

Event Integration Patterns in Kupsapiny

KAWACHI, Kazuhiro

National Defense Academy of Japan

This study describes event integration patterns in Kupsapiny, a Southern Nilotic language of Uganda. This language exhibits a satellite-framed language pattern (Talmy 1991, 2000) only to a limited degree; it has satellite verb affixes that can be used for motion, a few categories of temporal contouring, and one category of action correlation (correlating), but not for state change or realization. However, the temporal sequence participle construction in Kupsapiny has the widest range of applications among the constructions used for complex events. It can be used at least for event domains and sub-domains where a co-event and the association function (the core-schematic component of a framing event) have to occur or can be interpreted as occurring in that order, and the construction reflects this order iconically. Another construction, the simultaneity participle construction, is used when the two event components occur at the same time or when one occurs during the other, or when one of these interpretations is possible. This construction normally displays the ‘association function – co-event’ order. Thus, these constructions can be characterized not only in terms of what types of grammatical constituents are used for particular kinds of event components, but also in terms of the temporal relation between a co-event and a framing event, especially the order in which the event components are mentioned in temporal sequence constructions, which should be another typological parameter considered for studies on event integration patterns.

Keywords: typology, event integration, Talmy, Kupsapiny (Kupsabiny, Kupsapiiny)

1. Introduction
2. Literature review
3. Data: Patterns of expressing events in the five domains in Kupsapiny
4. Analysis and discussion
5. Conclusion

1. Introduction

The goals of the present study are (i) to describe event integration patterns in Kupsapiny, a Southern Nilotic language of Uganda, and (ii) to discuss typological characteristics of the constructions that Kupsapiny uses.

Section 2 briefly reviews previous studies on event integration that are relevant to the present paper. Section 3 presents data on expressions of events in the five event domains (motion, state change, realization, temporal contouring, and action correlation) in Kupsapiny. Section 4 discusses typological characteristics of this language and their implication for typological studies on event integration. Section 5 concludes the paper.

Before going on to Section 2, the rest of the present section provides background information on Kupsapiny.

Background information on Kupsapiny

Kupsapiny (also spelled Kupsapiiny or Kupsabiny) is spoken by the Sebei people in the Sebei region on the northern and western slopes of Mt. Elgon in Eastern Uganda. It belongs to the Kalenjin branch of the Southern Nilotic group of the Nilotic language family. According to the national census of 2014, the population of the Sebei is 289,456, and almost all of them speak Kupsapiny. Sabaot, which is spoken on the Kenyan side of Mt. Elgon, seems to be another intelligible dialect of this language.

Kupsapiny is an agglutinating language, which uses both prefixes and suffixes, though some morphemes are portmanteau. It shows head-marking properties.

Kupsapiny has two cases, the absolute case and the nominative case, and distinguishes them by means of tone (e.g. ‘bird’ ABSL: *tàrtet*, NOM: *tártet*, ‘water’ ABSL: *peeko*, NOM: *pééko*; third-person singular pronoun ABSL: *nééto*, NOM: *neetó*).¹ Formally, it is difficult to determine which case is unmarked or marked, but functionally, the absolutive case is unmarked in that it has a wider range of uses (including its use as the citation form of a noun) than the nominative case. In this respect, this language can be regarded as having a marked-nominative system (Dixon 1994, König 2006, 2008).

In Kupsapiny, a verb usually carries a tense prefix or a participle prefix, both of which inflect for the person or the person-and-number of the subject. The tense categories are distant past, recent past, today past, present, and future. A verb can also take a negative prefix. Inflectional suffixes are those for aspect, for the person-and-number of the object, and for that of the indirect object (and also that of the subject, depending on the verb). When the object suffix does not occur, most verbs must take a suffix for the person-and-number of the subject. Derivational suffixes include those for paths of motion (‘along’, ‘from’, and ‘via’/‘through’/‘over’), deixis of motion, reflexive, anti-causative, and intransitivization.

The basic word order of Kupsapiny is VSO, but other orders are also possible in some discourse contexts. This language has prepositions (*am/om* ‘at, from’, *kucaké* ‘from,

¹ Kupsapiny has five tones: high (marked with an acute accent ´), mid (unmarked), low (marked with a grave accent `), rising (marked with a hacek ˇ), and falling (marked with a circumflex accent ^).

since’, *akay/akoy* ‘up to, until’, *paka* ‘up to, until’, *kupa* ‘for’), and a noun precedes any noun modifier (e.g., adjectives, numerals, relative clauses, genitive nouns).

Kupsapiny has no grammatical gender. The majority of proper names for people in this language are also gender-neutral. In some of the examples in the present chapter, *s/he*, *him/her*, or *his/her* is used as an English translation of the Kupsapiny third person pronoun.

According to Talmy (2000: 222), the satellite “can be either a bound affix or a free word,” and is “the grammatical category of any constituent other than a nominal or prepositional-phrase complement that is in a sister relation to the verb root” (e.g., English verb particles, German verb prefixes). In Kupsapiny, the morphemes that satisfy this definition are all derivational verb affixes. Four of them concern motion: the suffix for ‘along’ (or the translational motion suffix) *-aa/oo*, the deictic suffixes *-n* ‘hither’ and *-t* ‘thither’, the applicative suffix for the vector FROM or VIA *-e*, and the applicative suffix for the vector TO *-ci* (allomorphs: *-ci*, *-tyi* (after an alveolar), *-lyi* (after *ʎ*)). Three of them concern temporal contouring: the present habitual prefix on the verb for habitual actions, the verb prefix for ‘still’, and the verb prefix complexes for ‘no longer’. One of them is an action correlation notion of concert, the verb suffix for ‘together’. The combination of the ‘along’ suffix and one of the deictic suffixes in the motion domain may also be used for the temporal contouring categories of continuation and habitual actions. However, Kupsapiny does not seem to have any satellite for state changes or realization.

As in many other languages, Kupsapiny has two multi-verb/clause constructions: what may be called the temporal sequence participle construction (the TS participle construction) and the simultaneity participle construction (the SMLT participle construction). Both are subtypes of the participle construction, where a main clause is followed by a clause starting with a participle. In either construction, the main verb is usually tensed, and the participle is not marked for tense or aspect. The TS participle construction conveys two events, expressed by the clauses in their temporal order, as in (1). When this construction is used, the two events normally have to be in a causal relation.

- (1) ka-kkwoom-is neetó ku-piyóŋ.
 T.PST.3-eat-INTR 3SG.NOM PTCP.3-become.full
 ‘S/he ate, and became full.’

The ‘and’ construction, a similar construction to the TS participle construction, where a main clause is followed by a participle clause starting with the conjunctive clitic *an=* (*an=* when the subject of the following clause is in the third-person or the first-person plural, *ank=* when it is in the first-person singular or the second-person plural, and

ankee = when it is in the the second-person singular) and a participle, can be used for any pair of events occurring in their temporal order. Thus, instead of (1), (2) could be used. In contrast, in (3) and (4), where it is difficult to find a causal relation, the TS participle construction is not appropriate, though the ‘and’ construction is perfectly fine to use.

- (2) ka-kkwoom-is neetó an = ku-piyón.
 T.PST.3-eat-INTR 3SG.NOM and=PTCP.3-become.full
 ‘S/he ate, and became full.’
- (3) ka-kkwoom-is neetó àn = kù-wo/?kù-wo sùkuulù.
 T.PST.3-eat-INTR 3SG.NOM and=PTCP.3-go/PTCP.3-go school
 ‘S/he ate, and went to school.’
- (4) ka-kkwoom-is neetó àn = kù-pur/*kù-pur súúmut.
 T.PST.3-eat-INTR 3SG.NOM and=PTCP.3-beat/PTCP.3-beat telephone (SWH)
 ‘S/he ate, and made a phone call.’

The SMLT participle construction is formally similar to the TS participle construction – a clause with a tensed verb at its beginning is followed by a subordinate clause starting with an imperfective participle, as in (5).

- (5) ka-piyón neetó kù-kkwoom-iš-í.
 T.PST.3-become.full 3SG.NOM PTCP.3-eat-INTR-IPFV
 ‘S/he became full, while s/he was eating.’

The participle also has other uses. One of them relevant to the present study is its use for the formation of a verb-phrase complement in a construction syntactically and semantically corresponding to the subject-control/raising-to-subject construction (V S PTCP) or the object-control/raising-to-object construction (V S O PTCP) in other languages. In the “V S PTCP” construction, the participle agrees in person (for all the persons) and number (only for the first and second persons, not for the third person) with the subject as well as the main verb, as in (6) and (7).

- (6) ka-caku-cám ceeróp ku-wó sukuulù.
 T.PST.3-become-like Ceerop.NOM PTCP.3-go school
 ‘Ceerop came to like going to school.’
- (7) kyaa-nkət anì a-sút mataket.
 D.PST.1-get.to.know 1SG.NOM PTCP.1SG-drive car

‘I learned to drive a car.’

In the “V S O PTCP” construction, the participle agrees in person (for all the persons) and number (only for the first and second persons, not for the third person) with the object, as in (8) and (9).²

- (8) ki-mmwwóó-ci ceprot ceššee-ni (kule)
 D.PST.3-tell-to Ceprot.NOM wife-3SG.POSS COMP
 ku-sit-tyi sírok.
 PTCP.3-wash-for.3 clothes
 ‘Ceprot told his wife to wash the clothes for himself.’

- (9) kà-kkwìy = aaní neetó à = wo màkít.
 T.PST.3-do/cause=1SG 3SG.NOM PTCP.1SG-go market
 ‘S/he caused me to go to the market.’

2. Literature review

Talmy (1985, 1991, 2000) investigated patterns of expressing a macro-event (e.g., motion event) consisting of a framing event, i.e., a main event (e.g., motion along a path), and a co-event, or a subordinate event (e.g., manner of motion, means of causation), in various languages. He found that languages are classified into two major types, verb-framed and satellite-framed languages. Verb-framed languages use a main verb and an adverbial or a non-main verb, while satellite-framed languages use a satellite or an adpositional phrase and a main verb to express the association function and a co-event, respectively. (In the case of a motion event, its association function is a path of motion, and its co-event is, for example, a manner or cause of motion.) Talmy (1991, 2000) claims that the two types of languages consistently show the two different patterns of expressing the components of macro-events across the following five event domains: motion (specifically, translational motion), state change, realization, temporal contouring (aspect), and action correlation (‘action correlating’ in Talmy’s terminology).

Various cases where a language cannot fit well into either typological type have been reported in the literature. For example, Aske (1989) reports that Spanish, which is basically a verb-framed language, can use a construction characteristic of satellite-framed

² Depending on the verb and on the construction where it is used, *kule* is optionally used before the participle, as in (8), or is not, as in (9). There is also a construction that requires *kule* (perhaps, as a quote marker, rather than as the complementizer), as in (i).

- (i) ki-mmwwóó-ci ceprot ceššee-ni kule ø-sit-wa sírok
 D.PST.3-tell-to Ceprot.NOM wife-3SG.POSS QUOTE/COMP IMP.2SG-wash-for.1SG clothes
 ‘Ceprot told his wife to wash the clothes for himself.’
 (*lit.* ‘Ceprot told his wife, Wash the clothes for me.’)

languages, where a manner verb as a main verb takes a path complement when the path is atelic. Croft et al. (2010), who noticed that most languages have typologically diverse constructions, propose a treatment of Talmy's typological findings in terms of constructions and situation types, and claim that certain constructions, rather than languages as a whole, have properties such as verb-framedness or satellite-framedness, and differ in the degree of morpho-syntactic integration, which reflects the typicality or naturalness of event types.

