

Syllabic and Tonal Patterns of Esan Serial Verb Constructions

Yuka, Constantine Lenzen

lcyuka@uniben.edu; 08023089747

and

Ikoyo-Eweto, Evarista Ofure

Department of Linguistics Studies, University of Benin, Benin City.

ofure.ikoyo-eweto@uniben.edu; 08027060005

Abstract

Contemporary treatments of the serial verb construction provide a broader base for identifying them. In light of these current approaches, this study identifies syllabic and tonal characteristics of symmetrical and asymmetrical types of serial verb constructions in the Esan language. These characteristics are identified on the basis of existing relevant empirical studies of the language. Data for the study were obtained from both primary and secondary sources. Serial verb constructions were extracted from manual recordings of utterances of Esan native speakers domiciled in some speech areas of the language. Data from previous works on Esan serial verb constructions were also examined. Identification of syllabic patterning followed simple existing linguistic practice while that of tonal patterning was conducted in line with familiar autosegmental tenets. Findings show that these constructs may also be tri-syllabic in Esan and not only bi-syllabic, as claimed in earlier studies. Tonal patterns on some verbs in citation are altered when they co-occur as serial verbs. These changes affect both bi-syllabic and tri-syllabic serial verb constructions in declaratives, imperatives, and the habitual temporal aspect. The study improves on earlier efforts on the study of Esan serial verb constructions and complements identified basis for recognizing this structural type in the language. The study would enhance the documentation of Esan.

Keywords: Esan, Serial verb construction, syllable pattern, tonal pattern

Introduction

The study of Esan serial verb constructions is not exhaustive. Earlier attempts at examining these constructs in Esan include Ejele (1994) and Osiruemu (2005). Whereas, previous studies focused more on their general syntactic and semantic outlay, the present study identifies changes in prosodic features, which may emerge due to the formation of these structures in the language. The current approach would thereby close existing gaps in the study of Esan SVCs. Esan is a member of the North Central branch of Edoid along with Edo(Bini), and Ora-Emai-Iuleha. The Edoid group is of the New Benue Congo of the Niger Congo Phylum. The present study is conducted in light of recent typological treatments of this phenomena.

The grammatical construct called ‘Serial Verb Construction’ (SVC) has attracted the attention of Linguists for some time now. This interest in SVCs may not be unconnected with what Dixon (2006) refers to as its “...robust grammatical construction type” and the fact that it “...carries a considerable functional and semantic load.” Aikhaenvald (2006) defines an SVC as “...a sequence of verbs which act together as a single predicate, without any overt marker of coordination, subordination or syntactic dependency of any other sort...” According to Yuka (2014), studies of the languages of West Africa, especially those of the Kwa family

(Bamgbose 1974, Williamson 1965 and 1989, Ndimele 1996, Kari 1975b and 2000, Yuka 2008 among others) have identified the prominent peculiarity of conflated sentences as a trait of languages that exhibit verb serialization. A serial verb construction has generally been understood to be "...a type of construction in which two or more verbs are strung together without an overt connecting morpheme." (Ndimele 1996:127). The verbs are not linked by a conjunction thereby "...sharing a common surface subject, one or more common aspectual/tense/polarity markers (Williamson, 1989:30). Bodomo (2004; 2006) analyses SVCs as complex predicates which undergo syntactic operations as a single unit, while Kambon et al (2015) suggests that they contain nonverbal elements which may not be overlooked in the consideration of their structure. Recent studies of SVCs attest that they occur in about one-third of the languages of the world. Aikhenvald's definition of an SVC presents the construct as a single event. He states further that an SVC is mono clausal, possessing identical intonational properties as those of a mono-verbal clause, with the constituent verbs having just one tense, aspect and polarity value and sharing case and other arguments. In his words, "...each component of an SVC must be able to occur on its own and may or may not share transitivity values."

Current treatments separate SVCs into two basic typologies of asymmetrical and symmetrical. Dixon (2006) describes the asymmetrical variety as composed of a major member, which is the head of the SVC, is determined by the meaning of the minor member, which member may increase the valency of the major verb in a causative construction or reduce it in a passive type construction. He describes the symmetrical variety as composed of verbs with equal status from an unrestricted class, neither of which may be regarded as the head of the SVC. Studies show that nearly all languages with SVCs feature both varieties, with the asymmetrical generally outnumbering the symmetrical. Dixon highlights the grammatical properties and parameters for identifying an SVC as follows.

- There is no mark of linkage or subordination between the verbs that comprise an SVC.
- Each verb in an SVC has the potential of the sole verb in a clause but their meanings must be relatable when used in an SVC.
- The SVC functions like a single predicate as it features one intonation group and in most cases, no pause is possible in the middle. This feature also affects tense, aspect, evidentiality, modality, mood, negation and markers of subordination and questioning.
- An SVC generally has its transitivity value.
- All the verbs in an SVC almost always share at least one argument. In some languages, if the component verbs are all transitive, they share the same objects.
- The 'switch function' phenomenon also occurs in some SVCs. This is a situation where an argument is in subject function for one verb and in non-subject function for the other.
- Typically, the Object argument of the first verb is Subject argument for the second verb.
- The verbs in an SVC may make up one word making them lexicalized, or they may remain separate words.
- The components of an SVC may be contiguous or non-contiguous. In the contiguous type, no morpheme may occur between the constituent verbs whereas in the non-contiguous type, an object NP may intrude between the verbs which constitute the SVC. This arrangement constitutes the *constituent order* of the SVC.

