just future eventuality in so much as it also has deontic modal values of possibility and commitment.

In the declarative mood, there are four possible aspects, including the participle (PTCP). The other three Kuikuro aspects are punctual, durative, and perfect.

One of the main properties of Kuikuro verbs is the organization of aspectual inflection in five morphological classes (Franchetto 2006; dos Santos 2002, 2007), which are purely formal arbitrary properties of the roots without any semantic or phonological conditioning. The Kuikuro morphological classes are the result of diachronic processes such as syllabic reduction, deletion of unstable vowels, and assimilation (spreading of features such as coronal and labial, and vowel harmony), but synchronically these processes are no longer active (Franchetto et al. 2016)⁶.

Table 6 presents a summary of the Kuikuro verbal inflectional classes, with verbs marked for punctual, durative and perfect aspects.

Table 6. Morphological classes for aspectual verbal inflection in Kuikuro⁷.

Class	1	2	3	4	5
Aspect					
Punctual	∅	-nügü	-lü	-jü	-lü
Durative	-tagü	-tagü	-tagü	-tsagü	-gagü
Perfect	-hügü	-tühügü	-pügü	-tsühügü	-pügü
	apünguN-∅	ongiN-nügü	agi-lü	agugi-jü	api-lü
	apünguN-tagü	ongiN-tagü	agi-tagü	agugi-tsagü	api-gagü
	apünguN-hügü	ongiN-tühügü	agi-pügü	agugi-tsühügü	api-pügü
	'die'	'hide'	'throw'	'split'	'hit'

The punctual aspect (PNCT)—with its allomorphs *-lü*, *-jü*, *-nügü*, and \emptyset —is a kind of *default* aspect. It expresses an eventuality conceived as instantaneous, without any inherent temporal duration; “almost a thing” as the Kuikuro say. The punctual aspect is interpreted as referring to a nonpresent eventuality.

21. *tolo amelü uheke*
 tolo ame-lü u-heke
 tolo fill-PNCT 1-ERG
 ‘I recorded *tolo* songs’ (earlier today; yesterday; a few days ago).

The durative aspect (DUR)—with its allomorphs *-tagü*, *-tsagü*, and *-gagü*—expresses an eventuality conceived as having an inherent duration in time and covers past and present eventualities.

22. *tolo ametagü uheke*
 tolo ame-tagü u-heke
 tolo fill-DUR 1-ERG
 ‘I’m/I was recording *tolo* songs’.

Temporal anteriority is inherent to the perfect aspect (PRF)—with its allomorphs *pügü*, *-tühügü*, *-tsühügü*—thus denoting an eventuality completed before another temporal reference (utterance time or topic time).

23. *tolo amepügü leha uheke*
 tolo ame-pügü leha u-heke
 tolo fill-PRF COMPL 1-ERG
 ‘I have (already) recorded *tolo* songs’ (quite a while ago).

We add one more aspect: the participial resultative.

24.	<i>tolo tamé leha uheke</i>			
	tolo	t-amé	leha	u-heke
	tolo	ANA-fill.PTCP	COMPL	1-ERG
	'I, having already recorded tolo songs...'			

After the next section, devoted to a brief overview of the so-called participle in some Carib languages, the Kuikuro participial resultative aspect will be described in detail in Section 4. Then, we will proceed to its analysis in Section 5.

3. The Reflexes of the *t-V-ce System in Northern Carib Languages

The languages of the Carib family for which we have accessible and reliable grammars have cognate constructions of the one summarized in the formula *tii-/t-verb-i/-ti/-si/-* stress for Kuikuro. In his reconstructions of the proto-morphosyntax of the Carib language family, Gildea (1998) describes the proto-form *t-V-ce as composed by *t- 'adverbial' and *-ce 'participial', with its allomorphs -se, -so, -ze, -∫e, -tze, -t∫e, -ye, -he, -ti, -t, -y, -e, -i and -∅. In Carib languages, these components may occur separately or combined, functioning synchronically as an ambifix that indicates past tense and/or completive/perfective aspect. Gildea mentions the absence of person marking on the verb among the morphosyntactic properties of this construction. If the language has auxiliary verbs, agreement occurs with the unmarked absolutive argument; the agent is realized as the argument of a postposition, following an ergative pattern.

The descendants of the *t-V-ce system in the northern Carib languages are described as having an adverbial function, or alternatively as being the result of an adverbializing process. This is how Derbyshire (1999, p. 50) defines it in his comparative descriptive panorama of Carib languages, providing the structure *tʰ- + N or V radical + suffix*. The prefix *tʰ-* would be an ADV(erbializer) that combines with different suffixes in nominal or verbal stems. Derbyshire uses examples from the Wai Wai language, taken from Hawkins's (1998) grammar:

25.	Wai Wai (Derbyshire 1999, p. 50; example (16a))			
	<i>tʰ-...-so/-∫i</i>	'state or process derived from the verb'		
a.	INTR	t-waih-so		n-∅-a-sʰ
		ADVZ-die-ADVZ		3S-be-SF-NOPAST
	'He is dying' (refers to S of the action).			
b.	TR	t-ama-∫i	n-∅-a-sʰ	on weewe
		ADVZ-slash-ADVZ	3S-be-SF-NOPAST	this tree
	'This tree is slashed' (refers to O of the action).			

Note that in Wai Wai, the derived adverbial construction is accompanied by an inflected auxiliary verb. To form a S(ubject) nominalization, the nominalizing morpheme -*mʰ* (whose cognate in Kuikuro is -*nhü*) is suffixed to the adverbialized construction, which results in a noun derived from an intransitive verb: *t-waih-so-mʰ*, "one who is dying".

