Event Integration Patterns in Bende (Bantu, F12)*

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This study aims to present patterns of event integrations in Bende (F12)¹, a Bantu language spoken in western Tanzania, with reference to Talmy's typological classification (Talmy 2000). The paper investigates these patterns using a questionnaire designed to cover five semantic domains.² Based on the results from the questionnaire, this study classifies Bende in terms both of Talmy's general typology and of a typology proposed for Bantu languages (Gaines 2001, Atindogbé 2012).

In Talmy's classification, Bende normally follows the verb-framed pattern in expressing Motion events with Manner as a co-event and in exhibiting some categories of Temporal contouring domain. For the other domains, a range of strategies is occasionally employed, including consecutives, derivations, infinitives, and adverbs.

Based on the description of Bende, some related topics for Bantu languages in general are also discussed: locative use of the Bantu applicative and Bantu internal typology.

Keywords: event integration, verb-framed, Bende, applicative, Talmy's typology

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1. Introduction

Talmy's typological classification of event integrations has been applied to many languages of the world (Talmy 2000). He began by conducting typological studies on

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¹ The most well-known and widely used classification system of Bantu languages is that of Malcolm Guthrie (1948, 1967–71). According to Guthrie's classification, each Bantu language is given a three character code, consisting of an upper-case letter indicating regional zone followed by two digits indicating language group and language. For example, the code F12 refers to Zone F, Group 10, language no. 2, which is Bende (Maho 2001: 41).

² The questionnaire designed for our project is "Studies on Event Integration Patterns in African Languages" (Kawachi 2013).

Motion events, and later extended the classification to complex events in general. Among the languages studied in terms of the typological classification of event integration patterns have been some African languages by Kawachi (2008, in this volume); some studies have focused especially on Motion events and have considered Bantu, like other languages in African phyla, basically as a verb-framed language in Talmy's terms (Atindogbé 2012, Gaines 2001, Schaefer 1985, Schaefer & Gaines 1997).

Talmy's original typological classification differentiates two major types of languages based on the way they express complex events: verb-framed languages and satellite-framed languages. Verb-framed languages (e.g., Romance languages) typically conflate Motion and Path in a main verb and express a co-event, typically manner, in a non-main verb. In contrast, satellite-framed languages (e.g., Germanic languages) typically use a satellite to express the core-schematic component of a framing event and encode the co-event component in the verb root (Kawachi 2008: 176).

- (1) is a typical verb-framed language example, in which the main verb *entró* expresses Motion and Path, while manner is expressed by non-main verb *flotando*. (2), which is the English translation of (1), shows the typical satellite-framed pattern where the co-event *floated* is expressed in the verb root, while the framing event 'MOVE-in' is expressed by a satellite, the verb particle *into*.
 - (1) Typical verb-framed pattern in Spanish conflating Motion + Path *La botella entró a la cueva (flotando)*.

 the bottle MOVED-in to the cave (floating)

 'The bottle entered the cave (by floating).'
 - (2) Typical satellite-framed pattern in English The bottle floated into the cave.

(Talmy 2000: 49)

Talmy later extended his typology to events, particularly events with resulting states, i.e., in addition to Motion event, there are four other semantic domains investigated in this paper. (3) is a list by Kawachi (2008: 176–177) that summarizes the five semantic domains investigated with the association function (the core-schematic component of a framing event) of each domain in square brackets. In a verb-framed language, the association function is expressed with a main verb, whereas the co-event is expressed with a non-main verb or adverbial. In a satellite-framed language, on the other hand, the association function is expressed with a satellite as shown in italics in (3), whereas the co-event is expressed with a main verb.

- (3) Five semantic domains (Kawachi 2008: 176–177)
 - a. motion [association function: path] (e.g., The ball rolled *in*.)
 - b. state change [association function: transition type (entry into a state, departure from a state, lack of transition] (e.g., The candle blew *out*.)
 - c. realization [association function: (confirmation of the implicature of) the fulfillment of the agent's goal] (e.g., The police hunted the fugitive *down*.)
 - d. temporal contouring [association function: aspect (e.g., continuation, completion, repetition, etc.] (e.g., They talked *on*.)
 - e. action correlation [association function: correlation of one action with respect to another] (e.g., I sang *along* with him.)

The present study on Bende aims to contribute data and analysis to the general typology of African languages, and in particular the typology of Bantu languages that have non-uniform patterns of event integration.

2. Literature review

Talmy's typology of event integration patterns has been applied in Bantu languages with a particular focus on Motion events. Schaefer and Gaines (1997) was a preliminary study of African languages on this topic, giving an overview of expression of Motion events across the four language phyla of African origin, namely Afro-Asiatic, Khoisan, Nilo-Saharan, and Niger-Kordofanian (or Niger-Congo), the last of which included Bantu languages. It concluded, "across Africa, basic directional motion tends to be verb-framed with respect to direction" (Schaefer & Gaines 1997: 193). Gaines (2001) investigated data from ten Bantu languages and classified them into three types, given as (I)–(III) below. He classified them by noting differences with respect to subordination markers, and also the degree of similarity (in terms of Motion, Direction, and Manner) that a subordinate clause (or non-main verb) bears to a finite clause (or main verb). Atindogbé (2012) conducted a further investigation of Bantu languages belonging to Zone A³, and confirmed two more types, (IV) and (V), in addition to Gaines' original three. All of the types proposed up to now are as follows:

(I) Motion and Direction (or "Path") appear in a main clause, while Manner surfaces in a subordinate clause (e.g., Gikuyu, Swahili, Tswana, Zulu) (Gaines 2001: 5–6).

³ Zone A languages are spoken in Cameroon, Equatorial Guinea, and the Northern part of Gabon. They are part of a larger group of languages "Forest Bantu," whose characteristics are phonetic and morphological reduction, the emergence of serial verbs, and replacement of the verbal subject marker with independent pronouns (Nurse & Philippson 2003: 177).