Data for this study were obtained from both primary and secondary sources. Primary data comprised a collection of Esan SVCs from field work specifically conducted for the purpose

of this work. Serial verb constructions were extracted from manual recordings of utterances of Esan native speakers domiciled in some speech areas of the language. Data from previous works on Esan serial verb constructions comprised our secondary source. Available data, are presented in orthographic format in the first instance and translated in English thereafter, at two levels. The first level of translation of Esan SVCs is the lexical while the second is the literary. Data presentation is in both phonemic and phonetic format in IPA tradition.

Tonal patterning on Esan SVCs are identified and presented within the purview of autosegmental phonology, a framework primarily fashioned to account for the behaviour of prosodic phenomena such as tone, in a way preceding theories could not (Goldsmith, 1976). The realization that the features of a segment do not always function as a unit, is one which autosegmental phonology adequately demonstrates. The consistent retention of prosodic features, which occurs in some languages, after the deletion of the segment of which they were supposed to be a part, is well known. For example, in Esan, elision may affect a nasalized vowel without affecting its nasal feature. Similarly, in disyllabification induced by glide formation, the di-syllabified tone units of the affected segment may be retained and subsequently hook unto the next tone bearing unit. These occurrences, termed ‘the stability of phonological features’, attest that the latter are independent of the segments which supposedly bore them and are capable of spreading or being assimilated by other phonological features (Ikoyo-Eweto, 2016).

Previous Relevant Studies on Esan

In a prior attempt at examining Esan SVCs, Ejele (1994) describes them as a string consisting of verbs that occur next to each other without an overt connector and with a common subject. The work also states that the meaning of an Esan SVC is not usually a direct function of the meanings of its constituent verbs. Osiruemu (2005) describes an Esan SVC as mainly constituted of two monosyllabic verb stems which result in a bisyllabic structure, featuring a V₁V₂ constituent structure. Thus, whereas these previous attempts focus on its general syntactic and semantic features, the present study focuses more on prosodic features of these constructs in the Esan language, thereby closing existing gaps in the study of this structural type in the language. Specifically, it identifies changes in syllable structure and tonal patterning which may occur when constituents of this structural type co-occur as SVCs. As a part of the basis for the present study, a fore knowledge of the relevant basic features of Esan segments and prosody are presented as follows.

Segments

Previous works provide that Esan sound system comprises twenty-eight consonant and twelve vowel sounds (Ejele 1982, Ikoyo-Eweto, 2010). The vowel segments which are all phonemic include /i, e, ε, u, o, ɔ, a, ã, ã̃, ã̄, ã̅, ã̆/ while the consonant sounds are identified as [p, b, t, d, f, v, s, z, k, g, kp, gb, h, β, x, γ, ʃ, ʒ, ʧ, dʒ, m, m̃, n, ɲ, l, w, j, r].

Syllable structure

Following Ikoyo-Eweto (2005), three syllable structural types occur mostly in the Esan language- the N (nucleus only, V) syllable type comprising only the vowel component, the ON (onset and nucleus, CV) syllable type comprising one consonant and the vowel component and the complex syllable type comprising two consonant slots and the vowel component (CCV). The CCV structural type is rare and usually occurs as a result of the gliding process which the language features. Esan words in the following illustrations are separated into syllables (.)

1	Esan word	syllable type
a.	/ ð̃ / 'drink'	V
b.	/ ú kp. ð̃ / 'cloth'	V . CV
c.	/ á. ð̃i. li / 'oil'	V . CV. CV
d.	/ o.kpia / 'male' → [o.kpja]	V.CCV
e.	/ o.xuo / 'female' → [o.xwo]	V. CCV

An Esan word may be monosyllabic, comprising only one syllable, or multisyllabic, comprising as many as six or more syllables, and occur within the range of the four types identified for the language.

Esan Tonal system

A tone language is "... a language having lexically significant, contrastive but relative pitch on each syllable." (Pike, 1948). This definition refers to the occurrence in most African languages where the different pitch levels contrast, causing a change in meaning of words. This occurrence refers to the fact that a change in pitch height of a word results in a simultaneous change in meaning without a resulting change in its segmental constitution. Egbokhare (2004) defines pitch as the perception of rate of vibration of the vocal chords per second. He explains that "... a high frequency of vocal chords vibration is perceived as high pitch" while "... a low frequency of vibration is perceived as low pitch." Research shows that pitch is present in voiced segments only and is continually changing in speech depending on the changes in voice production. The melodic pattern of speech is therefore a result of fluctuation in pitch. When a change in pitch height results in a change in meaning of an utterance, it is called "tone".

Following Ejele (2003) and Ikoyo-Eweto, (2005) Esan features pitch contrasts on lexical items. This occurrence is illustrated in 2.