In the Trio (Tiriyó) language, Carlin (2002, p. 72; 2004, p. 340; 2005) analyzes the construction *tʰi-√-se* as "past non-witnessed form of the verb (that) also requires the verb to be non-finite. In addition, person marking is not possible on the verb itself, but rather the person slot on the verb is filled by the semantically bleached coreferential prefix *tʰi-*, here functioning as a dummy prefix, and the verb takes the non-finite marker -*se* (*∅*, -*e*, -*je*)". The behavior of the allomorphs, however, is not clear and nothing is said about morphological classes. Carlin (2005) additionally lists the following properties of the Trio participle:

- (i) The verb has no tense inflection; the construction is not formally anchored in time but is translated as past tense;
- (ii) With transitive verbs, the A(gent) is marked with the postposition -*ja*;
- (iii) The person slot on the verb must be filled; the prefix *tʰi-* is a semantically weakened third person coreferential prefix;
- (iv) Epistemic or evidential value is added to the meaning; if the verb is transitive, the speaker is indicating that they did not witness the past event; if the verb is intransitive,

1-C11: All class 1 verbs are formed by overt intransitive verbalizers; the participial suffix *-i* affects the quality of the vowel of the verbalizing morpheme.

28. *ekegepe tapiingi leha*
 ekege-pe t-apü-nguN-i leha
 jaguar-NTM ANA-mature-VBLZ-PTCP COMPL
 'The jaguar having died'.

2-C12: the participial suffix has the form *-ti*. Example 29 has a detransitivized verb with inchoative reading, while example 30 has a transitive verb with its external argument marked as ergative.

29. *akādohope leha tetsuheti*
 akaN-toho-pe leha t-etsuhe-ti
 sit-INSTNMLZ-NTM COMPL ANA-DTR.break-PTCP
 'The bank being broken'.

30. *ahütü gele ēbuta tūdila uheke iinha*
 ahütü gele ēbuta tuN-ti-la u-heke i-inha
 NEG2 IMPF medicine ANA.give-PTCP-PRIV 1-ERG 3-DAT1
 'The medicine has not yet been given by me to him'.

3-C13 and C15: the participial inflection of verbs included in these two classes is realized as stress on the final vowel of the stem. The verbs in examples 31 and 32 belong to C13, while in example 33 the verb belongs to C15:

31. *tolo aileha tamé uheke*
 tolo aileha t-amé u-heke
 tolo COMPL ANA-record.PTCP 1-ERG
 'Having already recorded the tolo songs'.
32. *ülepe tühagakí iheke agiliü leha iheke*
 üle-pe tü-hagakí i-heke agi-lü leha i-heke
 LOG-NTM ANA-pull.PTCP 3-ERG throw-PNCT COMPL 3-ERG
 'Having ripped it off, he threw it away'.
33. *ipe tühoté leha*
 i-pe tü-hoté leha
 tree-NTM ANA-burn.PTCP COMPL
 'The tree having burned'.

4-C14: the allomorph of the participial suffix is *-si*.

34. *ualatogupe tsekegiupe tatagugisi leha*
 u-alato-gu-pe tsekegü-pe t-at-agugi-si leha
 1-pot-POSS-NTM big-NTM ANA-DTR-crack-PTCP COMPL
 'My pot being broken'.

4.1.2. The Prefix *tü-/t-*

Looking at other Carib languages, we saw, in Section 3, that the prefix of the participial construction is interpreted as part of an 'adverbial' ambifix by linguists such as Derbyshire and Gildea himself. Carlin interprets the same prefix in the Trio participle as a coreference mark. Like Carlin, we consider that the *tü-/t-* form in Kuikuro is a coreferential, meaning an anaphoric pronoun. Let us briefly look at the evidence we have in support of this interpretation.

- (i) *tü-/t-* is the form of the reflexive person marker in nominals, as exemplified in examples 35 and 36:

35. *itoto telü leha tituna*
 itoto te-lü leha t-itu-na
 man go-PNCT COMPL REFL-village-ALL
 'The man went to his own village'.

36. *tiihho opokineniigü itaō heke*
 tü-nho opokine-nügü itaō heke
 REFL-husband.POSS abandon-PNCT woman ERG
 ‘The woman abandoned her own husband’.

- (ii) *tii-/t-* marks the coreference between the subject of a dependent clause and the subject of its superordinate clause; observe that *tii-/t-* always occupies the position to be obligatorily filled by the absolutive argument, like S of the intransitive verb *itādu* (‘marry’) in example 37:

37. *tüitāduti iitsagü*
 tü-itādu-ø-ti i-i-tsagü
 ANA-marry-PNCT-DES 3-be-DUR
 ‘He wants to marry’.

- (iii) *tii-/t-* is coreferential in the context of a verbal interaction between speaker A and her interlocutor B, as the one exemplified by the pair of utterances in examples 38a and 38b. In example 38b, *tii-/t-* occupies the position to be obligatorily filled by the absolutive argument O of the transitive verb *ha* (‘make’):

Speaker A

38a. *īkeha tatohongo hatagü uheke*
 ī-ke=ha tatohongo ha-tagü u-heke
 see-IMP=TOP basket make-DUR 1-ERG
 ‘Look! I’m making a basket’.

Speaker B

38b. *tiihake hōhō uinha*
 tü-ha-ke hōhō u-inha
 ANA-make-IMP EMPH 1-DAT1
 ‘Made it for me!’

In the following example, speaker B answers to speaker A using a resultative participial (*tanheti*).

Speaker A

39a. *ūde atahakugu*
 uN-te a-tahaku-gu
 Q-INE1 2-bow-POSS
 ‘Where is your bow?’

Speaker B

39b. *tanheti leha uheke*
 t-anhe-ti leha u-heke
 ANA-loose-PTCP COMPL 1-ERG
 ‘I have lost it’.

