Applicative Constructions in Igbò

Gerald Okey Nweya
University of Ibadan

Abstract

The structure of applicative constructions has been in debate due to diverse opinions regarding the categorial status and distribution of the applicative morpheme. Previous studies have focused on the morphemic structure with scant attention paid to the distribution and interaction of the applicative morpheme with other inflectional affixes. This study examines the syntactic distribution of the Igbo applicative morpheme with a view to determining its categorial status and base position in relation to other inflectional affixes such as tense, aspect and negation. Employing the split verb phrase hypothesis of minimalist program, the study reveals that Igbo applicative morpheme is a functor that projects maximally as an Applicative Phrase, showing up after the verb in the process of interacting with other inflectional elements. The study concludes that in deriving applicative constructions in Igbo, the verb enters the derivation with unvalued tense and applicative features which get valued as the verb moves from one head to another while the affixes get merged to the verb.

_____

Gerald Nweya, PhD.
Department of Linguistics and African Languages
University of Ibadan, Ibadan, Nigeria
Phone: +234 803 265 3343; Email: go.nweya@ui.edu.ng

1. Introduction

Applicative[1] constructions (ACs) are means through which some languages structure clauses which allow the coding of a thematically peripheral argument or adjunct as a core object argument. Such constructions are marked by overt verbal morphology (Peterson 2007:1). In applicative constructions, the oblique object becomes the core object of the verb with the absence of any pre-/post-position with overt concomitant verbal morphology[2]. In transitive cases, they make the verb more transitive by extending the number of verb internal arguments to two or three. Consider (1) and (2) below from Classical Nahuatl and Zulu.

(1)   a.   ni-tlaōcoya
              s1-be sad
              'I am sad.'

        b   ni-tē-tlaōco-lia
              s1-INDF-be sad-APPL
              'I am sad in regard to someone;
              I feel pity for someone.'
                            (Yasugi 2012: 9)

(2)   a.   Ngi-theng-e   iphepha
              1SG:SC-buy-PST   5paper
              'I bought a newspaper'

---

[1] See Peterson (2007:2) and Yasugi (2012:7-8) for the origin of the term 'applicative'.

[2] In the literature, this process is also termed 'preposition incorporation' (Baker 1988).

b. Ngi-thenge-el-e   ubaba   iphepha
   1SG:SC-buy-APPL-PST   1father   5paper
   'I bought father a newspaper'
                         (Lamoureaux 2004:1)

In (1), an intransitive verb (1a) is transformed into a two-argument verb in (1b) by adding an applicative suffix *-lia* without affecting the verb meaning. In (2), a two-argument verb is transformed to three-argument verb by the suffixation of the applicative morpheme *–el*. These examples demonstrate that applicative morphemes often increase the valency of the verb by one. Cross-linguistic studies have provided evidence to support the existence of this phenomenon in some languages of the world; for Bukusu (a Bantu language spoken in Kenya) and Hakha Lai (spoken in Western Burma) see Peterson (2007); for Chaga (a Bantu language), see Pylkkanen (2008); for Chichewa see Rill (2011), for Tepehua, see Yasugi (2012); for Massai, see Lamoureaux (2004), for Sesotho and Kinyarwanda see Hoffman (1991), for Bantik see Utsumi (2012). These studies show that languages vary in the manner applicative constructions are derived in terms morphemic realisations, syntactic structure and semantic functions.

    In Igbo, the status of the applicative morpheme has been in debate over the years. Consider (3) below:

(3)   a.   O   sì-rì   nri
                  3SG   cook-PST   food
                  'S/he cooked (food)'

b.   O   sì-**ì-rì**[3]   ànyị   nri
3SG   cook-SUF-SUF   PL   food
'Uche cooked soup for us'

(3a) is a simple past construction while (3b) is its applicative counterpart. The bold particles in (3b) are suffixes that mark T(ense) and A(pplicative) respectively. Existing studies show that the two morphemes are morphologically similar. In other words, they are of the form 'rV' where 'r' is constant the 'V', a harmonising vowel. Consider this example from Mbah (1999) where both suffixes are realised in full

(4)   Òbi   rù-rù-rù   m̀   ńjiǹ[4]
O.   repair-SUF-SUF   1SG   Engine
'Obi repaired the engine for me'