- (II) Manner appears in a main clause, while Motion and Direction are expressed in a subordinate clause (e.g., Gikuyu) (Gaines 2001: 5–6).
- (III) Motion and Direction appear in a main clause, while Manner surfaces as a participial/nominalized verb form (e.g., Swahili) (Gaines 2001: 5–6).
- (IV) Motion, Manner, and Direction are all stacked in one single clause/sentence with a locative adverb expressing Direction (e.g., Barombi, Isubu, Mokpe, Oroko) (Atindogbé 2012: 71).
- (V) Manner appears in a main clause, while Motion and Direction are expressed in a participial verb form (e.g., Barombi, Isubu, Mokpe, Oroko) (Atindogbé 2012: 72).

Using this typology above, some individual Bantu languages have been described: Tswana (S30) was described by Schaefer (1985), Shona (S10) by Schaefer and Gaines (1997: 214–216), Swahili (G40) by Gaines (2001), and Yeyi (R41) by Seidel (2008). Fortis (2010) also summarized the typology of Bantu languages above, and described the applicative uses from some Bantu languages in his in-depth analysis.

3. Event integration patterns in Bende

Bende is a Bantu language spoken in the Mpanda district of the Katavi Region in western Tanzania. The speakers of Bende are estimated at 27,000 by Ethnologue (Lewis 2015) and at 41,490 by the Language of Tanzania Project (Chuo Kikuu cha Dar es Salaam 2009). These estimates are difficult to verify at present.

Bende, like many other Bantu languages, is a highly agglutinative language whose word order is canonically SVO. Basic Bende verb structure consists of a root in central position that takes prefixes and suffixes on both sides (i.e., a finite verb has the slots shown in (4). The TAM and the extension suffix slot may take multiple affixes ([ⁿ] stands for multiple affixes). In addition, clitics may be attached to both ends of the structure. Following the verb structure below, we see that event integrations in Bende consist of a complex of two verbs (or clauses) for type (I) and (II).

(4) PRC=PreSM-SM-TAMⁿ-OM-Root-EXTⁿ-F=ENC

PRC	proclitic	OM	object marker
PreSM	pre-subject marker	EXT	extension
SM	subject marker	F	final
TAM	tense-aspect-mood	ENC	enclitic

The integration patterns of Bende typically manifest in one of the four ways shown in (5)–(8).

The most common event integration pattern takes the form V1+V2, where V1 stands for the main verb and V2 the non-main verb. Both V1 and V2 appear in the form of (4), that is, the finite form. In the first typical event integration pattern of Bende, the main verb (V1) takes a variety of tenses and aspects, while the non-main verb (V2) may appear either with the anterior suffix (ANT) -ilé/-iíté⁴ in the F slot or with the progressive prefix (PRG) líkú- in TAM slot. Thus, the aspect of V2 is consistently anterior or progressive, regardless of the tense or aspect of V1 (see (5a–d)).

(5) Integration patterns of V1+V2 (V2; kílímá 'run')

a. V1 + V2 (V1; Past, V2; ANT)

gha-a-jingíl-á mú-ny-umba na-a-kílíím-é.

3SG-PST-enter-F LOC18-9-house ASS-3SG-run-ANT⁵

'S/he ran into the house. / S/he entered the house while s/he was running.'

b. V1 + V2 (V1; Past, V2; PRG)

gha-a-jingil-á mú-ny-umba na-a-líkú-kílíím-a.

3SG-PST-enter-F LOC18-9-house ASS-3SG-PRG-run-F

'S/he ran into the house. / S/he entered the house while s/he was running.'

c. V1 + V2 (V1; Future, V2; ANT)

*a-lóó-jingíl-á mú-ny-umba na-a-kílíím-é.*3SG-FUT-enter-F LOC18-9-house ASS-3SG-run-ANT

'S/he will run into the house. / S/he will enter the house while s/he is running.'

d. V1 + V2 (V1; Future, V2; PRG)

*a-lóó-jingíl-á mú-ny-umba na-a-líkú-kiliím-a.*3SG-FUT-enter-F LOC18-9-house ASS-3SG-PRG-run-F

'S/he will run into the house. / S/he will enter the house while s/he is running.'

In the second pattern, the event components, Motion, Path, and Manner, are conflated in a single verb with the help of an applicative suffix⁶, as in (6). The main verb *filinkitá* 'roll' indicates Motion and Manner, while the applicative suffix implies Path 'down.' However, the applicative suffix usually (but not necessarily) co-occurs with a satellite adverbial phrase, *kwîfo* 'down,' that means Path might be expressed by a complex of the applicative suffix and the adverbial phrase.

⁴ The anterior is used with stative verbs to indicate a resultative state. In many Bantu languages, there is a close connection between the anterior and the near/recent past (Rose, Beaudoin-Lietz, & Nurse 2002: 8).

⁵ ASS, which stands for "associative," appears only before the 1–3-person singular subject marker in V2 (or the subordinate clause). Subject markers of 1–3-person singular follow the associative marker; *ne-N-* (1sG), *no-o-* (2sG), *na-a-* (3sG).

⁶ The applicative may derive various semantic roles with added arguments: (i) beneficiary, (ii) place and by extension time, cause, and reason, and (iii) instrument (Schadeberg 2003: 74). For Motion events, (ii) the place role is derived by adding a locative phrase *kwifo* 'down' as a new argument.

(6) Integration pattern with applicative suffix with a satellite adverbial

mu-píla ghw-a-filinkit-íl-á kw-îfo no mú-sosí.
 3-ball 3-PST-roll-APP-F LOC17-down with 3-mountain

'The ball rolled down the mountain.'

The third pattern uses a TAM prefix: one of the event components is encoded as a TAM marker on the verb, while the other event is expressed in the main verb, as in (7). The event component encoded as a TAM marker is limited to the Temporal Contouring domain, as we will see later, in 3.2.3.