2	Tonal contrasts in Esan
a.	/ éf̃ / 'rat' HL
b.	/ èf̃ / 'edge' LL
c.	/ ð̃kpá / 'one' LH
d.	/ ð̃kpà / 'cock' LL

Two level tones, (high, low), and the falling contour tone are identified for Esan at the systematic phonetic level of representation. These patterns are illustrated as follows.

d. / àmɛ̃ /	'water'	LL
e. / únǔ /	'mouth'	HL
f. / àbâ /	'father'	LHL
g. / óxwô /	'woman'	HHL

Following Ikoyo-Eweto (2016), Nouns in Esan are mostly bisyllabic and trisyllabic. Bisyllabic nouns exhibit four tonal combinations: LL, HL, LHL and HHL. Adjunctives, described as lexical units used to extend the meanings of other lexical items, bear an all L tone pattern in citation. Numerals in Esan are either bisyllabic or polysyllabic. The cardinal numerals bear HL and LH(L) while the ordinal numerals (excluding the first) bear an all L tone pattern in citation. Deictics are lexical items which specify individual persons, things or ideas. Personal pronouns and the first dimension of demonstratives and place adverbs bear an all L tone pattern. The second dimension of place adverbs and demonstratives bear a LH, while the third bears a HLHL tonal pattern in citation.

Ikoyo-Eweto (2016) draws attention to the grammatical role of tone in Esan and emphasizes the interaction of tone and time relations in the language. This grammatical role of the phenomenon of tone in Esan, where it acquires the status of a morpheme as has been identified in related languages, would be taken into consideration in the relevant sections of this paper.

Esan Serial Verb Constructions (SVCS)

Data in 3 and 4 show compilations of some Esan SVCs in Esan orthography and IPA format. The writing system captures nasality as the 'n' alphabet in word final position and at the completion of all phonological processes involving nasality in the word. Data in 3 comprise the asymmetrical while 4 list symmetrical SVCs.

Asymmetrical Esan SVCs					
3. s/n	constituent verbs in citation	svc in citation	phonetic form	Esan sentence	constituent order
a.	dè # mùn fall catch	dè mùn 'encounter unexpectedly'	[de mũ]	ò dé mú ọlèn 'he fall catch him'	contiguous 'he came across him unexpectedly.'
b.	sàn # rà jump over	sàn rá 'overcome (challenge)'	[sã ra]	ò sán rá òlòghò 'he jumped cross flood'	contiguous 'he crossed over the flood'
c.	nè#wìlì run lost	nè wílí 'abscond'	[ne wili]	ò nẹ wìlì 'he run loss'	contiguous 'he absconded'
d.	rẹ#kpà use assist	rẹ kpá 'assist'	[rɛ kpa]	ò ré kpá ìmèn 'he use support me'	contiguous 'he assisted me'
f.	rẹ#hùmwùn use pardon	rẹ hùmwùn pardon	[rɛ humũ]	ò ré hùmwùn ọlè 'he use pardon him'	contiguous 'he pardoned him'
g.	nè #tàn take spread	nè tán 'spread'(clothes on line)	[ne tã]	ò né íkpòn tán 'he take clothes spread'	non contiguous 'he spread clothes (on the line)'

h.	rìè#sò take shout	rìè só scream	[rje so]	ò ríé só 'he take shout'	contiguous 'He screamed'
i.	sò#tíè	sò tíé 'call loudly'	[so tje]	ò só tíé ìmèn 'he shout call me'	contiguous 'he called me loudly'
j.	mù#ré carry come	mùn ré bring	[mũ re]	mùn ómòn rè 'carry child come'	non contiguous 'bring the child'
k.	dè#gwòghò fall break	dè gwòghò 'to have a bad fall'	[degwɔɔ]	ò dé gwòghò à 'he fall break pst'	contiguous 'he had a bad fall'

Symmetrical Esan SVCs

4. s/n	constituent verbs in citation	svc in citation	phonetic form	Esan sentence	constituent order
a.	dè # m̀ndià fall stand up	dè m̀ndiá 'survive dangerous experience'	[de m̀ndja]	ìmèn dé m̀ndià 'I fall stand' 'I survived the fall'	Contiguous
b.	gbè#lè kill eat	gbè lé 'get a bonus'	[gbe le]	ò gbé émwìn lè he kill something eat	non-contiguous 'he got a bonus'
c.	rìè # yèn take suckle	rìè yèn 'suckle breast' 'to be pampered'	[rje n̄]	ómòn rjé éyèn yèn 'child take breast suck' 'the child suckled breast'	non-contiguous
d.	rìè # lè take #eat	rìè lé 'eat up'	[rje le]	ò rjé ótìen lè he take cherry eat	non-contiguous 'he has eaten up the cherry'
e.	rìè # dà take #drink	rìè dá 'drink up'	[rje da]	ò rjé áyòn dá he take wine drink	non contiguous 'he drank up the wine'
f.	rìè # yò take #wear	rìè yò 'to dress up'	[rje ɔ]	ófùré ríé èwù yò ófùré take dress wear	non contiguous 'ófùré has dressed up'
g.	nèn # lè defecate #eat	nèn lé 'fall into disrepute/disgrace'	[n̄ le]	ò nèn ìsòn lé he defecate feces eat	non contiguous 'he ate his feces'
h.	dìgùè' # t̀tè bend# knee greet	dìgùè' t̀tè' 'greet on bended knee'	[digwɛ twɛ]	ò dígùè t̀tè ìmèn 'he kneel greet me'	contiguous 'he greeted me on bended knee'
i.	rìè # gbèrà take #bypass	rì èlò gbèrá 'ignore/overlook'	[rje gbera]	ò rjé èlò gbèrá ọlè 'he take eye pass over him'	contiguous 'he ignored her'
j.	rìè # gbèrà take # walkpast	rìè gbèrá 'pass by briskly' 'surpass'	[rje gbera]	ìjònì ríé gbèrá 'John take pass' 'John passed by briskly'	contiguous

Some features of Esan SVCs

Available data show that constituents of Esan SVCs undergo some structural changes when they co-occur as serial verb constructs. These changes affect syllable structure and tonal

patterning of Esan SVCs. Specifically, input syllable structures and tonal patterning on verbal constituents are sometimes altered when verbal elements co-occur in SVCs. These occurrences are presented and discussed as follows.

