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Case Checking in Igbo Serial Verb Constructions

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Abstract
This paper has focused on serial verbs in Igbo. The aim was to find out how Case is checked by the series of verbs that make up a serial verb construction to their argument DPs. This syntactic interaction was analyzed with the Minimalist Program. A major finding of this study is that Igbo attests more serial constructions than those postulated in earlier literature and that verbs in serial constructions may (and not necessarily must, as defined by some scholars like Welmers (1973) and Bamgbose (1974)) share core argument (subject) and other arguments. It was also found that serial constructions do not create problem for the Case theory. The direct object of the first verb in a serial construction gets it original accusative Case, while the object of the second verb gets a genitive Case as checked by the Open Vowel Suffix in Igbo on the verb.
Keywords: Case, Igbo, serial verb, noun, subject, object

1. Introduction

Serial verbs are complex syntactic structures that are internally made up of a number of verbs. The peculiar nature of this kind of verbs has pointed out the need for theories of grammar to take cognizance of certain features of African languages. Serial verbs allow the speaker to express various aspects of a situation as a single cognitive package within one clause and with one predicate. This paper investigates serial verb constructions (SVCs) in Igbo, its properties and types and how Case is checked by these complex predicates in Igbo.

2. The Concept of Case

Case is a property of DPs. It is the morphology that is associated with grammatical relations (GRs) (Carnie, 2002:233). It is intricately involved in the identification of GRs in many languages involving morphological markings on or within NPs (Farrell, 2005). Case has generated a lot of interest among linguists in the past decades (see Blake, 2001; Falk, 1997; Chomsky, 1981; Ura, 2001).
It is a well-known fact that languages differ in terms of their way of expressing morphological case on nominals. Languages like Latin, Russian, Finnish, Basque, etc have rich overt case morphology for every nominal. It is only for pronouns that English, Yoruba and Igbo make the distinction in terms of their morphological case. According to Ura (2001: 335), the important point to note is that whether case is marked overtly or covertly, "case should be present in all nominals at a more deeply abstract level in the theory of grammar. This abstract notion of Case as a theoretical construct is called "abstract Case" to contrast it with the morphological forms of case."

2.1 Case in Minimalist Program

The GB notion of Case assignment was replaced in minimalism with one of checking (of Case and agreement features) with functional heads. In the MP, nouns enter the derivation fully inflected for Case and agreement features. Nouns bear uninterpretable Case features as well as their inherent interpretable phi-features (such as person and number) (Richards, 2011). These formal features, according to Ura (2001:350) undergo "Operation Feature Checking ", which motivates syntactic movements. By feature checking, a relation (called Checking Relation) is produced.
Feature checking is possible only when the element (Checkee) that possesses the feature to be checked is in the Checking Domain of the element (Checker) that possesses the checking feature. The movement of the Checkee could be either covert or overt, depending on whether it took place before or after spell-out (Richards, 2011). Checked features are erased when possible and are invisible at LF, but accessible to syntactic operations, but erased features are not accessible at all in C_{HL} (Chomsky, 1995: 280-281).
Uninterpretanle features must be checked and deleted at LF, while interpretable ones may not be checked or deleted because they are interpretable at LF; hence, the existence of them at LF does not yield a violation of Full Interpretation at LF. Uninterpretable features that remain undeleted at LF cause the derivation to crash. Ura (2001) noted that it is universally true that Case features are uninterpretable and therefore must be checked and deleted at LF.
Chomsky's Minimalist theory of Case gives a syntactically more concrete status than the earlier versions of PPT. It counts as a kind of formal feature that has an individual property concerning strength. Moreover, by the LF

interface condition (i.e., Full Interpretation), Case is required to be properly licensed (i.e., checked, deleted, and erased) in accordance with the mechanism of feature checking under a certain structural condition; for Case feature is universally uninterpretable, and no interpretable features can enter into the interpretation at the conceptual – intentional (C-I) system (i.e., LF) (Ura, 2001:351).

2.2 Types of Case

Distinction is made between structural Case and inherent Case. Structural Case is checked in a specific structural configuration, that is, it is sensitive only to structure, whereas an inherent Case is that which is associated with particular arguments of predicates and it is sensitive to semantic roles (Blake, 2001:60). An inherent Case checker can check Case only where it assigns a semantic role.

