Journal of Linguistics and Language in Education Volume 15, Number 1 (2021)

On Serial Verb Constructions in Zarma

Waheed Ayisa Jayeola[*]

Abstract

This article discusses serial verb constructionsin Zarma, a Songhay language of the Nilo-Saharan family, along the lines of the claim that serialization is a property of universal grammar (UG). This is contrary to some opinions held about the status of the construction in the language. In this connection, the data presented show a preliminary report that identifies three types of serial verbs in Zarma: Resultative, Consecutive and Directional/motion. Unlike what has been identified in related languages, Instrument and Causative constructions in Zarma do not lend themselves easily amenable to a serial verb analysis. Combining the VP shell hypothesis with the analysis developed in Aboh (2009); the different types of verb series appear to point at some forms of structural variability in the realizations of serial verb constructions. Taking into account findings from comparable studies, an expansion of the VP shell is required so that the unit gà, which separates the two predicates in verb series can be accommodated within the expanded functional category.

Key words: *Functional projection, functional versus lexical verbs, serial verbs, VP shell, Zarma*

Introduction

Creissels et al (2008:113) describe serialization as a type of complex predicates that is very common in a restricted area including Kwa languages and Western Benue-Congo languages. Similarly, the phenomenon of verb serialization has been reported for many languages in West Africa, Southeast Asia, Amazonia, Oceania, the Caribbean and New Guinea (Aikhenvald 2006, cited in Aboh 2015:269). The foregoing is a corollary to certain assumption in some studies on language typology, which suggests that the construction is not evenly distributed across languages of the world. In other words, serial verb construction (SVC) is not considered a universal principle. More recently, however, serialization has been described as a property of universal grammar (UG) for which there does not seem to be any obvious distinctive parameter that could set serializing languages apart from non-serializing ones (Aboh 2003, 2009 cited in Aboh 2015:271). This assertion notwithstanding, there is little or no information about serial verb constructions in Zarma, a West African language classified into the Songhay group of the Nilo-Saharan family.

[*] Lecturer, Department of Linguistics and African Languages, Faculty of Arts, Obafemi Awolowo University Ile-Ife, Osun State, Nigeria. E-mail: jayeolawaheed@yahoo.com

Heath's (1998) account of serial verbs in Koyra Chiini, a Songhay variety spoken in Mali is a likely pointer to the presence of serial verb constructions in Zarma. According to him, successive events with shared subject NP are expressed by an initial main clause which is followed by one or more infinitival verb phrases. However, in his analysis of Zarma, Abdoulaye (2018: 63) argues that Zarma is not a serializing language because; it simply strings the verbs with the help of an infinitive marker. Incidentally, available literatures on the descriptions of serial verb constructions have not provided a unique comparable syntactic framework even in a single language. Thus, the position of this paper is that Zarma is qualified to be recognised as a serializing language. My position in this regard isthat, some properties with which serial verbs are associated are present in the language. An examination of serial verbal constructions in Zarma will help to appreciate some accounts that have been extended to this type of constructions in other languages.

The data used for this study come from Niamey and Dosso speakers of the language. The paper makes use of the official orthography of Zarma with some modifications where possible. This is due to some amount of divergence betweenavailable texts and the data collected. This paper is organized as follows: section 2 provides the background to the study, illustrates the types of SVC and appraises the characteristic properties of SVC with data from Zarma. Section 3 treats the derivation of SVC within the VP shell hypothesis while section 4 discusses the semantics of verb series. Distinction is drawn between functional and lexical verbs in section 5 while section 6 provides the conclusion.

Background

It is not likely that a single definition, as contained in different literatures on serial verb, will suffice. This is due to the intricate nature of the construction type. Different definitions are available for the term and they vary from being exclusive or narrower to being more inclusive in their senses. According to Creissels et al (2008:112), a serial construction is the one in which two or more verbal lexemes combine without any overt indication of a dependency between them: none of the verbs is morphologically marked as dependent, and there is no conjunction between them. In a not too different fashion, Aboh (2015: 269) describes the construction as the one in which a series of finite verbs are stacked together in a single clause and the verbs are typically not separated by any conjunction

of coordination or subordination. A representative example of this construction type is provided in (1) below.

1a) Áí ná músù bèrò hái gà wí
1sg Perf cat big-Def shot FP kill
'I shot the lion dead.'
b. Áí dé dùndú gà ŋ□wá
1sg buy yam FP eat
'I bought yam and ate it.'

It is observed from (1a) that the two verbs i.e. *hái* 'shot' and *wí* 'kill' that appear in what can be described as a single clause are not joined together with any connecting particle or clitic. The same can also be said of the example in (1b) where V_1*dé* 'buy' and V_2 *ŋ□wá* 'eat' are not considered to be coordinated or in dependent relations. This account relies on the assumption that the particle *gà*, which separates the two verbs, is not a conjunction of any sort. In his analysis of data from Koyra Chiini, Heath (1998: 304) describes 'serial verb' as a verb that is specialized to occur in combination with a fuller VP, where the full VP represents the major event and the attached serial verb is more or less a grammatical category. In short, he explains that an initial main clause is followed by one or more infinitival phrases. In this regard, *gà* is taken for an infinitive morpheme or marker. It then means that *gà wí* in (1a) will have the literal translation with English infinitive, 'to kill'. Heath's analysis of SVCs in Koyra Chiini may be considered to be in tune with Casrstens' (2002) account of what she describes as Control SVCs, where an empty category is assumed to be present in the lower verb phrase. This, in effect, means that, in each of the examples in (1), there is a covert or understood pronominal which is controlled by the overt external or internal argument of V_1. However, the analysis we shall present in this study is quite different.

Contributing to the debate, Abdoulaye (2018:63), following Creissels (2006) avers that Zarma is not necessarily a serializing language. He explains that the language 'simply strings the verbs with the help of an infinitive marker *kà* (or *gà* in some cases) before the marked verbs'. In Abdoulaye's view, speakers of Zarma will not necessarily view sentences of the type in (1) as a series of actions. However, his example (2a) can optionally mean 'they left Tillaberi to go to Ayoru'.

2a) Ì fǔn Tílbeerì kà koy Ayyoru
3pl leave T. Inf go A

'They moved from Tillaberi to Ayoru'

b. Zànkèy kà fûu gà fŭn làkkwâl
Children.Def come home Inf leave school
'The children came home from school' (Abdoulaye 2018:63)

What appears to concern Abdoulaye as regards his examples in (2) is the meaning; he says nothing about the internal structure of the sentence type. Structurally, Heath's examples from Koyra Chiini are not in any way different from the Zarma data in (2). In my opinion, the sentences provide evidence for features associated with SVCs. Aside this assumption, there are constructions in Zarma where two verbs are stacked in what looks like a single clause and the verbs are not separated by *gà* as in (1-2).

3a) Ìrì gébà koy hábú
1pl want go market
'We want to go to market'

b. Áí gá sóbéí nérè jí chírè sá súbà
1sg Fut begin sell oil red P tomorrow
'I will begin to sell palm oil (from) tomorrow'

Examples in (3) are not meant to say that the particle *gà* cannot be analysed as an element of an infinitive phrase, but it is not relevant to the examples above. On the evidence of subcategorization however, the verb *síntì* 'begin/start' chooses the particle *gà* as its complement in what I describe here as an inceptive construction.

4a) Áí gá síntì gà zùrú koy fú
1sg Fut begin to run go house
'I will begin to run home'

b. Rakiat gá síntì gà dóndòn
Rakiat Fut begin to learn
'Rakiat will begin to learn'

Relying on the judgment of my informants, the sentences in (4) have the meaning shown in the translations, despite the interpretation of the particle *gà* as an element of the infinitive. In fact, the infinitive marker is missing from (5), where the examples are clearly viewed as series of distinct actions, which are rendered as a form of command.

