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## **The participial *-k* and the structuring of Chitimacha discourse**

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### **1 Introduction**

This paper aims to describe the participial suffix *-k* in Chitimacha, namely its functions within the sentence and discourse. This participle is particularly interesting because of its highly polyfunctional nature, covering all types of subordination except reported speech, complement clauses, and certain kinds of temporal clauses (§3). All other types of subordinate clauses are participial constructions coded with either the present / general participial *-k* or the past participle *-tut*. The *-k* participial suffix also plays an important role in discourse, providing a means of participant tracking of same and different subjects, and of structuring the discourse into discrete narrative events. This paper examines each of these facets of the participial suffix in turn.

The data for this study come from a collection of 88 texts dictated by tribal chief Benjamin Paul (1867–1934) to linguist Morris Swadesh (1909–1967) over a series of visits by Swadesh to Charenton, Louisiana between 1930 and the time of Chief Paul's death in 1934. They consist primarily of traditional narratives, but also a number of expository texts and some direct commentary from Chief Paul to Dr. Swadesh. Typed versions of the texts were deposited by Swadesh at the American Philosophical Society in 1953 (Swadesh 1953), and a digitized version of this manuscript forms the basis for this study.

The verbal *-k* suffix is first described in detail in Swadesh's draft grammar (earlier work by John R. Swanton did not identify the suffix), where he characterizes the morpheme as follows:

The participle is used (a) in conjunction with auxiliaries to form periphrastic tense-modes, (b) in a few complexes as complement of verbs, (c) as the nucleus of modifier clauses. The last function is the most characteristic. The participial clause, which may have subject, object, verbal complement, modifiers, stands in the relation of a generalized modifier to the superordinate clause, and expresses an event or circumstance somehow related to it. Temporal proximity, simultaneous, prior, or

occasionally subsequent, is always implied. The relation may be purely temporal, as in the expression of sequence or combination of actions, or it may involve causality, non-prevention ('although...'), means, or some other relation. In so far as the events of the participle or series of participles and the superordinate verb have a temporal sequence, this is reflected in the order of use. In giving a sequence of events, for example, the steps in a manufacturing process, it is a common device to express all the steps but the last in participial clauses, the last being given the form of a predicative verb, formally the main verb of the sentence. The participle does not indicate tense-mode; the implied tense-mode is ordinarily the same as that of the superordinate verb. The implied subject is likewise frequently the same as that of the superordinate verb, but need not be. (Swadesh 1939:206–207)

Many of Swadesh's observations will be corroborated and expanded on in this paper.

The term *participle* is apposite for this suffix since, as Payne (1997:38) notes, "Participle is a relatively widely understood term for verb forms that have reduced verbal properties, but which are not full nominalizations." Dryer (2007:198) also notes that, "Participles thus exhibit a mixture of verbal, adjectival, and nominal features." Since the Chitimacha participle takes what was historically (and still is elsewhere) a nominal suffix, but most frequently functions adjectivally, and yet has the clausal syntax of a verb, the term *participle* seems fitting.

## 2 Formal realizations of -k

The participial -k is one of three devices for forming subordinate clauses in Chitimacha, one finite, and two non-finite (though each non-finite in different ways). The first is the nominalizer -pa (often realized as -pī), used in complement clauses with the verbs 'know / be able', 'be unable', 'be not', 'want', and the interrogative / simulative copula *te*. The resulting non-finite subordinate verb is uninflected for person or tense, but still marks event number with the pluractional -ma. This subordinate construction type is exemplified in (1) and (2), with the verb of the subordinate clause emphasized.<sup>1</sup>

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<sup>1</sup> Each example is accompanied by its location in Swadesh's typed manuscript, following his numbering system. The letter A refers to texts dictated by Chief Benjamin Paul, the first number to the number of the text, the next letter to the number of the paragraph, and the final number to the number of the sentence. Thus A4g.11 refers to the fourth text dictated by Chief Paul, paragraph (g), sentence 11.

All translations are Swadesh's unless given in square brackets.

- (1) *weyč'ik's panš pinikank ku:mit k'uš-m-pi k'ay-š-na?a.*  
 that.being Indians squirrel eat-PLACT-NZR be.not-PROG-NF.PL.A  
 'That is why Indians do not eat squirrel.' (Swadesh 1953:A4g.11)

- (2) *wetk hunks nehe ?apš t'em-pi k'ih-na?a.*  
 then they self REFL hit(PL)-NZR want-NF.PL.A  
 'They wanted to fight [each other].' (Swadesh 1953:A6a.8)

The second subordinate clause type is formed with the locative nominalizer *-nki*, which attaches to fully-inflected finite verbs to create adverbial time clauses, illustrated in examples (3) and (4).