Syllable structure of Esan SVCs

In addition to submissions from previous treatments of the Esan SVC, that it is mostly constituted of two monosyllabic verb stems which result in a bisyllabic structure, (Ikoyo-Eweto, 2005), findings from the present study show that an Esan SVC may also be constituted of a mono-syllabic and a bi-syllabic verb stem, to produce a tri-syllabic structure. These occurrences are illustrated from available data as follows.

Esan SVCs composed of two monosyllabic verbs

5. s/n input verbs in citation	svc in citation	phonetic form	Esan sesntence	syllable structure
a. gbè#lè kill#eat	gbè lé 'get a bonus'	[gbe le]	ò gbé émwìn lè he kill something eat 'he got a bonus'	CV.CV
b. riè # yèn take # suckle	riè yèn 'suckle breast'	[rje nẽ]	ómọ̀n ríé éyèn yèn child take breast suck 'the child suckled breast'	CCV.CV
c. nèn # lè defecate #eat	nèn lé 'fall into disrepute/ disgrace'	[nẽ le]	ò nèn ìsọ̀n lé he defecate feces eat 'he ate his feces'	CV.CV

The illustrations in 5 show Esan SVCs, each composed of two monosyllabic verbal items as reported in earlier studies on the composition of Esan SVCs. This composition results in bi-syllabic structures as demonstrated in their phonetic transcription. These SVCs bear a CV.C(C)V bi-syllabic structure. However, the present study further shows that SVCs in Esan may also be composed of a monosyllabic and a bi-syllabic verb to yield tri-syllabic structures. Illustrations of this SVC type are presented in 6.

Esan SVCs composed of a monosyllabic and a bi-syllabic verb

6. s/n input verbs in citation	svc in citation	phonetic form	Esan sesntence	syllable structure
a. 'nè#wìlì' run# lost	nè wílí abscond	[nɛ#wili]	ò nèn wìlì à he run loss pst. 'he got missing in flight'	CV.CV.CV
b. dè#gwòghò fall # break	dè gwòghò 'to have a bad fall'	[degwɔɔ]	ò dé gwòghò à he fall break pst 'he had a bad fall'	CV.CCV.CV
c. dè # mùndíá fall#stand up	dè mùndíá 'survive dangerous experience'	[de mùdja]	ìmèn dé mùndià I fall stand 'I survived the fall'	CV.CV.CV
d. dì#ígùè#tùè bend# knee# greet	dìgùè túè 'greet on bended knee'	[digwe twe]	ò dígùè tùè ìmèn 'he kneel greet me' 'he greeted me on bended'	CV.CCV.CCV

The illustrations in 13 show that Esan SVCs also occur as tri-syllabic structures, which feature CV.CCV.CV syllable structures. This observation is an improvement on previous studies on Esan SVCs which describe them as mainly bi-syllabic.

Tonal patterning on Esan SVCs

Of the grammatical moods and time frames which the Esan language describes, two moods and one aspectual frame capture some tonal modifications displayed by Esan SVCs. These include the declarative and imperative moods and the habitual aspect. Available data show that when bi-syllabic and tri-syllabic SVCs, whose verbal constituents bear an all L tonal pattern in citation respectively, occur in the aforementioned sentence types in Esan, these tone patterns are modified. These tonal modifications are usually different from tone patterns featured by the individual constituents of the SVCs when used singly in separate sentences. Illustrations of these occurrences are presented from available data as follows.

Tonal changes on bi-syllabic Esan SVCs

An Esan SVC constituted of two monosyllabic verbs is bisyllabic and features a LL tonal pattern underlyingly. It undergoes tonal modifications in sentence modes as follows.

Declaratives

In sentences which express simple statements, Esan bisyllabic SVCs of both the contiguous and non- contiguous variety, change tonal pattern from an underlying LL to a HL at the surface level as illustrated in 7.