However, Talmy (2000: 64–67) himself was aware that languages could each have typologically diverse constructions, and that there are languages that have such systems as a split system, a parallel system, and an intermixed system, as in (10).

(10) Split system: A language uses one typological pattern for one type of event, and uses another typological pattern for another type of event.

Parallel system: A language uses different typological patterns in expressing the same type of event; these patterns are nearly equally colloquial.

Intermixed system: A language intermixes different typological patterns rather randomly.

The present author (Kawachi 2014) showed that Kupsapiny has a split system of conflation of motion components between the satellite-framed system and a parallel subsystem of the verb-framed and other non-verb framed patterns, and that it exhibits different typological characteristics, depending on what type of co-event and what path component(s) are expressed; specifically, this language has limited combinations of path components that can be expressed in a satellite-framed construction, which can accommodate various verbs for co-events. Whether it can use these constructions depends on whether the path component(s) expressed can fit in the range of any of these combinations. However, what pattern(s) Kupsapiny exhibits in expressing events in the other four event domains has not been investigated. (In fact, the typological characteristics shown by any other Nilo-Saharan language, or by Nilo-Saharan languages in general for that matter, are virtually unknown.)

The questions that the present paper addresses are as follows. First, how can Kupsapiny fit into Talmy's framework of event integration; specifically, does Kupsapiny show this typological property of having a split and parallel system of conflation of event components in the other four event domains (state change, realization, temporal contouring, and action correlation) as well? Second, why does Kupsapiny have the system that it has (i.e. the system that is shown in Section 3)? Third, can this language be well characterized by means of the parameter used in Talmy's framework in the first place?

Talmy's typology of event integration is based on what types of constituents express different types of semantic components. An additional factor that the present paper takes into account is the order in which the different types of semantic components are expressed (Kawachi, this issue).

3. Data: Patterns of expressing events in the five domains in Kupsapiny

This section presents data on the Kupsapiny constructions used in each of the five event domains. Table 1 summarizes the constructions used for the five event domains and their subdomains. “√” indicates that the present author found that the construction occurred for the particular event domain or sub-domain. “(√)” means that the SMLT participle construction can be used for motion events with those types of co-events, but the meaning expressed with this construction (the repeated occurrence of the co-event) differs from that expressed with the other constructions. The state-change data are restricted to those whose co-event is a cause, which is the most common co-event of a state-change event, though state-change events may have other types of co-events (e.g., manner).³ The data on the constructions for temporal contouring include those for sub-domains that Talmy (1991, 2000) does not deal with: ‘already’, successiveness (‘one after another’), ‘still’, ‘no longer’, and ‘yet’.

³ Kupsapiny generally seems to have difficulty expressing state-change events whose co-event is a manner (e.g. *The candle flickered/sputtered out.* from Talmy 2000: 243; *I felt for nails on the board./I felt the board for nails.* from Talmy 2000: 253). This needs further investigation.

Table 1: Kupsapiny constructions used for the five event domains

	SAT	TS	SMLT	V (AF) S PTCP (Co.E.)	ADV (AF)	Other
MOTION						
Motion (self-agentive/non-agentive) with manner	√	√	√			
Motion (agentive) with manner	√	√	√			
Motion (self-agentive/non-agentive) with cause	√	√				
Motion (agentive) with cause	√	√	√			
Motion with concomitance	√	√	√			
Motion with precursion	√	√	(√)			
Motion with enablement	√	√	(√)			
Motion with reverse enablement		√				
Motion with subsequence		√ ⁴				
Motion with concurrent result	√	√	√			
STATE CHANGE (with cause)		√				
REALIZATION		√				
TEMPORAL CONTOURING						
Completion		√		√		
Termination		√		√		
Repetition		√		√	√	REP
Continuation	√	√		√	√	REP
Initiation				√		
Habitual action	√				√	
Gradualness					√	CNSTR
Frequency					√	
Other aspectual notions:						
Successiveness: 'one after another'		√	√			
'Still'	√				√	
'No longer'	√					
'Already'					√	
'Not yet'						CNSTR
ACTION CORRELATION						
Concert: 'together with'	√	√	√		√	PREP
Accompaniment: 'along with'		√ ⁵	√			
Surpassment		√ ⁶				V (AF) with PP (Co.E)
Imitation		√				V (AF) with PP (Co.E.)
Demonstration		√		√		

⁴ When the TS participle construction is used for motion events with subsequence, where an association function precedes a co-event, it expresses the association function and the co-event in that order, unlike when it is used for other types of events.

⁵ When used with the verb for 'follow' for accompaniment, the TS participle construction can be used in two ways. It may express an association function with the main clause and a co-event with the participle clause in the imperfective, or may express them the other way around.

⁶ When used for surpassment, the TS participle construction can be used in two ways. It may express a co-event and an association function in that order, or it may express them in the opposite order.

Abbreviations used in the table:

ADV	a construction where an adverbial expresses an association function, and a main verb is used for a co-event
AF	association function
Co.E.	co-event
PREP	a preposition expressing an association function
REP	repetition expressing an association function
SAT	a satellite construction, where a verb carries a suffix, serving as a satellite
SMLT	the simultaneity participle construction
TS	the temporal sequence participle construction
V (AF) S PTCP (Co.E)	the construction that corresponds to the subject-control/raising-to-subject construction. In this construction, the main verb and the participle express an association function and a co-event, respectively, and the participle agrees in person and number with the subject and the main verb.

The types of co-events of motion listed in Table 1 are illustrated with Talmy's (2000) English examples in (11a)-(11g), (11i), and (11j) and his German example in (11h). ("GO" is used for self-agentive motion. "A MOVE" means "agentively cause to move".)

- (11) a. Motion (self-agentive/non-agentive) with manner (Talmy 2000: 36)
The ball bounced/rolled down the hall.
[the ball MOVED down the hall] WITH-THE-MANNER-OF [the ball bounced/rolled]
- b. Motion (agentive) with manner (Talmy 2000: 228)
I rolled the keg out of the storeroom.
[I A MOVED the keg out of the storeroom] WITH-THE-MANNER-OF [I rolled it]
- c. Motion (self-agentive/non-agentive) with cause (Talmy 2000: 227)
The bone pulled out of its socket.
[the bone MOVED out from its socket] WITH-THE-CAUSE-OF [(something) pulled on it]
- d. Motion (agentive) with cause (Talmy 2000: 228)
I kicked the ball into the box.
[I A MOVED the ball in to the box] WITH-THE-CAUSE-OF [I kicked it]
- e. Motion with concomitance (Talmy 2000: 46)
She wore a green dress to the party.
[she WENT to the party] WITH-THE-CONCOMITANCE-OF [she wore a green dress]
- f. Motion with precursion (Talmy 2000: 42)
The researcher ground the caraway seeds into the test tube.

- [the researcher _AMOVED the caraway seeds into the test tube]
WITH-THE-PRECURSION-OF [the researcher ground the caraway seeds]
- g. Motion with enablement (Talmy 2000: 45)
I scooped jellybeans up into her sack.
[I _AMOVED jellybeans into her sack] WITH-THE-ENABLEMENT-OF [I scooped up the jellybeans]
- h. Motion with reverse enablement (Talmy 2000: 44)
Ich habe den Sack aufgebunden.
I have the sack open-tied
'I untied the sack and opened it.'
[I _AMOVED the sack TO AN-OPEN-CONFORMATION]
WITH-THE-ENABLING-REVERSAL-OF [(someone) had tied the sack]
- i. Motion with subsequence (Talmy 2000: 47)
They locked the prisoner into his cell.
[they _AMOVED the prisoner into his cell]
WITH-THE-SUBSEQUENCE-OF [they locked the cell]
- j. Motion with concurrent result (Talmy 2000: 47)
The door slammed shut.
[the doore MOVED TO A-POSITION-ACROSS-AN-OPENING]
WITH-THE-CONCURRENT-RESULT-OF [the door slammed]

3.1. Motion

In expressing motion events, the following three constructions are possible: (i) the satellite-framed construction, (ii) the TS participle construction, and (iii) the SMLT participle construction. Because the satellite construction is a mono-clausal construction, it may occur as part of multi-clause constructions like (ii) and (iii).

(i) Satellite construction

This construction contains only one verb for a co-event; the suffix(es) express(es) path components. The co-event and the path are expressed with the verb and the suffix(es), respectively.

(ii) Temporal sequence participle construction

In this construction, V1 (a main verb) is a verb for a co-event, and V2 (a participle) is a path verb. Path components may also appear in the suffix(es) on one of the verbs or both verbs.

(iii) Simultaneity participle construction

In this construction, V1 (a main verb) is a path verb, and V2 (a participle) is a verb for a co-event in the imperfective. Path components may also appear in the suffix(es) on one of the verbs or both verbs.

Examples of the three constructions are shown in (12), (13), and (14), respectively. In the

literal gloss for each of the following examples for the TS participle construction, the same tense as the main clause is used for the participle clause, and no conjunction is used between the two clauses; in the literal gloss for the SMLT participle construction, the present participle is used. (The construction label at the end of each example will be discussed shortly.)

- (12) (a) kwè-koŋ/(b) kwe-koŋ-óó-n korkét
 T.PST.3-run.hither/T.PST.3-run-along-hither woman.NOM
 màkìt àmtun.
 market yesterday
 (a) ‘The woman ran hither to the market yesterday.’
 (b) ‘The woman ran along hither to the market yesterday.’
 [SAT-2]
- (13) (a) kwè-koŋ/(b) kwe-koŋ-óó-n korkét
 T.PST.3-run.hither/T.PST.3-run-along-hither woman.NOM
 kù-co màkìt àmtun.
 PTCP.3-come market yesterday
 (a) ‘The woman ran hither to the market yesterday.’
 (*lit.* ‘The woman ran hither, she came to the market yesterday.’)
 (b) ‘The woman ran along hither to the market yesterday.’
 (*lit.* ‘The woman ran along hither, she came to the market yesterday.’)
 [TS-2]
- (14) ka-có neetó makìt
 T.PST.3-come 3SG.NOM market
 (a) kùù-koŋ-è/(b) kuu-koŋ-óó-n-u àmtun.
 PTCP.3-run-IPFV/PTCP.3-run-along-hither-IPFV yesterday
 (a) ‘The woman ran to the market yesterday.’
 (*lit.* ‘The woman came to the market, running yesterday.’)
 (b) ‘The woman ran along hither to the market yesterday.’
 (*lit.* ‘The woman came to the market, running along hither yesterday.’)
 [SMLT-2]

Each construction consists of four types of sub-constructions, which differ in the expression of a ground object, the use of the applicative suffix, and the use of a preposition.

Construction Type 1:

No ground object is expressed. The construction is made up of only a verb for a co-event with one of the deictic suffixes and the ‘along’ suffix (in the satellite-framed constructions), or of a verb for a co-event and a path verb (with or without a deictic suffix and the ‘along’ suffix) (in the TS participle constructions or the SMLT participle constructions).⁷

Construction Types 2–4 each contain a noun phrase for a ground object in addition to the components of construction Type 1.

Construction Type 2:

A ground object is expressed with a bare noun phrase. The vector is TO, VIA (across), or VIA (around).