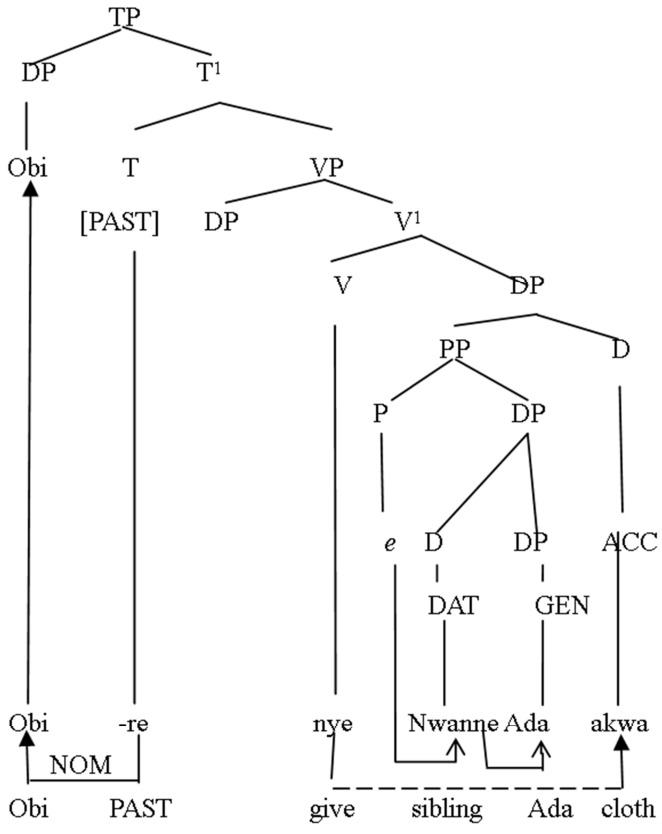
The common cases are nominative (NOM), accusative (ACC), oblique (OBL), dative (DAT) and genitive (GEN). In MP, government is replaced by a basic specifier–head relation. NOM is checked in a specifier position of VP. ACC is checked in the domain of V-bar. Oblique and Dative cases are checked by PP and genitive by DP possessor. These cases are exemplified below:

Obí nyèrè nwánné Adá ákwà. (1)

NOM DAT GEN ACC
Obi gave sibling Ada cloth
'Obi gave Ada's sibling (a piece of) cloth.'

Subject DP receives NOM Case that generated from specifier position of V-bar and moved to Spec-TP to have it NOM Case checked by T. *Nwanne* is the indirect object and has the DAT Case. Svenonius (2002) argues that dative is always inherent and not based on structural configuration. The direct object *akwa* receives ACC Case and *Ada* GEN Case. The preposition which checks DAT Case is null in Igbo because Igbo dative shift obligatorily (Uwalaka, 1995). The VP still check the Case of direct object even with the PP intervening between them in a construction. The diagram below shows the directionality of Case checking.

(2)



'Obi gave Ada's sibling (a piece of) cloth.'

3. Serial Verb Constructions

Serial verb construction (SVC) or verb serialization is a syntactic resource which allows the speaker to express

various aspects of a situation as a single cognitive package within one clause and with one predicate. Welmers (1973: 367) says serialization '… seems to involve actions that can be associated with each other only if they are performed by the same subject'. Along this view, Bamgbose (1974:17) defines it as a construction '… where all the verbs share a common subject in the surface structure. Larson (1991) describes verb serialization as a phenomenon whereby notions that would elsewhere be expressed through conjunction, complementation, or secondary predication are rendered uniformly by means of a sequence of verbs or VPs.

For our working definition of the serial construction, we shall adopt Aikhenvald's (2006:1) definition:

> A serial verb construction is a sequence of verbs which act together as a single predicate, without any overt marker of coordination, subordination or syntactic dependency of any sort. They are monoclausal; their intonation properties are the same as those of a monoverbal clause and they just have one tense, aspect, and polarity value. Serial verb constructions may also share core and other arguments. Each component of an SVC must be able to occur on its own right.

Déchaine's claim that SVCs have one subject is not always the case that verbs in a serial construction share one subject especially in resultative serial constructions (Ogie, 1991; Arokoyo, 2010).