Tone pattern on bi-syllabic Esan SVCs in statements

7.	verbs in citation	contiguous SVC	non -contiguous SVC	phonetic form	underlying tone	surface tone
a.	nèn # lè defeacate eat	ò nèn lè 'he defeacate eat'	ò nèn ìsòn lè 'he defeacate feces eat'	[nẽ le]	LL	HL
b.	rìè# sò take shout	ò ríé sò 'he take screamed'	nil	[rje so]	LL	HL
c.	ḡbè# lè kill eat	ò ḡbé lè 'he kill eat'	ò ḡbé émwìn lè 'he kill something eat'	[gbe le]	LL	HL
d.	rìè#yèn take suckle	ó mò ríé yèn 'child take suckle'	ó mò ríé éyèn yèn 'child take breast suckle'	[rje pẽ]	LL	HL
e.	dè# mùn fall catch	ò dé mùn òlèn 'he fall catch him'	nil	[de mũ]	LL	HL

The change in tonal patterning of SVCs in Esan highlighted in 14 is further buttressed by data in 15 showing that the individual verbal constituents behave differently when used in

isolation, in similar sentence type. In this case, these verbs which also feature a L tone underlyingly, exhibit a falling contour or an all H pattern at surface level. This occurrence further emphasizes the tonal change that occurs when these verbs constitute SVCs. These occurrences are illustrated as follows.

Tone pattern on constituents of bi-syllabic SVCs used singly in declaratives

8. verbs in citation	Esan sentence	phonetic form	underlying tone	surface tone
a. nèn defecate	ìmè nèn I defecate pst	[nɛ̃ le] 'I defecated'	L	H̄L
b. lè eat	ómò lè child eat pst	[le] 'the child ate'	L	H̄L
c. rìè take	ò ríé èrèbhé he took all	[rje] 'he took everything'	L	H
d. sò shout	ò lè wó só he do shout	[so] 'he is shouting'	L	H
e. ḡbè kill	à hí gbé íbhálu we neg kill innocent	[gbe] 'the innocent is not punished'	L	H
f. yèn suckle	ò yén fò he suckle finish	[nɛ̃] 'he has finished suckling'	L	H
g. dè fall	hè yè dé do neg again fall	[de] 'don't fall anymore'	L	H
h. mún catch	ò mún ónì óyì he catch the thief	[mũ] 'he has caught the thief'	L	H

Imperative

In sentences which express command, the second verbal constituent in a contiguous bi-syllabic SVC bears a H tone, resulting in a LH tonal pattern, whereas in the non-contiguous type, the underlying LL pattern of the constituent verbs is maintained except where the first or second verbal constituent is contiguous with a H tone bearing unit. In this case, it's L tone is raised to a H, resulting in a HL or LH tone pattern. This tone raising is traceable to the effect of the H of the following tone bearing unit of the object as provided by autosegmental phonology tenets. These occurrences are illustrated in 9.

Tone pattern on bi-syllabic Esan SVCs in imperative sentences

9. verbs in citation	contiguous SVC	non contiguous SVC	phonetic form
a. nèn#lè (LL) defecate#eat	(úwɛ́) nèn lé! (LH) (you sing.) defecate eat 'be disgraced!'	(úwɛ́) nèn ìsò n lè! (LL) (you sing.) defecate feces eat 'eat your feces!'	[nɛ̃ le]
b. rìè#sò (LL) take#shout	(íbhá) rìè só! (LH) (you plu.) take shout . 'scream!'	nil	[rje so]

- c. $\widehat{gb\acute{e}}\#l\grave{e}$ (LL) (úwε´) gbè lé! (LH) (úwε´) gbé émwín lè! (HL) [gbe le]
kill# eat (you sing.) kill eat ! (you sing.) kill something eat
'get a bonus!' 'get a bonus!'
- d. $r\grave{i}\#y\grave{e}n$ (LL) (úwε´) rìè yèn! (LH) (úwε´) ríé éyèn yẹ'n! (HL) [rje nɛ̃]
take# suckle (you sing.) take suckle (you sing.) take breast suckle
'get pampered!' 'suckle breast!'
- e. $d\grave{e}\#m\grave{u}n$ (LL) (íbhá) dè mún! (LH) (íbhá) dè mú ólèn! (LH) [de mū]
fall #catch (you plu.) 'fall catch' (you plu.) 'fall catch him.'
encounter unexpectedly! 'take him by surprise!'

Tone patterns on constituents of bi-syllabic SVCs in imperatives

10. verbs in citation	Esan sentence	phonetic form	underlying tone	surface tone
a. nèn defecate	(úwε´) nèn! (you sing.) defecate Defecate!	[nɛ̃]	L	L
b. lè eat	(íbhá) lè ! (you plu.) eat! Eat!	[le]	L	L
c. rìè take	(úwε´) rìè! (you sing.) take! Take!	[rje]	L	L
d. sò shout	(íbhá) sò ! (you plu.) shout! Shout!	[so]	L	L
e. $\widehat{gb\acute{e}}$ kill	(úwε´) $\widehat{gb\acute{e}}$! (you sing.) kill! Kill!	[gbe]	L	L
f. yèn suckle	(íbhá) yèn! (you plu.) suckle! Suckle!	[nɛ̃]	L	L
g. dè fall	(úwε´) dè ! (you sing.) fall! Fall!	[de]	L	L
h. mún catch	(íbhá) mún ! (you plu.) catch! catch!	[mū]	L	L

Habitual structures

Mathews (2007) defines aspect as verbal categories that distinguish the status of events in relation to periods of time as opposed to their simple location in the present, past or future. Of the temporal aspects which the Esan language features, the habitual aspect is significant for tonal changes in Esan SVCs. Specifically, in the habitual structure which is marked by the Aspectual Auxiliary marker (AAM) /mí/ in this language, bi-syllabic SVCs feature an all H tone pattern. This occurrence is observed with both contiguous and non- contiguous SVC types as illustrated in 11.