Construction Type 3:

A ground object is expressed with a noun phrase, which is an applied object. The vector is FROM or VIA (through, along). The verb (of the satellite-framed construction) or one of the verbs (the TS participle construction or the SMLT participle construction) carries the applicative suffix *-e* (FROM/VIA) or *-ci* (TO). (For a goal, some verbs carry the suffix *-ci*, while others do not, and only take a bare noun phrase.)

Construction Type 4:

A ground object is expressed with the noun phrase that the preposition *am* ‘from’ takes in a prepositional phrase. The vector is FROM.

The type used depends partly on the vector expressed. Table 2 summarizes the vectors that the four sub-construction types can express.

Table 2: Vectors of the four sub-construction types

	Vector
Type 1	ALONG
Type 2	(ALONG +) TO, VIA (across), VIA (around)
Type 3	(ALONG +) FROM, VIA (through, along), TO
Type 4	(ALONG +) FROM

⁷ The ‘along’ suffix could instead be analyzed as a suffix for translational motion.

Thus, there are 12 sub-constructions, whose components are shown in Tables 3–5. Because the deictic component of motion can appear as part of the meaning of a verb itself, as a verb form, as a verb suffix, or as an adverbial, it is not listed in the tables.

Table 3: Components of sub-constructions of satellite construction

	Morpho-syntactic components
Type 1	Co-event verb with suffixes
Type 2	Co-event verb, NP
Type 3	Co-event verb (with applicative suffix), NP
Type 4	Co-event verb, PP

Table 4: Components of sub-constructions of temporal sequence participle construction

	Morpho-syntactic components
Type 1	V1: co-event, V2: path
Type 2	V1: co-event, V2: path, NP
Type 3	V1: co-event, V2: path (with applicative suffix), NP
Type 4	V1: co-event, V2: path, PP

Table 5: Components of sub-constructions of simultaneity participle construction

	Morpho-syntactic components
Type 1	V1: path, V2: co-event
Type 2	V1: path, V2 (IPFV): co-event, NP
Type 3	V1: path, V2 (IPFV): co-event (with applicative suffix), NP
Type 4	V1: path, V2 (IPFV): co-event, PP

The examples in this section are labeled with “SAT”, “TS”, or “SMLT” with the sub-construction type number. For example, “SAT-1” means “satellite-framed construction Type 1.” When the satellite construction is embedded in the TS participle construction or the SMLT participle construction, the example is labeled “TS” or “SMLT”.

The same motion event may be expressed with any of the three constructions. (15)-(23) are examples of the sub-construction Types 2–4 of each of the three constructions. (15)-(17) are examples of the satellite construction, (18)-(20) are examples of the TS participle construction, and (21)-(23) are examples of the SMLT participle construction. The examples for the Type 2 sub-constructions of the three constructions, (15), (18), and (21), express the vector TO. The Type 3 sub-construction examples, (16), (19), and (22),

and the Type 4 sub-construction examples, (17), (20), and (23), each express the vector FROM, for which the Type 3 sub-constructions use the applicative suffix *-e* and the Type 4 sub-constructions use the preposition *am*.

- (15) kèè-tàmpùlìil-oo-t cúúpet kepén sáj.
 T.PST.3-float-along-thither bottle.NOM cave outside
 ‘The bottle floated along out of the cave (to the outside of the cave) thither.’
 [SAT-2]
- (16) (a) kèè-tàmpùlìil-t-e/(b) kèè-tàmpùlìil-oo-t-e
 T.PST.3-float-thither-from/T.PST.3-float-along-thither-from
 cúúpet kepén arít.
 bottle.NOM cave inside
 (a) ‘The bottle floated out of the cave (from the inside of the cave) thither.’
 (b) ‘The bottle floated along out of the cave (from the inside of the cave) thither.’
 [SAT-3]
- (17) (a) kèè-tàmpùlìil/(b) kèè-tàmpùlìil-oo-t cúúpet
 T.PST.3-float/T.PST.3-float-along-thither bottle.NOM
 àm kepén arít.
 from cave inside
 (a) ‘The bottle floated out of the cave (from the inside of the cave).’
 (deictic-neutral)
 (b) ‘The bottle floated along out of the cave (from the inside of the cave) thither.’
 [SAT-4]
- (18) (a) kèè-tàmpùlìil/(b) kèè-tàmpùlìil-oo-t cúúpet
 T.PST.3-float/T.PST.3-float-along-thither bottle.NOM
 kù-muŋ-t-ò kepén sáj.
 PTCP.3-cross.boundary-thither-3 cave outside
 (a) ‘The bottle floated out of the cave (to the outside of the cave) thither.’
 (*lit.* ‘The bottle floated, it crossed the boundary of the cave to the outside thither.’)
 (b) ‘The bottle floated along out of the cave (to the outside of the cave) thither.’
 (*lit.* ‘The bottle floated along thither, it crossed the boundary of the cave to the outside thither.’)

[TS-2]

- (19) (a) kèè-tàmpùlìil/(b) kèè-tàmpùlìil-oo-t cúúpet
 T.PST.3-float/T.PST.3-float-along-thither bottle.NOM
 kù-muŋ-t-e kepén arít.
 PTCP.3-cross.boundary-thither-from cave inside
 (a) ‘The bottle floated out of the cave (from the inside of the cave) thither.’
 (*lit.* ‘The bottle floated, it crossed the boundary of the cave from the inside thither.’)
 (b) ‘The bottle floated along out of the cave (from the inside of the cave) thither.’
 (*lit.* ‘The bottle floated along thither, it crossed the boundary of the cave from the inside thither.’)

[TS-3]

- (20) (a) kèè-tàmpùlìil/(b) kèè-tàmpùlìil-oo-t cúúpet
 T.PST.3-float/T.PST.3-float-along-thither bottle.NOM
 kù-muŋ-t-ò àm kepén arít.
 PTCP.3-cross.boundary-thither-3 from cave inside
 (a) ‘The bottle floated out of the cave (from the inside of the cave) thither.’
 (*lit.* ‘The bottle floated, it crossed the boundary of the cave from the inside thither.’)
 (b) ‘The bottle floated along out of the cave (from the inside of the cave) thither.’
 (*lit.* ‘The bottle floated along thither, it crossed the boundary of the cave from the inside thither.’)

[TS-4]

- (21) kà-muŋ-t-ò cúúpet kepén
 T.PST.3-cross.boundary-thither-3 bottle.NOM cave
 sáŋ (a) kù-tampulìil-e/(b) kù-tampulìil-òò-t-i.
 outside PTCP.3-float-IPFV/PTCP.3-float-along-thither-IPFV
 (a) ‘The bottle floated along out of the cave (to the outside of the cave) thither.’
 (*lit.* ‘The bottle crossed the boundary of the cave to the outside thither, floating.’)
 (b) ‘The bottle floated out of the cave (to the outside of the cave) thither.’
 (*lit.* ‘The bottle crossed the boundary of the cave to the outside thither, floating along thither.’)

3.1.1. Motion with manner

For motion events with a manner as their co-event, any of the three constructions can be used, as in (12)-(23). Another set of examples is given in (24)-(26).

- (24) kèè-mukurkur-cì mpiirèt aŋpo.
 T.PST.3-roll-to ball.NOM river
 ‘The ball rolled into the river.’ (deictic-neutral)
 [SAT-3]
- (25) kèè-mukurkur mpiirèt kù-wut aŋpo.
 T.PST.3-roll ball.NOM PTCP.3-enter river
 ‘The ball rolled into the river.’ (deictic-neutral)
 (*lit.* ‘The ball rolled, it entered the river.’)
 [TS-2]
- (26) kèè-wut mpiirèt aŋpo kù-mùkùrkur-è.
 T.PST.3-enter ball.NOM river PTCP.3-roll-IPFV
 ‘The ball rolled into the river.’ (deictic-neutral)
 (*lit.* ‘The ball entered the river, rolling.’)
 [SMLT-2]

The path components that have appeared in the examples so far are the vectors TO, FROM, and ALONG, as well as the deictic components. If a direction like ‘upward’ or ‘downward’ needs to be expressed, the satellite construction (e.g., (27)) cannot accommodate it, and either the TS participle construction (e.g., (28)) or the SMLT participle construction (e.g., (29)) needs to be used.

- (27) kee-raan-áá-t neetó
 T.PST.3-jump-along-thither 3SG.NOM
 ‘S/he jumped along thither.’
 [SAT-1]
- (28) kee-raan-áá-t neetó kù-rek-t-o.
 T.PST.3-jump-along-thither 3SG.NOM PTCP.3-descend-thither-3
 ‘S/he jumped down along thither.’
 (*lit.* ‘S/he jumped along thither, s/he descended thither.’)
 [TS-1]

[TS-2]

- (33) kèè-muut neetó kùsaawà kù-lapat-e.
 T.PST.3-move.around 3SG.NOM field PTCP.3-run-IPFV
 ‘S/he ran around the field.’ (deictic-neutral)
 (*lit.* ‘S/he moved around the field, running.’)
 [SMLT-2]
- (34) (a) kà-kuy/(b) kà-kùy-oo-t
 T.PST.3-crawl/T.PST.3-crawl-along-thither
 lekwét kù-kettye kurkát.
 child.NOM PTCP.3-cross doorway
 (a) ‘The child crawled across the doorway.’ (deictic-neutral)
 (*lit.* ‘The child crawled, s/he crossed the doorway.’)
 (b) ‘The child crawled thither across the doorway.’
 (*lit.* ‘The child crawled along thither, s/he crossed the doorway.’)
 [TS-2]
- (35) kà-kettye lekwét kurkát
 T.PST.3-cross child.NOM doorway
 (a) kù-kùy-e/(b) kù-kùy-oo-t-í.
 PTCP.3-crawl-IPFV/PTCP.3-crawl-along-thither-IPFV
 (a) ‘The child crawled across the doorway.’ (deictic-neutral)
 (*lit.* ‘The child crossed the doorway, crawling.’)
 (b) ‘The child crawled thither across the doorway.’
 (*lit.* ‘The child crossed the doorway, crawling along thither.’)
 [SMLT-2]
- (36) kà-tèreer-t-à tartèt kù-kettye koo-ńí.
 T.PST.3-fly-thither-3 bird.NOM PTCP.3-pass house-3SG.POSS
 ‘The bird flew thither past its nest.’
 (*lit.* ‘The bird flew thither, it passed its house.’)
 [TS-2]
- (37) kà-kettye tartèt koo-ńí
 T.PST.3-pass bird.NOM house-3SG.POSS
 (a) kù-tereer-tòy/(b) kù-tereert-òò-t-i.
 PTCP.3-fly-thither-IPFV/PTCP.3-fly-along-thither-IPFV

- (a) ‘The bird flew past its nest.’ (deictic-neutral)
(lit. ‘The bird passed its house, flying.’)
 (b) ‘The bird flew thither along past its nest.’
(lit. ‘The bird passed its house, flying along thither.’)
 [SMLT-2]

Expressions of agentive motion with a manner also work in ways similar to those of non-agentive/self-agentive motion with a manner. (38), (39), and (40) are examples of the satellite-framed construction, the TS participle construction, and the SMLT participle construction, respectively.