As already shown in Section 2, in Kuikuro, the verbal phrase (VP) is the syntactic and phonological unit where the relation between a verbal head and its morphologically unmarked absolutive argument—S or O—is established, with their basic order and strict adjacency. The syntactic position of the absolutive argument must be filled either by a nominal or by a pronominal. In example 40, *ekegepe* occupies the absolutive argument position of the intransitive verb *apünguN* (‘to die’), which is inflected in the punctual aspect. The ungrammaticality of example 41 is the evidence that this order (SV) is fixed and cannot be altered.

40. *ekegepe apüngu leha*
 ekege-pe apünguN-ø leha
 jaguar-NTM die-PNCT COMPL
 ‘The jaguar is already dead’.

41. **apüngu leha ekegepe*

In the *tii-/t-verb-i/-ti/-si/-stress* construction, the internal argument position is exclusively and obligatorily filled by *tii-/t-*, the anaphoric third person (ANA) prefix. Therefore, the nominal which would occupy the position of the absolutive argument is detached from the prosodic unit with the verb, thus maintaining its lexical stress and being able to occur freely before or after the verb in participial form, and frequently separated from it by the completive (COMPL) aspectual particle *leha*.

In examples 42 and 43, the participial form *tapiüngi* is the state resulting from the event of dying. Note that the NP (*ekegepe*), coindexed with the anaphoric prefix *t-*, may either precede or follow the verb. It retains its lexical stress since it doesn't constitute a (syntactic and phonological) unit together with the verb; in other words, it is not occupying the internal (absolutive) argument position of the verb.

42. *tapiüngi leha ekegepe leha itoto inkgakungbüngü*
 t-apü-nguN-i leha ekege-pe-i leha itoto inkgaku-ngi-büngü
 ANA-mature- COMPL jaguar- COMPL man make.run-ANMLZ-
 VBLZ-PTCP NTM-COP REF
 'The jaguar that had chased the man having died'.

43. *ekegepe leha tapiüngi leha*
 ekege-pe leha ti-apü-nguN-i leha
 jaguar-NTM COMPL ANA-mature-VBLZ-PTCP COMPL
 'Having died/once the jaguar was dead'.

A sentence whose verb in participial form lacks the required prefixal form *tii-/t-* is ungrammatical:

44. **ekegepe apiüngi leha*

The mandatory presence of the coreferential or anaphoric prefix in a clause with participial construction indicates its dependence on a superordinate clause; a topic to which we will return in Section 4.3.

4.2. The Aspectual Value of the Resultative Participle

The Kuikuro participial construction has a perfect/resultative aspectual reading. It occupies the same position as any other type of aspectual inflection in the verbal word structure.

The following sentences exemplify the paradigm of punctual aspect (example 45), perfect aspect (example 46), and participial resultative aspect (example 47)⁸.

45. *etenepe anhenüügü itoto heke* (punctual)
 etene-pe anhe-nügü itoto heke
 oar-NTM lose-PNCT man ERG
 'The man lost his oar'.

46. *itoto etenegüpe anhetihügü leha itoto heke* (perfect)
 itoto etene-gü-pe leha anhe-tühügü
 man oar-POSS-NTM COMPL lose-PRF
 'The man has lost the (other) man's oar'.

47. *etenepe leha tanheti itoto heke* (participle)
 etene-pe leha t-anhe-ti itoto heke
 oar-NTM COMPL ANA-lose-PTCP man ERG
 'The man having lost his oar...'

Note the occurrence of the completive aspectual particle *leha* in the sentences in examples 46 and 47. *Leha* is extremely frequent in Kuikuro utterances and may occur more than once in the same utterance, qualifying a completion of an eventuality: "it is as if a door were closed", in the metalinguistic definition offered by native consultants. The perfect and participial resultative aspects are almost always accompanied by *leha*.

Remember, from Section 2.4, that Kuikuro verbs are inflected only for mood and aspect and that temporal reference is inferred contextually from the interaction between aspects,

adverbs, epistemics, and deictics. For the following elicited sentences, note the temporal interpretations that our Kuikuro consultants have provided. With the punctual aspect (e.g., example 48), the temporal interpretation is that the event of the students arriving is quite recent.

48. *alunuko etibelü leha escola tongopenginhe*
 alunu-ko et-ibe-lü leha escola tongopenginhe
 student-PL1 DTR-bring-PNCT COMPL school ABL
kongoho ngingilü etinenügü hata
 kongoho ngingi-lü et-ine-nügü hata
 rain fall-PNCT DTR-start-PNCT TEMP3
 ‘The students arrived from school when it was starting to rain’.

With perfect aspect (e.g., example 49) the temporal interpretation is that the students arrived at a much earlier previous moment, more than a day before.

49. *alunuko etibepügü leha escola tongopenginhe*
 alunu-ko et-ibe-pügü leha escola tongopenginhe
 student-PL1 DTR-bring-PRF COMPL school ABL
 ‘Students have arrived from school’.

Our consultants affirm that the sentences from examples 50 to 52, where the verb is inflected for the participial resultative aspect, are not self-sufficient; the resultative reading announces that an upcoming event will happen shortly thereafter.