Tone pattern on bi-syllabic Esan SVCs in the habitual aspect

11. Verbs in citation	contiguous SVC	non contiguous SVC	phonetic form	underlying tone	Surface tone
a. nẹ̀n#lẹ̀ defecate #eat	mí ọ̀mọ̀ nẹ̀n lé aam child defecate eat	mí ọ̀mọ̀ nẹ̀n ísọ̀n lé aam child defecate eat	[nẽ le]	LL	H
	‘the child gets disgraced’ ‘the child eats his feaces’				
b. rìè#sò take#shout	mí ọ̀mọ̀ rjé só aam child take shout	nil	[rje so]	LL	H H
	‘the child screams’				
c. ǵbè#lẹ̀ kill#eat	mí ọ̀mọ̀ gbé lé aam child kill eat	mí ọ̀mọ̀ gbé émwín lé aam child kill something eat	[gbe le]	LL	H H
	‘the child gets a bonus’ ‘the child gets a bonus’				
d. rìè#yèn take #suckle	mí ọ̀mọ̀ ríé yèn aam child take suckle	mí ọ̀mọ̀ rjé éyèn yèn aam child take breast suckle	[rje jẽ]	LL	H H
	‘the child gets pampered!’ ‘the child suckles breast’				
e. dè#mùn fall# catch	mí ọ̀ dé mún ọ̀lèn aam he fall catch him	nil	[de mũ]	LL	H H
	‘he takes him by surprise’				

This all H tone patterning could be attributed to the influence of the initial H tone of the AAM /mí/ in the language. However, the occurrence of the SVC constituents in isolation in similar context presents a different picture. In these structures, the verb constituents retain their underlying L tone. Data in 11 illustrate this occurrence.

Tone pattern on constituents of bi-syllabic SVCs in the habitual aspect.

12. verbs in citation	Esan sentence	phonetic form	underlying tone	surface tone
a. nẹ̀n defecate	mí ọ̀mọ̀ nẹ̀n aam child defecate ‘the child defecates’	[nẽ]	L	L
b. lẹ̀ eat	mí ọ̀mọ̀ lẹ̀ aam child eats the child eats	[le]	L	L
c. rìè take	mí ọ̀mọ̀ rìè aam child take ‘the child takes’	[rje]	L	L
d. sò shout	mí ọ̀mọ̀ sò aam child shout ‘the child shouts’	[so]	L	L
e. ǵbè kill	mí ọ̀mọ̀ gbè aam child kill ‘the child kills’	[gbe]	L	L
f. yèn suckle	mí ọ̀mọ̀ yẹ̀n aam child suckle	[jẽ]	L	L

g.	dè fall	mí ọ̀mọ̀ dè aam child fall 'the child falls'	[de]	L	L
h.	mùn catch	mí ọ̀mọ̀ mùn aam child catch 'the child catches'	[mũ]	L	L

The occurrence illustrated in 12 buttresses the differing behaviour of tone on these verbs when they constitute SVCs in the language.

Tonal changes on Tri-syllabic Esan SVCs

An Esan SVC constituted of one monosyllabic and one bisyllabic verb stem is trisyllabic and bears a LLL tonal pattern underlyingly. It undergoes tonal modifications in sentences as follows.

Declaratives

Esan Trisyllabic SVCs of both the contiguous and non-contiguous variety feature a HLL tone pattern in declaratives, even when they take an object. This occurrence is irrespective of the positioning of the constituent verbs in the SVC. This tone pattern is different from the LLL pattern which they bear in citation. Illustrations of these occurrences are presented in 13.

Tone pattern on tri-syllabic Esan SVCs in statements						
13. Verbs in citation	contiguous SVC	non contiguous SVC	phonetic form	underlying tone	Surface tone	
a. dè # gwòghò fall # break	ọ̀ dé gwòghò he fall break 'he fall very badly'	nil	[de gwɔɔɔ]	LLL	HLL	
b. dè # mùndià fall # stand	ọ̀ dé mùndià he fall stand 'he survived a fall'	nil	[de mūdja]	LLL	HLL	
c. rìè # gbèrà take#bypass	nil	ò ríé èlò gbèrà ólè he take eye bypass him 'he ignored him'	[rɛ gbera]	LLL	HLL	
d. dígùè # tùè kneel greet	ọ̀ dígùè tùè he kneel greet 'he genuflected in greeting'	ọ̀ dígùè túé ìmèn he kneel greet me 'he genuflected to greet me'	[digwe twe]	LLL	HLL	
e. rẹ̀#hùmwùn take #pardon	ọ̀ ré hùmwùn he take forgive 'he forgave'	nil	[rɛ humũ]	LLL	HLL	
f. rẹ̀#hùmwùn take# pardon	ọ̀ ré hùmwùn he take forgive 'he forgave him'	ólè him	[rɛ humũ]	LLL	HLL	

g. nèn#wìlì run #loss	ò nèn wìlì he run loss 'he absconded'	[nɛ̃ wìlì]	LLL	HLL
--------------------------	---	------------	-----	-----

However, a \widehat{HL} (falling contour) pattern mostly results on the final syllable of both the mono and bi syllabic verbal constituents of the SVCs when they occur individually in declaratives as illustrated in 14.