(7) Integration pattern with TAM prefix (kóó- 'Habitual TAM prefix' and já 'go')

a-kóó-j- \acute{a} kw- \hat{i} -sokólú-mwik $\underline{\acute{u}}$ - \emptyset -wiki.3SG-HAB-go-FLOC17-5-market11-oneLOC17-9-week

'S/he goes (used to go) to the market once a week.'

The final pattern shows less integration between the two events: they usually appear in V1+V2, where V2 is accompanied by a consecutive marker in the TAM slot. We can usually insert the conjunction *kundi* 'and then' between V1 and V2. Compared with pattern (5), we can say that V1 and V2 are less integrated, or more specifically, that the relation between V1 and V2 is one of coordination.

(8) Less integrated pattern (e.g., V1+V2 (Consecutive))

n-supá jy-a-hon-á (kundí) jy-á-bhelághúk-a há-ø-semênti. 9-bottle 9-PST-fall-F (and.then) 9-CONS-splinter-F LOC16-9-cement 'Glass fell and splintered on the cement floor.'

The V1+V2 pattern of (5) is a typical verb-framed pattern, while (6) and (7) show features of the satellite-framed pattern, and (8) is seemingly verb-framed, but less integrated. Next, we investigate how those patterns are distributed by semantic domain.

3.1. Motion

Motion events typically show integration patterns; indeed, Talmy himself originally started his typology with the semantic domain of Motion events. In Bende, many Motion events are integrated as V1+V2, if and only if V2 appears in anterior and/or progressive, as we saw in (5a–c). The V1+V2 complex has been mentioned as a clause complex (V1 as main clause/V2 as subordinate clause) in some studies (Schafer & Gaines 1997; Gaines 2001).

In terms of the semantics of Motion events, Bende normally follows the verb-framed pattern seen in (5), in which Motion+Path is encoded in the main verb (V1), while Manner is encoded in the non-main verb (V2). V1 may take verbs like *jingilá* 'enter', *fumá* 'exit', *tandá* 'ascend', and *soóka* 'descend'. V1 carries the appropriate tense and/or aspect markers, and V2 can be realized exclusively with either the anterior or progressive aspect marker. However, anterior is predominantly used with V2.

Many manner verbs are compatible with both anterior and progressive, as in (5b), although anterior is predominantly used. A few manner verbs are realized exclusively with anterior (5a) or progressive (5b). The choice of anterior (5a) or progressive (5b) is highly relevant to the meaning of V2 manner verbs. However, a significant percentage of manner verbs can appear in both anterior and progressive with nearly identical meanings, as in (9).

- (9) ANT/PRG with identical meanings (V2s: kílímá 'run', ghúlúká 'fly', lyátá 'walk', ghafúlá 'crawl', ghángúhyá 'rush', seeseetéka 'stagger', tyelemúká 'slide', súngá 'swim')
 - a. $gha-a-jingil-\acute{a}$ $m\acute{u}-ny-umba$ $na-a-lik\acute{u}-kiliim-a/na-a-kiliim-\acute{e}$.

 3SG-PST-enter-F LOC18-9-house ASS-3SG-PRG-run-F/ASS-3SG-run-ANT

 'S/he ran into the house. / S/he entered the house while s/he was running.' = (5a, b)
 - b. *ii-nyónyí* ly-a-jingíl-á mú-bhw-ĭsa li-líkú-ghúlúk-á/li-ghúlwík-é.
 5-bird 5-PST-enter-F LOC18-14-nest 5-PRG-fly-F/5-fly-ANT
 'The bird flew into the nest.'
 - c. gha-a-ká-j-áng-á na-a-líkú-lyát-á/na-a-lyát-ílé kú-mwaje.

 3SG-PST-DIS-go-EMP-F ASS-3SG-PRG-walk-F/ASS-3SG-walk-ANT LOC17-3SG

 'S/he walked to him.'
 - d. *gha-a-ká-j-áng-á* na-a-líkú-ghafúlá/na-a-ghafwíl-é kú-mwaje.

 3SG-PST-DIS-go-EMP-F ASS-3SG-PRG-crawl-F/ASS-3SG-crawl-ANT LOC17-3SG

 'S/he crawled to him.'
 - e. gha-a-ká-j-áng-á na-líkú-ghángúhy-á/na-a-ghángwíhí-é kú-mwaje.

 3SG-PST-DIS-go-EMP-F 3SG-PRG-rush-F/ASS-3SG-rush-ANT LOC17-3SG

 'S/he rushed to him.'
 - f. gha-a-ká-j-áng-á na-a-líkú-seeseeték-a/na-a-seeseeték-é kú-mwaje.

 3SG-PST-DIS-go-EMP-F ASS-3SG-PRG-stagger-F/ASS-3SG-stagger-ANT LOC17-3SG

 'S/he staggered to him.'
 - g. gha-a-ká-j-áng-á na-a-líkú-tylemúk-á/na-a-tylemúwík-é kú-mwaje.
 3SG-PST-DIS-go-EMP-F ASS-3SG-PRG-slide-F/ASS-3SG-slide-ANT LOC17-3SG
 'S/he slid to him.'

h. gha-a-ká-j-áng-á na-a-líkú-súng-á/na-a-súng-ílé kú-mwaje.

3SG-PST-DIS-go-EMP-F ASS-3SG-PRG-swim-F/ASS-3SG-swim-ANT LOC17-3SG

'S/he swam to him.'

Some verbs, on the other hand, assign different meanings to each form (anterior/progressive), as in (10) and (11). The meanings of the anterior and progressive may therefore emerge more clearly in the following examples. Consider (10a, b), where the anterior form of *niengéla* 'hang around' refers to the result of the action (10a), and the progressive form focuses on the process of the action (10b).

(10) Each ANT/PRG has its own meaning (V2s: filinkita 'roll', niengéla 'hang around')

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a. mu-píla ghw-a-soók-a ghu-filinkít-ííté.
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3-ball 3-PST-move.down-F 3-roll-ANT

'The ball rolled down. (The ball had already reached the goal.)'

b. mu-píla ghw-a-soók-a ghu-líkú-filinkít-a.