50. *tetibé leha alunuko escola tongopenginhe...*
 t-et-ibé leha alunu-ko escola tongopenginhe
 ANA-DTR-bring.PTCP COMPL student-PL1 school ABL
 ‘The students having come home from school...’
51. *ahulu leha tahumitsí itaō telü ikine tüüliinha*
 ahulu leha t-ahumitsí itaō te-lü ikine tüi-lü-inha
 door COMPL ANA- woman go-PNCT beiju make-PNCT-
 open.door.PTCP DAT2
 ‘(With) the door open, the woman went to make beiju (manioc bread)’.
52. *ahulu leha tahüdi itoto heke itaō telü tünkgülüinha*
 ahulu leha t-ahüN-ti itoto heke itaō te-lü t-ünkgü-lü-inha
 door COMPL ANA-close.door- man ERG woman go- REFL-sleep-
 PTCP PNCT PNCT-DAT2
 ‘(With) the door closed because of/by the man, the woman went to sleep’.

The only possible temporal interpretation of the sentences above is that the events described by the verbal participial form happened immediately before the event described by the verb of the following sentence⁹. This relation of dependence is the topic of the following subsection.

4.3. The Kuikuro Participial Construction as a Dependent Clause

Analyzing the occurrence of the so called ‘participial’ forms in narratives, it becomes clear that they provide the background for other foregrounded events. We could describe it as a type of bridge, a passageway that allows one to recover a previously mentioned actor, maintaining it as a discourse topic and thus recoverable by interlocutors.

Example 53 is an excerpt taken from a Kuikuro narrative entitled *Hitakinalu*¹⁰. The verb *tuN-* (‘to give’) of the sentence in the first line is inflected with the resulting state participial form *tüdi*; the sentence in the second line has the same verb inflected in the punctual aspect (*tunügü*).

53. *ankge tüdi iheke iinha ihoguingoha egei*
 ankge tuN-ti i-heke i-inha ihogu-ingo=ha ege-i
 rattle ANA.give-PTCP 3-ERG 3-DAT1 begin-FUT=TOP DDIST-COP
 ‘Having given him a rattle, that would be the beginning’ (of later events).

ankge **tunügi**ha iheke iinha
 ankge tuN-nügi=ha i-heke i-inha
 rattle give-PNCT=TOP 3-ERG 3-DAT1
 ‘He gave her a rattle’.

The excerpt in example 54 was taken from the *Ongokugu*¹¹ narrative and shows an instance of the participial resultative aspect being used in event sequencing. The verbs of the sentences in the first and second lines are inflected in the participial aspect (*tupeĩsi* and *tetiibe*) denoting backgrounded events, that lead up to the foregrounded event in the third line, where the verb *telü* is inflected in the punctual aspect (-*lii*).

54. *katsegü agü katsegü pisu pisu pisu pisu pisu tupeĩsi iheke katsegü*
 katsegü agü katsegü pisu pisu **t-upeĩ-si** iheke katsegü
 ANA-
 katsegü leaf katsegü IDEO IDEO macerate.leaves- 3-ERG katsegü
 PTCP
 ‘Having macerated the *katsegü* leaves pisu pisu pisu pisu pisu’.
tetiibe uagiti kanga
 t-et-i-be uagiti kanga
 ANA-DTR-bring.PTCP uagiti fish
 ‘Having arrived *uagiti* fish’.
kürü kürü kürü kürü kürü kürü taka ati leha eteli
 kürü kürü kürü taka-ati leha ete-lü
 IDEO IDEO IDEO trap-ILL COMPL go-PNCT
 ‘(the fish) went into the *taka* trap’.

The function of the participial for backgrounding events also appears in elicited data, such as example 55: the sentence with *tahüdi* introduces the following one, whose main verb is *telü*, inflected in the punctual aspect.

55. *ahulu tahüdi itoto heke itaõ telü tüngülüinha*
 ahulu t-ahuN-ti itoto heke
 door ANA-close-PTCP man ERG
 itaõ te-lü t-üngülü-lü-inha
 women go-PNCT REFL-sleep-PNCT-DAT2
 ‘The door having been closed by the man, the woman went to sleep’.

Examples 56 and 57 are taken from an elicitation session and are accompanied by comments from Ashauá Kuikuro, a consultant particularly versed in metalinguistic reflections. Our aim was to compare the use of the participial resultative aspect and of the perfect aspect. It didn’t take us long to resolve our doubts, thanks to the explanatory efforts of our consultant, who forced us to reconstruct the necessary context.

56. *tolo amepügi leha uheke*
 tolo ame-pügi leha u-heke
 tolo fill-PRF COMPL 1-ERG
 ‘I already recorded *tolo* songs’.

Consultant’s interpretative comment: it is a normal statement that does not need additions or complementation

57. *tolo tamé leha uheke*
 tolo t-amé leha u-heke
 tolo ANA-fill.PTCP COMPL 1-ERG
 ‘Having already recorded *tolo* songs, I...’

Consultant’s interpretative comment: it needs something more, thinking about what comes next, I recorded *tolo* songs and now I will record other songs, such as *Jamugikumalu* songs.

At this point, we know that the clause that contains a verb inflected in the participial resultative aspect has a relation of dependence on an adjacent clause.

Kuikuro data seem to corroborate that in the participial construction the topic time is located within a result state of a described event. If the next (superordinate) sentence

describes an event in the punctual aspect, this event will be located within the resultant state of the participial event, and hence it will be understood to happen after it. In other words, when the resultant state is used as the background of a foregrounded event, this event is understood to follow the event that resulted in the backgrounded state. It seems to be a syntactic requirement and not just a semantic temporal relation. As a matter of syntax, if a participial clause is adjoined to a matrix clause and since it denotes a resultant state, the event described in the matrix clause will be understood as occurring after the event of the participial sentence¹².

The analysis of this particular type of syntactic dependency, however, is just beginning. Stump (1985) is an inspiring source for the next steps of our investigation. Examining the absolute constructions in English, Stump (1985, p. 1) observes that:

“These constructions have the syntactic characteristics of adverbial subordinate clauses, but they are distinguished by a special peculiarity: their logical connection with the clause they modify is not overtly specified...Despite the fact that they lack any overt indication of their logical function, absolute constructions may nevertheless be felt to play very specific roles in the sentences in which they appear”.

