

Event Integration Patterns in Yoruba

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In this paper, I examine how Yoruba expresses the components of complex events in the five event domains of Motion, State Change, Realization, Temporal Contouring and Action Correlation. Yoruba shows intralanguage variation in the encoding of the framing event; namely, it shows the equipollent-framed, verb-framed and non-verb framed patterns. It will be suggested that it is plausible to add the equipollent-framed pattern to investigate a language like Yoruba, which has a serial verb construction, and the typological classification should be applied to individual event integration types rather than to languages as a whole.

Keywords: Yoruba, serial verb construction, equipollent, symmetrical strategy, deverbalization

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1. Introduction

According to Talmy's (1991, 2000) typology of event integration, there are two major typological types, satellite-framed (S-framed) languages and verb-framed (V-framed) languages. Talmy's classification has been taken as a typological classification of languages as a whole, but it has been observed that a single language can use more than one of Talmy's types of event integration to encode complex events, and this classification should therefore apply to individual event integration types within a language, not to languages as a whole (Croft et al. 2010). There seems to be intralanguage variation in the encoding of the framing event. For example, Kawachi (2012) showed that Sidaama, a Cushitic language of Ethiopia, exhibits the V-framed pattern in the event domains of Motion, State Change and Realization, but not in the domains of Temporal Contouring and Action Correlation.

Yoruba, one of the major ethnic languages of Nigeria (West Benue-Congo, Niger-Congo), also uses more than one of Talmy's patterns, as well as an additional one, called the equipollent-framed (E-framed) pattern. Yoruba is a typical language among those that have serial verb constructions in that there are cases where both the framing event and the co-event are expressed by bare verbs, that is, verb forms that may occur as predicates on their own. As it is difficult to point out which is the main verb among them and they may have the same status as main verbs, the pattern is called E-framed, because both the framing event and the co-event are expressed by 'equipollent' elements¹.

In this article, I examine how Yoruba expresses components of different types of events. It will be suggested that the typological classification should be applied to individual event integration types rather than to languages as a whole, as Croft et al. proposed. I show that Yoruba exhibits intralanguage variation in the encoding of complex events, variation that includes E-framed, V-framed and non-verb framed (non-V framed) events. The term 'non-V' framed is adopted here instead of 'satellite-framed', because 'satellite' in Talmy's classification is defined as 'a constituent in construction with the main verb (root) and syntactically subordinate to it as a dependent to a head' (Talmy 2009: 390), such as the preposition *in* (of *into*) in the sentence "*The bottle floated into the cave.*" Yoruba does not use a 'satellite' for the framing event in the strict meaning, but uses 'satellite-like' elements such as infinitives, ideophones, prepositional phrases (PPs), and deverbalized elements. For this reason, the pattern in which the framing event is expressed by these elements is called 'non-V framed' instead of 'satellite-framed' in this article.

The paper is organized as follows. Section 2 reviews the relevant literature, especially concerning the event integrations and serial verb constructions. Section 3 provides some grammatical notes concerning verbs in Yoruba. Section 4 describes how Yoruba expresses different types of events. Section 5 discusses the variation in the encoding of framing events and the relation between event types and the grammaticalization process concerning serial verb constructions. Section 6 concludes the paper.

2. Literature review

Croft et al. (2010) revised Talmy's typological classification of event integration types, proposing two changes: 1) including other types in addition to Talmy's verb-framing and satellite-framing types; and 2) applying the classification to individual event integration types within a language, not to languages as a whole. They proposed adding the following two types: double-framing (a construction in which the framing expression is expressed

¹ The term 'equipollent-framed' is proposed by Slobin (2004) (although he does not quote examples from Yoruba), including not only serial verb languages, but also other types of languages that have two preverbs or bipartite verbs in which the verb consists of two morphemes of equal status.

twice, once as a detached satellite and once as part of the verb) and symmetrical constructions (coordination, compounding, verb serialization) (Croft et al. 2010: 207–8).

It is observed that all types of event constructions form a scale beginning with double framing and satellite framing and moving to verb framing, compounding and coordination. This syntactic scale encodes the degree of integration or cohesiveness of the complex event, from more to less integrated.

Both verb-framing and satellite-framing (including double-framing) are asymmetric strategies in their encoding of the semantic components of an event. They contrast with symmetric strategies, where complex events are expressed by elements that can each occur as a predicate on their own. Croft et al. identified three symmetric constructions, as mentioned above; coordination, compounding, and verb serialization.

The coordinate construction is the least tightly bound of the three, requiring some kind of conjunction or another morpheme that joins the verbs. For example, in Japanese, coordinate constructions are expressed with the *-te* form of a verb or the conjunction *-nagara* ‘while’. Examples of coordinate constructions in Japanese are as follows: (1) is a construction with the *-te* form, and (2) is one with the *-nagara* conjunction.

- (1) *Watashi wa taru o korogashi-te chikashitsu ni ireta.*
 I TOP barrel ACC roll **-and** basement to put.into:PST
 ‘I rolled the barrel into the basement.’

- (2) *Kanojo wa odori-nagara douro o watatta.*
 she TOP dance-**while** street ACC cross:PST
 ‘She danced (her way) across the street [lit. She crossed the street, dancing].’