- (3) *teweš ni ka:ku-mi-na:-nki hus tep kin hi ?am-na?a.*  
 but DTRZR know-PLACT-NF.PL-LOC 3SG fire with DIST see-NF.PL.A  
 'Still when they found out (about him) they saw him with his fire.'  
 (Swadesh 1953:A5e.5)

- (4) *ku ni čuw-a-nki we panš hup ?apš ?eh-i?i.*  
 water DOWN go-NF.SG.A-LOC DEM people to RETURN arrive-NF.SG.A  
 'When the water went down, he came back to that person.'  
 (Swadesh 1953:A5e.1)

The final subordinate clause type, the participial construction, is the focus of this paper. It has two forms: the present or general participle *-k* and the past participle *-tut*. Participial clauses are non-finite, marking event number and patientive arguments but not tense or agentive arguments. This differs from subordinate clauses with *-pa* in that, as mentioned, *-pa* nominalizations do not mark patientive arguments. Examples of participial constructions with both *-k* and *-tut* are given in examples (5)–(8). *-tut* is glossed as PTCP(PAST) while *-k* is glossed simply as PTCP.

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Glossing abbreviations for examples are listed at the end of this paper.

### General Participle

- (5) *tutk kunuk'u we siksink kap k'ap-t-k we šemi wa?a = nk*  
 then QUOT DEM eagle UP **take-TRZR-PTCP** DEM pond other = LOC

↪ *hi peš-i?i.*  
 AND fly-NF.SG.A

‘Then they say the eagle took him up and flew toward the opposite side of the pond.’ (Swadesh 1953:A1c.1)

- (6) *wetk we šemi kišut-k hi nen-šw-i?i.*  
 then DEM pond **swim-PTCP** DIR out.of.water-VERT-NF.SG.A  
 ‘He crossed that pond swimming.’ (Swadesh 1953:A2a.3)

### Past Participle

- (7) *?ašt kankiš ?uš paňš kap nup-k, hi ney nuč-mi-tut*  
 sometimes 1PL people PUNC die-PTCP DIST earth **work-PLACT-PTCP(PAST)**

↪ *t'ut-iš-naka.*  
 go(PL)-PROG-1PL.A

‘Sometimes when (one of) our people died we would go on after having buried him.’ (Swadesh 1953:A4b.6)

- (8) *?am ni k'ušt-i ni wop-mi-k',*  
 something DTRZR eat-GER DTRZR ask-PLACT-PTCP

↪ *wetk ni k'uš-tut ?iška [...]*  
 then DTRZR **eat-PTCP(PAST)** QUOT [...]

‘He asked for something to eat and when he had finished eating said [...]’ (Swadesh 1953:A7b.2)

The present / general participle has four allomorphs, each of which is exemplified with its conditioning context below. Some minor variation exists for the /n\_/ and /{ + SON }\_/ environments where the suffix is non-glottalized, but this is extremely rare.

V\_ | -:k'

- (9) *weyš memti-k' neh-čw-i?i.*  
 DEM **jump-PTCP** go.down-VERT-NF.SG.A

‘He jumped down.’ (Swadesh 1953:A3f.6)

**n\_ | -t'k**

- (10) *kap kamčín ten-t'k šuš hup hi t'ut-naʔa.*  
 INCH deer **become-PTCP** woods to DIR go(PL)-NF.PL.A  
 'Turning into deer they went into the woods.' (Swadesh 1953:A35c.5)

**{ + SON } | -k'**

- (11) *neki šiš k'amin kap tēy-k' ni wopmiʔi we pup [...]*  
 elephant STAT **sit-PTCP** DTRZR he.asked DEM rabbit [...]  
 'The elephant stopped and asked the rabbit, [...]' (Swadesh 1953:A17b.3)

**C\_ | -k**

- (12) *wetk we hani kas huk-t-k, kun kas ʔic-čwi-:k'*  
 then DEM house BACK **close-TRZR-PTCP** some BACK turn-VERT-PTCP  
 ↪ *we paňš pinikank waʔa ni wopmiʔi, [...]*  
 DEM Indians other DTRZR he.asked [...]  
 'He closed the house and turning back to asked (told) the other Indians, [...]'  
 (Swadesh 1953:A11a.9)

The general participle frequently occurs with the topic marker -š (roughly 40% of the time, counting just instances of the allomorph -k'), for reasons that will be discussed later but do not significantly affect the function of the participle itself. An example of this PTCP + TOP construction is given in (13).

- (13) *kun ču-:k'-š ču-:k'-š, šemi=nk hup hi ni-čw-iʔi.*  
 some **go-PTCP-TOP go-PTCP-TOP** pond=LOC to DIR WATER-VERT-NF.SG.A  
 'He went and went until he came to the edge of a pond.'  
 (Swadesh 1953:A1a.2)

While both -k and -tut are participles in the same verbal slot, they have drastically different frequencies, functions, and distributions in discourse. Even in the several examples above, there are multiple instances of -k in addition to the cases being emphasized. While the participial -tut occurs 37 times in the corpus, the participial -k occurs *approximately 2,700 times in a corpus of 3,490 sentences*, attesting to the significantly broader range of functions that -k fulfills both within and across sentences. Even excluding the instances where -k appears to have become lexicalized (when used on the end of generic, lexicalized discourse markers like *wetk* 'so' and *tutk* 'then' – more

on these later), the suffix still occurs at least 515 times – and this is only counting instances of the *-k*’ allomorph.

The past participle seems limited to expressing temporal sequences, and to giving internal structure to long procedural sentences involving many steps. It does not code the many other functions accomplished by *-k*. It also never occurs with the topic marker *-š*. An example of *-tut* being used to structure a sequence of steps in a procedure is given in example (14) below. The past participles are underlined, and additional participles in the sentence are also emphasized.