3-ball 3-PST-move.down-F 3-PRG-roll-F

'The ball rolled down. (The ball was still on the way to reach the goal.)'

Some verbs in (11) tolerate only the anterior form. (11a') and (11b') are grammatical but awkward because of the unusual context (e.g., that the person was not wearing anything when s/he started to go in (11b')).

- (11) ANT only (V2s: *lelámá* 'float', *fwála* 'wear', *jínámá* 'lean')
 - a. n-supá jy-a-fum-á ji-leléém-é mú-m-pakompako.

9-bottle 9-PST-go.out-F 9-float-ANT LOC18-9-cave

'The bottle floated out of the cave.'

a'.?? n-supá jy-a-fum-á ji-líkú-lelám-á mú-m-pakompako.

9-bottle 9-PST-go.out-F 9-PRG-float-F LOC18-9-cave

'The bottle went out of the cave by bobbing up and down many times.'

- b. a-ji-ilé kú-party na-a-fwal-iíté ø-ghaúni jy-a kijaáni.
 3SG-go-ANT LOC17-party ASS-3SG-wear-ANT 9-dress 9-of green
 'S/he wore a green dress to the party.'
- b'.?? a-ji-ílé kú-party na-a-líkú-fwál-a ø-ghaúni jy-a kijaáni. 3SG-go-ANT LOC17-party ASS-3SG-PRG-wear-F 9-dress 9-of green 'S/he started going naked, and put on a green dress on the way to the party.'
- c. *gha-a-j-á* na-a-jínéém-é. 3SG-PST-go-F ASS-3SG-lean-ANT
 - 'S/he went with his/her body leaning to one side.'

Some verbs that imply repeated acts in V2 are used only with the progressive, as in (12). The meaning of anterior in (12a) is grammatical but awkward because of its deviant situation, while the progressive is fully acceptable (12a').

(12) PRG only (V2s: niengélá 'hang around', suntá 'limp', kubhílá 'hiccup', fulá kághunsú 'whistle')

a. gha-a-kílím-á na-a-líkú-niengél-a.

3SG-PST-run-F ASS-3SG-PRG-hang.around-F

'S/he ran around.'

a'. ?? gha-a-kílím-á na-a-niengéél-é.

3SG-PST-run-F ASS-3SG-hang.around-ANT

'S/he swirled around by running.'

b. gha-a-ká-j-áng-a na-a-líkú-sunt-á kú-mwaje.

3SG-PST-DIS-go-EMP-F ASS-3SG-PRG-limp-F LOC17-3SG

'S/he limped to him.'

c. gha-a-jingíl-á mu-ny-umba na-a-líkú-kubhí-á. 3SG-PST-enter-F LOC18-9-house ASS-3SG-PRG-hiccup-F

'S/he came into the house, hiccupping.'

d. gha-a-jingíl-á mu-ny-umba na-a-líkú-ful-á ká-ghunsú.

3SG-PST-enter-F LOC18-9-house ASS-3SG-PRG-whistle-F 12-whistle

'S/he came into the house, whistling.'

The less integrated consecutive pattern of (8) seems close to the patterns in (9)–(12) above at first sight, however, the two verb forms, V1+V2, stand in accordance with the sequence of two events. Other examples of the consecutive pattern are given in (13). The V2s in (8) and (13a) take a consecutive prefix \acute{a} - in the TAM slot, when the agent of V1 and V2 is the same. In (13b), the agent of V2 with a consecutive marker is different from that of V1. The other pattern is as in (13c), in contrast to (11a), where V1 encodes Manner and V2 encodes Motion+Path. We can confirm that this consecutive pattern is less integrated, since we can insert the conjunction *kundí* 'and then' between V1 and V2.

(13) Less integrated patterns (e.g., V1+V2 (Consecutive))

a. gha-a-jíghúl-á mú-lyángó (kundi) ghá-á-jingíl-á.
3SG-PST-open-F 3-door (and.then) 3-CONS-enter-F
'S/he opened the door, and entered.'

b. gha-a-teél-e é-bhwé (kundi) ly-á-jingíl-á mú-ny-mba.

3SG-PST-throw-F 5-stone (and.then) 5-CONS-enter-F LOC18-9-house

'S/he threw a stone and it entered the house.'

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c. n-supá jy-a-jyl-á (kundí) jy-á-fum-á mú-m-pakompako.

9-bottle 9-PST-float-F (and.then) 9-CONS-go.out-F LOC18-9-cave

'The bottle floated and went out of the cave.' (Cf. (13a))
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The use of the applicative is another significant strategy to integrate Motion events, as we illustrated in (6). Here, the event components Motion, Path, and Manner are conflated in a verb that carries an applicative suffix. Applicative suffixes are common among Bantu languages, and can be attached to most verbs, with the added argument fulfilling various semantic roles, including place, as in (14a); the applicative suffix implicates Path, more properly Motion 'toward (to down)'. (14a') without the applicative suffix, in contrast to (14a), does not imply Path 'toward (to down)'. The same situation with (14a) is also expressed using V1+V2 [anterior/progressive], as in (14b, c).

In addition to the applicative suffix, the applicative pattern usually takes the goal of Motion, as in (14a) in the adverbial phrase *kw-îfo nó mú-sosí* 'down the mountain'. However, the source of Motion, for example in *kú-lúghámbá nó mú-sosí* 'from the top of the mountain', never co-occurs with an applicative verb.