5a) síntì dónù
start sing
'start singing'

b. síntì ŋwá
start eat
'start eating
c. síntì zùrú
start run
'start runing'

Since Zarma does not exhibit finite versus non-finite morphology on the verbs, it makes sense to say that *gà* is not an infinite marker; its absence from the examples in (5) is the reason for recognising them as a form of imperative expressions. Assuming *gà* functions as an infinitive marker in (1-2), it will not be appropriate to regard those examples as SVC types, because V_2 would have become non-finite, contra Aboh's (2015: 269) definition of SVC. On the strength of the available data and relevant facts from Heath (1998), Carstens (2002) and Aboh (2003, 2009 & 2015) among others; this study argues that serialization is a property with which Zarma is associated.

Although the position of this paper is that the verbs in series in (1) above are not coordinated; being one of the diagnostics for SVCs, the two sentences do not present the same semantic import. Thus, on the basis of structural (or in terms of argument structure) and semantic relations that exist among a succession of verbs and their complements, different types of SVCs have been identified. According to Carstens (2002:12), 'Yoruba has a particularly rich inventory of SVC subtypes; this list is nonexhaustive. Other languages with SVCs vary in which and how many such constructions they include'. The implication of this assertion from Carstens is that a number of subtypes of SVC are commonly distinguished and vary from language to language. In the light of the foregoing, I will discuss the different types of SVC that are tentatively assumed to be available to Zarma in the section that follows.

Types of Serial Verb Constructions in Zarma

One influential source in support of the assertion that languages with verb series differ in relation to the range of the type of SVCs which they tolerate* comes from Dechaine (1993). In the same vein, Aboh (2015) explains that the properties with which SVCs are associated do not uniformly cut across all the relevant languages. According to Baker (1989, 1991); Collins (1997); Baker & Stewart

* See Awobuluyi (1973); Bamgbose (1973, 1974), Collins (1997); Dechaine (1993); Aboh (2009, 2015); among others for broader discussions of SVCs in different languages.

(2002); among others; sentences that are representative examples of serialization appear to obey the Argument Sharing-Hypothesis. More so, such sentences show that two or more lexical verbs are present and they share one subject without a clear case or indication of coordination. Besides, the two or more verb roots are not members of separate clauses. However, Carstens (2002: 11) suggests that the apparent sharing of both subject and direct object is not characteristic of all sorts of SVC. Consider the examples below.

6a) Írì gá hánsò kàrù gà wí
1pl Fut dog-Def beat FP kill
'We will beat the dog dead/to death.'
b. À ná hánsò kàrù gà bú
3sg Perf dog-Def beat FP die
'S/he beat the dog dead.'
c. Áí ná músù bero hái gà wi
1sg Perf cat big-Def shot FP kill
'I shot the lion dead.'

Examples in (6) are categorized as resultative SVCs. According to Williams (2008), in a resultative SVC, one of the two predicates is a mean predicate M and the second one is a result predicate R. In those examples, the internal arguments of the unaccusative V_2 (*wí* 'kill' & *bú* 'die') occur to the left of V_1 (*kar* 'beat') as its themes. Though two verbs each appear in the examples above, they do not share exactly the same properties with the ones below.

7a) Áí dé dùndú gà ŋ□wá
1sg buy yam FP eat
'I bought yam and ate it.'
b. Kadi gá hìná dùndú gà nérè
Kadi Fut cook yam FP sell
'Kadi will cook yam and sell or Kadi will cook yam for sale.'

The sentences in (7) replicate the type which George (1975) refers to as sequential SVC, Collins (1997) calls it direct object sharing SVC while Aboh (2009) describes it as a consecutive SVC. In (7a) for instance, the V_1 *dé* 'buy' and V_2 *ŋ□wá* 'eat' that are notionally transitive, are assumed to share the same internal argument, *dùndú* 'yam.'

8a) Áí goo zùrú koy hábú
1sg Prog run go market
'I am/was running to market.'

b. Kadi koy Abou ché
Kadi go Abou call
'Kadi went to call Abou.'

c. Áí dìrà gà koy a doo
1sg walk FP go 3sg place
'I walked to him/to his place.'

d. Usman goo ganu koy hábú
Usman Prog dance go market
'Usman is/was dancing to the market.'

The example sentences in (8) are in close relationship with what George (1975) describes as directional SVC, whereas, Carstens (2002) describes them as motion: conveyance SVC. Here, V_1 seems to encode the way the event expressed by V_2 has been carried out. The situation described here is similar to what Awobuluyi (1973) describes as modifying serial verbs.

It is not yet clear whether Zarma actually distinguishes the instrumental type of SVCs. However, an interesting but complicating observation revolves around a kind of constructions whose semantic interpretation mimics the instrumental type of SVCs. This is shown in (9).

9a) Áí ná túrí kar hánsò
1sg Perf tree beat/hit dog-Def
'I used stick to beat/hit the dog.'
b. Áí gá túrí kar hánsò
1sg Fut tree beat/hit dog-Def
'I will use stick to beat/hit the dog.'

Although it is somewhat difficult to evaluate, the semantic imports of the expressions in (9) seem to satisfy the general description available to SVCs. One claim about SVCs, which has been mentioned earlier, is that in a serial verb construction, V_1 and V_2 must share an internal argument e.g. theme, goal, instrument. This account or assumption is popularized by Foley and Olson (1985), Dechaine (1988); Baker (1989); and Collins (1997). This seems to be the case in a consecutive SVC type illustrated with example (7), where the direct objects of V_1 are also understood as the direct objects of V_2. However, this tendency seemingly appears not to be a general property of SVC, considering the examples in (9) where we take the V_1 that selects

túrí 'stick' as its internal argument as lexically empty or a null-light verb while *kàr* 'beat/hit' takes *hánsò* 'the dog' as its own internal argument. In the same vein, we also consider *kar* as a triadic verb that assigns an instrument θ-role to the object of the phonologically unfilled V_1. This claim is tied to the reasoning that *túrí* 'stick', bears some thematic relationship to *kar* 'beat/hit'. If this assumption or analysis is proper and well-conceived; it is either that the examples in (9) are not true representatives of SVCs or that there is no internal argument sharing. The latter alternative is the position that Aboh (2009, 2015) holds. Two possible ways of explaining the situation in (9) are: (i) taking the sentences as apparent or bona fide SVCs, the items *ná* and *gá* are used to indicate perfective aspect and future tense respectively, and a null-light verb* is assumed; (ii) relying on Law and Veenstra's (1992) claim, the instrumental SVCs of the type assumed in (9) do not involve internal argument sharing. Incidentally, the proposal for a light-verb in (i) is a confirmation of the claim by Law and Veenstra in (ii). If in this case, we consider the light verb as assigning a theta role to *túrí* 'stick' being its object, then there is no argument sharing. Nonetheless, *túrí* is still understood as bearing some thematic relationship to V_2 *kar* because it is unarguably the instrumental argument of *kar*. A consideration of the example in (10) appears to lend credence to the claim that instrument SVCs display a null-light verb.

10) Áí gá á kar ŋgàdè góbú
1sg Fut 3sg beat/hit with cane/thin stick
'I will beat/hit him/her with cane.'

The interpretation that we have for (10) is not the same as the ones in (9). In (10), the instrument *góbú* 'stick/cane' is introduced by *ŋgàdè*, an element that can be described in this case as an instrument or preposition marker. The same element, *ŋgàdè* can function as a conjunction or coordination marker in the language. This is suggested by the examples in (11a, b) below.

11a) Àròsó ŋgàdè áí ŋ□wá mòó
boy Conj 1sg eat rice
'A boy and I ate rice.'

* The analysis pursued in this study is in line with (Jansen, Koopman and Muysken 1978; Collins 1997; Dechaine 1988; Lefebvre 1991; a.o).

b. Usman dí ní ńgàdè áí
Usman see 2sg/pl Conj 1sg
'Usman saw you and me.'