(Croft et al. 2010: 219)

The compounding construction is most tightly bound, as the two verbs are morphologically bound. Japanese has two types of verbal compounding constructions, the *te-* compound and *i-* compound. Examples are illustrated in (3) and (4) respectively.

- (3) *Momo ga kawa o nagarete- itta.*
 peach NOM river ACC **float-** **-go:**PST
 ‘The peach floated down the river.’ (*te-* compound)

- (4) *Momo ga kishi ni nagare- tsuita.*
 peach NOM shore to **float-** **-get.to:**PST
 ‘The peach flowed and reached the shore.’ (*i-* compound)

Basically each verb of the compounding construction can occur as a predicate on its own, but one can also observe cases in which one or both components of the *i-* compound cannot occur as a predicate. For example, in the *i-* compound *nagare-* *-komu* ‘float into’ (float move.into), *-komu* never occurs alone and it should always be the second component of the *i-* compound. This fact represents a further step in the grammaticalization path towards univertation of the compounding constructions (Croft et al. 2010: 230).

The serial verb construction may be placed between compounding and coordination on the scale of morphosyntactic integration. It is a construction that has two or more verbs in one clause requiring no conjunctions or markers on the verbs that would show relations among them. The Yoruba example in (5) includes two verbs without any markers or morphological changes².

- (5) *Wón gbé àga lọ síbẹ̀.*
 they take chair go there
 ‘They carried [took and went] a chair there.’

Each verb in (5) appears in a form that occurs as a main predicate on its own. As Aikhenvald (2006) describes, serial verb constructions express what is conceptualized as a single event. They are monoclausal; their intonational properties are the same as those of monoverbal clauses. They have just one tense, aspect, and polarity value, and they may share core and other arguments (Aikhenvald 2006: 1). These are typical properties of serial verb constructions in general, and they are clearly seen in Yoruba serial verb constructions. A number of studies have been conducted on serial verb constructions in Yoruba (Bamboşe 1974, 1985, Oyelaran 1982, Ekundayo 1983, Baker 1991, Larson 1991, Lawal 1993). They focused mostly on the syntactic structures of the construction and the syntactic status or constraints of verbs. It was found that the serial verb construction constitutes a single clause, and the verbs are in the single VP of the clause (Baker 1991, Larson 1991).

Slobin (2004) proposed E-framed languages in the domain of Motion events. He proposed this language type to include serial verb languages and other types of languages in which both manner and path are expressed by equipollent elements (Slobin 2004: 228). Slobin’s proposal is for the classification of languages as a whole, but it is not practical to classify a language as a whole in order to study the five event domains. Therefore, I use

² Yoruba orthography is as follows. Oral vowels: i, e, ɛ [ɛ], a, o [ɔ], o, u Nasal vowels: in [ĩ], an/ɔn [ɔ̃], en [ɛ̃], un [ũ] Consonants: b, d, f, g, gb [gb], h, j [dʒ], k, l, m, n, p [kp], r, s, ʃ [ʃ], t, w, y [j]

Yoruba has three distinct tones, H, M and L. H tone is marked as *á*, L tone is marked as *à*, and M tone is not marked. The first verb that appears in a serial verb construction is called V1, and the second is V2.

the term ‘E-framed’ to classify the event integration types in addition to the terms ‘V-framed’ and ‘non-V framed.’ This term is almost the same as Croft et al.’s term ‘symmetrical types,’ but the term ‘symmetrical types’ rather contrasts with ‘asymmetrical types,’ which includes V-framed and S-framed types as well. The term ‘E-framed types’ is used in this article rather than ‘symmetrical types,’ since Yoruba shows three types of integration patterns, V-framed and non-V framed, and E-framed as discussed below.

3. Information on the grammar of Yoruba

Yoruba is an isolating language in terms of its morphological type, and the constituent order marks grammatical relations. The basic word order is SAVO, where the A(uxiliary) slot may be filled with, for example, aspect markers (e.g., the perfective *ti*, or progressive *ní*), a tense marker (future tense *yóò*), or a negation marker (*kò*), or other grammatical elements. There are no tense markers for present or past. Dynamic verbs are interpreted as past, and stative verbs, as ‘present,’ in general, when they occur without any tense marker or other elements referring time in predicate sentences.

Yoruba basic verbs consist of one syllable in principle (e.g., *lọ* ‘go,’ *gbé* ‘take,’ *ní* ‘have,’ *ṣe* ‘do’). Many verbs with two or more syllables are actually compound verbs consisting of multiple verbs or a verb plus a noun, although the original words of compound verbs are not always transparent. Compound verbs are divided into two groups: verb+verb compounds (e.g., *bàjé* ‘spoil,’ *gbàgbó* ‘believe’) and verb+noun compounds (e.g., *gbàgbé* ‘forget,’ *retí* ‘expect’). The original words of these compounds cannot be recognized in modern Yoruba meanings, but the distinctive property is clear for dividing the compounds into the two groups. When a verb+verb compound takes an object, the verb is split and the object is inserted between them, while the object of a verb+noun compound comes after the compound. Moreover, an object pronoun of the verb+noun compound is in the possessive case. Examples (6) and (7) show a verb+verb compound and verb+noun compound respectively.

(6) verb+verb compound verb: *bàjé* ‘spoil’

a. *Wón* *bà* *omọ* *nàà* *jé*.³
 they (spoil) child the (spoil)

‘They spoiled the child.’

b. *Wón* *bà* *á* *jé*.
 they (spoil) OP3sg (spoil)

‘They spoiled him/her.’