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(14) Multiple strategies for the integration of the same event: 'The ball rolled down.'
      a. mu-píla
                      ghw-a-filinkit-íl-á
                                             kw-îfo
                                                               nó
                                                                        mú-sosí.
         3-ball
                      3-PST-roll-APP-F
                                             LOC17-down
                                                               with
                                                                         3-mountain
         'The ball rolled down the mountain.'
                                                                                  =(6)
      a'.??mu-píla ghw-a-filinkit-ákw-îfo
                                                  mú-sosí.
         3-ball
                        3-PST-roll-F
                                             LOC17-down
                                                                with
                                                                           3-mountain
         'The ball rolled at the foot of the mountain.'
      b. mu-píla
                       ghw-a-soók-a
                                                  ghu-filinkít-ííté.
         3-ball
                       3-PST-move.down-F
                                                  3-roll-ant
         'The ball rolled down. (The ball had already reached the goal)'
                                                                                  =(10a)
      c. mu-píla
                       ghw-a-soók-a
                                                 ghu-líkú-filinkít-a.
         3-ball
                       3-PST-move.down-F
                                                  3-PRG-roll-F
         'The ball rolled down. (The ball was still on the way to reach the goal)' =(10b)
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(15) shows another function of the applicative. The Manner verb *ghúlúká* 'fly' is used both with and without an applicative suffix. In (15a), the locative phrase *mú-bhw-ĭsa* indicates the starting point of Motion, 'from the inside of the nest', while in (15b) with an applicative suffix, the same locative phrase indicates the goal of Motion 'in(to) the nest.' The applicative suffix thus in this case seems to reverse the Path of Motion. The Path of (15a) and (15b) could be changed using the typical strategy of V1+V2, as in (15a') and (15b') respectively.

(15) Applicative indicating reverse direction

a. *ií-nyónyí ly-a-ghúlúk-á mú-bhw-isa*.

5-bird 5-PST-fly-F LOC18-14-nest

'The bird flew out of the nest.'

a'. *ií-nyónyí ly-a-fum-á mú-bhw-ĭsa li-líkú-ghúlúk-á/li-ghúlwík-é*.

5-bird 5-PST-go.out-F LOC18-14-nest 5-PRG-fly-F/5-fly-ANT

'The bird flew out the nest.'

b. *ii-nyónyi ly-a-ghúlúk-íl-á mú-bhw-isa*.

5-bird 5-PST-fly-APP-F LOC18-14-nest

'The bird flew into the nest.'

b'. *ií-nyónyí ly-a-jingíl-á mú-bhw-ĭsa li-likú-ghúlúk-á/li-ghúlwík-é*.

5-bird 5-PST-enter-F LOC18-14-nest 5-PRG-fly-F/5-fly-ANT

'The bird flew into the nest.' =(9b)

Since the applicative suffix above partly refers to the co-event component of the verb root 'toward', this usage can be analyzed as a satellite-framed pattern. We will discuss this topic further in terms of previous studies of Bantu languages in 4.1 below.

3.2. Other domains

In this section, we will exemplify and discuss the four domains other than Motion in Bende: State Change (3.2.1.), Realization (3.2.2.), Temporal Contouring (3.2.3.), and Action Correlation (3.2.4.). In Bende, the patterns observed for these domains are different from those for Motion.

3.2.1. State Change

Bende shows different patterns in State Change expressions from those of Motion. Bende usually uses V1+V2 to express State Change events, with V1 followed by V2 in accordance with the temporal sequence as in (16). V2 appears with a consecutive marker, but not with an anterior or progressive marker as in Motion events. This means that the V1+V2 of State Change is expressed as less integrated. (Recall that we identified the consecutive strategy as a less integrated pattern in (8) and (13)).

(16) Typical State Change

gha-a-ténk-á mú-lyángó gha-á-jíghál-á. 3SG-PST-push-F 3-door 3SG-CONS-close-F

'S/he pushed the door closed.'

Some State Change events can be expressed in a more integrated way as in (17). Example (17) 'The candle blew out' includes two processes: the candle 'was blown' and the flame 'disappeared'. The Bende verb *sip* '(something hot, burning) become extinguished' is the one and only possible verb used for the processes, but the cause of extinguishing, that is, 'by blowing, by wind', can be expressed with an adverbial phrase *ná mu-ságha*, as in (17a).

A similar situation is expressed using the applicative suffix with *sip*, as in (17b), in which the applicative implicates that the fire has gone away. In the Motion domain of (15a) the applicative implicates Path, while the applicative of (17b) can be interpreted in two ways: one is 'vanishing away' — a completion of State Change, and the other is 'by something' — a cause of State Change.

(17) Other strategies for State Change

a. *mu-shumáa* ghw-a-sip-á ná mu-ságha.

3-candle 3-PST-become.extinguished-F with 3-wind

'The candle was extinguished by wind. / The candle blew out.' (Talmy 2000: 217)

b. mu-shumáa ghw-a-sip-íl-á.

3-candle 3-PST-become.extinguished-APP-F

'The candle was extinguished by something. / The candle blew out.'

(Talmy 2000: 217)

We can also observe that both strategies, that is, in (19a) the adverbial phrase and in (19b) the applicative suffix, follow the satellite-framed pattern.

3.2.2. Realization

The category of Realization expression is a catch-all category for a pair of related types that will be termed fulfillment and confirmation (Talmy 2000: 261), as in the example from (3) 'The police hunted the fugitive *down*.' Realization events are expressed similarly to the typical State Change events. V1+V2 is used to express Realization events, with V1 followed by V2 with a consecutive marker, in accordance with the temporal sequence. This means that the V1+V2 of Realization is expressed as less integrated. The following example, (18), expresses two events: 'I washed' and 'the shirt became clean'. As above, the fact that the conjugation *kundi* 'and then' can be inserted between V1 and V2 also confirms the weak integration of these two events.

(18) Realization with a common agent for V1 and V2

gha-a-kans-e e-ghwánda (kundí) ly-â-labh-á.
3SG-PST-wash-F 5-shirt and.then 5-CONS-be.white-F

'S/he washed the shirt clean.'

(19) is another example in which two events, 'he drank' and 'water finished up', are linked by the consecutive marker of V2, but the agents of V1 and V2 are different from each other. The conjunction *kundi* is acceptable here as well.