Stump considers the free adjunct construction as one of the three types of absolute construction. The following sentence is an example of a free adjunct with temporal adverbial semantics:

58. Walking home, he found a dollar (Stump 1985, p. 1; e.g., 1a).

A free adjunct may be headed by a verb, that can be a present or a past participle or a perfect aspect as in example 59.

59. Having come to this conclusion, I settled down to enjoy the rest of the day (NY 9/1/80, 55) (Stump 1985, p. 5; e.g., 17):

The similarity of example 59 with Kuikuro participial constructions is at least suggestive. Following Stump (1985), we could consider these constructions as unrelated or misrelated free adjuncts, with temporal semantics. This hypothesis is reinforced by a syntactic property described by Stump (1985, p. 7): “the control of the subject position of a free adjunct rests elsewhere—with a nonsubject noun phrase in the superordinate clause or with an extralinguistic controller”. These are still open questions, to be addressed in further investigations on the syntax of participial constructions. It will be crucial to also investigate the prosodic characteristics of participial clauses, their intonational profile and the occurrence of pauses at the border with the superordinate clause.

Having concentrated our attention, thus far, on the description of the *tii-/t-verb-i/-ti/-si/-stress* construction, we will turn, in the following two final sections, to an analysis of the Kuikuro resultative participle from the perspective of a formal approach.

5. Towards a Formal Analysis of the Kuikuro Resultative Participle

The aim of this section is to offer an analysis of the main characteristics of the Kuikuro resultative participle, beyond its basic description. Our proposal for the formal structure of the Kuikuro resultative participle mainly follows Embick’s analysis (Embick 2004).

In Section 5.1, we argue that (i) the derivation of the resultative participle is the result of the attachment of the ASP (aspect) operator above the vP^{13} , and (ii) the resultative participle does not occur as a secondary predicate.

In Section 5.2, we address the properties of the resultative participle of transitive or transitivized verbs that maintain external arguments in Kuikuro, an ergative language.

We thus pave the way for a formal representation of the construction *tii-/t-verb-i/-ti/-si/-stress*, proposed in Section 6, the last one of this article.

5.1. The Resultative Participle in Kuikuro

Embick’s analysis follows the distributed morphology (DM) theoretical framework, in which roots do not have lexical categories but are categorized in the syntax by functional morphemes, which can be phonologically overt or null. The verbal categorizer little *v*

encodes features such as agentivity and causativity, eventivity or stativity (Halle and Marantz 1993; Harley and Noyer 1998; Marantz 1999; Chomsky 1995; Embick 2000).

The author proposes a three-way distinction for English participles (Embick 2004, p. 356). Eventive participles (which occur in verbal passives) are distinguished from two types of stative participles: resultative participles (denoting a state resulting from a grammatically represented previous eventuality) and stative participles (merely representing a state, similar to an adjective). Embick employs the terms “eventive passive” and “resultative”, which roughly correspond to the distinction between “verbal” and “adjectival”. The author exemplifies the three interpretations of the participle with the verb OPEN:

60. The door was **opened**. (Embick 2004, p. 356)

The participial form ‘opened’ has two different interpretations:

a. Eventive passive

Someone opened the door.

b. Resultative

The door was in a state of having become open.

In addition to the eventive passive and resultative interpretations, there is a stative interpretation, which, in the case of the verb OPEN, requires a different form: ‘open’. In example 61, ‘open’ describes a simple state.

61. The door was open (Embick 2004, p. 356).

Embick (ibid.) argues that the difference between stative and resultative lies in the structural relationship between the aspect head (ASP) operator and the *v*P. When the aspect head (ASP) operator attaches directly to the root, as shown in Figure 1, the structure lacks eventivity and agentivity since little *v* is absent. This results in a stative participle.

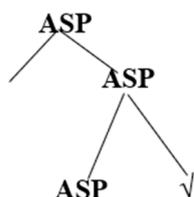


Figure 1. Structure of the stative participle. The aspect head (ASP) operator attaches directly to the root.

However, if the derivation takes place above the *v*P as shown in Figure 2, with the root already categorized as a verb, the structure is interpreted as eventive and agentive. This results in a resultative participle.

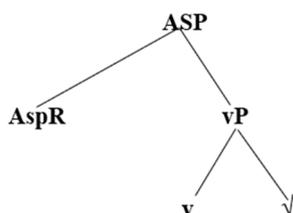


Figure 2. The resultative participle. The aspect head (ASP) operator attaches above the *v*P with the root already categorized as a verb.

Stative participles are unattested in Kuikuro. Therefore, we assume that ASPs always attach above the *v*P, as in Figure 2. In examples 62 and 63 there is no overt categorizing head, but the participles are eventive, which suggests that a covert verbalizer is present in the scope of the ASP.

62. *kangamuke leha takādi*
 kangamuke leha t-akāN-Ø-ti
 child COMPL ANA-sit-VBLZ-PTCP
 ‘Having the child sit’.
63. *kola gele tongīdi uheke*
 kola gele t-ongiN-Ø-ti u-heke
 bead IMPF ANA-hide- VBLZ -PTCP 1-ERG
 ‘With the beads still hidden by me’.

In example 64, the verbal stem of the participial construction is derived from a nominal stem recategorized by means of an explicit verbalizing morpheme (-*nhuN*).

64. *tiginhi*
 t-igi-Ø-nhuN-i
 ANA-song- NCAT-VBLZ-PTCP
 ‘Having sung’.

In examples 65 and 66, the verbal stem of the participial construction is derived from a root categorized by means of explicit verbalizing morphemes (-*luN*; -*nguN*).