Tone patterns on individual constituents of tri-syllabic Esan SVCs in declaratives.

14. verbs in citation Esan sentence phonetic form underlying tone surface tone

a.	dè fall	ò dè he fall pst. 'he fell'	[de]	L	\widehat{HL}
b.	gwòghò break	ò gwòghò it break pst. 'it broke'	[gwɔɔɔ]	LL	\widehat{HL}
c.	mùndià stand	ò mùndià he stand pst. 'he stood'	[mũdja]	LL	\widehat{HL}
d.	riè take	ò riè he take pst. 'he took'	[rje]	LL	\widehat{HL}
e.	gbèrà pass by	ò gbèrà he pass by pst 'he passed by'	[gbera]	LL	\widehat{HL}
f.	dìgùè` kneel	ò dìgùè` he kneel pst 'he knelt'	[digwɛ]	LL	\widehat{HL}
g.	tùè greet	ò tùè he greet pst 'he greeted'	[twɛ]	LL	\widehat{HL}
h.	rè use	ò rè he use pst 'he used'	[rɛ]	LL	\widehat{HL}
i.	hùmwùn pardon	ò hùmwùn he forgive pst. he pardoned	[humũ]	LL	\widehat{HL}
j.	nèn run	ò nèn he run pst. 'he escaped'	[nɛ]	LL	\widehat{HL}
k.	wìlì loss	ò wìlì he loss pst 'he is missing'	[wìlì]	LL	HL

Habitual structures

In the habitual aspect, trisyllabic Esan SVCs feature a HLL and an all H tone pattern in contra distinction to their underlying all L tone pattern in citation. The difference in the resulting tone pattern may not be unconnected with the segmental composition of the affected syllables. The syllables which bear the final L tones comprise heavier back vowels while those which bear the final H tones comprise lighter front vowels.

Tone pattern on tri-syllabic Esan SVCs in the habitual aspect

15. verbs in citation	contiguous SVC	non contiguous SVC	phonetic form	underlying tone	Surface tone
a. <i>dè</i> # <i>gwòghò</i> fall break	<i>mí ó dé gwòghò</i> aam he fall break 'he does have a bad fall'	nil	[de gwɔɔɔ]	LLL	HLL
b. <i>dè</i> # <i>mùndià</i> fall stand	<i>mí ó dé mùndiá</i> aam he fall stand 'he survives a fall'	nil	[de mūdja]	LLL	HHH
c. <i>rìè</i> # <i>gbèrà</i> take#by pass	<i>mí ó ríé gbérá</i> aam he take bypass he by passes	<i>mí ó ríé éló gbérá</i> aam he take eye by pass 'he ignores'	[rje gbera]	LLL	HHH
d. <i>dìgùè</i> # <i>tùè</i> kneel greet	<i>mí ó dígúé túé</i> aam he kneel greet 'he genuflects in greeting'	nil	[digwɛ twɛ]	LLL	HHH
e. <i>rè</i> # <i>hùm̀ẁùn</i> take# pardon	<i>mí ó ré hùm̀ẁùn</i> aam he take forgive 'he forgives'	nil	[re humũ]	LLL	HLL
f. <i>nèn</i> # <i>ẁìlì</i> run loss	<i>mí ó nèn ẁìlì</i> aam he run loss 'he absconds'	nil	[nẽ wili]	LLL	HLL

The all L underlying tone pattern is retained when monosyllabic and bi-syllabic constituents of tri-syllabic Esan SVCs are used separately in the habitual temporal aspect. This occurrence is illustrated in 16.

Tone patterns on constituents of tri-syllabic SVCs used singly in habitual structures.

16. verbs in citation	Esan sentence	phonetic form	underlying tone	surface tone
a. <i>dè</i> fall	<i>mí ó dè</i> aam he fall ' he falls'	[de]	L	L
b. <i>gwòghò</i> break	<i>mí ó gwòghò</i> aam it break 'it breaks'	[gwɔɔɔ]	LL	LL
c. <i>mùndià</i>	<i>mí ó mùndià</i>	[mūdja]	LL	LL

stand	aam he stand			
d. rìè take	mí ó rìè aam he take 'he takes'	[riɛ]	LL	LL
e. gbèrà pass by	mí ó gbèrà aam he pass by 'he passes by'	[gbera]	LL	LL
f. dìgùẹ̀ kneel	mí ó dìgùẹ̀ aam he kneel 'he kneels'	[digwɛ]	LL	LL
g. tùẹ̀ greet	mí ó tùẹ̀ aam he greet 'he greets'	[twɛ]	LL	LL
h. rẹ̀ use	mí ó rẹ̀ aam he use he uses	[rɛ]	LL	LL
i. hùmwùn forgive	mí ó hùmwùn aam he forgive 'he forgivess'	[humũ]	LL	LL
j. nèn run	mí ó nèn aam he runs	[nɛ̃]	LL	LL
k. wìlì loss	mí ó wìlì aam he loss 'he gets missing'	[wili]	LL	LL

Conclusion

This study has examined serial verb constructions (SVCs) in the Esan language. Its aim was to identify syllable structure and tonal patterns of this grammatical construct in the language. This effort closes some gaps in the study of SVCs in Esan as previous studies were concerned with general syntactic and semantic features of these constructs in the language. Contemporary treatments of SVCs separate them into the asymmetrical and symmetrical types. The contiguous and non-contiguous varieties, which may cut across these two main groups of SVCs are also indicated. Available data showed that Esan features the symmetrical and asymmetrical types of serial verbs construction.