(19) Realization with different agents for V1 and V2

gha-a-nyw-á ma-nsi mu-mú-hange (kundí) gha-á-hw-ã. 3SG-PST-drink-F 6-water 18-3-water.jar and.then 6-CONS-finish-F 'He finished drinking the water from the pot.'

3.2.3. Temporal Contouring (Aspect)

Temporal Contouring is a realm of linguistic aspect, conceptualized as an event in its own right (Talmy 2000: 230–231). Here we investigate seven aspectual categories: (i) Completion/Termination, (ii) Initiation, (iii) Continuation, (iv) Habitualness, (v) Repetition, (vi) Gradualness, and (vii) Frequency.

Bende uses a verb root followed by V2 in infinitive form for (i) and (ii), while (iii), (iv), and (vii) are expressed with a TAM marker on the main verb and (v) is expressed with an adverbial phrase. The pattern of (i), (ii), and (vi), that is, a verb root followed by an infinitive verb, is analyzed as the verb-framed pattern, while (iii), (iv), (v), and (vii) are expressed with a prefix, a TAM marker, or an adverbial phrase following the satellite-framed pattern. We will consider examples of each below.

For (i) Completion/Termination, Bende uses two verbs. V1 expresses the event of Completion or Termination, and V2, which appears as an infinitive, expresses the main event, as in (20) and (21a). Alternatively, the Termination or Continuation aspect is also expressed by a TAM marker, the persistive, on the main verb, as in (21b).

(20) Completion

n-an-hw-ã kú-nyw-a ø-chaái. 1SG-PST-finish-F INF-drink-F 9-tea 'I finished drinking the tea.'

(21) Termination

a. $ty=a-l\acute{e}k-il\acute{e}$ ku-sahul-a.

NEG=3SG-leave-ANT INF-talk-F

'S/he would not stop talking. / S/he kept on talking.'

b. a-syá-sahul-a.

3SG-PER-talk-F

'S/he was still talking.'

= Continuation

For (ii) Initiation, Bende consistently uses a verb root ji 'start' followed by an infinitive verb, as in (22). The root ji is grammaticalized from a Motion verb $j\acute{a}$ 'go'.

(22) Initiation

ka-ana-ká-nyá ka-a-j-á kú-líl-á. 12-child-12-little 12-pst-start/go-F INF-cry-F

'The baby started to cry.'

Next, (iii) Continuation is expressed with a persistive aspect marker $sy\acute{a}$ - on the main verb, as we saw in (21b). There is no lexical verb that conveys Continuation, but a TAM marker, namely the persistive, is used. The persistive is a type of aspect that occurs widely and specifically across Bantu languages, typically to affirm that a situation has held continuously from some implicit or explicit point in the past up to the time of speaking (Nurse 2008: 145).

There is no verb root that conveys (iv), Habitualness. Instead, the Habitual is expressed with a TAM marker, $k\acute{o}\acute{o}$ -, on the main verb.

(23) Habitual

n-kóó-nyw-a ma-bheéle kíle e-fukú. 1SG-HAB-drink-F 6-milk every 5-day 'I drink milk every day.'

For (v) Repetition, Bende has no verb root nor TAM marker that indicates repetition, but rather uses an adverb *kabhílí* 'again', as in (24).

(24) Repetition

gha-a-jis-á kabhílí. 3SG-PST-come-F again 'She came again.' For (vi) Gradualness, Bende uses a verb root *sumf* 'surpass' followed by an infinitive verb, as in (25).

(25) Gradualness

gha-a-sumf-y-á kú-kolw-á.

3SG-PST-surpass-CAU-F INF-get.drunk-F

'He is in the process of getting drunk.'

Finally, (vii) Frequency is marked by a Habitual aspect marker, like the Habitual.

(26) Frequency

a-kóó-j-akw-í-sokólú-mwiku-Ø-wiki.3SG-HAB-go-F17-5-market11-one17-9-week'She goes to the market once a week.'

3.2.4. Action Correlating

Talmy refers to the linguistic phenomenon of Action Correlating as a "coactivity"; in it, a first agent executing a particular activity is associated with a second agent whose activity is correlated with the first (Talmy 2000: 253–254), as in the example from (3) 'I sang *along* with him'.

As far as studies have shown, Bende does not show any integration patterns concerned with Action Correlating of Accompaniment and Concert. Instead, the two events are expressed separately as a coordination, as in (27), or when the agent(s) is/are engaged in a joint activity, simply using an adverb $k\acute{u}mwi$ 'together', as in (28).

(27) Action Correlating of Accompaniment

a-likú-huúl-en-goma(kundí)no-onene-n-dikú-jimb-a.3SG-PRG-hit-F9-drum(and.then)and-PPRON.1SGASS-1SG-PRG-sing-F'While he is playing drums, I am singing.'

(28) Action Correlating of Concert

n-an-kin-á
 n-goma kúmwi nó nyene.
 1SG-PST-dance-F
 9-drum together and PPRON.3SG
 'She danced together with him.'

No sign of integration of V1 and V2 seems to be present in (27). They are completely independent clauses, since the second clause *no-one ne-n-dikú-jimb-a* 'I am singing' is independent in tense and aspect. The consecutive strategy of V2, on the other hand, is

analyzed as the less integrated pattern, since V2 is dependent on V1 for tense (cf. (8), (13), (18), (19)).

Action Correlating of Surpassment, Imitation, and Demonstration all use an infinitive verb strategy. Surpassment is expressed in the main verb *sumbá*, which is followed by an infinitive verb as a co-event *kilímá* 'run' as in (29). Imitation, on the other hand, is expressed with an infinitive verb *lóndá* 'follow' as in (30). Demonstration (31) is expressed in the main verb *lángá* 'show,' similarly to Surpassment.

(29) Action Correlating of Surpassment

n-a-mú-sumb-á kú-kílím-á. 1SG-PST-3SG-surpass-F INF-run-F 'I run faster than him.'