The structural build-up of the sentences in (10-11) is indicative of the multiple use of the lexical item, *ńgàdè*. It can be treated as a preposition that introduces *góbú*, the instrument, as its complement and the whole prepositional phrase *ńgàdè góbú*[*] 'with stick/cane' serves as an adjunct to the verb *kàr* 'beat'. This is why it is possible to do away with the instrument and the element that introduces it. Consider the example in (12).

12) Áí gá á kàr
1sg Fut 3sg beat
'I will beat him/her.'

What is presented in (12) is not the same with the structures in (9). If we omit *hánsò* in (9a), it will yield the ungrammatical form in (13a) while the absence of *túrí* as shown in (13b) altogether gives the expression a new reading. Similarly, any attempt to make *ńgàdè* in (10) optional will lead to the derivation of a completely non-convergent expression illustrated with example (13c).

13a) * Áí ná túrí kar
1sg Perf tree beat/hit
'I beat/hit the tree.'
b. Áí ná hánsò kar
1sg Perf dog-Def beat/hit
'I have beaten/hit the dog.'
c. Áí ná á kar *(ńgàdè) góbú
1sg Perf 3sg beat/hit with cane/stick
'I beat/hit him/her with (a) cane/stick'

Example (13a) crashes because the Theta-Criterion does not apply at LF. In (b), the criterion applies properly at the LF, making the derivation to converge. In (c), *ńgàdè* 'with' cannot be dropped; it is the preposition that introduces the instrument DP *góbú* 'stick'. As evident from the foregoing, it makes sense to infer that *túrí* 'tree/stick' in (9) is introduced by a null preposition but has to move

[*] The syntactic characteristic or behaviour of *ńgàdè* in Zarma is similar to that of *nda* in Koyra Chiini, which Heath (1998:319) describes as an overt instrument/comitative preposition. The same item also conforms to *ku*, which in Saramaccan, Muysken (1987:89), functions as an instrumental, a comitative marker, a subcategorized preposition, and as a coordination marker.

to the Spec-VP of *kar*, where it is licensed. If this hypothesis is one that is well conceived, then, the idea that V_1 in (9) is a null-light verb is not consistent. Thus, examples in (9) are not true representatives of instrument series, even as (9a), for instance, can be paraphrased as 'I beat/hit the dog with a stick'. What Zarma data has shown differs from the situations in Yoruba, Oyelaran (1982), Gungbe, Aboh (2009), where instrument series are available.

By a first approximation, it appears that causative constructions in Zarma are not expressed in the form of SVCs. This is unlike the situations in Yoruba, Baker (1989) and Ewe, Agbedor (1994). Abdoulaye and Buba (2015) citing Haspelmath (1993) reveal that in causative expressions, the intervention of a causer is deemed to be marked on the verb. This is the case with the following examples.

14a) Kadi zúrú
Kadi run
'Kadi ran'

b. Abou ná Kadi zúr-ándì
Abou Perf Kadi run-CAUS
'Abou made Kadi (to) run.'

15a) Áí goo dìrà
1sg Prog walk/go away
'I am/was walking/going away'

b. Áí ná Kadi dir-andi
1sg Perf Kadi go-CAUS
'I made Kadi to go away'

In (14a), the verb *zúru* 'run' functions as an intransitive verb that takes the DP *Kadi* as its agent. In (14b) however, the suffix *-ándì* turns *zúru* to a causative verb *zúrándì,* which in that instance, relates to two nouns, *Abou* and *Kadi* with the semantic roles of agent and experiencer respectively. In this case, *Abou* is the causer that instigates what happens to *Kadi.* The same relationship exists between examples (15a & b). In this case, the base verb *dìrà* is intransitive, whereas the causative form in (15b) has direct relationship with two arguments; the causer occurring in the subject position while the causee agent syntactically precedes the verbs. Obviously, examples (14b & 15b) are not a representative case of SVC. It is reasonable to assume that the morphologically marked causative verbs *zúrándì* and *dirandi* individually occur by themselves and present cause and effect reading for the sentences.

The same cause and effect reading is available to the sentence below, where the verb *dìrà* takes a different form.

16a) Í ná dóle a ma-dira
3pl Perf force 3sg CAUS-go away
'They forced him/her to leave/go away.'
b. Áí ná Kadi ma-dira
1sg Perf Kadi CAUS-leave
'I made Kadi to leave/go away'

In (16a), three arguments are present and the actual verb is not notionally triadic. Structurally, the sentence above requires two verbs to render the meaning with which it is associated; causative and effect verbs. Interestingly, only the effect verb is at least morphologically present leaving *dóle* 'force', a nominal item, without any known thematic role. Similarly, the subject *I* 'they' does not seem to scope over any verb, which should ordinarily be a causative verb. Also, the role of the third person singular pronoun, *a* 'him/her' is difficult to evaluate if we still consider *madira* as an unaccusative verb. In the context of the examples in (16), it seems to be clear that causative meaning can also be marked with a prefix. This is contrary to Hamani (1981); Oumarou Yaro (1993), and Bernard & White-Kaba (1994), cited in Abdoulaye and Buba (2015:38). They probably assume that causative meaning in Zarma is marked with the suffix –*andì.* This being the case, the verb *madira* is analysed as a composite of two morphemes i.e. the base verb *dira* 'walk, go away' and a prefix *ma-*, meant to express a causative meaning 'cause to leave or go away'. This argument accords with the following examples.

17a) Í ná dole Kadi gà dira
3pl Perf. force Kadi FP walk
'They reluctantly walked Kadi away'
b. Í ná dole gà dira
3pl Perf. force FP leave/walk
'They reluctantly left/walked away'

Examples in (17) do not show any form of causative interpretations because the verb *dìrà* behaves/functions as an intransitive verb that take the subjects as the agents in each of the sentences. In (18) however, the verb takes the prefix *ma-* in the absence of a causee agent, ruling out the starred example.

18) *Áí goo ma-dira
1sg Prog CAUS-leave

We also find expressions with a causative reading, where the first verb (causative) in a string refers to the event leading to the effect represented in the later verb (effect).

19a) Abou ná Kadi tute à kàŋ
Abou Perf. Kadi push 3sg fall
'Abou caused Kadi to fall/Abou pushed Kadi down.'

This example is different from the one which Baker (1989:529) reports for Yoruba, where the V_2 theta-marks the DP between it and the V_1. In the Zarma example, there is no subject or object sharing. The V_1 *tute* theta-marks *Kadi* while the V_2 *kaŋ□*, takes *a,* glossed as a third person singular pronoun, as its agent. The pronoun in question intricately forms an anaphoric chain with *Kadi*, making it possible to analyse the sentence as the one that involves embedding. The structure below lends credence to this assumption.

19b) Abou ná Kadi tute kala à kaŋ□
Abou Perf Kadi push until 3sg fall
'Abou pushed Kadi until she fell down.'

Given the imports of the two related constructions in (19), it is safe to say that the example sentence in (a) actually contains a covert subordination. This proposal is borne by a principle of binding illustrated in (20) below.

20) Mai_x nò Abou ná t_x tute kala $à_x$ kaŋ□
who Foc Abou Perf push till 3sg fall
'Who did Abou push that fell down?'

In (20), the object of the matrix clause is the target of the movement, allowing it to enter into a chain with the trace it leaves behind at the extraction site. The pronominal third person, subject of the lower/embedded clause, is coindexed with the immediately preceding DP (t_x), its antecedent in the matrix clause. In conformity with principle B of Binding, the pronominal subject of the embedded clause is not bound in its governing category. On the basis of the foregoing, (19 & 20) are not true SVCs because they involve subordination.