- (14) *weyt* *bak-te-pi-tut* *we* *hoku = nki*  
 thus flat-INTRZR-CAUS-PTCP(PAST) DEM mortar = LOC
- ↳ *kap* *šan-š-t-k* *he:p-mi-tut* *tukun* *ki*  
 UP OUT-HAND-TRZR-PTCP fan-PLACT-PTCP(PAST) sack = LOC
- ↳ *kap* *šah-č-t-k* *hunks* *hani* *sek’is* *kap* *šak’it-k* *weyt*  
 UP IN-HAND-TRZR-PTCP 3PL house up UP **hang-PTCP** thus
- ↳ *kun* *kas* *nuč-mi-na-k*.  
 some BACK work-PLACT-NF.PL.A-REL
- ‘After flattening it thus, they fixed it by taking it out of the mortar, putting it into a sack after fanning it, and (thus) hung it up inside their house.’ (Swadesh 1953:A74g.2)

In this example, *-tut* serves to section off certain clauses as being temporally prior to the following ones. The participle *šanštk* ‘taking (it) out’ is itself subordinate to the past participle *hepmitut* ‘having fanned (it)’. As will be seen later, this internal structuring of sentences is a function *-tut* shares with the *-k + -š* construction, the difference between the two being that *-k + -š* groups clauses into macro-units within the sentence conceptually, regardless of the time of the events, while *-tut* groups clauses into macro-units specifically on the basis of their temporal sequence.

Since *-tut* is so limited in its functions as well as infrequent, it will not be discussed further here.

Within the clause, verbs and participles are with very few exceptions clause-final. The general exception to this for main verbs is reported speech, which typically follows the verb of saying or a quotative *řiška* ‘X said’ or *kunuk’u* ‘it is said’. For participles, the

exception is when the participle is followed by a copula as part of a complex predicate, as shown in (15).

- (15) *wetk wey pekup his hečt-a-nki-š ʔo:š hepši = nk*  
 then DEM on BACK meet-NF.SG.A-LOC-TOP buzzard feces = LOC  
 ↪ *kap mest'i:k' hi-ʔuy-i.*  
 STAT be.white-PTCP COP(NEUT)-IMPFV-NF.SG  
 'When we met him up there he was white with buzzard excrement.'  
 (Swadesh 1953:A4c.5)

Within the sentence, the vast majority of participial clauses precede the main clause, and those that follow have the function of expressing purpose or manner, as will be seen below. I turn now to describing the various functions of *-k* within the sentence.

### 3 Functions of *-k* within the sentence

#### 3.1 Nominal functions

One of the most frequent uses of *-k* is as a nominal modifier. More precisely, since there is not always (or even often) an overt nominal being modified, in this use *-k* functions to provide additional detail regarding a participant in the main clause. Examples (16) and (17) illustrate this function with and without overt nominals, respectively. In (16), *hi šamt-k-š* 'getting out of there' is modifying the nominal phrase *we panš* 'the people'. In (17) the participle *k'aptk* 'taking (you)' provides additional information about the first person argument of the main clause.

- (16) *wetk kunuk'u [[we panš] hi šamt-k-š] t'ut-naʔa.*  
 then QUOT DEM people DIST OUT:PLACT-PTCP-TOP go(PL)-NF.PL.A  
 'The people got out and went on.'  
 (Swadesh 1953:A3d.1)
- (17) *[...] kap k'ap-t-k nen-ču-pi-ču-k, [...]*  
 [...] UP take-TRZR-PTCP CROSS.WATER-VERT-CAUS-FUT(SG)-1SG.A [...]  
 '[...] I'll take you up and take you across [the water], [...]'  
 (Swadesh 1953:A2b.8)

As Nikolaeva (2007:3) notes (citing Kalinina (2001)), "typological studies have demonstrated that in a sizable number of languages arguably non-finite forms with reduced tense and agreement can function as the only predicate in a clause". This is

also the case for Chitimacha, though it happens infrequently, since typically if a participle is serving as the main predicate it is accompanied by at least a copula, as shown in (15) above. Example (18) is one instance where the participle functions as a main clause without the copula. However, as the copula is not infrequently implied rather than overt in Chitimacha, one could interpret this sentence as a copular construction as well.

- (18) *ʔašt̪kankiʃ kap teyin ku huh-či-mi-kʹ.*  
 sometimes STAT stopped water INDOORS-HAND-PLACT-PTCP  
 ‘Sometimes he would stop and beg for water.’ (Swadesh 1953:A7a.2)

### 3.2 Adverbial functions

Since Chitimacha lacks any clear class of adverbs,<sup>2</sup> it is no surprise that the participial construction fulfills a wide variety of adverbial functions, functioning as a modifier of verb phrases or entire clauses (Thompson, Longacre & Hwang 2007). This section briefly examines the Chitimacha participial construction in relation to each of the types of adverbial clauses listed in Thompson, Longacre & Hwang (2007).

The most common adverbial function of *-k* is to express sequentiality of events, such that the participial clause precedes the main clause in time. An example of this is shown in (19).