Payne (1997) argues that serial verbs occur in all types of languages, but are more common in languages that have little or no verbal morphology, that is, isolating languages. SVC is widespread in West African, Southeast Asian, Creole, Amazonia, Oceania, and New Guinea languages (Aikhenvald, 2003). The sequence of verbs in an SVC shares the same subject NP and may have an intervening object between the verbs as illustrated in (3):

a. Ada jì ḿmà bèe ánụ.
(3)
Ada hold knife cut meat
'Ada cut the meat with a knife.'

b. Ó sìrì jí ríe.
3SG cook yam eat
'He/She cooked yam and ate.'

c. Ó zụrụ ákwụkwọ nyé m.
3SG buy book give me
'He/She bought a book for me.'

Each of the verbs in the serial constructions above has objects. The object of V_1 in (3b) is understood as the object of V_2 in the clause. All the verbs in a clause share the same subject. Arokoyo's (2010:76) view that "there are SVCs where the object of the first clause functions as the subject of the second clause" holds but the verbs are in phrases and not clauses, because with clauses it is no longer SVC but consecutive constructions (Ameka, 2005). Object of a V_1 functioning as the subject of V_2 is possible in resultative SVCs. Déchaine (1993) and Baker and Stewart (1999) claim that resultative SVCs show up in the form of V-V compounds in Igbo. Contrary to this view, we have instances of resultative SVCs that actually show up as true SVCs in Igbo. We shall examine this under the different types of SVCs attested in Igbo. In the following sub-section, we will look at the distinctive features of SVCs in Igbo.

3.1 Properties of Serial Verb Constructions in Igbo

Serial constructions in Igbo have the following properties:

- The two or more verbs with their complements (if any) in an SVC do not have any marker of coordination or subordination. This makes SVCs monoclausal. Coordination and subordination are usually achieved with the use of tone in Igbo (see Emenanjo, 1978; Welmers, 1973; Watters, 2000).
- The VPs in the sequence are construed as occurring within the same temporal frame. Some verbs appear with or without the –rV affix that indicate past but the sentence obligatorily receives a past interpretation (Uwalaka, 1982):

a. Ó jì ḿmà báa jí.
(4)
3SG hold knife peel yam
'He/She peeled yam with a knife.'

b. Ó jì-rì ḿmà báa jí.
3SG hold-rV knife peel yam

'He/She peeled yam with knife.'

Auxiliaries, negation, tense and aspect markers of all the verbs sequence are found with the first verb of the construction. Extensional affixes and the open vowel suffix may however, be found on the other verbs in the series.

a. Adá nà-ebú nkụ aga áhía.
(5)
Ada PROG carry firewood go market
'Ada carries firewood to the market.'

b. Ó jí-ghì ńgàjì erí ńri.
3SG hold-NEG spoon eat food
'He/She is not eating with a spoon.'

c. Ọ ga-ra áhịa zụọ ńchà.
3SG go-PAST market buy soap
'He/She went to market and bought soap.'

All VPs in the series share the same grammatical subject except in resultative SVC where the object of V_1 is understood to be the subject of V_2. This is referred to as subject-object alternation SVC (see Arokoyo, 2010).

a. Ó sìrì jí ríe.
(6)
3SG cook yam eat
'He/She cooked yam and ate.'

b. Ada mèrè dí ya arụọ ụlọ. (Uwalaka, 1995)
Ada cause husband her build house
'Ada made her husband build a house.'

It is clear that the subject of the verb *siri* 'cook' in (6a) is also the subject of *rie* 'eat'. The direct object of V_1 is also the direct object of V_2, therefore there is internal argument sharing in the SVC. Collins (1997) following Baker (1989) states that internal argument sharing is a necessary property of SVCs. In (6b) the object of V_1 *di ya* 'her husband' is the subject of V_2. (6b) is a resultative SVC.

- The individual verbs that make up an SVC can function as independent verbs in simple clause. (6a) above can be thus;

a. Ó sìrì jí.
(7)
3SG cook yam
'He/She cooked yam.'

b. Ó rìrì jí.
3SG eat yam
'He/She ate yam.'

The VPs share the same mood e.g imperative, future, indicative, hortative, or progressive. (4a) is indicative and (5a) is progressive.