³ L tone on the verb (*bà*) changes to M tone when the verb is followed by an object NP. The verb is written with M tone in the Yoruba orthography, but the original L tone is marked in this paper.

- (7) verb+noun compound verb: *retí* ‘expect’
- a. *Wón retí ọmọ náà.*
 they expect child the
 ‘They expected the child.’
- b. *Wón retí rẹ.*
 they expect POSP3sg
 ‘They expected him/her.’

A verb+verb compound as in (6) is called a “splitting verb” henceforth, according to the tradition of Yoruba grammar (Awobuluyi 1979).

In the serial verb construction, when both verbs are transitive, the syntactic word order of verbs and the object is the same with a splitting verb and its object. The object comes between the two verbs as shown in (8).

- (8) serial (transitive) verbs:
- a. *Wón jì ẹran jẹ.*
 they steal meat eat
 ‘They stole and ate meat.’
- b. *Erin tẹ ọtá pa.*
 elephant stomp enemy kill
 ‘The elephant stomped and killed the enemy.’

The meanings of serial verbs are transparent, for they are integrated from the meanings of the verbs. Splitting verbs have idiomatic meanings, and the original meanings of each verb are not always clear. It can be said that splitting verbs originate from the serialization of verbs and they have become more idiomatic and lexically united.

Serial verb constructions are heavily related to the discussion of event integration patterns in Yoruba, because they are used in the domains of Motion, State Change, and Realization, as we will see in Section 3. The verbs expressing the framing event and the co-event have an equal morphological status, and it is difficult to determine which of them is the main verb, because each verb has main verb status in forms and meanings as a predicate, without any distinctive markers. Auxiliary markers cannot be crucial to decide which is the main verb, because they always appear in a fixed position, that is after the subject. So both verbs are assumed to have main verb status.

However, there are some cases where one of the verbs is on the way to deverbalization or grammaticalization, and it is easy to identify which is the main verb. In other words, non-main verbs can be identified based on several factors, mainly meanings and

co-occurrence properties. As for the factor of meaning, some verbs are deverbalized, denoting adverbial meanings. See the example of the verb *sáré* ‘run’ in (9).

- (9) a. *Àlàbí* *ń* *sáré.*
 Alabi PRG run
 ‘Alabi is running.’
- b. *Àlàbí* *ń* *sáré* *şí* *fèrèsé.*
 Alabi PRG hastily open window
 ‘Alabi is opening the window hastily.’

Sáré ‘run’ is the main verb of (9a), and it is deverbalized in meanings denoting ‘hastily’ with another verb *şí* ‘open’ in the serial verb construction, as in (9b). In addition to meanings, *sáré* may also lose the verbal status grammatically, because the auxiliary (progressive *ń*) can be moved closer to V2, as shown in (9c) below.

- (9) c. *Àlàbí* *sáré* *ń* *şí* *fèrèsé.*
 Alabi hastily PRG open window
 ‘Alabi is opening the window hastily.’

It is clear that *sáré* is losing the main verb status in (9b) and (9c), although it cannot be said with certainty whether *sáré* is no longer a verb or can be still regarded as one.

As for the deverbalization, its process can be also recognized by the factor of co-occurrence. A non-main verb can no longer stand alone as a main predicate, and it has to co-occur with another verb. For example, V1 *jùmò* ‘be.together’ in (10a) below has fewer properties than V2 *şişé* ‘work,’ because it cannot stand alone as a main verb in a predicate, as in (10b), while V2 can stand alone as a main verb, as in (10c).

- (10) a. *Wọ̀n* *ń* *jùmò* *şişé.*
 they PRG be.together work
 ‘They are working together.’
- b. **Wọ̀n* *ń* *jùmò.*
 they PRG be.together
 (Int. ‘They are together.’)
- c. *Wọ̀n* *ń* *şişé.*
 they PRG work
 ‘They are working.’

Bamboşe (1974) called this type of verb the “preverbal modifying verb” because it appears in the V1 position after the auxiliary, although it no longer functions as the main verb. There are other examples of preverbal modifying verbs that originated from transitive verbs, as in (11) and (12) below.

- (11) a. *Mo ñ bá Aina jó.*
 I PRG join Aina dance
 ‘I am dancing with Aina.’
- b. **Mo ñ bá Aina.*
 I PRG join Aina
 Int. ‘I am joining Aina.’
- c. *Mo ñ jó.*
 I PRG dance
 ‘I am dancing.’
- (12) a. *Bàbá ñ fí okó ro ilè.*
 father PRG use hoe plow ground
 ‘Father is plowing the ground using a hoe.’
- b. **Bàbá ñ fí okó.*
 father PRG use hoe
 Int. ‘Father is using a hoe.’
- c. *Bàbá ñ ro ilè.*
 father PRG plow ground
 ‘Father is plowing the ground.’

Bá ‘join’ in (11) and *fí* ‘use’ in (12) can no longer be the main verb of a predicate, but they can still be recognized as verbs, because of their position in the sentence.

There are also “postverbal modifying verbs” according to Bamboşe (1974), as some verbs went through the process of deverbalization in meaning and have come to behave like prepositions. For example, in (13a) below, *fún* ‘give’ is used as a main verb, but when it appears in the V2 position as in (13b), it is used just like a preposition meaning ‘for.’ This is a result of deverbalization in the meaning of the verb.