(30) Action Correlating of Imitation

n-díkú-kin-á n-gómá ku-mú-lónd-á mw-ina-ane. 1SG-PRG-dance 9-dance INF-3SG-follow-F 1-friend-my 'I am dancing as an imitation of my friend.'

(31) Action Correlating of Demonstration

n-a-mú-láng-á kú-kin-á n-gómá. 1SG-PST-3SG-show-F INF-dance-F 9-dance 'I showed him to dance.'

3.3. Summary of event integration patterns in Bende

From the data presented above, we can generalize that Bende basically follows the verb-framed pattern in all domains of Motion, State Change, Realization, Temporal Contouring, and Action Correlating, although the satellite-framed pattern is also observed in some cases in all domains except for Realization (See (32)).

Motion events are integrated in V1+V2, where V1 functions as the main verb encoding Motion+Path, while V2 functions as the co-event encoding Manner. Less integrated patterns are expressed with the consecutive V2 construction, where V1 encodes Manner and V2 encodes Motion+Path. Another strategy is one in which the main verb employs an applicative suffix to partly encode Path, which follows the satellite-framed pattern.

State Change and Realization usually employ the verb-framed pattern, although V2 takes the consecutive construction. Some forms of Temporal Contouring (Completion, Termination, Initiation, and Gradualness) and Action Correlating (Surpassment, Imitation, and Demonstration), on the other hand, employ the verb-framed pattern V1+V2, in which

V2 is realized as an infinitive. The infinitive V2 usually encodes co-events except for Imitation.

Finally, some of State Change, Temporal Contouring (Habitualness, Continuation, Frequency, Repetition), and Action Correlating (Concert) follow the satellite-framed pattern. The satellites in these cases are adverbs, the applicative suffix, or TAM prefixes.

Table 1 shows a summary of Bende event integration patterns by semantic domain. V/S refers to verb-framed/satellite-framed. The Explanation column gives a sketch of each domain.

Domain	V/S	Explanation	
Domain			
	V	V1 (Motion+Path) + V2 (Manner) in anterior/progressive	
Motion	V	V1 (Manner) + V2 (Motion+Path) in consecutive	
	S	Applicative suffix	
State Change	V	V2 in consecutive	
	S	Adverb, Applicative suffix	
Realization	V	V2 in consecutive	
Temp. Cont.	V	V1 (Completion, Termination, Initiation, Gradualness) + V2 in infinitive	
	S	TAM prefix (Habitualness, Continuation, Frequency), Adverb (Repetition)	
Action Correl.	(V)	Coordination (no integration) (Accompaniment)	
	V	V1 (Surpassment, Demonstration) + V2 in infinitive	
		V1 + V2 (Imitation) in infinitive	
	2	Adverb (Concert)	

Table 1: Summary of event integration patterns in Bende by semantic domain

4. Discussion

This section discusses two topics that arose from Bende event integration patterns.

4.1. Applicative suffix in the Satellite-Framed Pattern

As we mentioned in Section 1, Bantu languages, like other languages in African phyla, are basically considered verb-framed languages (Schafer & Gaines 1997: 193). However, we saw in Section 3 that Bende can employ various strategies to express event integration. Of these, the applicative suffix strategy that derives a locative implication (usually Path) is characteristic of many Bantu languages. Since the applicative suffix is the co-event component of the verb root both morphologically and semantically, it is usually analyzed as a satellite, as in (32); the strategy itself is considered to follow the satellite-framed pattern.

(32) Applicative suffix to Motion verb

mu-pílaghw-a-filinkit-íl-ákw-îfonomú-sosí.3-ball3-PST-roll-APP-FLOC17-downwith3-mountain'The ball rolled down the mountain.'=(6), (14a)

The Bantu applicative strategy for Motion event integration has been discussed in earlier studies, as was summarized in Fortis (2010: 27–29). Fortis (2010: 29) suspended making a straightforward judgment on the applicative, but mentioned that "since applicative morphemes function like satellites, we can tentatively make V-appl constructions a specific type of S-framing, ... keeping in mind that their status of *path* satellites is dubious."

This dubiousness will be illustrated in examples (33) and (34), from Zulu. They are similar to (32), in that Zulu takes two strategies for the expression 'The boy ran to school'; (33a) illustrates the Path-verb solution, and (33b) is an applicative strategy.

(33) Zulu examples

a. umfana wagijima waya esikoleni.
 boy he-ran he-went-to school.LOC
 b. umfana ugijimele esikoleni.
 boy he-ran-APP school-LOC
 'The boy ran to school.'

(Fortis 2010: 27-28)

However, the Zulu applicative suffix does not necessarily have spatial meaning by itself. This is evidenced by (34), where no spatial interpretation is possible for the applicative suffix if the complement noun *isikole* 'school' is not locativized.

(34) Zulu applicative as benefactive

umfana ugijimele isikole. boy he-ran-APP school

'The boy ran for the school.' [e.g., the boy represented his school in a race.]

(Fortis 2010: 28)

In Bende example (32), the applicative suffix alone is not enough to carry spatial meaning, as is the case with the Zulu examples in (33): the combination of an applicative suffix and a locative noun phrase with a locative prefix $k\dot{u}$ (/kw)- are required to express Path.

In any event, in Bende as well as in many other Bantu languages like Zulu, Haya, or Tswana (Fortis: 2010: 27–29), the applicative strategy is the odd but common case, and

follows the satellite-framed pattern. This strategy is employed not only for some Motion events, but also for some State Change events.

4.2. Bende in Bantu typology (Motion events)

In Section 2, we reviewed a typology of event integration patterns in Bantu (Gaines 2001, Atindogbé 2012). Gaines (2001) proposed that three types from (I)–(III) would cover the majority of Bantu languages, excepting those in Zone A. The event integration patterns in Bende seen in Section 3 indeed illustrate all three types in Gaines' typology, although the first type (I) is most common. In (I), "Motion and Direction (or "Path") appear in a main clause, while Manner surfaces in a subordinate clause," as in (35), where V1 encodes Motion+Path and the non-main verb V2 encodes Manner.