3.2 Types of Serial Verb Constructions in Igbo

There are different types of SVCs in serializing languages. Some are attested with the use of surface serial constructions in the language while others are achieved and surfaced as V-V compounds which are analyzed as being derived from covert serial constructions. Contrary to Dechaine's (1993: 238) claim that there are no dative and resultative serial constructions in Igbo but that these predicates types surface as V-V compounds, we will show that some datives and resultatives SVCs actually show up as serial constructions in the language.

3.2.1 Instrumental Serial Verb Construction

The verbs *ji* 'hold' and *were* 'take' are used to express instrumentality in Igbo. Both verbs are syntactically similar. Each occur in a complex structure [- NP VP], typical of SVCs, where it obligatorily takes a complement and a VP.

a. Ó wèrè ụkwụ gàá áhịa. (Dechaine, 1993)
(8)
3SG take leg go market
'He/She went to market on foot.'

b. É jì áziżà ázà ụlọ. (Emenanjo, 1978)
IMP hold broom sweep house
'People sweep the house with a broom.'

c. Obí wèrè ósísí kụọ Adá.
Obi take stick hit Ada
'Obi hit Ada with a stick.'

In instrumental SVC, the object of V_1 is also the instrumental argument of V_2. In (8c) above, the object of *were* 'take' is *osisi* 'stick' and it is also the instrument used to carry out the action of *kụọ* 'hit' on Ada.

3.2.2 Multi-Event Serial Verb Construction

In multi-event SVC Serial constructions, different events which are related are formed. All the verbs share a single subject in a multi-event serial construction. (9a-c) illustrate this.

a. Ógù gòrò ọkụkọ gbúo síe ríe. (Dechaine, 1993)
(9)
Ogu buy chicken kill cook eat
'Ogu bought a chicken, killed [it], cooked [it] and ate [it].'

b. Ó kwùrù ókwu kwáa ákwa. (Nwachukwu, 1987)
3SG speak word cry cry
'He/She spoke and cried.'

c. Ọ bịàrà kụọ aka.
3SG come knock hand
'He/She came and knocked.'

3.2.3 Dative Serial Verb Construction

Dative SVC indicates and distinguishes the recipient of something given or transferred. Dative constructions in Igbo usually surface as V-V compound, hence Dechaine's (1993) claim that there is no dative serial construction in the language. Examples (10a-b) show dative constructions with V-V compounds, while (10c - d) illustrate those with serial construction.

a. Ó bì-nyèrè Adá égo.
(10)
3SG borrow-give Ada money
'He/She lent Ada some money.'

b. Ó bùtè-ere únù jí. (Saah & Eze, 1997)
3SG bring-APPL you (pl.) yam
'He/She brought you(pl) yams.'

c. Ọ zụtàrà ákwà nye ḿ.
3SG buy cloth give me
'He/She bought [a piece of] cloth and gave me [for me].'

d. Ọ nàtàrà ya nyé Uzọ.
3SG collect 3SG give Uzo
'He/She got it from him/her and gave it to Uzo.'

3.2.4 Resultative Serial Verb Construction

Just like the use of dative constructions surfacing as V-V compounds, resultative constructions also surface as V-V compounds in Igbo (11a-b) (Baker & Stewart 1999:11). There are some occasions where resultative constructions surface as true serial construction (11c-d).

a. Ọ kụ-gburu Ézè. (Dechaine, 1993)

(11)
3SG heat-kill Eze
'He/She beat Eze mercilessly/to death.'

b. Há kụ-wara ikó.
they hit – break cup
'They broke the cup.'

c. Adá mere dí ya arụọ ụlọ. (Uwalaka, 1995)
Ada cause husband her build house
'Ada made her husband build a house.'

d. Ọ kpọọ anyị bịá.
3SG call us come
'He/She brought us.'

V_2 in a resultative construction expresses the result of V_1. The object of V_1 is regarded and understood to be the subject of V_2. Those that surface as V-V compound, V_2 is analyzed as incorporating into V_1 to give the complete predicate (Dechaine, 1993).

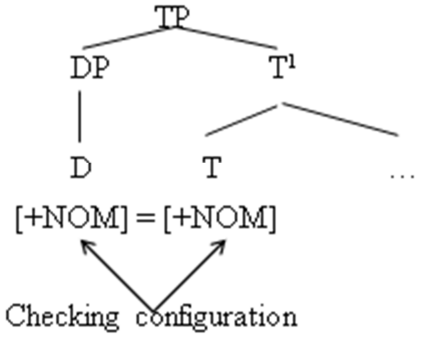
Serial constructions are used to express many notions in Igbo. Primary of such notions are preposition and adverb (see 8a-c and 10a-d). SVCs are also used for expressing direction, modality, causatives, benefactive, instrumentals, manners, comparison, purpose, dative, etc (see Emenanjo, 1978; Madugu, 1976).