- (13) a. *Bàbá fún mi ní ìwé.*
 father give OP1sg with book
 ‘Father gave me a book.’
- b. *Jésù kú fún wa.*
 Jesus die for OP1pl

‘Jesus died for us.’

Other examples of postverbal modifying verbs are shown below in (14)–(16). *Tán* ‘finish,’ *tó* ‘be enough,’ and *jù* ‘exceed’ are intransitive verbs, and they can stand alone as main verbs, but when they appear as V2, they denote adverbial meanings and modify the meanings of the main verbs of V1.

- (14) a. *Iṣé mi tán.*
 work POSP1sg finish
 ‘My work is finished.’
- b. *Mo kọ létà náà tán.*
 I write letter the finish
 ‘I finished writing the letter.’
- (15) a. *Ó ti tó.*
 3sg PRF be.enough
 ‘It is enough.’
- b. *Mo mu ọtí tó.*
 I drink alcohol be.enough
 ‘I drank enough alcohol.’
- (16) a. *Kò jù oṣù kan.*
 NEG exceed month one
 ‘It is not more than a month.’
- b. *Mo mu ọtí jù.*
 I drink alcohol exceed
 ‘I drank alcohol excessively.’

This kind of verb is on the way to the grammaticalization process and becoming a non-verbal element. Verbs like *lọ* ‘go’ and *bọ* ‘come’ are also used as grammaticalized elements for expressing gradualness, as shown below in (17).

- (17) a. *Ó ní tutù lọ.*
 3sg PRG be.cold go
 ‘It is getting colder.’
- b. *Ó ní gbóná bọ.*
 3sg PRG be.hot come
 ‘It is getting hotter.’

Since verbs on the way to deverbalization or the grammaticalization process (although it is obvious only from the meaning, not from morphological or syntactical phenomena) can be regarded as non-main verbs, the constructions that contain these types of verbs expressing the framing event are not equipollent, and they would be regarded as non-V framed patterns in this article.

4. Patterns of expressing events in the five event domains in Yoruba

This section examine how Yoruba expresses components of different types of events. Yoruba exhibits the E-framed pattern in expressing the domains of Motion, State Change and Realization, but it does not follow the pattern in expressing Temporal Contouring or Action Correlation, where V-framed and non-V framed patterns are observed instead.

4.1. Motion

Yoruba basically shows the E-framed pattern in expressing Motion events. In the E-framed pattern, both the framing event and the co-event are expressed in verb forms that may occur as predicates on their own, as shown in (18).

- (18) *ìgò náà léfòó wọ inú ihò.*
 bottle the float enter inside cave
 ‘The bottle floated into the cave.’

V1 (*léfòó* ‘float’) and V2 (*wọ* ‘enter’) appear without any markers. Each verb appears in a form that occurs as a main predicate on its own. V1 expresses Manner as a co-event and V2 expresses Path as a framing event. Other examples of the combination of V1 (Manner) and V2 (Path) are shown in (19)–(22).

- (19) *Bọ̀p̀lù náà yí wọ ilé.*
 ball the roll enter house
 ‘The ball rolled into the house.’

- (20) *Ó rákòrò lẹ idí ilẹ̀kùn.*
 3sg crawl go base door
 ‘S/he crawled thither to the door.’

- (21) *Ó sáré jáde láti inú ilé.*
 3sg run go.out from inside house
 ‘S/he ran out of the house.’

- (22) *Wọ̀n tẹ̀lé ọ̀lọ̀pàá nàà jáde láti inú ilé.*
 they follow policeman the go.out from inside house
 ‘They followed the policeman out of the house.’

For the meaning of ‘go inside,’ Yoruba has a PP *sínú* ‘into’ (< *sí* ‘to’ + *inú* ‘inside’) in addition to the verb *wọ̀* ‘enter’ and the verb phrase *wọ̀ inú* ‘enter inside.’ Thus, examples (18) and (19) can also be expressed as shown in (23a) and (23b) respectively.

- (23) a. *Ìgò nàà léfòó sínú ihò.* (cf. 18)
 bottle the float into cave
 ‘The bottle floated into the cave.’
 b. *Bọ̀ọ̀lù nàà yí sínú ilé.* (cf. 19)
 ball the roll into house
 ‘The ball rolled into the house.’

In (23), the framing events are expressed by the PP *sínú*, so the pattern may be regarded as a PP-framed pattern, which would be included in the non-V framed pattern in this paper.

There are examples where V1 expresses Cause as a co-event as shown in (24)–(26). In (24), two verbs (*lọ̀* ‘go,’ *kúrò* ‘leave’) are used to express Path (for the expression ‘away from’).

- (24) *Ìwé nàà fò lọ kúrò lóri tábilì.*
 paper the fly go leave on table
 ‘The paper flew thither away from the table.’
- (25) *Ó ṣubú wọ̀ inú odò.* (= *Ó ṣubú sínú odò.*)
 3sg fall enter inside river
 ‘S/he fell into the river.’
- (26) *Mo gbú bọ̀ọ̀lù nàà wọ̀ inú àpótí.*
 I kick ball the enter inside box
 ‘I kicked the ball into the box.’