- (38) kàà-mukurkúr-ci anì mpííret kó.
 T.PST.1SG-cause.to.roll-to 1SG.NOM ball house
 ‘I rolled the ball into the house.’ (deictic-neutral)
 [SAT-3]

- (39) kàà-mukurkúr anì mpííret
 T.PST.1SG-cause.to.roll 1SG.NOM ball
 (a) à-wuuté/(b) kù-wut ko.
 PTCP.1SG-cause.to.enter/PTCP.3-enter house
 ‘I rolled the ball into the house.’ (deictic-neutral)
(lit. ‘I rolled the ball, (a) I made it enter the house/(b) it entered the house.’)
 [TS-2]

- (40) kàà-wuute anì mpiirèt
 T.PST.1SG-cause.to.enter 1SG.NOM ball
 kó (a) à-mukurkur-é/(b) kù-mukurkur-e.
 house PTCP.1SG-cause.to.roll-IPFV/PTCP.3-cause.to.roll-IPFV
 ‘I rolled the ball into the house.’ (deictic-neutral)
(lit. ‘I made the ball enter the house, (a) rolling it/(b) rolling.’)
 [SMLT-2]

In (39) and (40), the participle is transitive in (39a) and (40a), and is intransitive in (39b) and (40b). Like in (38), (39a) entails the agent’s intention to cause the ball to enter the house, whereas in (39b), this type of intention on the part of the agent may or may not exist, and the ball’s entering the house might be only accidental. Similarly, in (40a), the agent maintains his/her control over the ball up to the endpoint of the path, whereas in (40b), the agent only caused the ball to enter the house, and did not have any intention to

cause it to roll; in other words, the rolling manner of the ball's motion is accidental.

3.1.2. Motion with cause

Non-agentive/self-agentive motion with a cause is expressed with either the satellite-framed construction (e.g., (41)) or the TS participle construction (e.g., (42)).⁸

- (41) kaa-capóó-ci anì ñúŋ.
 T.PST.1SG-slip-to 1SG.NOM ground
 'I slipped to the ground.'
 [SAT-3]

- (42) kaa-capáttye anì a-pur/a-ru ñúŋ.
 T.PST.1SG-slip 1SG.NOM PTCP.1SG-fall/PTCP.1SG-lie.down ground
 'I slipped to the ground.'
 (*lit.* 'I slipped, I fell/lay down on the ground.')

[TS-2]

In contrast, for expressing agentive motion with a cause, any of the three constructions in Section 3.1.1 is possible, as in examples (43)-(48). (42) and (45) are examples of satellite-framed construction; (43) and (46) are examples of the TS participle construction; and (44) and (47) are examples of the SMLT participle construction. The meaning expressed with the SMLT participle construction is usually somewhat different from that expressed with the other two constructions. For example, in (45), the wind blows continuously, unlike in (43) and (44); and in (48), the agent may kick the ball a number of times, unlike in (46) and (47).

- (43) ka-kúút-ut-è yoomét kártáásit meesà.
 T.PST.3-blow-thither-from wind.NOM paper table
 'The wind blew the paper off the table thither.'
 [SAT-3]

- (44) kà-kuut yoomét kártáásit
 T.PST.3-blow wind.NOM paper

⁸ With the SMLT participle construction, a grammatical sentence would be formed, as in (i), but its meaning is quite different from that of (41) or (42).

(i) kàa-pùr anì ñúŋ a-capóóty-oy.
 T.PST.1SG-fall 1SG.NOM ground PTCP.1SG-slip-IPFV
 'I fell while I was slipping (multiple times).'

[TS-2]

- (58) ka-có neetó kó cìluut-e/cìluut-oo-n-ú.
 T.PST.3-come 3SG.NOM house hiccup-IPFV/hiccup-along-hither-IPFV
 ‘S/he came into the house, hiccupping.’
 (*lit.* ‘S/he came to the house, hiccupping/hiccupping as s/he moved along
 hither.’)
 [SMLT-2]

- (59) yòò kii-peré cèè-lip
 when D.PST.3-think PTCP.1PL-have(porridge)
 mùsarék, ku-lúm neetó làttyet
 porridge.PL PTCP.3-hear 3SG.NOM neighbor.SG
 kù-ηolool-oo-n-ú ák cìtaake.
 PTCP.3-talk-along-hither-IPFV with someone
 ‘When they thought of having the porridge, she heard a neighbor talking with
 someone as she moved hither.’
 [SAT-1]

(from *Sókkyiní pic soojàn* ‘Selfishness can cause trouble to people’)

Because verbs for co-events cannot take the suffix for VIA, they cannot form the satellite-framed construction. Thus, for this vector, only the TS participle construction and the SMLT participle construction are possible, as in (60) and (61).

- (60) ka-móoryen-óó-t neetó kù-ketty-éna = aní.
 T.PST.3-whistle-along-thither 3SG.NOM PTCP.3-pass-1SG=1SG
 ‘S/he whistled thither along past me.’⁹
 (*lit.* ‘S/he whistled as s/he moved along thither, s/he passed me.’)
 [TS-2]

- (61) ka-ketty-éna = aní neetó
 T.PST.3-pass-1SG=1SG 3SG.NOM
 (a) kù-mooryen-e/(b) kù-mooryén-oo-t-í.
 PTCP.3-whistle-IPFV/PTCP.3-whistle-along-thither-IPFV
 (a) ‘S/he whistled past me.’ (deictic-neutral)
 (*lit.* ‘S/he passed me, whistling as s/he moved.’)
 (b) ‘S/he whistled past me thither.’

⁹ Strictly speaking, (60) means ‘S/he whistled hither (as she approached me) and then thither along past me.’

- kà-kkwom-iiš-oo-n/kà-kkwom-iiš-oo-t ‘eat (intransitive)’ (*-iš*: the intransitivizing suffix)
- kà-payoon/kà-payaat (e.g., lékwet) ‘feed {*pay*} (e.g., the child)’
- kà-yeeyy-òò-n/kà-yeeyy-òò-t (e.g., pééko) ‘drink {*ye*} (e.g., water)’
- kà-ŋoy-oo-n/kà-ŋay-aa-t (e.g., mayitooník) ‘grind {*ŋáy*} (e.g., groundnuts)’
- kee-rúruk-óó-n/kee-rúruk-óó-t (e.g., tuttwék) ‘collect {*rurúc*} (e.g., rubbish)’
- kà-pur-oo-n/kà-pur-oo-t (e.g., teetá) ‘hit, beat {*pur*} (e.g., cow)’
- ke-súman-óó-n/ke-súman-áá-t (e.g., kayitišét) ‘read, learn {*sùman*} (e.g., math)’
- ka-ŋééru-n-óó-n/ka-ŋééru-n-óó-t ‘become angry {*ŋeeru*}’
- ka-cííren-óó-n/ka-cííren-óó-t ‘joke {*cííran*}’
- kà-sooy-oo-n/kà-sooy-oo-t ‘pray {*sááy*}’
- ka-sóóm-oo-n/ka-sóóm-ooo-t ‘beg, pray {*sóóm*}’
- kà-kuur-òò-n/kà-kuur-òò-t (e.g., ceelíímo) ‘call {*kùùr*} (e.g., Ceeliimo)’
- kà-lumt-oo-n/kà-lumt-aa-t (e.g., ŋalek) ‘listen to {*lumte*} (e.g., words, news)’
- kee-róót-oo-n/kee-róót-oo-t (e.g., pííko) ‘stare at {*root*} (e.g., the people)’
- kà-riir-òò-n/kà-riir-àà-t ‘cry, yell {*riir*}’
- ka-ŋímpim-óó-n/ka-ŋímpim-óó-t ‘smile {*ŋimpimín*}’
- kà-cuur-oo-n/kà-cuur-oo-t (e.g., ceelíímo) ‘insult {*cuur*} (e.g., Ceeliimo)’
- kee-kóóst-oo-n/kee-káást-aa-t (e.g., mùŋut) ‘praise {*káste*} (e.g., God)’
- kee-sóót-oo-n/kee-sóót-aa-t ‘think {*soot*}’
- kee-méy-oo-n/kee-méy-oo-t ‘yawn {*meý*}’
- ke-ryón-oo-n/ke-ryón-oo-t ‘sneeze {*ryon*}’
- kee-póóten-óó-n/kee-póóten-áá-t ‘tremble, shiver {*pootàn*}’

3.1.4. Motion with precursion

For motion events with a precursion as their co-event, the satellite-framed construction (e.g., (64)) or the TS participle construction (e.g., (65)) can be used.

- (64) kà-tè-ci kùmpàtet mùkàpet.
 T.PST.3-drip-to honey.NOM tin
 ‘The honey dripped into the tin container.’
 [SAT-3]

- (65) kà-tow kùmpàtet kù-wut mùkàpet.
 T.PST.3-drip honey.NOM PTCP.3-enter tin
 ‘The honey dripped into the tin container.’
 (*lit.* ‘The honey dripped, it entered the tin.’)

[TS-2]

The SMLT participle construction (e.g., (66)) could also be used, but the meaning expressed with this construction seems to somewhat differ from what is expressed with the satellite-framed construction or the TS participle construction. For example, in (64) and (65), the honey might have dripped once or more, whereas in (66), the honey dripped continually more than once.

- (66) kèè-wut kùmpàtet mùkàpet ku-tow-ú.
 T.PST.3-enter honey.NOM tin PTCP.3-drip-IPFV
 ‘The honey dripped into the tin container.’
 (*lit.* ‘The honey entered the tin, dripping.’)
 [SMLT-2]

It is not clear whether the SMLT participle construction should really be regarded as being used for motion events with a precursion. In fact, for the motion events expressed by (67) and (68), the SMLT participle construction cannot be used at all.

- (67) ka-ŋoo-ci ceelíimo pááka kuniyét.
 T.PST.3-grind-to Ceeliimo.NOM millet sack
 ‘Ceeliimo ground the millet into the sack.’
 [SAT-3]
- (68) ka-ŋááy ceelíimo pááka ku-ywé kuniyét.
 T.PST.3-grind Ceeliimo.NOM millet PTCP.3-put sack
 ‘Ceeliimo ground the millet into the sack.’
 (*lit.* ‘Ceeliimo ground the millet, s/he put it in the sack.’)
 [TS-2]

3.1.5. Motion with enablement

Also for motion events with enablement as their co-event, either the satellite-framed construction (e.g., (69)) or the TS participle construction (e.g., (70)) can be used.

- (69) kaa-ram-cí anì teššóónik kuniyét.
 T.PST.1SG-scoop-to 1SG.NOM maize sack
 ‘I scooped the maize up into the sack.’
 [SAT-3]

- (70) kaa-rám anì teššóónik
 T.PST.1SG-scoop 1SG.NOM maize
 (a) à-ywen-tyi/(b) kù-pa kuniyet.
 PTCP.1SG-put-to/PTCP.3-go.PL sack
 ‘I scooped the maize up into the sack.’
 (*lit.* ‘I scooped the maize, (a) I put it into the sack/(b) it went into the sack.’)
 (a) [TS-3]/(b) [TS-2]

The SMLT participle construction (e.g., (71)) could also be used, but it expresses a meaning somewhat different from the other two constructions. In (69) and (70), the agent scooped the maize once, whereas in (71), the agent scooped it multiple times.

- (71) kà-ywen-tyi anì teššóónik kuniyét
 T.PST.1SG-put-to 1SG.NOM maize sack
 à-ram-ci-ní.
 PTCP.1SG-scoop-to-IPFV
 ‘I scooped the maize up into the sack.’
 (*lit.* ‘I put the maize into the sack, scooping.’)
 [SMLT-3]

There are cases where the satellite-framed construction cannot be used because it cannot express the path components, and only the TS participle construction is possible, as in (72).