Finally, it is pertinent to state that the different examples of SVCs available to Zarma show quite clearly a remarkable variability within their structural realizations. This tendency or feature is not peculiar to Zarma data alone; this is a rather complex enterprise which carries along some degree of difficulties in characterizing SVCs as a unitary phenomenon. I need to state here that the different examples of SVCs identified are based on the semantic notion that each of them instantiates. They also differ with respect to their syntax. For instance, in resultative SVCs, the internal arguments of the unaccusative V_2 occur to the left of V_1 as its themes. In the case of consecutive SVCs, the V_1 and V_2 are notionally transitive; they are assumed to share the same internal argument. For the directional type, V_1 seems to encode the way the event expressed by V_2 has been carried out.

Characteristic Properties of SVCs

Certain correlations in the definition of SVCs can be drawn from the several incidences of SVCs in Zarma. For instance, there is the claim by Baker (1989:539) that there is usually one tense/aspect specification for the whole chain of verbs because the sequence of verbs appears in what seems a single clause. The example sentences in (6, 7 & 8) have suggested in the minimum; that verbs in SVCs tend to force a single event reading and are equally associated with a single tense specification. In (6a & 7b) for instance, it may appear that there are two occurrences of the word *ga,* which are assumed to be different lexical items although they are homophonous. One of them is a tense marker (future) while the other one, which occurs immediately before V_2 in (6 & 7), has been analysed as an infinitive element, (cf. Heath, 1998 & Abdoulaye, 2018). Therefore, it is not the case that future must be marked on both V_1 and V_2. The following expressions support the correctness of the prediction for a single event reading in SVCs.

21a) Í ná hánsò kar gà wí
3pl Perf dog-Def beat FP kill
'They have beaten the dog to death.'

b. Áí ná músù bèrò hái gà wí
1sg Perf cat big-Def shot FP kill
'I shot the lion dead.'

A juxtaposition of the examples in (6-8) shows a language particular evidence that verbs in series share a single temporal specification i.e. one tense and aspect. Thus, the free temporal morpheme *gá*

consistently follows the subject in sentences with a future reading (6a, 7b). The second occurrence is *gà*, which cannot be interpreted as a temporal marker. This position finds a very clear and convincing support in another characteristic of SVCs which predicts that a single occurrence of sentence negation has scope over both verbs. This is the case with the example in (22).

22a) Írì sí hánsò kàr gà bú
1pl Fut.Neg dog-Def beat gà die
'We will not beat the dog dead.'

b. *Írì sí hánsò kàr sí bú
1pl Fut.Neg dog-Def beat Fut.Neg die

As earlier suggested, *gá* is an indicator of future time. In (22) however, *sí* is interpreted as Future-Negative because it combines future time with negation. (22a) is grammatical because *sí* has scope over *kàr* 'beat' and *bú* 'die' respectively. The counterpart in (22b) is ill-formed because it is not possible to repeat *sí* before V_2.

On the strength that SVCs in Zarma involve a single tense/aspect and negation marker; it is desirable to say that Zarma also conforms to the standard that SVCs do not involve coordinating or subordinating conjunction. In all of the examples so far given, SVCs display a single overt structural subject that is shared by all the verbs in the series. For instance in example (21b), *ái* 'I' is understood as the subject of the first and second verbs, i.e. I shot and killed the lion. So, it is an aspect of SVCs to exhibit a single subject i.e. V_1 and V_2 share one external argument. Another property typical of verb series proposed by Baker (1989) is that SVCs are better defined in terms of the verbs in the series necessarily sharing a unique internal argument. This account appears to be incontrovertible if consecutive SVCs represented by examples in (7a, b) are considered alongside. By contrast, Aboh (2009, 2015) objects this analysis and describes it as unnecessary. I shall discuss the relevance of Aboh's objection to Baker's proposal later in this study. Examples in (8), regarded as directional or motion SVCs succinctly corroborate Aboh's view. In (8a) for instance, repeated as (23) below, the verbs *zuru* 'run' and *koi* 'go' are not complement taking verbs. Thus, there is no sense in assuming that such a construction involves object sharing.

23) Áí goo zuru koy hábú
1sg Prog run go market
'I am/was running to the market.'

The descriptions we have provided so far confirm our initial fear that it is hard to characterize SVCs as a unitary phenomenon. On this account, we shall treat the identified types of SVC in Zarma a little differently in the sections below.

Word Order in Serial Verbs

In section (2), the following types of SVC are identified and discussed: Resultative, Consecutive and Directional/Motion. As explained, Instrumental and Causative constructions in Zarma do not fit well into SVC analyses. I will take up the analysis of SVCs in relation to the way constituents are ordered within the VP in this section.

Resultative SVCs of the type mentioned earlier are single clause constructions that have two sequences of verbs where the second verb (i.e. V_2) is an unaccusative verb. Descriptively, RSVCs present events of change which come to play via means of an M event and ultimately end in a condition characteristically defined by R-result. Williams (2008) presents a relatively wider survey of resultatives viz-à-viz their word orders and concludes that the presence of overt direct object between M and R which creates discontinuous order is restricted to or found only in VO languages. Contrary to the cross linguistic evidence presented by Williams (2008), the only object of an RSVC in Zarma does not stand between the Means predicate and the Result predicate, rather, it occurs before the means predicate and still, the situation does not present a continuous order as it is found in Igbo (Williams 2008: 1). Instead, a lexical item *gà*, which is described as a form of a Functional Projection (FP) in this study, separates the two predicates.

The inadequacy of the ternary structure adopted for the treatment of SVC, especially within the earlier Transformational Grammar instigates an account of the construction type within the Minimalist Program, where the process of merge is inherently binary. In this case, the subject of RSVC is recognised as the agent because the first verb, for instance, *kàr* 'beat/hit' in (24) refers to the subject.

24) Írì gá hánsò kar gà wí
1pl Fut dog-Def beat/hit FP kill
'We will beat the dog dead/to death'

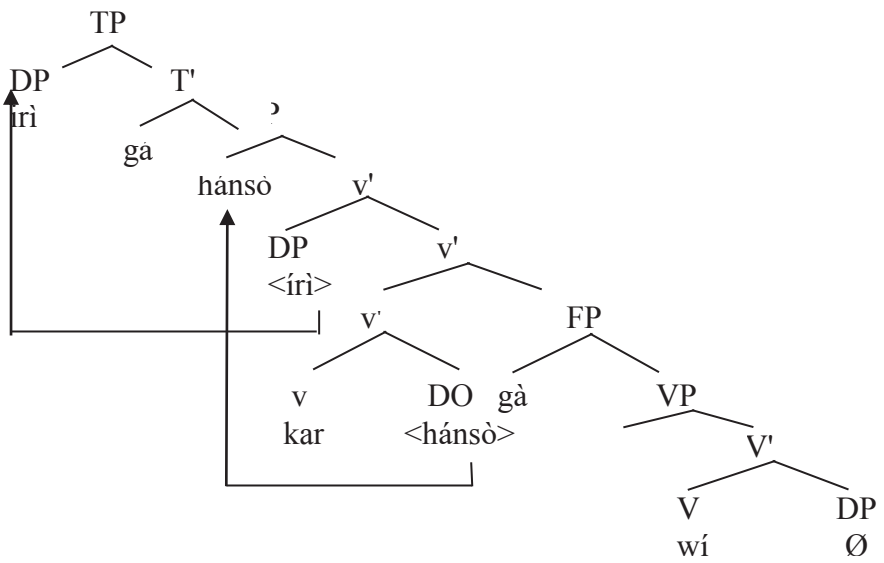
Therefore, the subject, in line with the VP shells, originates in Spec-vP as agent and is later raised to Spec-TP to check its nominative case feature. The verbal shells of the type required for the treatment of RSVC also has a double shell but the higher shell does not invoke an empty v. Instead, the higher shell is filled by *kar* 'beat/hit' and introduces *hánsò* 'the dog' as its internal argument, which later raises to the outer spec of vP to check its accusative case feature. The movement of the direct object is to show that the object receives emphasis from the discourse. Still on the derivation of RSVC, the position of this paper is that an expansion of the VP shell is required so that the unit *gà* can be accommodated within the expanded functional category (position) that is not transitive*.