In (26), V1 is a transitive verb and V2 is an intransitive verb. The object of V1 (*bọ̀ọ̀lù nàà* ‘the ball’) is a theme in terms of a semantic roll, and it functions as the subject of V2. This kind of combination, that is, V1 (transitive) + Object + V2 (intransitive), is very common in Yoruba serial verb constructions. The two verbs share one object between

them. This combination will be found in the domains of State Change and Realization in the following sections.

In (27)–(29), V1 expresses Concomitance as a co-event.

- (27) a. *Ó* *jó* *kọjá* *ọ̀nà*.
 3sg dance cross street
 ‘S/he crossed the street dancing.’
- b. *Ó* *jó* *wọ̀* *ààrin* *agbo*.
 3sg dance enter center crowd
 ‘S/he entered the center of the crowd dancing.’
- (28) *Wọ̀n* *ń* *mu* *ọ̀sàn* *rìn*.
 they PRG drink orange walk
 ‘They are walking drinking oranges.’
- (29) *Ọ̀mọ* *náà* *ń* *sunkún* *tẹ̀lé* *iyá* *rẹ̀*.
 child the PRG cry follow mother POSP3sg
 ‘The child is following his mother crying.’

V1 as a Concomitance is only allowed in Motion events, i.e., when V2 is a motion verb expressing Path. Examples below are impossible because V2 is not a motion verb. Compare (27) to (30), and (28) to (31).

- (30) **Ó* *jó* *kọrin*.
 3sg dance sing
 (Int. ‘S/he sang while dancing.’)
- (31) **Wọ̀n* *ń* *rìn* *mu* *ọ̀sàn*.
 they PRG walk drink orange
 (Int. ‘They are drinking oranges while walking.’)

The Yoruba motion verbs that allow V1 as a Concomitance are as follows.

<i>lọ</i>	‘go’	<i>jáde</i>	‘go out’
<i>bọ̀</i>	‘come’ (imperfective)	<i>wá</i>	‘come’ (perfective)
<i>kọjá</i>	‘cross, past’	<i>dé</i>	‘arrive’
<i>wọ̀</i>	‘enter’	<i>fò</i>	‘fly’
<i>padà</i>	‘return’	<i>kúrò</i>	‘leave’

rìn ‘walk’*tèlé* ‘follow’

With these motion verbs as V2 expressing Path in Motion events, V1 can appear in a form of a verb expressing Manner, Cause, or Concomitance as a co-event. It is difficult to decide which is a main verb between V1 and V2. Thus, Motion events in Yoruba are expressed by the E-framed pattern, although there is a tendency where the V1 of Manner may be deverbalized semantically. Bamboṣe (1974) explains that the sentence in (32) can be interpreted according to two meanings depending on the deverbalization of meanings of the verb *sáré*.

- (32) *Olú sáré wá ilé.* (Bamboṣe 1974:34)
 Olu run come home
 ‘Olu ran and came home.’ / ‘Olu came home quickly.’

If the verb *sáré* means ‘quickly’ in (32), as we saw in example (9b) (where *sáré* ‘run’ means ‘hastily’), the pattern is V-framed rather than E-framed.

4.2. State Change

Yoruba also shows the E-framed pattern in expressing State Change. Both the framing event and the co-event are expressed by verbs, and they are in the form of main verb predicates on their own.

- (33) *Mo fẹ àbẹ̀là náà pa.*
 I blow candle the extinguish
 ‘I blew the candle out.’

In (33), both verbs (*fẹ* ‘blow’ and *pa* ‘extinguish’) are transitive. This means V1 and V2 share the same object (*àbẹ̀là náà* ‘the candle’). On the other hand, there is a case in which the framing verb V2 is an intransitive verb. See (34) and (35) below. V2 for the framing event in (34) and (35) (*gbẹ* ‘be dry’ and *gbó* ‘become old,’ respectively) are intransitive verbs.

- (34) *Ìyá yan eja náà gbẹ.*
 mother roast fish the be.dry
 ‘Mother roasted and dried the fish.’

- (35) *Mo lò aṣọ yìí gbó.*
 I use cloth this become.old

‘I wore out this cloth.’

The object in each sentence above has a semantic role as a theme, and it is the only argument for the intransitive verb V2. This is the same construction as (26), where V1 is transitive and V2 is intransitive and they share the same argument (i.e., the object of V1). Some verbs can be interpreted either as transitive or intransitive, such as *şı* ‘open’ in (36a).

(36) a. *Mo ti ilèkùn náà şı.*
 I push door the open
 ‘I pushed the door open.’

cf. b. *Mo şı ilèkùn náà.*
 I open door the
 ‘I opened the door.’

c. *İlèkùn náà şı.*
 door the open
 ‘The door opened.’

In the domain of State Change, the event is expressed by the combination of V1 (transitive) and V2 (transitive/intransitive). Either combination can be recognized as the E-framed pattern in this domain.

4.3. Realization

In Realization events, both E-framed and non-V framed patterns are possible. Examples (37) and (38) are E-framed. V2 is the verb of a framing event, and V1 is the Cause as a co-event.

(37) a. *Mo ri í pa sódò.*
 I drown OP3sg kill in.river
 ‘I drowned him in the river.’

b. *Ó yìnbòn pa kìnùún náà.*
 3sg fire.a.gun kill lion the
 ‘S/he shot the lion dead.’