- (72) ka-nám neetó kìtapu-na àm šèlfut
 T.PST.3-grab 3SG.NOM book-that from shelf
 (a) kù-sut/(b) kù-co ñùj.
 PTCP.3-bring/PTCP.3-come ground
 ‘S/he grabbed that book down hither off the shelf.’
 (*lit.* ‘S/he grabbed that book from the shelf, (a) s/he brought it to the ground/(b) it came to the ground.’)
 [TS-4]

3.1.6. Motion with reverse enablement

Kupsapiny expresses motion with reverse enablement using the TS participle construction, as in (73) and (74).

- (73) kaa-tyác anì kuniyèt
 T.PST.1SG-untie 1SG.NOM sack
 (a) a-yáát/(b) kù-yaat-akay.
 PTCP.1SG-open(transitive)/ PTCP.3-open(transitive)-ANTICS
 ‘I untied the sack and opened it.’
 (*lit.* ‘I untied the sack, (a) I opened it/(b) it opened.’)
 [TS-1]
- (74) ke-tyác-key màpuušóóntet ku-wucikéy.
 T.PST.3-unchain-REFL prisoner.NOM PTCP.3-go.away
 ‘The prisoner unchained himself/herself and went away.’
 (*lit.* ‘The prisoner unchained himself/herself, s/he went away.’)
 [TS-1]

The SMLT participle construction expresses a different meaning. For example, what (75) means is that in the middle of the prisoner’s unchaining himself/herself, his/her going away occurred, not that his/her unchaining himself/herself enabled his/her going away.

- (75) kà-wucikéy màpuušóóntet kù-ttyooc-ə-kéy.
 T.PST.3-go.away prisoner.NOM PTCP.3-unchain-IPFV-REFL
 ‘The prisoner went away while s/he was unchaining himself/herself.’

3.1.7. Motion with subsequence

In motion events with subsequence as their co-event, their co-event occurs after the framing event. For them, either the satellite-framed construction (e.g., (76), (78)) or the TS participle construction (e.g., (77), (79)) can be used. When the TS participle construction is used, it follows the ‘association function – co-event’ order, rather than the other way around; thus, it expresses these event components in the order of their occurrence.

- (76) kaa-púúr anì ηacarét.
 T.PST.1SG-sit 1SG.NOM chair
 ‘I sat down on the chair.’
 [SAT-2]
- (77) kaa-púúr anì à-ηotu-né ηacarét.
 T.PST.1SG-sit 1SG.NOM PTCP.1SG-stay-at chair

‘I sat down on the chair.’
 (*lit.* ‘I sat, I stayed at the chair.’)
 [TS-2]

(78) kàà-sunken-é anì pííçet kooto takát.
 T.PST.1SG-hang-at 1SG.NOM picture house wall
 ‘I hung the painting on the wall.’
 [SAT-3]

(79) kàà-sunken-é anì pííçet kooto takát
 T.PST.1SG-hang-at 1SG.NOM picture house wall
 (a) à-tooré/(b) ku-ŋótu-nè yootó.
 PTCP.1SG-lay/PTCP.3-stay-at there
 ‘I hung the painting on the wall.’
 (*lit.* ‘I hung the picture at the wall of the house, (a) I lay it there/(b) it stayed there.’)
 [TS-3]

The use of the SMLT participle construction would yield a grammatical sentence, but one with a meaning very different from subsequence. For example, (80) expresses the speaker’s laying the picture on the wall in the middle of his/her hanging it.

(80) kàà-tooré anì pííçet kooto takát à-sunken-é.
 T.PST.1SG-lay 1SG.NOM picture house wall PTCP.1SG-hang-at
 ‘I laid the picture on the wall of the house while hanging it.’

3.1.8. Motion with concurrent result

The three constructions, the satellite-framed construction (e.g., (81)), the TS participle construction (e.g., (82)), and the SMLT participle construction (e.g., (83)) can express motion with a concurrent result.

(81) kèè-tol-lyì fáyyawaaks poollyét.
 T.PST.3-explode-to fireworks.NOM sky
 ‘The fireworks exploded into the sky.’
 [SAT-3]

- (82) kèè-tol fáyyawaaks kù-wo poollyét.
 T.PST.3-explode fireworks.NOM PTCP.3-go sky
 ‘The fireworks exploded into the sky thither.’
 (*lit.* ‘The fireworks exploded, they went to the sky.’)
 [TS-2]

- (83) kà-wo fáyyawaaks poollyét kù-tol-e.
 T.PST.3-go fireworks.NOM sky PTCP.3-explode-IPFV
 ‘The fireworks exploded into the sky thither.’
 (*lit.* ‘The fireworks went to the sky, exploding.’)
 [SMLT-2]

However, there is a set of examples where the satellite-framed construction (e.g., (84)) and the TS participle construction (e.g., (85)) are possible, but the SMLT participle construction would produce a different meaning (e.g., (86)).

- (84) ka-mmwóók-un-è kuruttyét cúúpet.
 T.PST.3-pop.out-hither-from lid.NOM bottle
 ‘The lid popped out of the bottle hither.’
 [SAT-3]

- (85) ka-mmwóók-un-è kuruttyét cúúpet kù-loot.
 T.PST.3-pop.out-hither-from lid.NOM bottle PTCP.3-move.out
 ‘The lid popped out of the bottle hither.’
 (*lit.* ‘The lid popped out hither from the bottle, it moved out.’)
 [TS-3]

- (86) ka-lóót-un-è kuruttyét cúúpet ku-mmwook-ú.
 T.PST.3-move.out-hither-from lid.NOM bottle PTCP.3-pop.out-IPFV
 ‘The lid popped out of the bottle hither (continuously or slowly).’
 (unlikely as a situation)
 (*lit.* ‘The lid moved out hither from the bottle, popping out.’)
 [SMLT-1]

In fact, in (86), the participle in the imperfective *ku-mmwook-ú* can be replaced by *ku-mmwók* [PTCP.3-pop.out] to form the TS participle construction, which means the same as (84) and (85). However, in this construction, the main verb and the participle express the association function and the co-event, respectively.

3.2. State change

Kupsapiny uses the TS participle construction for state-change events (only those whose co-event is a cause are dealt with in this paper), as in (87)–(93)¹¹ (Examples (87)–(89) are non-agentive; (90)–(93) are agentive.) In this construction as used this way, the main verb and the participle express a cause and its consequence, respectively. In the non-agentive examples in (87)–(89), the two verbs share the same subject. This also applies to the agentive examples with a transitive participle (90a), (91a), (92a), and (93a). In contrast, in the agentive examples with an intransitive participle (90b), (91b), (92b), and (93b), the object of the main verb is the subject of the participle. Unlike in the transitive participle construction, where the subject has the intention to achieve the action of the participle, in the intransitive participle construction, the subject may or may not have that intention.

- (87) kà-col mwaaty-áp cèèkò kú-pok.
 T.PST.3-melt oil.NOM-POSS milk PTCP.3-become.finished
 ‘The butter (*lit.* oil of milk) melted away.’
 (*lit.* ‘The oil of milk melted, it became finished.’)

- (88) kàa-lay-o kaawáánik kù-mít.
 T.PST.3-burn-3PL coffee.PL.NOM PTCP.3-decrease
 ‘The coffee boiled down.’
 (*lit.* ‘The coffee burned, it decreased.’)

- (89) kà-lay kaantlít kú-pok.
 T.PST.3-burn candle.NOM PTCP.3-become.finished
 ‘The candle burned out.’
 (*lit.* ‘The candle burned, it became finished.’)

- (90) kàa-cool anì mwaaty-ap ceeko
 T.PST.1SG-melt 1SG.NOM oil-POSS milk

¹¹ The use of the SMLT participle construction would yield a grammatical sentence, which conveys a somewhat different meaning from that of the TS participle construction. For example, as shown in the gloss for (i), this sentence does not express a causal relation as in (87).

- (i) kà-pok mwaaty-áp cèèkò kù-col-é.
 T.PST.3-disappear/become.finished oil.NOM-POSS milk PTCP.3-melt-IPFV
 ‘The butter disappeared while it was melting.’
 (*lit.* ‘The oil of milk disappeared, melting.’)

(a) à-waap/(b) kú-pok.

PTCP.1SG-finish/PTCP.3-become.finished

‘I melted the butter away.’

(lit. ‘I melted the oil of milk, (a) I finished it/(b) it became finished.’)

- (91) kaa-kúút anì káántlit (a) à-mis/(b) kù-mus.
 T.PST.1SG-blow 1SG.NOM candle PTCP.1SG-put.out/PTCP.3-go.off
 ‘I blew the candle out.’
 (lit. ‘I blew the candle, (a) I put it out/(b) it went off.’)

- (92) kaa-toor-t-é anì teempét
 T.PST.1SG-push-thither-1 1SG.NOM door
 (a) a-yáát/(b) kù-yaat-akay.
 PTCP.1SG-open(transitive)/PTCP.3-open(transitive)-ANTICS
 ‘I pushed the door open thither.’
 (lit. ‘I pushed the door thither, (a) I opened it/(b) it opened.’)

- (93) kàà-pur anì súrok
 T.PST.1SG-squeeze 1SG.NOM clothes
 (a) a-mááy/(b) kù-yoompó.
 PTCP.3-dry(transitive)/PTCP.3-become.dry
 ‘I squeezed the clothes dry.’
 (lit. ‘I squeezed the clothes, (a) I dried them/(b) they became dry.’)

The conjunctive clitic *an* = ‘and’, which is used for separate events, as discussed at the end of Section 1, could be used in any of the examples above to express roughly the same meaning (e.g., *an=kú-pok* in (87)). In fact, when the two events or event components take a long time, the use of the conjunctive clitic seems to be preferred over the TS participle construction (e.g., in (88), *àn=kù-mít* is judged as better than *kù-mít*).

3.3. Realization

Kupsapiny also uses the TS participle construction for realization, as in (94)-(98).¹² The main verb and the participle express the co-event of a cause and the confirmation of

¹² The use of the SMLT participle construction would yield a grammatical sentence, which conveys a somewhat different meaning from that of the TS participle construction. For example, as shown in the gloss for (i) and (ii), these sentences mean that one event lasted for some time, and another event occurred during that time, unlike (94) and (95).

(i) kà-mey neetó kù-lip-e peekò.
 T.PST.3-die 3SG.NOM PTCP.3-almost.drown-IPFV water
 ‘S/he died while s/he was almost drowning in the water.’

an implicature or the fulfillment of an intended goal, respectively. As in the examples of the use of this construction for state-change events, in the non-agentive example (94) and the agentive examples with a transitive participle, (95a), (96a), (97a), and (98a), the main verb and the participle have the same subject; on the other hand, in the agentive examples with an intransitive participle, (95b), (96b), (97b), and (98b), the object of the main verb and the subject of the participle are the same.

- (94) kà-ljñ neetó peekò ku-mey.
 T.PST.3-almost.drown 3SG.NOM water PTCP.3-die
 ‘S/he drowned in the water.’
 (*lit.* ‘S/he almost drowned the water, s/he died.’)

- (95) kàà-taar anì mpííret
 T.PST.1SG-kick.thither 1SG.NOM ball
 (a) à-pust-e/(b) kù-pust-à.
 PTCP.1SG-cause.to.become.flat-1/PTCP.3-become.flat-3
 ‘I kicked the ball flat.’ (deictic-neutral)
 (*lit.* ‘I kicked the ball thither, (a) I made it flat/(b) it became flat.’)