As hinted earlier in section (2) of this paper, lower and higher verbal shells are not separately or individually marked by a TNS/ASP marker as shown in examples (6-8). This is what makes the creation of a functional category between the higher shell and the lower shell imperative to host the functional element. This creation tends to indicate that RSVCs in Zarma do not involve stacking structures; this means that two finite verbs cannot be embedded within a single VP. On the other hand, the head of the lower VP has been said to be unaccusative, thus, its complement position is phonologically empty. The derivation is represented in (25b) using example (6a), repeated below as (25a).

25) Írì gá hánsò kar gà wí
1pl Fut dog-Def beat FP kill
'We will beat the dog dead/to death.'

*The analysis adopted here is in line with Cinque (1999), Veenstra (1993, 1996), Stewart (1998), Aboh (2009) among others.

25b)



The RSVCs' account presented in (25b) is structurally similar to the data from Edo, where certain adverbs, which Stewart (1998:34) treats as heads, intervene between the object and the lower verbal shell. A representative example of the situation in Edo is presented in (26).

26) Òzó dùnmwún èmà [gié!gié] khién *Edó*
Ozo V_1-pound yam quickly V_2-sell
'Ozo pounded the yam and quickly sold it.'

The situation in Ewegbe as reported by Aboh (2015) is, in some ways, different from the Edo example but they seem to be compatible. The case in Ewegbe is the one in which the habitual aspect marker is an affix, to which the verb must adjoin. Consider the sentence in (27) from Aboh (2015:282).

27) E tsɔ-na akɔɖu ɖu-na *Ewegbe*
3sg take-Hab banana eat-Hab
'S/he used to/habitually eat/s bananas.

Following Cinque (1999), Aboh (2009) proposes a functional projection AspP (aspect phrase) between V_1 and V_2. There is a measure of compatibility in the data from Edo, Stewart (1998) and Ewegbe, Aboh (2015) and those of Zarma under discussion. I assume that *gà* is not an adverb, at least semantically. It is also not qualified to be analyzed as a clitic pronoun. Based on its behaviour in most of the examples cited; it is a likely candidate for tense/aspect marker.

This is based on the fact of (27) and what Aboh (2009) reported for Gbe languages, where the verbs in the SVC show the same aspect marker. I am not persuaded to treat *gà* as an all-time infinitive marker; certain language internal evidence provides support for our categorization. They include: (i) the presence of *gà* in (25) and other related examples does not influence the morphology and semantics of the V_2 *wí* 'kill'; (ii) sentence (25) is not analyzable as a control reading because *hánsò* 'the dog', does not correspond to the understood subject of *wí* 'kill'; (iii) as Projection Principle will predict, V_1, *kar* 'beat/hit', which is a predicate head in the derivation, is not reminiscent of a verb that subcategorizes for a regular non-finite clause, explaining why it is improper to translate (25) as 'we beat/hit the dog to kill; (iv) the absence of *gà* in (5), which are clear examples of imperative sentences, does not support its analysis as an infinitive marker; (v) the translations of the particle in some studies on Zarma is a confirmation of our categorization. Consider for instance the following examples from Abdoulaye (2018:57).

28) À gà kani làabòo raa *Zarma*
3sg Imp lie ground. Def in 'He lies on the ground'.
b. Tandăa goo gà daaru làabòo raa
calabash. Def Prog spread ground. Def in
'The calabash plant spreads on the ground.'

It is translated as an imperfective marker in (28a); when it combines with *goo*, it is translated as a progressive marker as in (28b).

In the consecutive series, the same can be said of the position from which the agent-external argument originates although in this case, the two verbs are transitive and they semantically appear to share a single internal argument as suggested by example (7a), repeated here as (29).

29) Áí dé dùndú gà ŋ□wá
1sg buy yam FP eat
'I bought yam and ate it'

Logically, two events are assumed to take place in (29) where two VPs [VP dé dùndú] and [VP ŋ□wá dùndú] are jointly interpreted.

Following Larson (1991), Collins (1997); da Cruz (1997) and Stewart (1998) among others, we propose that the external argument *áí* 'I' is introduced by the higher vP (light verb) while the direct object is also

introduced by the same light verb and that the complement position of the lower verbal shell hosts an empty category *pro* that is controlled/coindexed by the internal object of the lexically filled light verb i.e. V_1. The *pro* in this case may be said to have the following properties: [+Functional, +Referential, +Nominal]. This is assumed because the upper verb shell has the theta role of agent, which its external argument must take, and that of theme for its internal argument *dùndú* 'yam'. Similar to what occurs in RSVCs, the element *gà* appears as an intervening functional projection between V_1 and V_2. Since it is not possible to translate (29) as 'I bought yam to eat', we would like to maintain that *gà* is not functioning as an infinitive marker here. The choice of *pro* as the candidate for the empty category position of the lower verb complement is predicated on the assumption that *ŋ□wá* 'eat' is a transitive verb with case assigning property whose case is also checked before spell-out and only one copy of the two DPs i.e. *dùndú* 'yam' can be linearized, however, they are both legible at the LF.

Nevertheless, this account is not without its problem. A pronominal, based on binding condition B, must be free in its governing category. In this framework however, *pro* is bound because it is coreferential with the immediately preceding NP. Therefore, the choice of *pro* in this regard is a contravention of the binding principle. An alternative account to the choice of *pro* which agrees with the argument sharing hypothesis proposed by Baker (1989) was given by Agbedor (1994). Agbedor assumes that V_2 in consecutive SVC of the type in (29) should be seen as having a null object coindexed with DP object of V_1. In line with the binding principle, he proposes that the null object of V_2 is an 'empty anaphor'. Zarma data seem to espouse the proposal for sharing of object DP between V_1 and V_2, contra Aboh's (2009, 2015) approach. The relevance of Aboh's approach to Zarma data will be dealt with in section 5.

As we have observed for the other SVCs, directional/motion SVC is also taken for a single clause construction with two sequences of verbs, where V_1 is an intransitive verb. It may not be appropriate to suggest a continuous order for the two verbs as implied by examples (8a, b & d). This is because in (8c), we see *gà*, a functional category separating the two predicates. Thus, it is assumed that a null functional category exists between the two predicates where the

morpheme *gà*[*] is not overt. Using example (8b) repeated below as (30a), the derivation begins with the merger of *ché* 'call' with the DP *Abou* to form the inner VP *ché Abou* 'call Abou'. The functional head, which in this case is null, merges with the inner VP. The light verb later merges with the null functional head to project another v' while the subject DP *Kadi* merges with the v' to project the light vP. In the absence of an aspectual marker, the vP merges with tense to project a T', and the T' in turn merges with its spec to project a TP. The subject DP *Kadi*, introduced at the spec of the upper shell i.e. V_1 has to move to the spec of TP to check its nominative case feature. The occurrence of the DP complement of *ché* 'call', Abou before V_1 is to satisfy an EPP feature because V_1 is a functional verb that does not have a theta role to assign; it cannot assign case either.

30a) Kadi koy Abou ché
Kadi go Abou call
'Kadi went to call Abou.'

b. Kadi ché Abou
Kadi call Abou
'Kadi called Abou.'

c. Kadi ná Abou ché
Kadi Perf Abou call
'Kadi called Abou.'

d. *Kadi Abou ché
Kadi Abou call

e. *Kadi ná ché Abou
Kadi Perf call Abou
'Kadi called Abou.'