4. Case Checking in Serial Verb Constructions

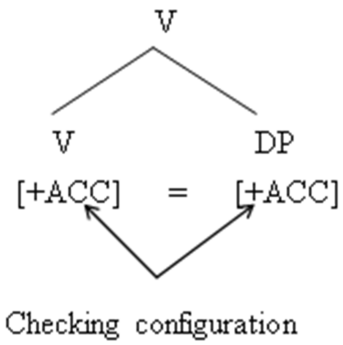
Case checking is an important theory within the Minimalist Program. Elements Checkee move into the Checking Domain to get their features checked by the Checker. The constraint that forces this movement to occur is called the Principle of Full Interpretation (Chomsky, 1993; 1995). The principle stipulates that features must be checked in a local configuration. We can thus reduce the Case Filter to Full Interpretation: NOM Case is feature checking like that in (12a) and ACC Case is like that in (12b) (Carnie, 2002:317).

(12)

a.



b.



In a serial construction, that share the same subject DP, NOM case is assigned to the subject DP in the Specifier TP position as illustrated in (12a) above. Serial constructions contain more than one verb which can be separated by their complements (if any) in a single clause. In SVCs in Igbo, V_1 bears the *–rV* suffix that marks past tense.

The label *–rV* indicates an affix which reduplicates the final vowel of the verb stem and inserts r as the syllable onset. The V_2 bears a harmonizing high tone vowel called the Open Vowel Suffix (OVS) (Emenanjo, 1978; Dechaine, 1993). In serial constructions, while the object of V_1 bears structural (ACC) Case, the object of V_2 has the tone pattern of GEN (Dechaine, 1993:239). Manfredi (1991) proposes that the complement of V_2 requires GEN Case (spelled out tonally) because the combination of V_2 with the OVS blocks structural case checking.

(13)

a. Ézè jì-rì ázịzà za-a ụlọ.
Eze:NOM hold-rV broom:ACC sweep-OVS house:GEN
'Eze swept the house with a broom.'

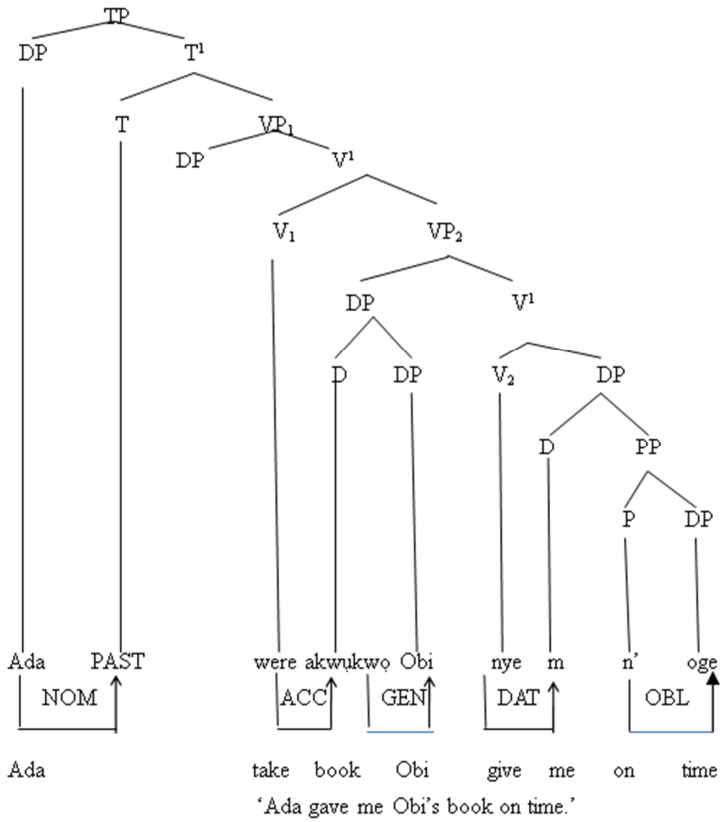
b. Adá wè-rè akwụkwọ nyé m n'ụtụtụ.
Ada:NOM take-rV book:ACC give me:DAT in morning:OBL
'Ada gave me a book in the morning.'

b. Ó jì ngàjì kụ-ọ ya n'ísí.
3SG:NOM hold spoon:ACC hit-OVS 3SG:GEN on head:OBL
'He/She hit him/her/it with a spoon on the head.'

d. Ada wè-rè akwụkwọ Obi nye m n'oge.
Ada:NOM take-rV book:ACC Obi:GEN give me:DAT on time:OBL
'Ada gave me Obi's book on time.'