- (96) kàà-sit anì saatít
 T.PST.1SG-wash 1SG.NOM shirt
 (a) a-tííí/(b) ku-tííí.
 PTCP.1SG-cause.to.become.clean/PTCP.3-become.clean
 ‘I washed the shirt clean.’
 (*lit.* ‘I washed the shirt, (a) I cleaned it/(b) it became clean.’)

- (97) ka-rat neetó kwèyoo-kyí
 T.PST.3-tie 3SG.NOM shoes-3SG.POSS
 (a) kù-kkwelakáy/(b) kù-kkwilakiis.
 PTCP.3-cause.to.become.tight/PTCP.3-become.tight
 ‘S/he tied her shoes tightly.’
 (*lit.* ‘S/he tied the shoes, (a) I made them tight/(b) they became tight.’)

(*lit.* ‘S/he died, almost drowning in the water.’)

- (ii) kaa-púst-e anì mpííret à-toor-é.
 T.PST.1SG-cause.to.become.flat-1 1SG.NOM ball PTCP.1SG-kick-IPFV
 ‘I made the ball flat while I was kicking the ball.’
 (*lit.* ‘I made the ball flat, kicking it.’)

- (98) kaa-yiṣé anì peesaaník-kwaaní
 T.PST.1SG-use.1 1SG.NOM money-1SG.POSS
 (a) a-waap/(b) kú-pok.
 PTCP.1SG-finish/PTCP.3-become.finished
 ‘I used up my money.’
 (*lit.* ‘I used my money, (a) I finished it/(b) it became finished’)

The conjunctive clitic *an* = ‘and’ could also be added to a sentence using the TS participle construction for realization to form a grammatical sentence. As is the case with state-change events, this construction seems to be used for realization especially when the process takes some time. However, when the main verb is transitive and the verb to which *an* = attaches is intransitive (e.g., (98)), a difference between the TS participle construction and the *an* = construction emerges. The agent’s achievement of the change expressed by the participle may be intentional or accidental in the TS participle construction, but is usually accidental in the *an* = construction.

There is one example, shown in (99), for which the *an* = construction can be used, but the TS participle construction cannot. The exact reason for this is not clear; it may be that hunting a thief cannot be a direct cause of catching him/her.

- (99) kà-ceṅ pòliisek coorintet an = kú-nam/*kú-nam.
 T.PST.3-hunt police.NOM thief and=PTCP.3-catch/PTCP.3-catch
 ‘The police hunted a thief down.’
 (*lit.* ‘The police hunted the thief, they caught him/her.’)

Kupsapiny has a verb suffix *-te* (allomorphs: *-te*, *-ute*, *-ite*), which expresses the completeness of an action. Examples are shown in (100)-(102). However, this suffix occurs only with certain verbs, and seems to be used emphatically without expressing the fulfillment of the agent’s goal. Thus, even without this suffix (*kaa-waap anì múššooontét./kaa-muc anì nééto./káá-pat anì sààmittya.*), (100)-(102) would each imply that the agent’s goal was fulfilled. Thus, the present paper does not regard this suffix as a satellite for realization.

- (100) kaa-wááṅ-te anì múššooontét.
 T.PST.1SG-finish-completely 1SG.NOM salt
 ‘I finished up the salt.’
- (101) kaa-múk-te anì nééto.
 T.PST.1SG-manage.to.handle-completely 1SG.NOM 3SG

- (105) kàà-waŋ anì à-yey kàwaanik.
 T.PST.1SG-finish 1SG.NOM PTCP.1SG-drink coffee.PL
 ‘I finished drinking the coffee.’¹⁴

3.4.2. Termination

Similar to completion, for termination, Kupsapiny uses the TS participle construction (e.g., (106)) or the “V S PTCP” construction with the verb for ‘stop’ and a participle for a co-event (e.g., (107)).

- (106) kaa-láál anì kú-pok (lòòllyoontét).
 T.PST.1SG-cough 1SG.NOM PTCP.3-become.finished cough.NOM
 ‘I stopped coughing.’
 (*lit.* ‘I coughed, the cough become finished.’)

- (107) kaa-yóŋt-e anì a-láál.
 T.PST.1SG-stop-1 1SG.NOM PTCP.1SG-cough
 ‘I stopped coughing.’

¹⁴ The verb *waŋ* ‘finish’ can also take a noun phrase as its object. The object noun phrase may be made up of a noun derived from a verb as a possessum and a noun phrase as its possessor, as in (i). According to my consultants, this construction sounds formal.

(i) kàà-waŋ anì yeešéét-ap kàwaanik.
 T.PST.1SG-finish 1SG.NOM drinking-POSS coffee.PL
 ‘I finished drinking the coffee.’ (*lit.* ‘I finished the drinking of the coffee.’)

- (112) ka-láál ku-láál neetó kót ku-músto.
 T.PST.3-cough PTCP.3-cough 3SG until PTCP.3-faint
 ‘S/he coughed repeatedly (*lit.* coughed, coughed) until s/he fainted.’¹⁶

3.4.4. Continuation

For continuation, Kupsapiny can use the set of four constructions analogous to those used for repetition: (i) the TS participle construction (e.g., (113), (114)), whose participle expresses continuation, (ii) the “V S PTCP” construction with the verb for ‘continue’ and a participle for a co-event (e.g., (115)), (iii) the construction with the adverb for ‘continuously’ (e.g., (116)), and (iv) repetition (e.g., (117)), by which the main verb root is copied onto a participle.¹⁷

- (113) kàà-ŋaláál anì à-tastakéy.
 T.PST.1SG-talk 1SG.NOM PTCP.1SG-continue
 ‘I kept on talking.’
 (*lit.* ‘I talked, I continue.’)
- (114) kàà-ŋaláál anì kù-muna-yóóŋt-e (ŋàlaalatèt).
 T.PST.1SG-talk 1SG.NOM PTCP.3-NEG-stop-1SG talking.NOM
 ‘I would not stop talking.’ (*lit.* ‘I talked, talking not stop me.’)
- (115) kaa-tastakéy anì à-ŋaláál.
 T.PST.1SG-continue 1SG.NOM PTCP.1SG-talk
 ‘I kept on talking.’
 (*lit.* ‘I continued talking.’)
- (116) kàà-ŋaláál neetó paka.
 T.PST.1SG-talk 3SG.NOM continuously
 ‘I talked continuously.’
- (117) kaa-kòŋ a-kòŋ
 T.PST.1SG-run.thither PTCP.1SG-run.thither

¹⁶ In this construction, the subject noun phrase could occur between the two verb forms (e.g., *ka-láál neetó ku-láál kót ku-músto*, instead of (112)).

¹⁷ There is a pair of verbs of continuation that seem to be related to each other, *tàstakey* ‘continue (after stopping)’ and *tàstoykey* (sometimes, *tàstookey*) ‘continue’. Either can be used in the TS participle construction and in the construction with the verb for ‘continue’.

saa-pun-t-é sùkuulù lakkwár.
 PURP-arrive-thither-1 school quickly
 ‘I ran thither continuously (*lit.* ran thither, ran thither) in order to arrive at school quickly.’

In addition to these, this language can use another construction for continuation. A verb in the today past with the suffix for ‘along’ *-aa/oo* and one of the deictic suffixes can form a satellite construction to express an action or state change that has been continuing up to the time of speaking, as in (118), though this verb form can also be interpreted as expressing a motion event with a concomitance.

- (118) (a) kà-kkaam-aa-n/(b) kà-kkaam-aa-t neetó
 T.PST.3-eat-along-hither/T.PST.3-eat-along-thither 3SG.NOM
 amík saawaaník sòmok.
 food.PL hour.PL three
 (a)/(b) ‘S/he has been eating food for three hours.’
 (also, ‘S/he moved (a) hither/(b) thither, eating food, for three hours.’)

3.4.5. Initiation

In Kupsapiny, initiation is expressed with the “V S PTCP” construction, where the verb for ‘start’ or ‘be about to’ takes a participle for a co-event, as in (119)-(121).

- (119) kàà-cac anì a-ŋét kòrron.
 T.PST.1SG-start 1SG.NOM PTCP.1SG-get.up early
 ‘I started to get up early.’
- (120) kà-cac lékwet ku-ríír.
 T.PST.3-start child.NOM PTCP.3-cry
 ‘The child started to cry.’
- (121) kaa-rik ku-ríír lékwet.
 T.PST.3-be.about.to.do PTCP.3-cry child.NOM
 ‘The child was about to cry.’

3.4.6. Habitual action

Kupsapiny uses the present habitual prefix on the verb, or an adverbial for a frequency, or both for a habitual action, as in (122) and (123). This prefix can be treated as a satellite to the verb.

- (122) à-lwee anì ceekó àkookáy.
 PRS.1SG-drink 1SG.NOM milk always/every.day/often
 ‘I drink milk always/every day/often.’¹⁸
- (123) à-ṅoor-u céérop kííla wííki/arááwa.
 PRS.1SG-meet-1SG Ceerop every (SWH) week/month
 ‘I meet Ceerop every week/month.’

The satellite complex, made up of the ‘along’ suffix and one of the deictic suffixes, can express a habitual action in the past with a verb in the distant past progressive. An example is given in (124), which uses a distant past progressive verb form *kii-punt-áá-t-e* shortened from the full construction *kii-míite ku-punt-áá-t-e* [DIST.PST.3-exist PTCP.3-pass-along-thither-IPFV].

- (124) káápomcit kulè, kii-punt-áá-t-e
 monster TOP D.PST.3-pass-along-thither-IPFV
 kelly-àp wook, nteené ku-ṅóór kookò
 route-POSS forest but PTCP.3-find old.woman
 ø-míite kù-tteempešiniikéy.
 3-exist PTCP.3-relax
 ‘As for the monster, he used to pass thither along (*lit.* was (always) passing thither along) through the forest route, but found an old woman relaxing.
 (from *Kaapomcít je kimiitè wòòk* ‘The monster that lived in the forest’)

3.4.7. Gradualness

For the notion of gradualness, Kupsapiny uses the progressive construction, which is made up of the verb of existence/locatedness and a participle, or an adverb for a gradual change, or both, as in (125)-(129).

¹⁸ The adverb *àkookáy* can mean ‘always’, ‘every day’, or ‘often’.

- (125) ø-mii ku-tùùyìit-u mòòt.
 PRS.3-exist PTCP.3-become.dark-IPFV slowly
 ‘It is getting dark slowly.’
- (126) ø-mii ku-tùùyìit-u mòòt mòòt.
 PRS.3-exist PTCP.3-become.dark-IPFV slowly slowly
 ‘It is getting dark little by little.’
- (127) ø-mii ku-tùùyìit-u kiisìc kiisìc.
 PRS.3-exist PTCP.3-become.dark-IPFV little little
 ‘It is getting dark little by little.’
- (128) kaa-yáám anì amík tukusíc tukusíc.
 T.PST.1SG-eat 1SG.NOM food.PL little.PL little.PL
 ‘I ate food little by little.’
- (129) yòò kaa-kás-e anì nééto,
 when T.PST.1SG-see-1 1SG.NOM 3SG
 ka-mífte neetó ku-pùùr-è ɲɲ.
 T.PST.3-exist 3SG.NOM PTCP.3-sit-IPFV bottom
 ‘When I saw him/her, s/he was in the process of sitting down.’