The treatment of *koy* as a functional verb receives an appreciable support from the behaviour of *ná*, glossed as a perfective marker 'have', which may not be so realized always. The surface word order variations between (30b) and (30c), where the DP complement of *ché* 'call', Abou originates at the post V_2 complement position in (b), but has to move in (c), is understood as the consequence of EPP licensing that necessarily triggers the V_2 object inversion. In a way, the particle *ná* is the trigger for the movement. Examples (30d, e) are starred because noun transposition is forbidden in either of (30b & c). The behaviour of *ná* in (30c) as an auxiliary is very much like that of

[*]The null functional category assumption is a corollary to Heath's (1998:314) reports that the verb *koy* 'go' in Koyra Chiini, is a verb with zero infinitive marker. Also, Abdoulaye (2018:63) asserts that this marker is sometimes dropped in strongly lexicalized constructions. Contrary to this claim, we have encountered examples where the same verb occurs with *gà*.

koy, which is susceptible to some undefined structural constraints and seems likely to force certain restrictions on its complement.

In summary, the verbal shell analysis adopted here solves the problems of ternary structures which are at odds with standard assumptions of X-bar theory, particularly as it is handled within the MP, where the process of merge is simply binary. Apart from helping to derive the correct surface order in Zarma, the verbal shell structure has also helped to erase the notion of deletion under identity (see Carstens 2002; Collins 1997; Aboh 2009; among others).

The Semantics of SVCs

One popular assumption in the literature is that; a construction of the type S… V_1 … XP … V_2 … V_3 makes a single proposition i.e. one truth condition. This account accords with Aboh's (2009, 2015) position that verbs in SVCs are not decomposable into events. Example (31) affirms the assumption.

31) Í ná hánsò kar gà wí
3pl Perf dog-Def beat FP kill
'They have beaten the dog to death.'

The meaning of the syntactic unit in the above sentence is not seen as derivable at least from the series of verbs it contains. In essence, the semantics of the sentence is not compositional i.e. beat + kill = to kill or to die. This account seems to find support in Zarma considering the example below where the scope property of negation affects only the V_2 ruling out the starred example in (32).

32) *Írì ná hánsò kar sí bú
1pl Perf dog-Def beat Fut.Neg die

By implication, the perfective marker *ná* has scope over V_1 *kar* 'die' while the particle *sí,* marked as 'Future-negative' scopes over V_2. The ungrammaticality of the example sentence in (32) above is a pointer to the fact that it is not permissible for a sub-event of an SVC to be negated. The configuration in (32) above is possible in compound sentences, where we have coordination and complex sentences of the type examined in (19-20), which involve subordination, or other forms of expressions that tolerate an adjunction of some form.

Following comparisons of SVCs in different languages, Aboh (2009, 2015), and insightful discussions of Emai data, Schaefer &

Egbokhare (2020), there is the argument that, verb serialization is not a free process; there are syntactic and semantic properties of verbs in series that either prohibit or allow co-occurrence. This view is a corollary to what we have observed, which is further explained below. The verbs in the series in (33) below do not fail restriction or co-occurrence tests, thus, the examples are convergent. (33a & b) are examples of directional SVCs; where each of *koy* and *dìrà*, both motion verbs, is a modifier of its lower verb phrase i.e.VP_2. In (c), *de*, a process verb precedes an activity verb, *ŋ□wá*.

33a) Kadi koy Abou ché
Kadi go Abou call
'Kadi went to call Abou.'
b. Usman goo dìrà koy hábú
Usman Prog walk go market
'Usman is/was walking to the market.'
c. Í ná demise dé gà ŋ□wá
3pl Perf peanut buy FP eat
'They bought peanut and ate it.'

When the order of the verbs in each of the examples in (33) is transposed, the outcomes of such utterances are either nonsensical or ungrammatical. The semantic specifications of V_1 in (34a & b) are not compatible with those of the V_2; they do not combine in that order to form convergent expressions. In addition to the observed semantic mismatch between V_1 and V_2 in (34b); the structure is syntactically defective. For instance, the motion verb, *koy*, and its subcategorized postpositional phrase * (PP) are not in local configuration or domain; they are separated by an intervening or offending verb, *dìrà* 'walk'.

34a) *Kadi ché Abou koy
Kadi call Abou go

*The choice of postpositional phrase in this context is predicated on the fact that, there are relevant examples, such as the ones below, which make use of postposition. However, in (35b), the particle is assumed to have been dropped; thus an instance of a null head is induced.

(i) Rakiat zùmbù motàa ra
Rakiat descend car-Def P
'Rakiat got out of the car'
(ii) Ní dé zàárà Alake sè
2sg buy cloth Alake P
'You bought cloth for Alake'
(iii) Áí koy wúndó rá
1sg go house-Def P
'I went into the house'

b. *Usman goo koy dìrà hábú
Usman Prog go walk market

c. *Í ná demise ŋ□wá gà dé
they Perf. peanut eat FP buy

It is not in all cases that a change in the order of verbs in series results in nonsensical or ungrammatical utterances. It is also possible for the reversal of the order to bring about a change in meaning. Consider the examples below.

35a) Kadi dé zaara kà
Kadi buy cloth come
'Kadi bought cloth and came along with it.'
b. Kadi kà gà dé zaara
Kadi come FP buy cloth
'Kadi came to buy cloth.'

The difference in the meanings of the two sentences in (35) is based on verb transposition. In (a), V_1, a process verb, is a complement taking verb whereas V_2, a change of location verb is unaccusative. It appears from its translation that the weight of the semantic import of sentence (a) is borne by V_2. In (b), the reversed order obtains and the complement taking verb seems to carry the bulk of the meaning which the sentence expresses. This point further provides support for Aboh (2015:280), who states that, the traditional analyses of SVCs as involving two independent verbs that discharge their thematic-roles on shared arguments as misleading. Further insight into this account is given in section 5 below. To conclude this section, it is not beside the point, to state that, though, serialization exhibits semantic selectional requirements on the co-occurrence of V_1 and V_2, what is possible or impossible does not correspond cross linguistically.

Functional Verbs versus Lexical Verbs

Following from the semantics of SVCs discussed in the immediately preceding section, Aboh (2009, 2015) treats SVCs as a combination of a functional verb i.e. an auxiliary and a lexical verb. The assumption in this framework is that, languages the world over seem to tolerate some form of auxiliation which is understood to share some amount of similarity with serialization. Thus, Aboh considers what happens in SVCs as a process where a verb form is combined with another verb form aimed at expressing tense, aspect, mood, quantification, or

introduce an additional argument. The currency of Aboh's proposal and its relevance to Zarma data deserve an appraisal in this study. By a first approximation, it is transparent from (36) that, V_1 may indeed be taken for a functional verb that provides some modification for the V_2.

36a) Usman goo dìrà koy hábú
Usman Prog walk go market
'Usman is/was walking to the market.'
b. Abou zuru koy
Abou run go
'Abou went away.'

In (36), V_1 bears directly on the notion of being a functional verb because the verb *dìrà* 'walk' seems to be concerned with the manner through which the action expressed by V_2*koy* 'go' is carried out. Thus, V_1 modifies the lexical verb in some ways. The same explanation is adequate for example (b). The possibility that V_1 can be dropped without affecting the interpretation of the sentence significantly is a shred of evidence that V_1 is indeed a functional verb. Consider the compositions and translations of the counter examples to the ones presented in (36).

37a) Usman goo koy hábú
Usman Prog go market
'Usman is/was going to the market.'
b. Abou koy
Abou go
'Abou went.'

Drawing comparisons between the interpretations of (36) and (37) provides a favourable support for the claim made by Aboh; that V_1, a functional verb does not display the same properties as when used as a lexical verb. It is rather used to express notions such as manner, cause, instrument and the likes, which are associated with V_2 i.e. lexical verb. This account appears to be in tune with the characters of the data used in the analyses of directional/motion SVCs earlier in this paper.

In contrast, resultative SVC does not seem to enter easily into this analysis. As earlier indicated, sentence (24) repeated as (38a) illustrates a resultative SVC where the internal argument of the unaccusative V_2 is the theme of V_1.