The present study faults earlier treatments of Esan SVCs as comprising only two monosyllabic verbs, making them bi-syllabic. In this regard, this study shows that an Esan SVC may also be tri-syllabic as it may be constituted of a monosyllabic and a bi-syllabic verb stem.

An examination Esan SVCs in this study showed a change from the all low tonal pattern on Esan verbs in citation, when they co-occur as SVCs. These changes affect verbs in the declarative and imperative moods as well as verbs in the habitual temporal aspect. These observations are summarized as follows.

- In declaratives, Esan bisyllabic SVCs of both the contiguous and non-contiguous variety, change tonal pattern from an underlying LL to a HL.
- Esan Trisyllabic SVCs of both the contiguous and non-contiguous variety feature a HLL tone pattern in declaratives, even when they take an object. This occurrence is irrespective of the positioning of the constituent verbs in the SVC. This tone pattern is different from the LLL pattern which they bear in citation. Illustrations of these occurrences are presented in 2a.
- In imperatives, the second verbal constituent in a contiguous bi-syllabic SVC bears a H tone, resulting in a LH tonal pattern, whereas in the non-contiguous type, the underlying LL pattern of the constituent verbs is maintained except where the first or second verbal constituent is contiguous with a H tone bearing unit. In this case, it's L tone is raised to a H, resulting in a HL or LH tone pattern.
- In the habitual structures, bi-syllabic SVCs feature an all H tone pattern. This occurrence is observed with both contiguous and non-contiguous SVC.
- In the habitual aspect, trisyllabic Esan SVCs feature a HLL and an all H tone pattern in contra distinction to their underlying all L tone pattern in citation.

This study is a contribution to the study of serial verbs construction in the Edoid group of languages. It closes some gaps in the study of SVCs in Esan and would enhance studies on the grammar as well as the documentation of the language.

References

- Aikhenvald, Alexandra & Dixon, William (eds). (2006). *Serial Verb Constructions – A Cross Linguistic Typology*.(ed.). U. S. A.: Oxford University Press.
- Bamgbose, Ayo. (1974). On Serial Verbs and Verb Stems. *Journal of West African Languages*, 9(1). 17-48.
- Bodomo, Adams. 2004. The syntax of nominalized complex verbal predicates in Dagaara. *Studia Linguistica*. 58 (1). 1-22.
- Bodomo, Adams. 2006. On nominalizing the verbal complex in Dagaara and English – 11th Biennial Symposium on Linguistics: Inter Theoretical Approaches of complex verbs constructions. Riec University: Houston Texas. 1-17.
- Egbokhare, Francis. 2004. *Introduction to Phonetics*. Ibadan: Sam Bookman.
- Ejele, Philomena. 1982. *Towards a phonology of Esan*. Unpublished M. A . thesis. London: University College.
- Ejele, Philomena 1994. The Semantic Input of Serial Verb Constructions in Communication. *Journal of Nigerian Language Studies (NILAS)*.2. 60-68.
- Ejele, Philomena 2003. “Tonal Assimilation in Esan.” Ozo-Mekuri, N. ed. *Four decades in the study of languages in Nigeria: A Festschrift for K. Williamson*. Aba: National Institute for Nigerian Languages.

Ejele, Philomena. 2004. The Source of the Extra-High Tone in Esan. *Journal of the Linguistics Association of Nigeria*, 8 (2001-2004). 56-65.

Kambon, Obadele, Osun, Kweku & Amfo, Nana. 2015. A case for revisiting definitions of serial verb constructions- Evidence from Akan serial verb nominalization. *Studies in African Linguistics*, Vol.44, Number 2.75-99.

Mathews, P. H. 2007. *Oxford Concise Dictionary of Linguistics*. Oxford: Oxford University Press.

Ndimele, O. M. (1996). On the “kwaness” of the Nigerian Pidgin: Insights from Verb Serialization. *Journal of Asian and African Studies*, 52, 125-136.

Goldsmith, J.A. 1976, *Autosegmental Phonology*. Indiana: Indiana University Linguistics Club.

Ikoyo-Eweto, E. O. 2005. Tone and Grammar in Esan. M. A. Thesis. Ibadan: University of Ibadan.

Ikoyo-Eweto, E. O. 2010. A Structural Dialectology of Esan. Ph. D. Thesis. Ibadan: University of Ibadan.

Ikoyo-Eweto, E. O. 2016. Interface of Tone and Tense/Aspect in Esan. *Journal of the Linguistic Association of Nigeria*. 19, 1.

Pike, Kenneth. 1943. *Phonetics*. Ann Arbor: University of Michigan Press.

Williamson, Kay. (1965). *A grammar of Kolokuma Dialect of Ijo*. Cambridge: CUP

Williamson, Kay .1989. The Niger Congo Overview. In J. Bendor Samuel (ed.) *The Niger Congo languages*. 3-46. Lanham: University of America Press.

Yuka, L. C., (2014). Nominal Serialization in Cameroonian Pidgin. *International Journal of Language Studies*, 8 (1), 15-32.