65. *itaō leha tinili*
 itaō leha t-ini-luN-i
 woman COMPL ANA-cry-VBLZ-PTCP
 ‘The woman having cried’.
66. *itaō leha tangi*
 itaō leha t-a-nguN-i
 woman COMPL ANA-dance-VBLZ-PTCP
 ‘The woman having danced’.

Syntactic diagnostics can help to differentiate statives from resultatives. One of them distinguishes stative and resultative participles based on their ability or inability to function as resultative secondary predicates, as demonstrated in the following example:

67. John kicked the door open/*opened (Embick 2004, p. 359; 13a).

In example 67, the ungrammaticality of the resultative form ‘opened’ is due to its function as a secondary predicate, the function for which only the stative form ‘open’ is allowed. Examples 68 and 69 show that the use of Kuikuro participles as secondary predicates is ungrammatical, which supports their analysis as dynamic participles¹⁴:

68. **kangamuke heke bola tetugupotsi apilii*
 kangamuke heke bola t-e-tugupotsi api-lü
 boy ERG ball ANA-DTR-pierce.PTCP kick-PNCT
 ‘The boy kicked the pierced ball’.
69. **kangamuke etibelü tüikungu tetsuheti*
 kangamuke et-ibe-lü tü-ikungu t-etsuhe-ti
 boy DTR-bring-PNCT REFL-arm ANA-break-PTCP
 ‘The child with the broken arm has arrived’.

5.2. Licensing the External Argument of a Transitive Verb

As mentioned in Section 2, Kuikuro has the external argument—the cause/source of an action or eventuality—of a transitive or transitivized verb ergatively marked by the postposition *heke*. We consider that the resultative participial forms of transitive and transitivized verb stems license their external argument. This characteristic is due to the fact that Kuikuro is an ergative language. According to Woolford (2006), ergative case is licensed by little *v* in the position where the external argument is base-generated. This phenomenon is observed in Basque (Berro 2019), an ergative language where agent arguments of adjectival participles are introduced or licensed in a regular verb configuration.

In Kuikuro, agentivity is retained by the participial forms of transitive verbs (e.g., 70).

70. *uhulagüpe leha tanheti itaō heke*
 u-hula-gü-pe leha t-anhe-ti itaō heke
 1-spindle-POSS-NTM COMPL ANA-lose-PTCP woman ERG
 ‘The woman having lost my spindle’.

In example 70, the verb *anhe* ‘lose’ is transitive, with two licensed arguments. Its internal argument is realized as the anaphoric prefix *t-*; the lexical form (*hula* ‘spindle’) is free in its structural relation to the verb and can occur in any position; its external argument is the NP marked by the postposition *heke*.

The Kuikuro language has three different transitivizing suffixes that attach to the verb stem and precede inflectional morphology: *-ne*, *-ki*, and *-le*. The first two occur in complementary distribution and follow semantic requirements. The transitivizing suffix *-ne* has the features [+cause change, -mental state], licenses an agentive external argument, and assigns a theme/patient role to the object. The transitivizer *-ki*, in turn, has the features [+cause change, +mental state], licenses an external argument, and assigns an experiencer role to the object; in other words, *-ki* is the transitivizer of psychological or mental/emotional state verbs.

Examples 71 and 72 are instances of participial forms of verbs transitivized by *-ne* and *-ki*, respectively:

71. *itaō leha tanguneti tolo heke*
 itaō leha t-angu-ne-ti tolo heke
 woman COMPL ANA-dance-TR-PTCP song ERG
 ‘The tolo songs having made the woman dance...’
72. *uajo leha tingunkingukisi uheke*
 u-ajo leha t-ingunkgi-ngu-ki-si u-heke
 1-lover COMPL ANA-think-VBLZ-TR-PTCP 1-ERG
 ‘My boyfriend having already made me think of him...’

In example 71, the intransitive verb *angu* ‘to dance’ is transitivized by the morpheme *-ne*, which introduces an external argument in the verbal structure. In example 72, the intransitive verb *ingunkgi* ‘to think’ is transitivized by the morpheme *-ki*. These two morphemes occur in complementary distribution and align with specific semantic requirements.

After this deeper approach to the main characteristics of the Kuikuro resultative participle, we can state that there is a class of resultative participle in Kuikuro. We saw that in the derivation of a resultative participle there is only one structural position, above the *vP*, to which the ASP operator is attached. We also saw that the resultative participle cannot occur as a secondary predicate. And finally, we argued that in Kuikuro, as an ergative language, the resultative participle of transitive or transitivized verbs maintains or licenses its external argument.

We are now ready to delineate a proposal of formal representation of the Kuikuro resultative participle.

6. Kuikuro Resultative Participles: A Representation of Their Formal Structure

We have seen that Kuikuro has only one form for the resultative construction: *tü-/t-verb-i/-ti/-si/-stress*¹⁵.

Kuikuro has no restrictions on verbal properties when it comes to applying the resultative operator: it can derive resultative participles from transitive, intransitive, transitivized, or detransitivized verb stems. In example 73, *tüpoté* is a participial form of a detransitivized verb.

73. *ipe leha tüpoté leha*
 i-pe leha tü-poté leha
 tree-NTM COMPL ANA-DTR.burn.PTCP COMPL
 ‘The tree having already burned...’ (it may be that the weather got too hot and the tree caught fire).

When realized with semantically transitive verbs, both forms set their external arguments free. The resultative participle in Kuikuro sets its external argument free and receives a resultative reading.

74. *tahūdi ahulu leha itoto heke*
 t-ahuN-ti ahulu leha itoto heke
 ANA-close-PTCP door COMPL man ERG
 ‘The door, closed by the man’.