- (19) *wetkš ni kʹas-t-k kʹasmank ʔam ʔomak no:pi-kʹ-š,*  
 then DTRZR plant-TRZR-PTCP corn thing all make.crop-PTCP-TOP  
 ↪ *weytenkʹenkš tʹut-naʔa hesikʹen.*  
 only.then go(PL)-NF.PL.A again.  
 ‘Then they planted, made a crop of corn and so forth, and after that went on again.’ (Swadesh 1953:A3b.3)

This type of clause expresses slightly different semantics than temporal subordinate clauses with *-nki*, shown in (3) and (4) above. Going by Swadesh’s translations (presumably given to him by Chief Paul), it seems temporal subordinate clauses

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<sup>2</sup> There are perhaps a few exceptions, consisting of lexicalized multi-morphemic constructions such as *wetk* ‘then’ (‘at that time / that being (the case)’), *tutk* ‘then’ (lit. ‘being finished’), *tʹat̪k* ‘now’ (lit. ‘at this time / this being’), *wenk* ‘to here’, *wenki* ‘here’, and a few others. It is notable that many (but not all) of these contain instances of the participial *-k* suffix.



with *-nki* are conceptualized and packaged as a telic event happening at a single point in time, that then serves as the anchor for the event in the main clause. That is, the subordinate event marked by *-nki* is typically the temporal starting point for the main event. Evidence to this effect is the fact that *-nki*, with a single exception, never occurs with the imperfective or progressive suffixes in its approximately 175 uses.<sup>3</sup> Moreover, in order to convey temporal sequence using *-nki* in the specific sense of ‘after’ as opposed to the more general anchor point ‘when’, additional adverbial modifiers are required, as shown in (20).

- (20) *wetkš ʔapš ʔuy-i-nki henk'enk ni k'uš-mi-naʔa.*  
 then BACK arrive-NF.SG.A-LOC only.after DTRZR eat-PLACT-NF.PL.A  
 ‘Only after they came back (to earth) did they eat.’ (Swadesh 1953:A4e.5)

This semantic difference is not too surprising given that the subordinate marker *-nki* derives from an enclitic locative postposition of the same form on nouns. The metaphorical extension from a point in space to a point in time explains its restricted temporal semantics. At the same time, the participle *-k* is also occasionally used for ‘when’-type temporal sequences:

- (21) *wetkš hesik'en his t'ut-k, kunuk'u ʔasi nahc'ibunkš hi textiʔi, [...]*  
 then again BACK go(PL)-PTCP QUOT little boy DIR he.said [...]  
 ‘When they went back, one little boy said, [...]’ (Swadesh 1953:A5b.1)

In addition to sequentiality, participial clauses may also express simultaneity, as in (22) and (23).

- (22) *hus ka:cpank wok-mi-k' hus tep c'ismam ʔuka-š-i*  
 3SG stick feel-PLACT-PTCP 3SG fire pieces COUNT-PROG-NF.SG.A  
 ‘Feeling with his stick, he counted his pieces of fire.’ (Swadesh 1953:A5a.6)

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<sup>3</sup> The single exception is as follows:

- (1) *nit'ik himk č'iwk'i č'i-ʔuy-i,*  
 it.seems 2SG bad COP(HORIZ)-IMPFV-NF.SG  
 ↪ *haksik'am č'i-ʔuy-i-nki.*  
 young.man COP(HORIZ)-IMPFV-NF.SG-LOC  
 ‘It seems you were a bad one when you were young.’ (Swadesh 1939:A85f.1)

- (23) *wetk č'imank piyi hen-t-k naki t'em-puy-na?a.*  
 then at.night cane peel-TRZR-PTCP chicken.hawk kill-IMPV-NF.PL.A  
 'Then at night they told stories [lit. 'killed chicken hawks'] while they peeled  
 cane.' (Swadesh 1953:A68a.7)

Many participial clauses can also be interpreted as a temporal sequence involving causation, as in (24):

- (24) *wa?aš kunuk'u ney kin pokti kin ?apš neh-t-k*  
 other QUOT earth with sky with together trap-TRZR-PTCP  
 ↪ *kap t'em-i.*  
 PUNC kill(PLACT)-NF.SG.A  
 'The earth and sky struck together and killed the others.'  
 (Swadesh 1953:A3c.5)

As mentioned by Thompson, Longacre & Hwang (2007:248), “‘before’ clauses are conceptually negative from the point of view of the event in the main clause”, and this conceptualization surfaces in the subordinate clauses expressing ‘before’ relations in some languages. Such is the case for Chitimacha, which uses the construction GERUND + *k'an ki* ‘not at’, rather than the participial *-k*, to express ‘before’ adverbial clauses. An example is given in (25).

- (25) *teweš kap k'uš-t-i k'an =ki kap k'et-na?a.*  
 however UP eat-TRZR-GER NEG =LOC PUNC kill(SG)-NF.PL.A  
 'However they killed it before it could eat her.' (Swadesh 1953:A32c.4)

Although expressing the location where an action happens is typically accomplished with *-nki*, as in (26), the participle also occasionally fulfills this function, as in (27).