(38) *Ó nu tábìlì náà mó.*
 3sg wipe table the be.clean

‘S/he wiped the table clean.’

In (37), the fulfilment of the subject’s intention for the object’s death is expressed by a direct action verb *pa* ‘kill’ as the framing event. The object is shared by V1 and V2 in (37a). In (38), the framing verb V2 (*mó* ‘be clean’) is an intransitive verb, and the object (*tábìlì náà* ‘the table’) functions as a subject of V2.

Some examples follow the non-V framed pattern, where the framing event is expressed by non-V elements like an ideophone or PP. See (39) and (40), which use ideophones (usually functioning as adjectival or adverbial elements) as framing events (ideophones are also shown in boldface).

- (39) *Ó gún iyẹfun náà féléfélé.*
 3sg pound dough the flat/flimsy
 ‘S/he pounded the dough flat.’

- (40) *Alágbèdẹ náà fi òdòlù lu irin náà pẹlẹbẹ.*
 blacksmith the use hammer hit metal the flat
 ‘The blacksmith hammered [used a hammer and hit] the metal flat.’

In example (41) below, the PP in boldface expresses the framing event.

- (41) *Wọ́n kun àbá náà ní àwọ̀ pupa.*
 they paint barn the in color red
 ‘They painted the barn red.’

In the domain of Realization, the framing event is expressed either by a verb or other elements (ideophones or PPs). The former is the E-framed pattern, and the latter is the non-V framed pattern.

4.4. Temporal Contouring

In the domain of Temporal Contouring, the perfect E-framed pattern is not found, and both V-framed and non-V framed patterns are recognized in this domain.

In the sub-domains of Initiation and Completion, the framing event is expressed by a verb and the co-event is expressed by an infinitive or a verbal noun. (42) shows an example of Initiation, and (43) one of Completion.

- (42) *Mo bèrẹ̀sí í kọ̀ èdè Yorùbá.*
 I begin INF study language Yoruba

‘I began to study Yoruba language.’

- (43) *Mo pari létà kíkọ náà.*
 I finish letter writing the
 ‘I finished writing the letter.’

For the domain of Completion, an equipollent-like pattern can be found as in (44).

- (44) *Mo kọ létà náà tán.* (=14b)
 I write letter the finish
 ‘I finished writing the letter.’

As discussed for (14), the verb *tán* ‘finish’ itself is a real verb that can be a main predicate, but when it appears as V2, it expresses an adverbial meaning, because it has no grammatical relations with the arguments (neither with the subject nor the object); it only modifies V1 adverbially. Therefore, the pattern is non-V framed, where the verb is recognized as deverbalized, becoming a non-V element.

In the domain of Continuation, a grammaticalized element or an adverb is used as the framing event. (45a) below shows the Continuation with the verb *lọ* ‘go’ as the framing event, but this verb no longer functions as a main predicate in meaning; it functions adverbially. (45b) is an example of using an adverb (*títí títí* ‘all along’) as the framing event.

- (45) a. *Wọ̀n ñ sọ̀rọ̀ lọ.*
 they PRG talk go
 ‘They are talking continuously.’
 b. *Wọ̀n ñ sọ̀rọ̀ títí títí.*
 they PRG talk all.along
 ‘They are talking on and on.’

In the domain of Gradualness, the grammaticalized elements *lọ* ‘go’ and *bọ̀* ‘come’ are used as framing elements, as shown in (46).

- (46) a. *Ó ñ tutù lọ.* (=17a)
 3sg PRG be.cold go
 ‘It is getting colder.’
 b. *Ó ñ gbóná bọ̀.* (=17b)
 3sg PRG be.hot come

‘It is getting hotter.’

These constructions can be also recognized as a non-V framed pattern, because V2 is no longer regarded as a verb. In the domain of Repetition, a preverbal adverb, that is, a non-V element, is used, as in (47).

- (47) *Wọ̀n tún sọ̀rọ̀.*
 they again talk
 ‘They talked again.’

In sum, in the domain of Temporal Contouring, Initiation and Completion are expressed by a V-framed pattern, because there are verbs for ‘begin’ and ‘finish,’ but no such verbs are found in other sub-domains like Continuation or Gradualness. Instead, non-V framed patterns are used for these sub-domains.

4.5. Action Correlation

For the domain of Action Correlation, we have Yoruba data in the sub-domains of Surpassment and Concert. In Surpassment, the framing event is expressed by the splitting verb and the co-event is expressed by a PP. The boldface elements in (48) are parts of a splitting verb meaning ‘surpass,’ whose object is between the two parts. This construction can be said to be a V-framed pattern.

- (48) *Mo ta á yọ ní tíṭẹ orin náà.*
 I surpass OP3sg surpass in playing song the
 ‘I surpassed him in playing the melody.’

In the domain of Concert, a PP is used to express the framing event, as in (49).

- (49) *Mo tẹ orin náà pẹ̀lú rẹ̀.*
 I play song the with POSP3sg
 ‘I played the melody along with him.’

It is also possible to use the preverbal modifying verb *jùmọ̀* ‘be together.’ This can be a non-V framed pattern, for *jùmọ̀* no longer has a main verb status and can be regarded as a non-V element, as demonstrated in (50).

- (50) *Wọ̀n jùmọ̀ sị̀şẹ̀.* (=10a)
 they be.together work

‘They worked together.’