In the example above, the participial form (*tahūdi*) of the transitive verb *ahuN* (‘close’), keeps its external argument marked by the postposition *heke* (*itoto heke*).

Embick (2004) proposes an aspect head ($Asp_{R(essultative)}$), with resultativity and stativity features, which attach to the *vP* without licensing an agent. For Embick, eventivity is provided by the verbalizing head *v*, so the complement of Asp_R must include *v*. This does not mean that the resultative is agentive, according to Embick the *v* complement of Asp_R cannot be *v[AG]*(agentive), but a different type of verbalizer.

We recall, from Section 2, that resultative constructions in Carib non-ergative (nominative) languages introduce their arguments through a by-phrase. Kuikuro differs from these nominative languages in that resultative and non-resultative forms license their external arguments in the same way.

75. *ahulu leha tahumitsí hite heke*
 ahulu leha t-ahumitsí hite heke
 door COMPL ANA-open.PTCP wind ERG
 ‘The wind having been opened the door’.

Kuikuro has no restrictions on the application of the resultative operator in terms of verbal properties. The agentivity is a property of ‘*v*’ and does not depend on the nature of the root.

We thus propose a formal analysis in order to account for the Kuikuro data, with regard to the maintenance of agentivity in participial resultative constructions. We propose the structure represented in Figure 3, in which the $Asp_{R(essultative)}$ occupies the position in the structure just above the *vP*, giving a resultative reading to transitive verbs, which, in Kuikuro, keep the external argument marked by the postposition *heke*.

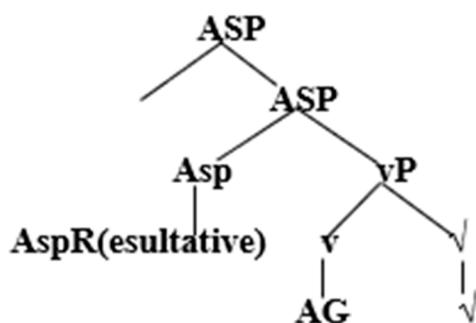


Figure 3. Structure of the resultative participle of transitive verbs in Kuikuro.

The structure represented in Figure 3 allows for the derivation of resultative participles (e.g., 76) from transitive and transitivized verbal stems.

To exemplify resultative participle derived from transitive verb stems, we reproduce example 27 as example 76, which is a participle form of the transitive verb *ame* ‘to fill’ occurring with the completive aspectual particle *leha* in the same clause.

76. *tolo tamé leha uheke*
 tolo t-amé leha u-heke
 tolo ANA-fill.PTCP COMPL 1-ERG
 ‘I, having already recorded tolo songs...’

Figure 4 represents the structure of resultative participial forms of intransitive verbs, which do not license external arguments.

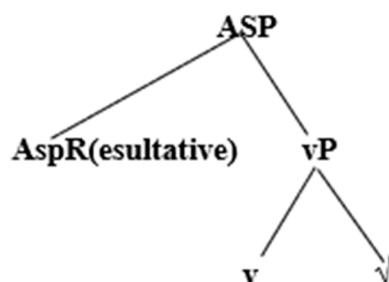


Figure 4. Structure of the resultative participle of intransitive verbs in Kuikuro.

The sentence in example 77 exemplify the resultative participle of the intransitive verb *he* ‘to shout’, with the completive aspectual particle *leha*.

77. *kangamuke tiiheti leha*
 kangamuke tii-he-ti leha
 child ANA-shout-PTCP COMPL
 ‘Having the child shout’.

The structures in Figures 3 and 4 represent Kuikuro resultative participles, where the operator AspR(esultative) is allocated to the same syntactic position, just above the *vP*.

7. Final Remarks

All Carib languages we know about have reflexes of the proto-construction **t-V-ce*, proposed by Gildea (1998). In a brief overview of extant literature, we observe that this construction is analyzed in a variety of ways by different researchers, alternately as an adverb or as a participle. The new data we bring from the Kuikuro language expands the comparative picture.

In the first part of this article, we have described the main morphosyntactic properties of the Kuikuro construction *tii-/t-verb-i/-ti/-si/-stress*, one more reflex of the proto **t-V-ce*. Kuikuro facts corroborate the description of the prefix *tii-/t-* as coreferential or anaphoric and not as part of an adverbializer ambifix. We argued for the aspectual value of the *-i/-ti/-si/-stress* inflection, considering its paradigmatic position in the verbal morphological structure as well as the conditioning of its allomorphy by morphological classes, a phenomenon characteristic of Kuikuro verbal inflection in general.

In a first syntactic approach, the clause containing a participle is akin to an adverbial adjunct, considering its dependence relationships to a superordinate following sentence. Kuikuro participles denote the state resulting from an event which announces or prepares the immediately subsequent event. The participial form of the verb is very productive and plays an important role in the construction of temporal sequencing or concatenation in narratives, providing the background for foregrounded (main) events.

A step further from the basic description of the Kuikuro resultative participles, the second part of the article offers a formal analysis based on Embick’s (2004) analysis of resultatives in distributed morphology. Kuikuro resultative participles are derived by combining a resultative operator to a little *vP* and can be derived from transitive, intransitive, transitivized, and detransitivized verbs.

As an ergative language, Kuikuro has no passives and therefore the participial forms do not derive from passive constructions. A central point that contributes to linguistic theory is that the Kuikuro participle, derived from transitive and transitivized verbal stems, maintains its agentive semantics. We propose, then, that the resultative participle is syntactically structured around a resultative aspect head (AspR) that attaches to the verb phrase (*vP*). As such, when attached to transitive and transitivized verb stems, whose *vP* carries functional properties such as agentivity and causation, it licenses an external argument.