- (26) *wetkš ney pokti kin ?apš he:čt-'iš-na?a-nki*  
 then earth sky with together meet-PROG-NF.PL.A-LOC  
 ↪ *hi ?uy-mi-na?a.*  
 DIST arrive-PLACT-NF.PL.A  
 'Then they arrived at (the place) where the earth and the sky keep meeting  
 together.' (Swadesh 1953:A3c.1)

- (27) [...] *ʔampup hus tep k'ap-t-k hamči-k' hi-ʔuy-i,*  
 [...] to.where 3SG fire **take-TRZR-PTCP** have-PTCP COP(NEUT)-IMPFV-NF.SG  
 '[...] where he got the fire he had,' (Swadesh 1953:A5e.2)

A common use of the general participle is to express the manner in which the main event is completed, as in (28) (as well as (6) and perhaps (9) above).

- (28) *kas ʔiwi-k'-š kas ču-ču-k-š.*  
 BACK **turn-PTCP-TOP** BACK go(SG)-FUT-1SG.A-TOP  
 'I shall go back by going around.' (Swadesh 1953:A3f.2)

A few participial manner clauses appear after the main clause rather than in the canonical slot for participles before the main verb. Thompson, Longacre & Hwang note the following regarding the function of preposed versus postposed adverbial clauses:

Whether local or global, their function is bidirectional, linking what has gone before to what is to come. Semantic information encoded in preposed clauses tends to be less significant, often repeating or giving predictable information from what has already been stated. The postposed adverbial clause, on the other hand, is often unidirectional, primarily relating to its main clause, already stated. It conveys information which is more integrated with the main clause at the local level, and it tends to 'appear at paragraph medial positions, i.e. in the middle of a tightly-coherent thematic chain' Givón (1990:847). (Thompson, Longacre & Hwang 2007:296)

Chitimacha appears to follow this pattern as well. The handful of postposed manner participles are repetitions of immediately-preceding discourse topics, as illustrated in (29).

- (29) *wetk kunuk'u tep ʔapš ʔay-puy-naʔa.*  
 then QUOT fire RECIP lend-IMPFV-NF.PL.A  
 'Then they lend fire to each other.'
- wetk tep k'ap-t-ʔiš-naʔa ʔapš ʔay-ik'.*  
 then fire get-TRZR-PROG-NF.PL.A RECIP lend-PTCP  
 'They get fire by lending back and forth.' (Swadesh 1953:A5d.4)

In contrast to manner clauses, participial clauses expressing purpose seem to follow the main clause by default. Postposed constructions like (30) are significantly more frequent than preposed ones like (31).

- (30) *wetk panš pinikank na:kšbu hi t'ut-naʔa*  
 then Indian children DIR go(PL)-NF.PL.A  
 ↪ *tep ʔo:ksne-pi k'ih-t-k.*  
 fire steal-GER **want-TRZR-PTCP**  
 'Indian youngsters went to steal the fire.' (Swadesh 1953:A5a.7)

- (31) *nučmi-:k' wap'it ʔuč-i-ču-ki nučm-pi ka:han.*  
**work-PTCP** money make-FUT(SG)-1SG.A work-GER unable  
 'I can't work to earn money.' (Swadesh 1953:A88.42)

In fact, purpose clauses appear to follow the main verb regardless of whether they are participial clauses. This is shown in (32), where the final clause is functionally subordinate in the sense of lacking an independent profile (Cristofaro 2003), but formally independent.

- (32) *ha šemiš nenču: ʔat-i nen-šwi-ču-ki.*  
 DEM(PROX) pond it.is.too be.big-GER **CROSS.WATER-VERT-FUT(SG)-1SG.A**  
 'This pond is too big for me to cross.' (Swadesh 1953:A1a.5)

While Thompson, Longacre & Hwang (2007) note that some languages use the same construction for both purpose and reason clauses, reason clauses in Chitimacha are different from purpose clauses in that they generally precede the main clause rather than follow it, as seen in (33).

- (33) *nenču: peksi-:k', č'imankš te:t t'apk'i ʔuč-i.*  
 it.is.too **be.deep-PTCP** night SIMIL dark make-NF.SG.A  
 'It makes it dark as night because it is too deep.' (Swadesh 1953:A5f.4)

Participles are not generally used to express any of the following functions listed by Thompson, Longacre & Hwang, there being other means of coding these functions in subordinate clauses:

- conditionals (finite verb + -š, or juxtaposition of finite verbs)
- datives / benefactives (verbal derivative suffix -aʔ)
- negative subordinate clauses (*k'an* 'not')
- circumstantial clauses (subordinator -pa)
- concessives (future tense verbs)

- substitutives and additives (no instances in the corpus)

### 3.3 Participant relations between main and subordinate clause

As Swadesh notes in the quote at the beginning of this paper, “The implied subject is likewise frequently the same as that of the superordinate verb, but need not be.” Interestingly, each of the examples he gives of exceptions are instances of partial coreference between the argument of the participle and the argument of the main verb, either as a body-part relation (34) or a member of a group relation (35).

- (34) *wetk hus mahči we ku: =ki ni ni-č-t-k,*  
 then 3SG tail DEM water =LOC DOWN WATER-HAND-TRZR-PTCP  
 ↪ *šak’it-k hi-ʔuy-i.*  
 hang-PTCP COP(NEUT)-IMPFV-NF.SG

‘Then he hung there with his tail soaking in the water.’