V_1 in (13a) checks the ACC Case on its object, while V_2 with OVS checks the GEN Case on its complement. In (13b), which is a dative serial construction, the V_2 *nye* 'give' does not bear OVS, thus does not assign GEN Case to *m* 'me', but rather checks DAT Case on the argument DP *m* 'me' and the object of preposition *ụtụtụ* 'morning' is assigned OBL Case. The object of V_1 in (9d) is made up of the possessive DP *akwụkwọ Obi* 'Obi's book'. The first NP which occurs post verbally and which is the head of the phrase bears the ACC Case, the second NP which modifies the head as possessor bears the GEN Case. The directionality of Case checking in (13d) is illustrated in (14) below:

(14)



Some scholars claim that the OVS on V_2 is labeled a quasi-conjunctive "consecutive" marker (Welmers, 1973; Lord, 1975). Lord's (1975) claim that Igbo does not have SVCs rest on the assumption that the OVS is a consecutive marker and that consecutive construction are distinct from serial constructions. However, Dechaine (1993) argues that neither the presence nor the absence of a consecutive morpheme is sufficient to distinguish serialization from consecutivization or coordination. She cited the ambiguity of the following sentence:

Ọ gbara ọsọ ga-a ahịá. (15)

3SG run-rV race go-OVS market
= 'He/She ran to the market'
= 'He/She ran and went to the market.'

All Genitive DPs which follow a verb follow the OVS even in constructions where 'consecutive' semantics are absent (Dechaine, 1993:240). Genitive DPs also occur after various nominal such as the possessive construction as in (13d).

Uwalaka (1995:163) argues that certain V-V compounds and serial constructions create problems for the Case Theory.

a. Adá mé-bà-rà m ája n'ányá. (16)

Ada cause-enter-rV me sand in eye
'Ada caused sand to enter my eye.'

b. Adá me-re ája abá m n'anya.
Ada cause-rV sand enter me in eye
'Ada caused sand to enter my eye.'

In (16a), the subject DP *Ada* gets NOM Case and the preposition *na* 'in' checks an OBL Case to the DP *anya* 'eye' of the PP. Uwalaka argues that the remaining two DPs appear to vie for the predicate's structural ACC Case. In the structure, the indirect object DP supplants the direct object by occurring immediately post verbally. It would then appear that the supplanted direct object DP *aja* 'sand' lacks Case, while the derived object DP and V determines ACC Case checking configuration (see (8b) and (9a-d)). For the direct object DP, Uwalaka adopted Baker's (1988) ingenious solution by claiming that the DP reanalyzes, with the causative verb prior to the incorporation of the prepositional element. The process involves Abstract Incorporation i.e., incorporation without movement (Uwalaka, 1995:167). Since in fact incorporation is a form of PF identification, an incorporated noun no longer requires any other identification (i.e. case) hence the structure is judged acceptable.