38a) Írì gá hánsò kar gà wí
1pl Fut dog-Def beat/hit FP kill
'We will beat the dog dead/to death'
b. *Írì gá kar
1pl Fut beat/hit

Traditionally, V_1 in (38a) is a transitive verb, capable of assigning case and theta to its complement. These features explain why (38b) does not converge. However, in line with the proposal developed by Aboh, *kar* 'beat/hit' cannot assign theta role to the DP *hánsò* 'the dog' because its syntactic position is assigned a functional role. Meanwhile, V_2 is unaccusative; it is improper to consider it assigning an internal theta role to *hánsò*. Besides, *kar* cannot be said to have lost its full lexical properties in this context. This is a challenge to the functional approach in the treatment of SVCs. It is not clear how the null oblique case assigner account proposed for Kpele in Aboh (2009:20) can be extended to the analysis of Zarma RSVC. Thus, I stand by the previous analysis.

Aboh (2009, 2015) extends this analysis to the consecutive SVC type, by assuming that the functional meaning associated with V_1 coincides with situations in which V_1 has no internal θ-role to assign, but selects for a complement inside which the element to its right is being licensed. In the same spirit, the lexical meaning is argued to correspond to situations in which V_2 selects for a DP internal argument to which it assigns an internal θ-role. Chief among the reasons he gives for this analysis is that; the meaning, which a verb assumed, when used lexically does not correspond to its functional use. The immediate implication of this hypothesis on the Zarma data is that V_1, *de* 'buy', in example (33c), repeated here as (39), cannot assign an internal θ-role to *demise* 'peanut'.

39) Í ná demise dé gà ŋwá
3pl Perf peanut buy FP eat
'I bought peanut and ate it.'

This is so, because, the intended meaning of V_1 is that of a modifier of VP_2. This does not work accordingly, if the Zarma data in (39) and (40)* are compared.

* The example in (40) is adapted from Abdoulaye (2018:62).

40) Bòrò ná nòorú ŋwá kàla à furò kàmbè
man Perf money eat till 3sg enter hand
'Someone embezzled so much money and got caught.'

In (39), the verb *ŋwá*, means 'eat' i.e. take peanut into the mouth as food and swallow it, and functions as a lexical verb i.e. V_2. In (40), however, *ŋwá* 'to eat' does not occur with an eatable element; and it is the only verb inside the matrix clause. Instead, it is translatable as 'embezzle' i.e. misuse entrusted money. In Aboh's analysis, *nòorú* 'money, the DP complement of *ŋwá*, will not receive θ-role Theme because; it does not fulfill the semantic function of Theme; since the agent, *bòrò*, did not literally eat the money. However, it needs be stated, that *ŋwá* is not used as a functional verb in either of the examples in (39 & 40), contra Gungbe, Aboh (2015:289). It seems to me that the lexical properties of verbs are more relevant, when an attempt is made to draw on the distinctions between functional and lexical verbs, than the preference for precedence. The situation in Yoruba, a language from a different family, is indicative of this assumption.

41) Ako□□wé nàà kó owó o□□gá rè je□ *Yorùbá*
secretary the gather money boss his eat
'The secretary embezzled his boss' money.'

In the Yoruba example in (41), the semantic concept of embezzlement is expressed by means of the SVC, whereas, it does not have an SVC correlate in Zarma (40). By Aboh's estimation, *je*, which is the V_2, translated as 'eat', does not have an internal theta-role to *owó o□□gá re□□* 'his boss money' because the secretary did not literally eat his boss' money. The same verb can function in V_2 position and be capable of assigning an internal theta-role to the DP that occurs to its left. This is illustrated with the example below.

42) Mo ra isu je□
I buy yam eat
'I bought yam and ate it'

Example (42) further shows the defect in drawing symmetry between functional versus lexical verbs and V_1versus V_2.

Further on the analysis of the consecutive series; Aboh (2009, 2015) argues that these SVCs do not support the Argument Sharing Hypothesis (ASH). To him, some properties of V_1, a functional verb in

such series, do not make an internal argument available to it. Following from this line of argument, it implies that *demise* 'peanut' in (39), is introduced by *ŋwá* 'eat'; but, it (*demise*) has to move to Spec-VP_2, where it is licensed. However, it is doubtful whether there is a difference in the meaning assumed by *de* 'buy', in (39), as a functional verb, and the meaning available to it in its usage as a full lexical verb (43).

43) Í ná demise dé
3pl Perf peanut buy
'They bought peanut.'

In (43), *demise* 'peanut' merges with the head V to form a VP, *demise de* 'buy peanut', whose complement occurs to its left*. In this case, Theta is available to the position, which *demise* occupies, in compliance with Theta-Role Assignment Principle (TRAP), which predicts that: "θ-roles can only be assigned under a Merge operation," (cf. Hornstein et al, 2005:54). Thus, *demise* is assigned the internal θ-role of THEME, being the entity affected by the action or state expressed by the predicate (*dé* 'buy'), (cf. Haegeman, (1993:50). I hypothesize that the structure in (43) is well formed because the THEME role is assigned to *demise* when it is merged with *dé*, and the AGENT role is assigned to *I* 'they' when it merges at the Spec-VP. Thus, the application of the Theta-Criterion at LF is a potential property, which makes the derivation to converge.

By contrast, the appropriateness of the assumption that there is no argument sharing in the two verbs; *de* 'buy' and *ŋwá* 'eat', in (38), relies on the hypothesis that *demise* 'peanut' is connected to V_1 by Move and not by Merge. It appears that *dé* in that context, is theta impotent. Thus, it cannot assign an internal θ-role. Here, it is analyzed as a modifier of VP_2 because it logically encodes the way the activity expressed inside V_2 has been carried out. Finally, though Aboh's proposal is responsive, as suggested by its applicability to the data used in this study, it requires further appraisal.

On a grand scale, this study has shown that the lexical features or properties of verbs are more relevant to the analyses of SVCs with respect to their order of precedence and co-occurrence restrictions. The idiosyncrasies of lexical items, particularly verbs, do not conform

*Zarma is not a configurational language; it spots verb object and object verb orders in its basic clause. See Jayeola (2020) for the discussions of this phenomenon.

cross linguistically. This assumption is a corollary to the following statement from Aboh (2015:274), who asserts that ". . . the properties discussed here do not uniformly cut across all the relevant languages; there are sometimes startling differences between them." Essentially, it cannot be claimed that all the verbs in series have lexical properties and vice versa.

Conclusion

Contrary to popular opinion, this paper argues that Zarma is indeed a serializing language. In this connection, three types of SVCs, based on their structural build-up and semantic imports, are identified: Resultative, Consecutive and Directional/motion in the language. Instrument and Causative constructions are not true SVCs in Zarma. In line with the various accounts that have been extended to the phenomenon of SVCs in other languages; this study examines the characteristic properties of the SVC and concludes that the construction type, though contains more than one verb, is still regarded as a single clause. The combination of the VP shell hypothesis with the functional versus lexical approach developed in Aboh (2009) provides a fine grained analysis for the derivation of the SVCs in Zarma.

The data used in this study indicate that there is no continuous order for the two verbs because the particle *gà*, a functional category separates the two predicates. This account departs radically from those of Heath (1998) and Abdoulaye (2018), who analyse *gà* as an infinitive marker. Drawing largely on language internal evidence, I analyse *gà* as a kind of functional projection whose behaviour is imitative of Tense/Aspect category. Following Aboh (2009, 2015) the paper posits that verbs in SVCs are not decomposable into events. I argue further that verb transposition is sometimes disallowed; causing a derivation to be either nonsensical or ungrammatical. And, at some other times, it can bring about a change in meaning of the structures involved. The paper concludes that the variability observed in the structural realizations of SVC has not helped in providing a uniform account for the widely studied phenomenon of SVC. Thus, further researches are still required.