(Swadesh 1953:A10d.4)

- (35) *ʔapš ʔuy-ma-mi-:k’ panš ʔašinč’at’a ʔunk’unk hiš*  
 together arrive-PLACT-PLACT-PTCP people old certain ERG  
 ↪ *hi tertiʔi, [...]*  
 DIR he.said, [...]

‘When they came together one of the old people [among them] said [...]’

(Swadesh 1953:A31c.3)

The argument of the participle is therefore almost always the subject of the main verb. Example (36) shows that whether a verb is agentive or patientive does not change this relation.

- (36) *[...] we panš pinikank ʔašantkank ko:š hiš k’et-ki-:k’*  
 [...] DEM people old switch with hit-1SG.P-PTCP  
 ↪ *hi ču-pa-ki-t’i-na.*  
 DIR go-CAUS-1SG.P-FUT(PL)-NF.PL.A

‘[...] the old people would have struck me with a switch and made me go away.’

(Swadesh 1953:A2.29)

Chitimacha does have a means of combining two clauses with different subjects, however, and that is simply via juxtaposition. For example, the following sentence

contains a purpose clause, which is coded with a postposed participle with *-k* when the subjects of the participle and main verb are the same; but here the subjects of the participle and the main verb are different, so a regular finite verb is used instead. A similar example was seen in (32) above.

- (37) *t'atkš* *šuš* *hapšč'i-čuy-i-nk'*, *hetki-it'-i-naka* *we* *šuš* *hisk'is*.  
 now tree **create-FUT-NF.SG.A-NEC** **rest-FUT(PL)-1PL.A** DEM tree under  
 'You should now create a tree that we may rest beneath the tree.'

(Swadesh 1953:A12b.1)

What this difference in construction types amounts to in practice is a generally consistent distinction between same-subject and different-subject clauses, i.e. a switch-reference system, such that participial constructions signal that the following clause is same-subject, while the coding of a subordinate clause with non-subordinate morphology (i.e., fully finite verbs) indicates that the following clause is different subject. This is similar to what Guillaume (2011) reports for Cavineña, except in that case the language shows an alternation between two different subordinating morphemes, whereas for Chitimacha the difference is realized by the presence or absence of the subordinating morpheme. This is also perfectly in line with what Cristofaro notes regarding the presence or absence of participant marking in the dependent clause:

[...] constructions with no overt participant reference usually alternate with constructions involving overt participant reference, and the latter are used when the main and dependent [states of affairs, i.e. clauses] do not share participants. This means that **the two construction types function as switch-reference devices**[...]: when there is no overt reference to participants of the dependent [state of affairs], the hearer should assume that these are the same as those of the main [state of affairs], otherwise participants are overtly referred to in the dependent clause. In this way, the construction with no overt participant reference involves no real loss of information. (Cristofaro 2003:250)

As is typically the case with purported switch-reference systems, there are of course exceptions, though rare. (38) is one such case where the subject of the participle and the subject of the main clause are different.

- (38) *nenčuk'u nus ya:k'ṣ nen-šw-i ka:han.*  
 it.is.too west.wind strong CROSS.WATER-VERT-GER unable  
 'They could not cross because the west wind was too strong.'  
 (Swadesh 1953:A14a.3)

Unfortunately, there are an insufficient number of these cases in the texts to determine with any certainty what causes these 'mismatches'.

There are also cases where no relationship holds between the participants of the subordinate and main clauses, namely where the argument of the subordinate clause makes reference to an entire event or state of affairs rather than a participant. This is most frequently accomplished by the use of a demonstrative like *wey* 'that' + participial *-k*, and in fact is the single most frequent use of *-k* in the corpus. The following example shows a chain of four such cases where the participial clause at the beginning of the sentence refers back to the entire event preceding it, rather than any particular participant within that event. *tutk* in the fourth sentence is also an example of this, since here 'finish' has an unergative/middle semantics, i.e. 'that having finished/been done'.

- (39) *kun čuk'ṣ čuk'ṣ, šenink hup hi ničwi?i.*  
 some going going pond to DIR he.came.to.water  
 'He went and went till he came to the edge of a pond.'
- we-t-k-š we šenink hi ničwinkiš,*  
 DEM-ANA-PTCP-TOP DEM pond DIR when.he.came.to.water
- ↪ *weyk hi kišuti?i.*  
 that.one DIR he.swam  
 'When he got to the edge of the pond, he swam it.'
- we-t-k-š hesik'en čuk'ṣ hi ničwi?i.*  
 DEM-ANA-PTCP-TOP again going DIR he.came.to.water  
 'Then he went (on) again and came (again) to the edge (of a body of water).'
- tut-k teti?i, ha šeniš nenču ?ati nenšwičuki.*  
 finish-PTCP he.said, this pond it.is.too big I.will.cross.water  
 'He said, "This pond is too big for me to cross".'

*we-t-k-š*                      *siksink*      *his*      *he:čti?i*.  
 DEM-ANA-PTCP-TOP    eagle              BACK    he.met  
 ‘Then an eagle met him.’

(Swadesh 1953:A1a.2–6)

It seems appropriate to describe these cases as *absolute adverbials*, following Thompson, Longacre & Hwang (2007:264), which they define as a marked subordinate clause with no explicit signal of the relationship between the main and the subordinate clause, and where the relationship must therefore be inferred from pragmatic context. Indeed, in cases like these the function of the participle is not so much to signal a connection between itself and the following main clause, but rather to background the preceding discourse and set up the new clause in juxtaposition to that.