Another preverbal modifying verb *bá* ‘join,’ which takes an object, is also possible to denote Concert, as in (51).

- (51) *Mo* *ń* *bá* *Aíná* *jó.* (=11a)
 I PRG join Aina dance
 ‘I am dancing with Aina.’

In the domain of Action Correlation, the framing event is expressed by a verb or other elements like a PP or preverbal modifying verb. The former is the V-framed pattern, and the latter is the non-V framed pattern.

5. Discussion

As we saw in Section 3, Yoruba shows the E-framed pattern in the domains of Motion, State Change, and Realization, but not in the domains of Temporal Contouring or Action Correlation. In these two domains, either V-framed or non-V framed patterns are used. In the V-framed patterns, where framing events are expressed by verbs, co-events are expressed by other elements like infinitives, verbal nouns, or PPs. This may be typical in the V-framed pattern. In the non-V framed pattern, where co-events are expressed by verbs, framing events are expressed by PPs or deverbalized elements, which are sometimes called “modifying verbs,” like *tán* ‘finish’ or *jùmò* ‘be together.’ These elements differ from each other regarding of the degree of deverbalization. For example, *tán* ‘finish’ may be more verb-like than *jùmò* ‘together,’ for *tán* can stand alone as a main predicate when it occurs without other verbs, but *jùmò* never stands alone as a main verb. Although there are different degrees of deverbalization, these non-V framed patterns can be regarded as deviations from the E-framed pattern. A summary of the patterns is shown in Table 1.

Table 1: Event integration patterns in Yoruba

	Framing event	Co-event	Pattern
Motion	V	V	E-framed
	PP	V	non-V framed
State Change	V	V	E-framed
Realization	V	V	E-framed
	ideophone / PP	V	non-V framed
Temporal Contouring	V	INF/VN	V-framed
	deverbalizedV / PP	V	non-V framed
Action Correlation	V	PP	V-framed
	deverbalizedV / PP	V	non-V framed

As mentioned above, the E-framed pattern is one of the symmetrical strategies that includes constructions of coordination, compounds, and verb serialization. Among these three constructions, the compound is the most highly integrated, the coordination is the least integrated, and the verb serialization stands between them, as we saw in Section 2.

When serial verbs take an object, two verbs are tightly connected in a meaning just like a compound verb, as shown in example (52) below.

- (52) *Bólá jẹ pofupóòfù méta kù.*
 Bola eat sweets three remain
 ‘Bola ate sweets and left three pieces.’

In the sentence in (52), the object *pofupóòfù méta* ‘three pieces of sweets’ is an object of the two connected verbs *jẹ* ‘eat’ and *kù* ‘remain.’ It cannot be an object of only *V1* semantically because it is not three pieces that Bola ate; rather, Bola just left three pieces after eating and one cannot tell how many pieces Bola ate. Thus, the two verbs are tightly connected in meaning, and this is the same case in the Japanese compound verb *tabe-nokosu* (eat-leave) ‘leave something half eaten.’

In a Japanese compound verb that takes an object, both verbs should be transitive, but this is not always the case in Yoruba, as we saw in the above sections. The combinations are either two transitive verbs or a transitive verb and an intransitive verb. This is the point of difference between Yoruba serial verbs and Japanese compound verbs that take an object. Other examples are shown in (53).

(53) Japanese compound verbs	Yoruba serial verbs	
Vt + Vt	Vt + Vi	
<i>keri-ireru</i> (kick-put.in)	<i>gbá wọ̀</i> (kick - enter)	‘kick in’
<i>tsukai-furusu</i> (use-make.old)	<i>lo gbó</i> (use - be.old)	‘wear out’
<i>fuki-kiyomeru</i> (wipe-make.clean)	<i>nu mó</i> (wipe - be.clean)	‘wipe clean’
<i>aburi-kawakasu</i> (roast-dry)	<i>yan gbẹ̀</i> (roast - be.dry)	‘dry by fire’
<i>oshi-taosu</i> (push-make.fall)	<i>ti şubú</i> (push - fall)	‘push down’
<i>yobi-atsumeru</i> (call - collect)	<i>pè jọ̀</i> (call - gather)	‘call together’

Syntactically, Yoruba serial verbs are not so tightly connected as Japanese compound verbs, but they are tightly connected semantically. The further step in the grammaticalization path towards univertation of the constructions may be the same. For example, as we saw in Section 2, the Japanese compound verb *nagare-komu* (flow-move.into) ‘flow into’ shows the process of grammaticalization, where *-komu* never occurs alone and it is in the process of deverbalization becoming a non-V element. In the same way, Yoruba serial verb constructions show the process of grammaticalization of verbs of the constructions, and they become deverbalized elements.

In general, the V1 of serial verbs tends to denote manner, cause, instrument, or concomitant action, and V2 tends to denote direction, beneficiary, aspectual concept, or resultant state. A certain small set of verbs in the serial verb constructions, that are the least semantically rich, are used over and over again, and they tend to be grammaticalized (Baker 1991: 94). So the framing events of Temporal Contouring (e.g., *tán* ‘finish’) and Action Correlation (e.g., *jùmọ̀* ‘be together’) have been expressed by the deverbalized V of a serial verb construction, because these elements are more easily grammaticalized.