(35) Typical event integration pattern in Bende

```
gha-a-jingíl-á mu-ny-umba na-líkú-kílíím-a/na-a-kílíím-é.

3SG-PST-enter-F LOC18-9-house 3SG-PRG-run-F/ASS-3SG-run-ANT

'S/he ran into the house. / S/he entered the house while s/he was running.' =(5a, b, 7a)
```

The second type (II), in which "Manner appears in a main clause, while Motion and Direction are expressed in a subordinate clause," is a special case in Bende. The only consecutive strategy, as in (36), could be considered to fall into this type; however, the V1 and V2 need to be reconsidered in terms of the extent to which they are integrated as a single event.

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(36) Less integrated patterns (e.g., V1+V2 (Consecutive))

gha-a-jighúl-á mú-lyángó (kundí) ghá-á-jingíl-á.

3SG-PST-open-F 3-door (and.then) 3-CONS-enter-F

'S/he opened the door and entered.' =(13a)
```

We have identified the Bende consecutive pattern as less integrated, but this is not the case with coordination, since a V2 with a consecutive marker is a grammatically dependent clause. However, Schaefer and Gaines (1977: 215–216) do not consider the consecutive strategy as an integrated single event, but they instead consider as a coordination, when V1 and V2 are completely alternative in the case of Shona. An example of this type appears with a participial prefix in V2, as in the Shona examples in (37), where both (37a) and (37b) are allowed.

(37) Shona: participial *chi*- in V2

```
a. mu-ana u-aka-pinda mumba a-chi-mhanya.

1-child 1-PST-enter room 1-PRT-run
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'The child ran into the room. / The child entered the room while he ran.'

b. *mu-ana u-aka-mhanya a-chi-pinda munda*.

1-child 1-PST-ran 1-PRT-enter room

'The child ran into the room. / The child ran while he entered the room.'

(Schaefer & Gaines 1977: 213)

The third type (III), "Motion and Direction appear in a main clause, while manner surfaces as a participial/nominalized verb form (e.g., infinitive)," is not available in Bende. A typical example of this type appears in Swahili (38).

(38) Swahili: Manner as an infinitive

kijana a-li-ingia chumba-ni kwa ku-kimbia. youth 3s-PST-move.into room-LOC LOC.ASS INF-run

'The youth entered the room at a run. / The youth ran into the room.'

(Gaines 2001: 8)

While this is not the case in Bende Motion events, an analogous approach is available in some of Temporal Contouring (Completion, Termination, Initiation, and Gradualness), and Action Correlating (Surpassment, Imitation, and Demonstration) domains, as in (39).

(39) Completion

n-an-hw-ã kú-nyw-a ø-chaái. 1SG-PST-finish-F INF-drink-F 9-tea 'I finished drinking the tea.' =(20)

In sum, from the point of view of Gaines' typology of motion events, Bende Motion fits into the first type (I) in Gaines' typology, when two events are typically integrated. Some cases of Motion, State Change, and Realization domains employ type (II) in less integrated constructions, i.e., V2 in consecutive constructions. The third type (III) does not fit into Motion events at all, but fits into some cases of Temporal Contouring and Action Correlating domains. The other types (IV) and (V), which are typical to Bantu languages in Zone A, are not the case in Bende.⁷

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⁷ The Mambwe-Lungu language of southwestern Tanzania and northeastern Zambia (M14, far from Zone A but just south of Bende), has a rare case of type (4) "Motion, manner, and direction are all stacked in one single clause/sentence and with a locative adverb expressing direction." The example below is available only with a deictic verb *vá*- 'go.'

⁽e.g.,) úmú-ntu i-yá-utúk-á mú ng'anda. 1-person 3SG-go-run-F in house 'S/he ran in the house.' (Author's fieldnote)

5. Conclusion

This work has tried to illustrate an exhaustive picture of event integration patterns in Bende.

To sum up, Bende normally follows the verb-framed Bantu pattern in all semantic domains of Motion, State Change, Realization, Temporal Contouring, and Action Correlating, although the satellite-framed pattern is also observed in some cases in all domains except for Realization. However, the degree of integration is different from domain to domain. Only Motion events can employ the typical integration pattern, in which the main verb expresses tense while the non-main verb expresses aspect (anterior or progressive only) when the events are integrated. The main verb typically describes Path, while the non-main verb expresses Manner, as in typical verb-framed languages. Other domains, including some of Motion, employ a less integrated strategy (consecutive), or adverbial strategy (infinitive). Moreover, Bende also uses more strategies other than the verb-framed pattern to express events in most domains; the applicative suffix, TAM prefixes, and adverbs are typically used in the satellite-framed pattern.

The variety of integration patterns in Bende itself might come from historically or semantically motivated reasons that remain to be studied in the future. Another topic for future study is type (III) in Gaines' typology, i.e., the infinitive strategy. Although Bende does not really employ the strategy, some Bantu languages (Swahili, Lungu-Mambwe, Herero, etc.) are known to use it more for Motion event integrations. The study of this type across Bantu languages could be linked with the grammaticalization of Motion verbs like 'go' and 'come', which could be a more extended study on Bantu internal typology.

Abbreviations

= (clitic boundary), - (morpheme boundary), 1 (first person), 2 (second person), 3 (third person), Numbers only indicate the respective noun class, ANT (anterior), APP (applicative), ASS (associative), CAU (causative), CONS (consecutive), DIS (distal), EMP (emphatic), ENC (enclitic), EXT (extension), F (final), FUT (future), HAB (habitual), INF (infinitive), LOC (locative), NEG (negative), OM (object marker), PER (persistive), PPRON (personal pronoun), PRC (proclitic), PreSM (pre-subject marker), PRG (progressive), PRT (subject (participial), PST (past), SG (singular), SM marker), **TAM** (tense-aspect-modality).

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