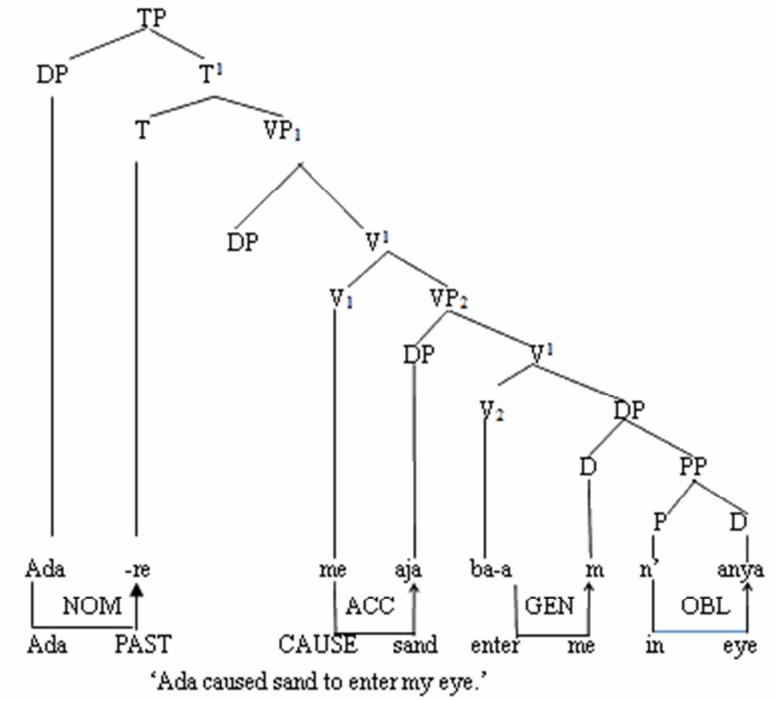
We take the stand that not DP reanalysis or Abstract Noun Incorporation as claimed by Uwalaka (1995) could stand in place of Case checking in the structure. Consider example (16b), in which the subject NP gets the NOM Case and the object of the preposition gets the OBL Case. The direct object of the predicate gets its original ACC Case as opposed to Uwalaka's claim above in (16a), the indirect object is assigned GEN Case. Note that the verb that occurs before this argument DP *m* 'me' that gets the GEN Case does not bear OVS but occurs in the verbal noun form. The same verb can occur with the OVS thus:

Adá mè-rè ája ba-a m n'ányá. (17)

Ada:NOM cause -rV sand:ACC enter-OVS me:GEN in eye:OBL
'Ada caused sand to enter my eye.'

In (17) above, the Genitive Case checking is clear based on the OVS that V_2 checks its direct object and assigns ACC Case. The directionality of the Case checking is shown in the tree diagram below.

(18)



'Ada caused sand to enter my eye.'

5. Conclusion

This paper has presented data to prove that Igbo is a true serializing language. The language attests dative overt serial verb construction and resultative serial verb constructions contrary to Déchaine's (1993) claim that these serial verb construction types are not allowed in the language but only surface as V-V compounds. These serial construction types also have V-V compounds exemplified in this study. It is also observed that not all serial constructions share a single subject as defined by scholars like Welmers (1973) and Bamgbose (1974). In resultative serial construction, the subject is not shared by both verbs. We adopt Aikhenvald's (2006) definition that SVCs may share core subject and other arguments such as direct object.

In this research, we have given a thorough description of the serialization phenomenon and Case checking in Igbo. It was also found that serial constructions do not create problem for the Case theory. The direct object of the first verb in a serial construction gets it original accusative Case, while the object of the second verb gets a genitive Case as checked by the Open Vowel Suffix on the verb. This is of particular importance to research in the issue of verb serialization and Case as it provides data and more facts.

Abbreviations

3SG: Third Person Singular, D : Determiner, DP: Determiner Phrase, GB : Government and Binding Theory, IMP : Impersonal Pronoun, LF : Logical Form, MP: Minimalist Program, NEG: Negation, P: Preposition, PAST: Past Tense, PP: Prepositional Phrase, PPT: Principles and Parameters Theory, PROG: Progressive Aspect, -rV: Past Tense Suffix, T: Tense, TP: Tense Phrase, V: Verb, V_1: Initial verb in an SVC, V_2:Second verb in an SVC, VP: Verb Phrase, VP_1 :Initial VP in an SVC, VP_2 :Second VP in an SVC

References

Aikhenvald, A.Y. (2003). Serial Verb Constructions. *www.labtrobe.edu.au/rclt/workshops/2003/position%20paper.pdf*. (11th October, 2011).

Aikhenvald, A.Y. (2006). Serial verb constructions in typological perspective. In A. Aikhenvald and R.M. Dixon (eds.) *Serial verb constructions: A cross-linguistic typology.* Oxford: Oxford University Press.

Ameka, F.K. (2005). Multiverb constructions in a West African areal typological perspective. Proceedings of TROSS 3, http://edvarda.hf.ntnu.no/ling/tross/TROSS03-toc.html. (October 11, 2011).