Abbreviations

The following abbreviations/symbols are used in this paper:
Asp = Aspect, CAUS = Causative, Conj = Conjunction, Def = Definite, DP = Determiner Phrase, EPP = Extended Projection Principle, Foc = Focus, FP = Functional Projection, Fut = Future

tense, Hab = Habitual, Imp = Imperfective, Inf = Infinitive Marker, LF = Logical Form, M = Mean, Neg = Negative Marker / Negation, Ø = Phonetically realized as zero, P = Preposition/Postposition, Perf = Perfective Aspect, Pl = Plural, PP = Preposition/Postposition Phrase, Prog = Progressive Aspect, R = Result, RSVC = Resultative Serial Verb Construction, Sg = Singular, Spec = Specifier, SVC = Serial Verbal Construction, T, TNS = Tense, TP = Tense Phrase, UG = Universal Grammar, V = Verb, VP = Verb Phrase, θ = Theta, * = Denotes an ungrammatical expression, 1 = First Person, 2 = Second Person, 3 = Third Person

References

Abdoulaye, M. L. (2018). Static Location and Motion Marking in Hausa and Zarma. *Journal of West African Languages,* 45(2): 41–65.

Abdoulaye, M. L. & Buba, M. (2015). Comitative-based Causative Constructions in Zarma. *SKY Journal of Linguistics* 28: 37–66.

Aboh, E. O. (2003). Les Constructions à Objet Préposéet les Series Verbales dans les Langues Kwa. In P. Sauzet & A. Zribi-Hertz (eds.). *Typologie des Langues D'Afrique et Universaux de la Grammaire:* 'Benue-Kwa, Soninke, Wolof'. Paris: L'Harmattan: 15–40.

Aboh, E. O. (2009). Clause Structure and Verb Series. *Linguistic Inquiry,* 40 (1): 1–33.

Aboh, E. O. (2015). *The Emergence of Hybrid Grammars: Language Contact and Change*. United Kingdom: Cambridge University Press.

Agbedor, P. (1994). Verb Serialization in Ewe. *Nordic Journal of African Studies,* 3: 115–135.

Awobuluyi, O. (1973). The Modifying Serial Construction: a Critique. *Studies in African Linguistics,* 4(1): 87–112.

Awobuluyi, O. (1978). *Essentials of Yoruba Grammar*. Ibadan: Oxford University Press.

Awoyale, Y. (1995). The Role of Functional Categories in Syntax: the Yorùbá Case. In K. Owolabi (ed.). *Language in Nigeria.* Ibadan: Group Publishers: 113–128.

Baker, M. C. (1989). Object Sharing and Projection in Serial Verb Constructions. *Linguistic Inquiry,* 20: 513–553.

Baker, M. C. (1991). On the Relation of Serialization to Verb Extensions. In C. Lefebvre (ed.). *Serial Verbs: Grammatical, Comparative and Cognitive Approaches.* Amsterdam: John Benjamins: 79–102.

Baker, M. C. & Stewart, O. T. (2002). A Serial Verb Construction without Constructions. Ms., Rutgers University, New Brunswick, NJ.

Bamgbose, A. (1973). The Modifying Serial Constructions: a Reply. *Studies in African Linguistics,* 4(2): 207–217.

Bamgbose, A. (1974). On Serial Verbs and Verbal Status. *Journal of West African Languages,* 9(1): 17–48.

Carstens, V. (2002). Antisymmetry and Word Order in Serial Constructions. *Language,* 78(1): 3–50.

Cinque, G. (1999). *Adverbs and Functional Heads: a Cross-linguistic Perspective*. New York: Oxford University Press.

Collins, C. (1997). Argument Sharing in Serial Verb Constructions. *Linguistic Inquiry,* 28: 461–497.

Creissels, D., Dimmendaal, G. J., Frajzyngier, Z. & König, C. (2008). Africa as a Morphosyntactic Area. In B. Heine & D. Nurse (eds.). *A Linguistic Geography of Africa*. United Kingdom: Cambridge University Press: 86–150.

da Cruz, M. (1997). Serial Constructions and Null Agreements in Fɔn. In R-M Dechaine & V. Manfredi (eds.). *Object Positions in Benue-Kwa*. The Hague: Holland Academic Graphics: 31–45.

Dechaine, R-M. (1988). Towards a Typology of Serial Constructions in Haitian. In V. Manfredi (ed.). *Niger-Congo Syntax and Semantics 1.* Boston: Boston University African Studies Center: 49–64.

Dechaine, R-M. (1993). Serial Verb Constructions. In J. Jacobs, A. V. Stechow, W. Sternefeld & T. Vennemann (eds.). *Syntax: an International Handbook of Contemporary Research.* Berlin: Walter de Gruyter: 799–825.

Foley, W., A. & Mike O.. (1985). Clausehood and Verb Serialisation. In J. Nicohols & A. Woodbury (eds.). *Grammar inside and outside the Clause.* Cambridge: Cambridge University Press: 17–60.

George, Isaac. (1975). Typology of Verb Serialization. *The journal of West African languages,* 9(1): 78–97.

Haegeman, L. (1993). *Introduction to Government and Binding Theory*. Oxford: Basil.

Heath, J. (1998). *A Grammar of KoyraChiini: The Songhay of Timbuktu*. Berlin/ New York: Mouton de Gruyter.

Hornstein, N., Nunes, J. & Grohmann, K. K. (2005). *Understanding Minimalism.* Cambridge: Blackwell.

Jansen, B., Koopman, H. & Muysken, P. (1978). Serial Verbs in the Creole Languages. *Amsterdam Creole Studies* 2: 125–159.

Jayeola, W. A. (2020). Antisymmetry and Word Order in Double Object Constructions in Zarma. *Linguistik Online*, 101(1): 49–74.

Larson, R. K. (1991). Some Issues in Verb Serialization. In C. Lefebvre (ed.). *Serial Verbs: Grammatical, Comparative and Cognitive Approaches.* Amsterdam: John Benjamins: 185–211.

Law, P. & Veenstra, T. (1992). On Empty Operators in Serial Verb Constructions. *MIT Working Papers in Linguistics 17: Proceedings of the Kwa Comparative Syntax Workshop.* MITWPL, Department of Linguistics and Philosophy, MIT, Cambridge, Mass: 183–203.

Lefebvre, C.. (1991). Take Serial Verb Constructions in Fon. In C. Lefebvre (ed.). *Serial Verbs: Grammatical, Comparative and Cognitive Approaches.* Amsterdam: Benjamins: 37–79.

Muysken, P. (1987). Prepositions and Postpositions in Saramaccan. In M. C. Alleyne (ed.). *Studies in Saramaccan Language Structure*, Caribbean Culture Studies: University of Amsterdam: 89–101.

Oyelaran, O. O. On the Scope of the Serial Verb Construction in Yoruba. *Studies in African Linguistics,* 13(2): 109–146.

Schaefer, R. P. & Egbokhare, F. (2020). Constraints on Verb in Series and the Coding of Syntactic Adjuncts. In E. Urua, F. Egbokhare, O. Adesola & H. Adeniyi (eds.), *African Languages in Time and Space: A Festschrift in Honour of Akinlabi Akinbiyi.* Ibadan, Nigeria: Zenith BookHouse: 410–419.

Stewart, O. T. (1998). The Serial Verb Construction Parameter. PhD. Dissertation, McGill University.

Veenstra, T.. (1993). Serial Verb Constructions, Parameter Settings and Thematic Restrictions on Argument Sharing. In F. Drijkoningen & K. Hengeveld (eds.). *Linguistics in the Netherlands*. Amsterdam: John Benjamins: 153–164.

Veenstra, T. (1996). *Serial Verbs in Saramaccan*. The Hague: Holland Academic Graphics.

Williams, A.. (2008). Word Order in Resultatives. Cascadilla Proceedings Project.