Thompson, Longacre & Hwang also note that, “lexical overlap – especially when it is a back-reference – can become stylized and reduced until it becomes similar to a conjunction. Thus, instead of the specific repetition of a verb in back-reference, the subsequent allusion may be by virtue of a verb of highly generic meaning such as ‘do’, ‘be’, or ‘say’. [...] All these forms sum up a previous sentence ‘So being then...’ but contribute bits of information such as might be found in any dependent [verb]. Often they are best translated simply as ‘and then’.” (Thompson, Longacre & Hwang 2007:290). This is exactly what we see in Chitimacha. In fact, the most common translation for *wetk* and *tutk* – when they are translated at all – is simply ‘then’. These two forms especially, but also others, have become so conventionalized as to probably be lexical. Out of 3,490 sentences, 1,008 begin with *wetk* ‘so, then’ (lit. ‘that being’), 133 begin with *tutk* ‘then’ (lit. ‘that finished’), 137 begin with *weyč’ik* ‘therefore’ (lit. ‘doing thus’), and approximately 100 more begin with other combinations with the demonstrative *wey*. In total, 36% of sentences begin with one of these generic subordinators. At the same time, every piece of morphology within these words is still highly productive, so that there are many instances where *wetk* can only have its literal meaning, ‘that being’ (‘thus’), as in (40).

- (40) *huyk’i*    *hi*    *?ak-iki-š*                      *wey-t-k*                      *hi*              *t’ut-k*,  
 well              DIR    see-1SG.A-TOP              DEM-ANA-PTCP    DIST              go(PL)-PTCP  
 ‘When I looked carefully, (I saw that) they were going along thus,’

(Swadesh 1953:A64f.6)



The use of a generic verb ‘do’ plus a demonstrative as a pervasive stylistic device referring back to the prior event in discourse that we see in (39) seems to be a type of *generic tail-head linkage* (de Vries 2005:376–377; Guillaume 2011:111).

This linkage function is not restricted to just sentence-initial position, however. When it occurs sentence-medially, *wetk* and other tail-head linkers usually signal the last item in a sequence of events, as seen in **Error! Reference source not found.**, and in this way provide macro-structure to the sentence, i.e. demarcate units larger than a clause but smaller than the sentence.

- (41) *wetk we ʔašinč’at’aš we haksik’ašank nuk’us hi nenšwi-ik’*,  
 then DEM old.man DEM youths behind DIR crossing.water-PTCP  
 ⇨ *hus šuš ʔuč’in hup hi ču-ik’*, *hus šuš ʔuč’in*  
 3SG wood rotten to DIR go-PTCP 3SG wood rotten  
 ⇨ *kas nučmi-ik’*, *wetk ču-ik’ tusiʔi*.  
 BACK work-PTCP then go-PTCP he.hid  
 ‘The old man crossed behind the youths, went to his rotten wood, prepared  
 his rotten wood, then went and hid.’ (Swadesh 1953:A38b.4)

What is especially interesting about generic tail-head linkage in Chitimacha, however, is its interaction with the topic marker -š. When a tail-head linker appears with -š, it signals a more significant break in the narrative sequence, and the beginning of a new narrative event. Consider (39) above: The first tail-head linker, in the second sentence, takes -š because the type of action has changed from simply ‘going’ to the new event of swimming. The ‘going’ is packaged as having been finished. The same holds for *wetkš* in the third sentence, because once again the action switches from ‘swimming’ to ‘going’. In the fourth sentence, *tutk* does not take the topic marker because the event is continuing from the point of the previous clause in both location and time, and still involves the same single participant. The last sentence, however, introduces the eagle as a new participant. All of the man’s actions leading up to that point are backgrounded as a single finished package of events by the use of -š on *wetkš* in the final sentence.

Similar patterns can be seen for the presence or absence of -š with tail-head linkers across the texts. Generally speaking, -š is much more likely to occur when the clause

involves changes that tend to accompany natural breaks in the narrative – a change in the action being performed, the participants involved, or the location where the event occurred. This suggests that *-š* is signaling how closely-related the speaker conceptualizes the two events. We can see more evidence for this by examining clause-internal uses of *-š* with participles (i.e., non-tail head linkage uses). Consider (42) below. Here, there is a chain of participial clauses, including two instances of *wetk*, but only one is marked by *-š*.