In (4) the medial rV-suffix occurs in full form in contrast to (3b) where the 'r' is deleted by a process of syncope (see Mbah 1999). Due to this morphological similarity, it is often difficult to determine the affix that marks tense or applicative. In addition, the categorial status of the applicative morpheme is also in debate. In this regard, there are two schools of thought: The first argues that the applicative morpheme is an extensional suffix that only expresses a prepositional notion (e.g. Emenanjo, 2010, 2015). The other school of thought recognises the morpheme as a prepositional category (e.g. Uwalaka, 1995, Emerenini, 2001, Mbah, 1999, 2010 and Mmadike, 2010). Therefore, this study further investigates ACs in Igbo in order to determine the categorial status of the applicative morpheme, its

---

[3] In Igbo, most of the functional categories (e.g. Tense, Aspect, Negation, applicative) are realised as affixes.
[4] Tone-marking is mine.

distribution in relation to other inflectional morphemes such as tense (T), Aspect (ASP), Negation (NEG)) and demonstrate how ACs are derived based on the split verb phrase (VP) hypothesis and phase theory of the Minimalist Program (MP). In this regard, the questions to address are: what is the categorial status of the Applicative morpheme? What is the distribution of the morpheme in relation to other inflectional morphemes in the Tense Phrase (TP) domain? How are ACs derived in phases? The paper is organised into four sub-sections. The first sub-section is the review of existing literature, the second is a brief on MP, the third and fourth sub-sections deal with distribution of the applicative morpheme and derivation of ACs, while sixth sub-section is the summary and conclusion of the study.

2. Igbo Applicative in the Literature

The applicative suffix is a constant 'r' and a copy of the vowel of the preceding verbroot often identified as the rV-suffix. Existing studies have identified it as benefactive (Nwachukwu 1976, Uwalaka 1995), prepositional suffix (Nwachukwu 1983, Emenanjo 1983) and applicative suffix (Emenanjo 2010, Mmadike 2010). The suffix performs other functions in the language such as tense marking and stativity. Due to its multifunctional nature, it is sometimes cumbersome to identify the morpheme especially whenever it co-occurs with another – rV suffix as in (3b) and (4). The multifunctional behaviour of the -rV suffix, has attracted a number of research interest such as Nwachukwu (1983, 1987), Onukawa (1994), Uwalaka (1995), Mbah (1999), Emerenini (2001), Agbo (2004) Mmadike (2010), Emenanjo (2010, 2015), Nweya (2018). The authors differ in their opinion about the classification and distribution of the –rV suffixes.

Scholars differ in their approach to the classification of the -rV suffixes. Onukawa (1994), for instance, classified the

non-derivational -rV suffixes into three based on meaning and roles in verb forms;

(a) r$_V$1,(the subject adhesive indicator)

(b) r$_V$2 (the simple aspect marker)

(c) rV3 (the indirect object adhesive indicator) also the applicative morpheme.

The numbering is based on the syntactic position of the nominal which literally adheres to the complement and the marking of the verbal category. The –rV1 is a meaning modifying suffix expressing 'for oneself' in verb forms and indicates a metaphorical sticking of the subject NP to the DO or complement. It occurs more prominently in the imperative, subjunctive forms of active verbs and stative verb forms. Consider these example from Onukawa (1994:85) :

(5) a.   Zù̩-ru̩   ji
           Buy-rV1   yam
           Buy yam (for yourself)

    b.   Kà   o̩   zu̩-ru̩   ji
          COMP 3SG buy-rV1   yam
          let him buy yam (for himself)

 c.   O̩   zū̩-ru̩-la   ji
          3SG buy-rV1-PERF   yam
          S/he has bought yam

    d.   O̩   zù̩-rù̩-rù̩   ji
          3SG   buy-rV2-rV1 yam
          S/he bought yam

In (5) above, (5a-b) manifest -rV1 only but there is a combination of -rV1 and the perfective in (5c), and -rV1 and rV2-the simple aspect in (5d). According to Onukawa, the -rV1 indicates that the subject adheres to the object. The -rV2 on the other hand marks tense or simple aspect in all the semantic classes of the Igbo verb as in the examples below:

(6) a. O gbùrù   ewu
      3SG kill-rv   goat
      S/He killed a goat

   b. Ọ hụ̀-rụ̀   égo
      3SG see-rv   money
      'S/he saw some money'

In the examples above, the -rV suffix indicates simple aspect, a function that differs from that of –rV1. The third type of -rV is the –rV3. Onukawa identifies it as meaning –modifying suffix that indicates some association of the IO with the DO/complement. Observe the data below from Onukawa (1994) below:

(7) a. Ọ kù-ụ̀-**rụ̀** m̀ bọ̀ọ̀lụ̀
      3SG kick-rv2-rv3 1SG ball
      'He kicked/played the ball for me'

   b. Ọ kụ-ghī̱-**rị̱**   m bọ̀ọ̀lụ̀
      3SG kick-NEG-rv3 1SG ball
      S/he did not play the ball for me'

   c. Ọ kū̱-ọ-**rā̱**-lā̱ m̄ bọ̀ọ̀lụ̀
      3SG kick-PST-rv3-PERF 1SG ball

> 'S/he has kicked the ball to me'
> (Onukawa 1994: 88)

Onukawa explains that the bolded morphemes are identifiable as rV3 or the applicative morpheme. It comes final whenever it combines with other suffixes except the perfective suffix which it may precede or follow depending on the dialect. Observe the presence of the IO 'm' object of the applicative suffix. The suffix may copy (7a) or harmonise (7b&c) with the vowel of the root[5]. One can observe from the foregoing that Onukawa's study relied mainly on meaning for the identification and classification of the -rV suffixes. Besides the meaning, there exists a high level of interaction between the suffixes which has received scant attention.

Other studies differ from Onukawa's (1994) view on the position of applicative suffix especially when it occurs with other –rV suffixes. These studies argue that it is the medial -rV whose constant 'r' has undergone the process of syncope that marks applicative while the word-final suffix marks T. Those that belong to this group are Nwachukwu (1976), Uwalaka (1995), Emerenini (2001) Agbo (2004), Mbah (1999), Mmadike (2010) and Mbah and Mbah (2014).

Uwalaka (1995), for instance, identifies the morpheme as a prepositional suffix and she posits that prepositional incorporation (PI) is obligatory in the language. It involves the incorporation of a prepositional affix (i.e. the applicative morpheme) into the verb (see also Emerenini 2001 for a similar view). Consider the examples below:

---

[5] Igbo has eight vowels and operates a complete harmony system where the vowels are divided into sets based on the feature ATR as follows: +ATR (e, i, o, u) -ATR (a, ị, ọ, ụ)

(8)   a. Ezè gbù-ù-rù   ànyị   ewu
           Eze kill-BEN-PST 1PL   goat
           'Eze killed a goat for us.'

    b. Di   Ādha jụ̀-ụ̀-rụ   Àdha nri
       husband Adha refuse-MALE-PST Adha   food
       'Adha's husband refused to eat Adha's food.'

Data (8) show that the medial –rV is the Applicative morpheme while the final one is the T-morpheme (cf. 7a & 8a).

    Scholars such as Mbah (1999), Mmadike (2010), Uchechukwu and Mbah (2010), and Mbah and Mbah (2014) also posit that the morpheme belongs to the prepositional category. For instance, Mmadike (2010: 21) tests the properties of applicative with those of canonical prepositions in Igbo. The properties include (a) functioning as the head of a phrase, (b) ability to assign θ-role to its complement, (c) governing and assigning case to a head, and (d) pied-piping of its object as a Wh-phrase. He observes that the applicative-rV has the first three but does not have the fourth one because the morphological status of the applicative does not allow it to be pied-piped as a wh-phrase. On the other hand, Mbah and Mbah (2014) re-examined the applicative -rV from a syntactic perspective. They argue that thematic roles could be used to determine the function of the affix wherever it occurs. In this regard, they studied the argument structure of applicative constructions and made distinction between inflectional -rV and other instances where it functions as a syntactic head such as applicative. They argue that in a sequence of two -rVs, the medial rV marks applicative while the outer one marks tense. They also classified -rV suffixes into two: rV agreement (which include stative, imperative, perfective, negative, svc, open conditional construction) and -rV head.

In contrast to these views, this study advances three arguments against categorising the element as a preposition. Firstly, the applicative morpheme is a bound morpheme while other substantive categories are free morphemes. Therefore, it is morphologically distant from other substantive categories such as nouns, verbs, adjectives and prepositions. Secondly, the Applicative morpheme intricately interacts with functional categories such as T, Asp and NEG unlike other substantive categories as shown in sub-section four. Hence, it is plausible to posit that it renders a prepositional sense but cannot be categorised as a presposition. Thirdly, ACs do not have equivalent prepositional dative constructions as shown in (9):

(9) a. Èmeka   zùtà-à-rà   Mma   akwà.
         Emeka   buy-PST-APPL Mma   clothes
         'Emeka bought Mma some clothes.'

    b. ꜟEmeka zùtà-rà   akwà màkà   Mmā
         Emeka buy-PST   clothes because   Mma
         'Emeka bought some clothes for Mma.' (Intended Meaning)

Data (9) represent AC (9a) and its intended prepositional dative equivalent (9b). (9b) is judged as being marginally grammatical because it cannot be used in the same context as (9a). In Igbo, it seems that it is obligatory to express the sense in (9a) with applicative constructions only.