Arokoyo, B.E. (2010). Acquisition of Yoruba argument structure by pre-school children in Nigeria. Unpublished PhD Thesis, University of Ilorin, Ilorin, Nigeria.

Baker, Mark (1988). *Incorporation: A theory of grammatical function changing.* Chicago;IL: University of

Chicago Press.
Baker, Mark (1989). Object sharing and projection in serial verb constructions. *Linguistic Inquiry* 20, 513-533.
Baker, M. and Stewart, O.T (1999). Verb movement, objects, and serialization. Unpublished ms., Rutgers University. www.**arts.mcgill.ca**/linguistics/faculty/travis/pdf_word_files/... (October 11, 2011).
Bamgbose, Ayo (1974). On serial verbs and verbal status. *Journal of West African Linguistics* 9, 17-48.
Blake, B.J. (2001). *Case.* (2nd ed.) Cambridge: Cambridge University Press.
Carnie, Andrew (2002). *Syntax: A generative introduction*. Oxford: Blackwell.
Chomsky, Noam (1981). *Lectures on government and binding*. Foris: Dordrecht.
Chomsky, Noam (1993). A minimalist program for linguistic theory. In K.L. Hale and S.J. Keyser (eds.) *The view from building 20: Essays in honour of Sylvian Bromberger.* Cambridge: MIT Press. 1-52.
Chomsky, Noam (1995). *The minimalist program*. Cambridge Mass: The MIT press.
Collins, Chris (1997). Argument sharing in serial verb constructions. *Linguistic inquiry* 28, 461-497.
Dechaine, R.M. (1993). *Predicates across categories: Towards a category neutral syntax.* PhD Dissertation. MIT Press.
Emenanjo, Nolue (1978). *Elements of modern Igbo grammar*. Ibadan: oxford University Press.
Falk, Y.N. (1997). Case typology and case theory. pluto.mscc.huji.ac.il/~msyfalk/Case-T%26T.pdf. (November 3, 2011).
Farrell, Patrick (2005). *Grammatical relations.* Oxford: Oxford University Press.
Larson, Richard (1991). Some issues in verb serialization. In C. Legebvre (ed.) *Serial verbs: Grammatical, comparative and cognitive approaches.* Philadephia: John Benjamins Pub. Co. 185-208.
Lord, Caroll (1975). Igbo verb compound and the Lexicon. *Studies in African Linguistics* 6, 123-148.
Madugu, G. (1976). A typology of verb serialization. *Journal of West African languages* 10, 78-97.
Manfredi, Victor (1991). *Agbo and Ehugbo: Igbo linguistics, consciousness, its origin and limits.* PhD Thesis, Havard University, Cambridge, Massachusetts.
Nwachukwu, P.A. (1987). *The argument structure of Igbo verbs: lexicon project.* Centre for cognitive sciences, M.I.T., Cambridge.
Payne, Thomas E. (1997). *Describing morphosyntax: A guide for field linguists.* Cambridge: Cambridge University Press.
Richards, M. (2011). *Minimalism.* Pc17115.pc.waseda.ac.jp/ccdl/cl_korea/0424_handout.pdf. (November 3, 2011).
Saah, K.K. and Eze, E. (1997). Double objects in Akan and Igbo. *Object position in Benue-Kwa* Workshop at University of Leiden: Neitherlands.
Svenonius, P. (2002). Icelandic case and the structure of events. Journal of Comparative Germanic Linguistics. www.hum.uit.no/a/**svenonius**/papers/**Svenonius**ICSE02ss.pdf. (November 3, 2011).
Ura, H. (2001). Case. In M. Baltin & C. Collins (Eds.). *The handbook of comtemporary syntactic theory.* New York: Blackwell Publishers. 334-373.
Uwalaka, M.A. (1982). Igbo consecutization revisited. *Journal of Linguistic Association of Nigeria* 1, 63-72.
Uwalaka, M.A. (1995). X^0-Movement and Igbo Complex predicates. In K. Owolabi (ed.) *Language in Nigeria: Essays in honour of Ayo Bamgbose.* Ibadan: Group Publishers.
Watters, J.R. (2000). Syntax. In B. Heine & D. Nurse (Eds.) *African languages: An Introduction.* Cambridge: Cambridge University Press. 194-230.
Welmers, W.E. (1973). *African language structures.* Berkeley: University of California Press.