3.4.8. Frequency

Kupsapiny expresses frequency with an adverb, as in (130).

- (130) à-wee-t-i sáweetakey màkit.
 PRS.1SG-go-thither-IPFV sometimes market
 ‘I sometimes go to the market.’

3.4.9. Successiveness: ‘one after another’

For the notion of successiveness ‘one after another’, Kupsapiny uses the reflexive form of the verb for ‘follow’ either in the TS participle construction (e.g., (131)) or the SMLT participle construction (e.g., (132)).

- (131) kèè-yit tuukà ku-rup-kéy.
 T.PST.3-bellow cows.NOM PTCP.3-follow-REFL

‘The cows bellowed one after another.’

- (132) ka-rup-kéy tuukà ku-yit.
 T.PST.3-follow-REFL cows.NOM PTCP.3-bellow
 ‘The cows bellowed one after another.’

3.4.10. ‘Still’

Kupsapiny seems to lack an adverbial for ‘still’. For this notion, a verb prefix, which serves as a satellite to the verb, is used; its present forms are 1SG, 2PL: *taa-*, 2SG: *tee-*, 3: *taku-*, 1PL: *tace-* (e.g., (133), (134)), which seem to be composed of *ta-* and the participle prefix (1SG, 2PL: *a-*, 2SG: *ø-*, 3: *ku-*, 1PL: *cee-*). The prefix for ‘still’ is preceded by a tense prefix, which is always in the third person.

- (133) ø-taku-mííte kù-kkwoom-ó rúpet.
 PRS.3-still.3-exit.3 PTCP.3-eat-OBJ:1SG hunger.NOM
 ‘I am still hungry.’ (*lit.* ‘Hunger is still eating me.’)

- (134) ka-takú-riir lekwèt.
 T.PST.3-still.3-cry child.NOM
 ‘The child still cried.’

3.4.11. ‘No longer’

Kupsapiny does not seem to have an adverbial for ‘no longer’. In order to express it, this language uses a prefix complex consisting of the distant past prefix, the negative prefix, the prefix for ‘still’, and a verb root, as in (135a), or one consisting of the distant past prefix, the negative prefix, and a participle, as in (135b). In this construction, the tense prefix is always in the third person. The present paper regards these prefix complexes as a satellite.

- (135) (a) kì-ma-ttaa-ye/(b) ki-má-á-ye anì koomék.
 D.PST.3-NEG-still.1SG-drink/D.PST.3-NEG-PTCP.1SG-drink 1SG.NOM beer
 (a)/(b) ‘I no longer drink beer.’
 (also, ‘I have not drunk beer since a long time ago.’)¹⁹

¹⁹ If the verb in (135b) were pronounced as *kì-ma-a-ye*, the sentence would mean ‘I did not drink beer a long time ago’.

3.4.12. ‘Already’

Kupsapiny uses the adverb *keɲ* for ‘already’.

- (136) kaa-rù anì keɲ.
 T.PST.1SG-sleep 1SG.NOM already
 ‘I already slept.’
- (137) kee-rù ɲi keɲ-í?
 T.PST.2SG-sleep 2SG.NOM already-Q
 ‘Did you already sleep?’

3.4.13. ‘Not yet’

Kupsapiny has a construction where the word for ‘not yet’ (*toompo*) in the third-person with a tense prefix, which may be optionally preceded by the third-person form of the prefix for ‘still’ *taku-* is followed by a verb in the present tense, as in (138) and (139). Note that in this construction, both *toompo* and *taku-* are invariably in the third person, and neither of them shows agreement in person with any constituent.

- (138) ø-toompo/ø-tàkù-toompo a-yoom-ííš-e anì.
 PRS.3-not.yet/PRS.3-still.3SG-not.yet PRS.1SG-eat-INTR-1 1SG.NOM
 ‘I have not eaten food yet.’
- (139) àm yóóto kulè, ki-tóómpo/ki-taku-tóómpo
 LOC that.time TOP D.PST.3-not.yet/D.PST.3-still.3SG-not.yet
 a-yoom-ííš-e anì.
 PRS.1SG-eat-INTR-1 1SG.NOM
 ‘At that time, I had not eaten food yet.’

3.5. Action correlation

This section presents data on the Kupsapiny constructions used for the categories of action correlation, concert (‘together with’), accompaniment (‘along with’), surpassment (‘out-V’), imitation (‘in imitation of’), and demonstration (‘in demonstraton’).

3.5.1. Concert

Kupsapiny has five ways of expressing concert: (i) the satellite construction, (ii) the TS participle construction, (iii) the SMLT participle construction, (iv) the construction with

the adverb *tukkwáy* or *wàànik* ‘together’, and (v) the construction with the preposition *akóó* ‘with’.

The satellite construction uses the verb suffix for ‘together’, *-cin* (allomorphs: *-tyiin* (after *t*), *-kyin* (after *ŋ*, *n*, or *ɲ*), *-lyin* (after *l*), *-cin* (elsewhere)), as in (140) and (141).

- (140) { (a) kàà-put-tyíin-toos
T.PST.1SG-play-together-IPFV.PL
(b) kàà-put-tyíin-te
T.PST.1SG-play-together-1
(c) kàà-put-tyíin-e
T.PST.1SG-play-together-1 }
anì tùmto akóó nééto (tukkway/waanik).
1SG.NOM song with 3SG together/together
(a) ‘I was playing the music together with him/her.’
(b)/(c) ‘I played the music together with him/her.’

- (141) kucakéy yóóto kulè, kii-púr-cin cerwón
since/from that.time TOP D.PST.3-stay-together hare.NOM
akóó meliil jee tapón kàroomɿŋ.
and leopard.NOM REL/MANNER good very
‘Since that time, the hare and the leopard have lived (*lit.* stayed) together very well.’

(from *Ceerwoŋ akoo meliil* ‘Hare and Leopard’)

The TS participle construction (e.g., (142)) and the SMLT participle construction (e.g., (143)) each use the verb for ‘get together, accompany’ *póóntakáy* (also *póóntekáy*), as the participle and as the main verb, respectively.

- (142) ka-túm cektó ku-póóntakáy.
T.PST.3-sing.and.dance 3PL.NOM PTCP.3-get.together
‘They sang and danced together.’
(*lit.* ‘They sang and danced, they got together.’)
- (143) kaa-póóntakáy cektó kù-tum-e.
T.PST.3-get.together 3PL.NOM PTCP.3-sing.and.dance-IPFV
‘They sang and danced together.’
(*lit.* ‘They got together, singing and dancing.’)

(akóó) nééto a-put-é/ce-put-é tùmto.
 with 3SG PTCP.1SG-play-IPFV/PTCP.1PL-play-IPFV music
 ‘I played the music along with him/her.’
 (*lit.* ‘I accompanied him/her, me/us playing the music.’)

(148) kaa-rúp anì nééto a-put-é tùmto.
 T.PST.1SG-follow 1SG.NOM 3SG PTCP.1SG-play-IPFV music
 ‘I played the music along with him/her.’
 (*lit.* ‘I followed him/her, playing music.’)

In the SMLT participle construction when used like this, the clause with the verb for ‘follow’ and the one for a co-event may be flipped to express the same meaning, as in (149) and (150), where the verb for the association function ‘follow’ rather than that for the co-event takes its participle form in the imperfective.²¹

(149) kàà-put anì tùmto a-rup-e nééto.
 T.PST.1SG-play 1SG.NOM music PTCP.1SG-follow-IPFV 3SG
 ‘I played the music along with him/her.’
 (*lit.* ‘I played the music, following him/her.’)

(150) ka-túúm neetó ku-rúp-e kurínkoonìk.
 T.PST-sing 3SG.NOM PTCP.3-follow-IPFV drums
 ‘S/he sang along with the drums.’
 (*lit.* ‘S/he sang, following the drums.’)

3.5.3. Surpassment

The TS participle construction (e.g., (151), (152)), whose main verb is one of the verbs for ‘defeat’ or the verb for ‘go beyond, cross’, can also be used for surpassment.

(151) kaa-pút anì tùmto
 T.PST.1SG-play 1SG.NOM music
 a-lóót/à-pel/à-kettyé nééto.
 PTCP.1SG-defeat/PTCP.1SG-defeat/PTCP.1SG-go.beyond 3SG
 ‘I played the music better than him/her.’
 (*lit.* ‘I played the music, I defeated/went beyond them.’)

²¹ In (149) and (150), the verb for ‘follow’ has to be in the imperfective, and cannot be a participle in the TS participle construction (e.g., (146)), unlike the verb for ‘accompany’.

- (152) \emptyset -yòðši neetó
 PRS.3-cook 3SG.NOM
 kuu-pél/ku-lóót/kù-kettye cekto.
 PTCP.3-defeat/PTCP.3-defeat/PTCP.3-cross 3PL
 ‘S/he cooks better than them.’
 (*lit.* ‘S/he cooks, s/he defeated/went beyond them.’)

The verbs serving as the main verb and the participle in (151) and (152) could also be flipped to express the same meaning, as shown in (153).

- (153) kàà-pel/kaa-lóót/kàà-kettyé
 T.PST.1SG-defeat/T.PST.1SG-defeat/T.PST.1SG-go.beyond
 anì nééto a-put tùmto.
 1SG.NOM 3SG PTCP.1SG-play music
 ‘I played the music better than him/her.’
 (*lit.* ‘I defeated him/her, playing the music.’)²²

In this construction, the participle is not in the imperfective, unlike in the SMLT participle construction. This construction is still the TS participle construction, but unlike in other uses of this construction, the main clause and the participle clause express the association function (the core-schematic component of a framing event) and a co-event, respectively.

Kupsapiny can also have another construction for surpassment. In this construction, one of the verbs for ‘defeat’ or the verb for ‘go beyond, cross’ is used as the main verb, and a co-event is expressed with a prepositional noun phrase, as in (154) and (155).

- (154) kàà-pel/kaa-lóót/kàà-kettyé
 T.PST.1SG-defeat/T.PST.1SG-defeat/T.PST.1SG-go.beyond
 anì nééto
 1SG.NOM 3SG
- | | | | | | |
|---|-----|-----|--------------|--------|---|
| { | (a) | àm | tùmto. | } | |
| | | LOC | music | | |
| { | (b) | àm | putiššét-ap | tùmto. | } |
| | | LOC | playing-POSS | music | |
- ‘I played the music better than him/her.’
 (*lit.* ‘I defeated/went beyond him/her (a) at music/(b) at the playing of music.’)

²² In this sentence, the imperfective form *a-put-e* [PTCP.1SG-play-IPFV], instead of *a-put*, could also be used as a participle to form a grammatical sentence. However, the sentence would mean ‘I defeated him/her, while playing the music.’

- (155) ø-pel-e/ø-lóót-e/ø-kettyé
 PRS.3-defeat-IPFV/PRS.3-defeat-IPFV/PRS.3-go.beyond
 neetó cekto àm kàyoošét.
 3SG.NOM 3PL LOC cooking
 ‘S/he cooks better than them.’
 (*lit.* ‘S/he defeats/goes beyond them at cooking.’)

3.5.4. Imitation

It is also possible for imitation to be expressed with the TS participle construction (e.g., (156)) or the construction where the association function and a co-event appear in the main verb and a prepositional phrase, respectively (e.g., (157)).