The literature on participles provides little consensus on the types of participles that are labeled stative or eventive. For the better studied languages, such as English, German, French, and others, these phenomena have been more thoroughly analyzed and described. We now need detailed analysis of underrepresented languages, such as the ergative languages of the South American Lowlands.

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Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: This study did not result in analyzed or generated publicly archived datasets.

Conflicts of Interest: The authors declare no conflict of interest.

Abbreviations for Glosses

1	1st person
2	2nd person
3	3rd person
1.2	1st person dual inclusive
1.3	1st person plural exclusive
ABL	ablative
ALL2	allative <i>nga</i>
ANA	anaphoric
ANMLZ	agent nominalizer
COMPL	completive (aspectual particle)
COP	copula
DAT1	dative benefactive

DAT2	positive finality
DDIST	distal inanimate
DTR	detransitivizer
DUR	durative
ERG	ergative <i>heke</i>
FUT	future
IMPF	imperfective (aspectual particle)
INE1	inessive <i>-te</i>
INE4	inessive <i>-ho</i>
INSTNMLZ	instrumental nominalizer
LOC1	locative <i>kae</i>
NANMLZ	non-agent nominalizer
Ncat	nominal categorizer
NMLZ	nominalizer
NEG2	negation <i>ahütü</i>
NTM	nominal tense marker
O	object
PL1	plural <i>-ko</i>
PL2	plural <i>-ni</i>
PNCT	punctual (aspect)
POSS	possessive
PRF	perfect
PRIV	privative
PTCP	participle
Q	question (particle)
REF	referential (substantivizer)
REFL	reflexive
TEMP3	temporal <i>hata</i>
TOP	topic
TR	transitivizer
VBLZ	verbalizer

Notes

- For more on Kuikuro morphosyntax, see, among other publications: (Franchetto 1990, 2006, 2010, 2015; dos Santos 2007, 2008; Franchetto and dos Santos 2018; Franchetto and Thomas 2016; Maia et al. 2019).
- In Kuikuro, a phrase whose head is the postposition *heke* appears to function as an adjunct in a VP or as the external argument (subject) of a transitive verb. In this latter function, it is a kind of ‘outsider’ in the Cariban family, given that in other Cariban languages, independent of the nature of their ‘ergativity,’ this role is played by dative or locative forms (Franchetto 2010, p. 136).
- Pers—pronominal prefixes; Ncat—nominal categorizer; NMLZ—nominalizer; POSS—‘possession’; FUT—future; NTM—nominal tense marker.
- Pers—pronominal prefixes; DTR—detransitivizer; VBLZ—verbalizer; TR—transitivizer; FUT—future.
- The suffix *-ingo* (FUT) can also be used with nominals. Example i shows *-ingo* as nominal inflection on a non-verbal predicate:

(i) <i>unhoingo ekisei</i>	
u-nho-ingo	ekise-i
1-husband-FUT	3DIST-COP
‘That (man) will be my husband/is my future husband’.	
- This complex allomorphy determined by morphological classes characterizes also the ‘possessive’ nominal inflectional, as well as some derivational suffixes (dos Santos 2007; Santos 2008).
- We propose an underspecified nasal in the phonological representation, indicated by N in the morphological segmentation. This nasal segment is not realized in word-final position, due to the Kuikuro (C)V syllable structure, prohibiting any segment in a coda position, or before a suffix beginning with a nasal consonant. If the first consonant of the suffix is not nasal, N is realized through voicing and prenasalizing it. Comparative studies with other Carib languages show that Kuikuro N is a remnant of diachronic processes that led to the suppression of syllables with an initial nasal consonant.
- The majority of the examples in this paper come from the Kuikuro corpus, which has been built and fed by the authors’ research since 1977 and which contains narratives and texts from a variety of genres, in addition to elicited data. Additional data were collected from different consultants, all native speakers of Kuikuro, in November 2021 and March 2022. Examples are presented with the following structure: the first line is the orthographic transcription; the second and third lines show the morphological

segmentation of each word and the corresponding interlinear glossing, respectively; the fourth line gives a translation that seeks to balance fidelity to the original utterance with a certain degree of freedom to provide the reader with a better understanding of the sentences.

9 One consultant, commenting on the sentence in example 50, said that the statement that the children have arrived is based on some kind of visual or auditory evidence; the speaker may have seen or heard the children coming in, or they could have seen their bags lying around. One of the reviewers raised a relevant issue, asking whether “the evidential component of the participle morphology’s meaning is a consistent part of this suffix’s interpretation”. We do not have a definitive answer at the moment, but it is certainly something that deserves further study.

10 Narrative *Hitakinalu* told by Kalusi in 2007, in the Ipatse village.

11 Narrative *Ongokugu*, told by Hopesé in 2003, in the Ipatse village.

12 We thank Guillaume Thomas for comments on versions of the manuscript, comments that we included in this paragraph.

13 According to distributed morphology, proposed by Halle and Marantz (1993), *vP*, or little *vP*, represents the projection of the verb into a syntactic structure, which carries functional properties such as agentivity and causation.

14 More generally, we have not been able to identify resultative secondary predicates in Kuikuro, similar to “kicked the door open” in example 67. Examples 68 and 69 can be made grammatical by nominalizing the participle, but in that case the nominalized participle is interpreted as an attributive modifier rather than as a resultative secondary predicate:

<i>kangamuke heke bola tetugupotsinhüpe apilü</i>				
kangamuke	heke	bola	t-e-tugupotsi-nhü-pe	api-lü
boy	ERG	ball	ANA-DTR-pierce-NANMLZ-NTM	kick-PNCT
‘The boy kicked the pierced ball’.				

15 There are probably underspecified readings of the participle that we have not explored in this article.

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