Similarly, V2 denoting a resultant state may be easy to be grammaticalized, but this kind of situation has not been observed in the domains of State Change and Realization in Yoruba. The V2 of the serial verb construction used for State Change is a verb that has main verb status. The V2 of the framing event of Realization is also expressed by a verb that has not been deverbalized, but ideophones or PPs are also used instead of verbs. This shows the possibility of the grammaticalization of V2 in this domain. In the domain of Motion, both V1 denoting manner and V2 of a path verb may be grammaticalized, and the examples of *sáré* ‘run’ (changing the meaning to ‘hastily’) and PP *sínú* ‘into inside’ show the possibility of grammaticalization in this domain.

6. Conclusion

In this paper, I examined how Yoruba expresses the components of complex events in the five domains. Yoruba shows intralanguage variation in the encoding of the framing

event, that is, E-framed, V-framed, and non-V framed patterns. It is efficient and plausible to refer to the E-framed pattern when examining a language like Yoruba, which has a serial verb construction. It is not suitable to apply the S-framed pattern because it does not use a ‘satellite’ for the framing event in the strict meaning. Therefore, I suggested using the terms ‘E-framed’ and ‘non-V framed’ to investigate event integration patterns in a language like Yoruba.

It is not possible to classify the Yoruba language as a whole into a single pattern, and the classification should be applied to individual event integration types as Croft et al. suggested. The E-framed pattern is observed in the domains of Motion, State Change, and Realization. In the other two domains, Temporal Contouring and Action Correlation, the E-framed pattern is not observed. However there are cases in which the framing events are expressed by deverbalized verb elements and the co-events are expressed by verbs. These cases could have been originally E-framed but have become non-V framed through the grammaticalization process. A language with a serial verb construction like Yoruba can be said to exhibit basically the E-framed pattern encoding complex events in these five domains. However, if one of the verbs of a serial verb construction undergoes a process of grammaticalization becoming a deverbalized element, the framing event is expressed by the non-V element and it would be recognized as a non-V framed pattern. Moreover Yoruba shows the V-framed pattern in the domains of Temporal Contouring and Action Correlation as a basic construction.

Abbreviations

INF	infinitive marker	PRF	perfective
NEG	negation	POSP	possessive pronoun
OP	object pronoun	PRG	progressive

References

- Aikhenvald, Alexandra Y. 2006. “Serial verb constructions in typological perspective”. In Aikhenvald, A. Y. and R. M. W. Dixon (eds.) *Serial Verb Constructions – A Cross-Linguistic Typology*. Oxford University Press. pp.1–68.
- Awobuluyi, O. 1979. *Essentials of Yoruba Grammar*. Ibadan: University Press Ltd.
- Baker, Mark. 1991. “On the relation of serialization to verb extensions”. In Lefebvre, C. (ed.) *Serial Verbs: Grammatical, Comparative and Cognitive Approaches*. Amsterdam: John Benjamins. pp.79–102.
- Bamgboṣe, A. 1974. “On serial verbs and verbal status”. *Journal of West African Languages* 9:1. pp.17–48.
- . 1985. “Negation and serial verbal construction types in Yoruba”. In Dimmendale, G.(ed.) *Current Approaches to African Linguistics* vol.3. Foris Publications. pp.31–40.
- Croft, William, Jóhanna Barðdal, Willem B. Hollmann, Violeta Sotirova and Chiaki Taoka. 2010. “Revising Talmy’s typological classification of complex event constructions”. In Boas, Hans C.(ed.) *Contrastive Studies in*

- Construction Grammar*. Amsterdam: John Benjamins. pp.201–235.
- Ekundayo, S. A. and F. N. Akinnaso. 1983. “Yoruba serial verb strings commutability constraints”. *Lingua* 60. pp.115–133.
- Kawachi, Kazuhiro. 2012. “Event integration patterns in Sidaama (Sidamo)”. *Proceedings of the 34th Annual Meeting of the Berkeley Linguistics Society*. pp.175–186.
- Larson, Richard K. 1991. “Some issues in verb serialization”. In Lefebvre, C. (ed.) *Serial Verbs: Grammatical, Comparative and Cognitive Approaches*. Amsterdam: John Benjamins. pp.185–210.
- Lawal, N. 1993. “Serial verbs in Yoruba as adjunct phrases”. *Lingua* 91. pp.185–200.
- Oyelaran, Olasope O. 1982. “On the scope of the serial verb construction in Yoruba”. *Studies in African Linguistics*. 13:2. pp.109–146.
- Slobin, Dan I. 2004. “The many ways to search for a frog: Linguistic typology and the expression of motion events”. In Strömquist, Sven, and Ludo Verhoeven (eds.) *Relating Events in Narrative, Volume 2: Typological and Contextual Perspectives*. Mahwah, NJ, Lawrence Erlbaum. pp.219–257.
- Talmy, Leonard. 1991. “Path to realization: A typology of event conflation”. In *Proceedings of the 17th Annual Meeting of the Berkeley Linguistics Society*. pp.480–519.
- . 2000. *Toward a Cognitive Semantics, Volume II: Typology and Process in Concept Structuring*. Cambridge, MA: MIT Press.
- . 2009. “Main verb properties and equipollent framing”. In Guo, Jiansheng et al. (eds.) *Crosslinguistic Approaches to the Psychology of Language*. New York, London: Psychology Press. pp.389–402.