- (156) kà-tum ceeróp ku-mmust-ó cèèliimò.
 T.PST-sing.and.dance Ceerop.NOM PTCP.3-imitate-3 Ceeliimo
 ‘Ceerop sang and danced in imitation of Ceeliimo.’
 (*lit.* ‘Ceerop sang and danced, s/he imitated Ceeliimo.’)
- (157) kèè-must-o ceeróp cèèliimò am túmto.
 T.PST.3SG-imitate-3 Ceerop.NOM Ceeliimo LOC singing.and.dancing
 ‘Ceerop sang and danced in imitation of Ceeliimo.’
 (*lit.* ‘Ceerop imitated Ceeliimo at dancing/singing.’)

3.5.5. Demonstration

Kupsapiny expresses demonstration with the TS participle construction (e.g., (158)) or the construction with the verb for ‘show’ (e.g., (159), (160)), whose theme is either a participle or an impersonal verb with ‘how’.

- (158) kàà-tum aní à-poor-ci nééto.
 T.PST.1SG-sing.and.dance 1SG.NOM PTCP.1SG-show-to 3SG
 ‘I showed him/her how to dance.’
 (*lit.* ‘I sang and danced, I showed it to him/her.’)
- (159) kàà-poor-cí aní nééto kù-tum.
 T.PST.1SG-show-to 1SG.NOM 3SG PTCP.3-sing.and.dance
 ‘I showed him/her how to dance.’
 (*lit.* ‘I showed him/her singing and dancing.’)

- (160) kàà-poor-cí aní nééto wùle cee-túm-toy.
 T.PST.1SG-show-to 1SG.NOM 3SG how IMPERS-sing.and.dance-IPFV
 ‘I showed him/her how to dance.’
 (*lit.* ‘I showed him/her how one dances.’)

4. Analysis and discussion

As shown in Section 3, Kupsapiny is satellite-framed only to a limited extent in that its satellites are restricted to motion, temporal contouring, and action correlation. The motion satellites are path and deictic suffixes on the verb, the temporal contouring satellites are verb affixes for habitual actions and ‘still’/‘no longer’, and the action correlation satellite is the suffix for concert. Because these satellites are verb affixes, they can also occur in any other construction that uses verbs. Importantly, in this language, there is only one satellite that can be used across different event domains – the motion satellite suffix complex consisting of the ‘along’ suffix *-aa/oo* and one of the deictic suffixes is also used for another domain, specifically, the temporal contouring category of continuation or that of a habitual action in the past. However, all the other satellites are each restricted to only one of the event domains. This is quite different from satellite-framed languages in Europe, which can often use their satellites for more than one event domain (e.g., English *up*, which can also be used for a state change, realization, and temporal contouring; Hungarian directional prefixes, which can also have aspectual meanings).

In contrast, the TS participle construction, which is non-head framed, but not satellite-framed, can be used for the largest number of types of event domains/sub-domains, motion events with any type of co-event, state-change events, realization events, several categories of temporal contouring (specifically, completion, termination, continuation, repetition, and successiveness), and all the categories of action correlation. The most basic use of this construction is for two separate, though causally related, events, which the main verb and the participle express in temporal order, as in (1). The TS participle construction can also be used for more fused events, whose co-event and framing event can be interpreted as occurring in this order.²³ Events that invariably follow the ‘co-event – framing event’ order are those whose co-event is a cause; specifically, they are (i) motion events with a cause as their co-event, (ii) state-change events, whose co-event is most commonly a cause, and (iii) realization events, whose co-event is always a cause. For any such types of events, it is perfectly acceptable to use

²³ However, for motion events with the co-event of subsequence, which always show the ‘framing event – co-event’ order, the TS participle construction expresses the event components in this order. Thus, strictly speaking, it is not correct to say that this construction follows the ‘co-event – association function’ order; this construction expresses event components in the order of their occurrence.

the TS participle construction, following the ‘co-event – association function’ order, and it is the only construction that can express state-change events and realization events. Events in a causal relation, which subsume these two types of macro-events, as well as two, causally related, separate events, seem to be the most prototypical types of events that are expressed with the TS participle construction.

This construction is also used for events whose co-event is not a cause. The event components of many such events could be analyzed as occurring in the ‘co-event – framing event’ order. In motion events with precursion, enablement, or reverse enablement as their co-event, a co-event occurs before the framing event. (This seems to apply to motion events with a concurrent result as their co-event, at least when they are expressed with the TS participle construction.) The notions of completion, termination, continuation, repetition, and successiveness each have to be preceded by the occurrence of a co-event that is described with these notions; this also applies to each of the categories of action correlation, for any of which the TS participle construction can be used.

However, it is difficult to analyze motion events with a manner or a concomitance as occurring in the ‘co-event – framing event’ order, though the figure object is usually prepared to show the manner or concomitance before the framing event starts. These event components of such events occur at the same time. Nevertheless, the TS participle construction can accommodate them. Thus, the application of this construction seems to be extended from its prototypical use for events that have to follow the ‘co-event – framing event’ order, namely those whose co-event is a cause, to its use for events with a co-event other than a cause that could be analyzed as occurring in the ‘co-event – framing event’ order, and further to events whose components do not show this order but occur simultaneously.

The SMLT participle construction is used for (i) motion with a manner, a concomitance, a cause (of agentive motion only), or a concurrent result, (ii) the temporal contouring notion of successiveness, or (iii) the action correlation notions of concert and accompaniment. (This construction is also applicable to motion with precursion and motion with enablement, but whenever it is used for these types of events, the satellite construction and the TS participle construction are also possible, and what the SMLT participle construction expresses is different from what the other two constructions express.) In events that can be expressed with the SMLT participle construction, a co-event and a framing event occur at the same time or a co-event lasts longer than a framing event.

In fact, for any type of event for which the SMLT participle construction is possible, the TS participle construction is also possible. Many of these events can be viewed in

terms of either the simultaneity of a co-event and a framing event or their temporal order.²⁴

Thus, in many cases, the TS participle construction and the SMLT participle construction in Kupsapiny each reflect the temporal structure of the event that they express. Therefore, in this language, the choice of these constructions depends largely on how the temporal relation between a co-event and a framing event is interpreted, unlike the use of the satellite construction, which hinges largely on the inventory of event components that are expressible with the satellites in the language.

Hence, there is an additional typological criterion for studies on event integration: the relationship between constructions and the temporal order of the event components that they express needs to be taken into account.

5. Conclusion

Kupsapiny has satellite constructions, but they are restricted to motion, temporal contouring, and action correlation. Although one of the motion satellite complexes can also be used as a continuous aspect marker or a habitual action marker, the other satellites are each confined within their event domain.

Kupsapiny most commonly uses the temporal sequence participle construction for events whose co-event and framing event occur in temporal order, and the simultaneity participle construction for events whose co-event and framing event occur at the same time or whose framing event happens during the occurrence of a co-event. The use of the temporal sequence participle construction ranges from events whose co-event is a cause to those whose components do not occur in a temporal sequence.

The distribution of the temporal sequence participle construction in Kupsapiny suggests that the typology of event integration needs to investigate not only what types of grammatical categories express different types of semantic components, but also in what order the event components, a co-event and the association function in particular, occur in constructions, as the present author (Kawachi, this issue) proposes.

Acknowledgments

I would like to express my profound thanks to my Kupsapiny native speaker consultants, especially Chebet Francis and Mercy Chebet, for the data. My sincere thanks

²⁴ When either of the two participle constructions can be used for motion events with a manner, the continuation of the manner seems to be much more emphasized with the SMLT participle construction than with the TS participle construction. Further investigation is needed to determine whether or not the two constructions have any subtle differences in meaning when they seem to be used interchangeably for other types of events.

also go to the anonymous reviewers for their helpful comments. I am also grateful to the audience at my presentation of an early version of the present paper at the 8th World Congress of African Linguistics at Kyoto University, Kyoto, Japan on August 23, 2015. The present study was supported by the Japan Society for the Promotion of Science (KAKENHI Grant Number: 24320073, principal investigator: Osamu Hieda; KAKENHI Grant Number: 24520490, principal investigator: Kazuhiro Kawachi).

Abbreviations

1	first person
2	second person
3	third person
ABSL	absolute
ANTICS	anti-causative
COMP	complementizer
D.PST	distant past
IMP	imperative
IMPERS	impersonal
INTR	intransitivizer
IPFV	imperfective
LOC	locative
NEG	negative
NOM	nominative
OBJ	object
PL	plural
POSS	possessive
PRS	present
PTCP	participle
PURP	purposive
REFL	reflexive
REL	relative
Q	question marker
SAT	satellite (construction)
SMLT	simultaneity (participle construction)
SG	singular
SWH	Swahili
TOP	topic
T.PST	today past

TS temporal sequence (participle construction)

References

- Aske, Jon. 1989. "Path predicates in English and Spanish: A closer look". *Proceedings of the 15th Annual Meeting of the Berkeley Linguistics Society*. Berkeley, CA: Berkeley Linguistics Society. pp.1–14.
- Croft, William, Jóhanna Barðdal, Willem B. Hollmann, Violeta Sotirova, and Chiaki Taoka. 2010. "Revising Talmy's typological classification of complex event constructions". In Hans Boas (ed.) *Contrastive Studies in Construction Grammar*. Amsterdam: John Benjamins. pp.201–236.
- Dixon, R. M. W. 1994. *Ergativity*. Cambridge, MA: Cambridge University Press.
- Guillaume, Antoine. 2013. "Reconstructing the category of 'associated motion' in Tacanan languages (Amazonian Bolivia and Peru)". In Ritsuko Kikusawa and Lawrence A. Reid (eds.) *Historical Linguistics 2011: Selected Papers from the 20th International Conference on Historical Linguistics, Osaka, 25–30 July 2011*. Amsterdam: John Benjamins. pp.129–151.
- Kawachi, Kazuhiro. 2014. "Patterns of expressing motion events in Kupsapiny". In Osamu Hieda (ed.) *Recent Advances in Nilotic Linguistics (Studies in Nilotic Linguistics Vol. 8)*. Tokyo: Research Institute for Languages and Cultures of Asia and Africa, Tokyo University of Foreign Studies. pp.103–136.
- . This issue. "Introduction: An overview of event integration patterns in African languages".
- Koch, Harold. 1984. "The category of 'associated motion' in Kaytej". *Language in Central Australia* 1.1. pp.23–34.
- König, Christa. 2006. "Marked nominative in Africa". *Studies in Language* 30.4. pp.655–732.
- . 2008. *Case in Africa*. Oxford and New York: Oxford University Press.
- Talmy, Leonard. 1985. "Lexicalization patterns". In Timothy Shopen (ed.) *Language Typology and Syntactic Description, Volume 3: Grammatical Categories and the Lexicon*. Cambridge: Cambridge University Press. pp.57–149.
- . 1991. "Path to realization: A typology of event conflation". *Proceedings of the 17th Annual Meeting of the Berkeley Linguistics Society*. Berkeley, CA: Berkeley Linguistics Society. pp.480–519.
- . 2000. *Toward a Cognitive Semantics, Volume II: Typology and Process in Concept Structuring*. Cambridge, MA: MIT Press.
- Van Valin, Robert D., Jr. 2005. *Exploring the Syntax-Semantics Interface*. Cambridge: Cambridge University Press.
- Wilkins, David P. 1991. "The semantics, pragmatics and diachronic development of 'associated motion' in Mparntwe Arrernte". *Buffalo Working Papers in Linguistics* 91. pp.207–257.