(42) *him kut čun kaččuš, kimik'unatkin kin ʔapš ʔičmi:k',*  
 2SG head for if.you.drink kimigunatkin with together mix-PTCP

↳ *ki: napšč'ikank ʔam ʔo:nak kin ʔapš ʔičmi:k'*  
 vine black thing all with together mix-PTCP

↳ *wet-t-k-š šuš napšč'ikank ʔapš ʔičmi:k',*  
DEM-ANA-PTCP-TOP wood black together mix-PTCP

↳ *wet-t-k ku ki šuhtpi:k', kaččuyi him*  
 DEM-ANA-PTCP water in boil-PTCP you.will.drink 2SG

↳ *ku kačt-ʔiš-i-nk-š teet.*  
 water drink-PROG-NF.SG.A-LOC-TOP SIMIL

‘If you drink it for your head, you mix it with *kimigunatkin*, mix with black vine, then mix it with black wood, boil it in water, and drink it as you drink your water.’ (Swadesh 1953:A75a.5)

Why the use of *-š* where it is? If not for the presence of *-š*, it would be possible to interpret this sentence as meaning, ‘mixing it with black vine and [while] mixing it with wood’, rather than the correct interpretation as ‘mix it with black vine, *then* mix it with wood’. Notice that this topic-marked *wetk* is given an explicit translation with ‘then’ whereas the non-topic marked *wetk* is not translated at all, attesting to its greater salience of the transition signaled by the topic-marked form. The *-š* signals a break in the sequence of steps, conceptually bracketing off the previous clause as being the background for the present one.

This interpretation of the function of *-š* when combined with the participial *-k* also neatly explains the presence of *-š* in the perfect aspect construction, as exemplified in (43)–Error! Reference source not found..

(43) *ʔap t'ut-k-š nakun, ʔuš panš ʔo:nak kap tuwʔišna.*  
 VEN **go(PL)-PTCP-TOP** **COP(1PL)** 1PL people all INCH die(PL)-PROG-NF.PL.A  
 'We have come because all our people are dying.' (Swadesh 1953:A3e.6)

(44) *wakstik'i panš ʔap nahmi-k'-š naʔa ʔam weytemank*  
 lately people PROX **send-PTCP-TOP** **COP(NEUT):NF.PL** thing that.sort  
 ↪ *kakumpi k'ih-t-k.*  
 learning want-TRZR-PTCP  
 'They have sent people lately to find out that sort of thing.'  
 (Swadesh 1953:A5j.1)

(45) *ʔiš kiš ʔatin kap niki-k'-š hiʔi.*  
 1SG horse INCH **be.sick-PTCP-TOP** **COP(NEUT):NF.SG**  
 'My horse has become sick.' (Swadesh 1953:A67g.7)

Not every instance of this construction imparts a perfect semantics, but most do. This construction is most clear, however, in the cases where the auxiliary is grammaticalizing onto the verb, as in **Error! Reference source not found..** It is these cases which consistently signal perfect aspect.

(46) *ʔišk ku keta = nki ʔap ni-k'-š-iki*  
 1SG water side = LOC VEN WATER-PTCP-PERF-1SG.A  
 'I have come to the water's side.' (Swadesh 1953:Ab.3)

For this construction to express a perfect semantics is unsurprising because, by signaling a break or bracketing in the narrative sequence, -š frequently functions to situate the first clause prior in time to the second, similar to how we saw the past participle -*tut* does above. Though the primary function of -š is not to signal temporal sequence per se, the fact that it marks a topical transition often results in just such a sequencing in practice. It is easy to see how this use developed into a perfect aspect construction, which indicates that an event occurred prior to the present, and often focuses on the state that results. The combined backgrounding function of -*k* and -š does exactly that: packages the prior event as a completed state, against the backdrop of which the current event takes place.

Because the development of perfect aspect out of the -*k* + -š construction implies a sequencing function for -š, this fact lends greater support to the interpretation of -š on

tail-head linkers as functioning to mark turning points in the narrative and segment the discourse into larger macro-units. The discourse-level function of -š with -k is thus perfectly analogous to the sentence-internal function of *wetk* seen above, helping to structure smaller sections of discourse together into larger coherent units. Thus while -k itself allows the speaker to signal chains of events and indicate same or different participant reference, the topic marker -š is a way of grouping these clause chains into larger units that structure the narrative into macro-events within the discourse.

#### 4 Conclusion

This paper has aimed to illustrate the various functions of the participial marker -k in Chitimacha at both the clausal level and the discourse level. Clausally, -k fulfills a wide range of nominal and adverbial functions. Its presence also correlates strongly with a same subject in the following clause, and in this manner functions as a switch-reference system. At the discourse level, -k very frequently occurs as part of a generic tail-head linker, *wetk* or *tutk*, referencing the preceding narrative event and setting the upcoming event apart from it, thus structuring the discourse into discrete narrative events. Moreover, when -k appears with the topic marker -š, this marks a more significant break in the narrative, allowing speakers to group chains of participial clauses with -k into larger macro-units within the discourse.

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## Abbreviations

1	first person
2	second person
3	third person
A	agent
ANA	anaphoric
AND	andative
CAUS	causative
COP	copula
DEM	demonstrative
DIR	directional
DIST	distal
DTRZR	detransitivizer
ERG	ergative
FUT	future
GER	gerund
HAND	do by handling
HORIZ	horizontal position
IMPFV	imperfective
INCH	inchoative
LOC	locative
NEC	necessitative
NEG	negation
NEUT	neutral position
NF	non-first person
NZR	nominalizer
P	patient
PAST	past
PL	plural
PLACT	pluractional
PROX	proximal
PTCP	participle
PUNC	punctual

PROG	progressive
QUOT	quotative
RECIP	reciprocal
REFL	reflexive
REL	relative
SG	singular
SIMIL	similative copula
STAT	stative
TOP	topic marker
TRZR	transitivizer
VEN	venitive
VERT	vertical position