Emenanjo (2010, 2015) differ from Uwalaka (2005), Mbah (1999) and Mmadike (2010) for the fact that the studies do not recognise the applicative suffix as a preposition. He posits that the prepositional meaning expressed by Igbo extensional suffixes are more akin to those used in the Finno-Ugric and Uralic languages. Therefore, the applicative

morpheme only expresses a prepositional notion in the language. Some of the suffixes that behave this way are:

(10) a. Kọ-Associative, 'together (as a team), in company with', *ibikọ* 'to live together'
 b. nyA-Illative 'denoting penetration to interior of/towards/in(to)', *itinye* 'to put into'
 c. *sa*-Suppressive 'the state of being placed 'on/over/upon'' *ikposa* 'to pack upon'
 d. *ta*-Directional-with the sense of motion towards/to in a lateral and figurative sense. *Ịgụta* 'to read for self, *ịlọ̄ta* 'to return in the interest of self; *ibūte* 'to carry towards/to self' (Emenanjo 2010: 8-9)
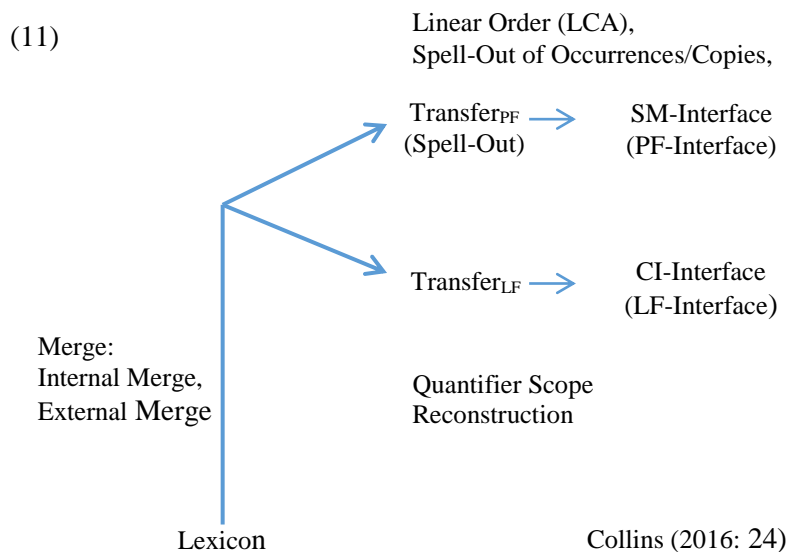
Nevertheless, it was observed that the applicative -rV differs from other extensional suffixes pointed out by Emenanjo because they share different semantic and morpho-syntactic properties. For instance, while applicative suffix increases the valency of the root verb, other suffixes do not.

In summary, the divergent opinions expressed in the existing studies discussed above show that there is need to further investigate how the applicative morpheme interacts with other functional suffixes in order to determine its base position relative to the verb. Most of the studies discussed in this section analyse the applicative morpheme without recourse to other functors such as T, Asp and Neg that often interact with it.

3. Theoretical Framework

The theoretical framework used for the analysis is the Minimalist Program (MP) advanced by Chomsky (1993, 1995, 2000, 2005, 2008, 2013 & 2015) and works by other linguists. Its major goal is to reduce the theoretical apparatus used for describing syntactic structure to the minimum (Radford 2009,

Cook and Newson 2007). Chomsky (1993:168) assumes that the performance system of language fall into two types, PF and LF which are the interface levels. The language determines the set of pairs drawn from the PF and LF levels. The program has two basic components of language: a lexicon and a computational system with their idiosyncratic properties as shown in the schema below.

(11)

Linear Order (LCA),
Spell-Out of Occurrences/Copies,

Transfer$_{PF}$ $\longrightarrow$ SM-Interface
(Spell-Out)   (PF-Interface)

Transfer$_{LF}$ $\longrightarrow$ CI-Interface
                  (LF-Interface)

Merge:
Internal Merge,
External Merge

Quantifier Scope
Reconstruction

Lexicon   Collins (2016: 24)

The schema shows that the basic computational process takes pre-selected lexical items (LIs) (with their semantic, syntactic and phonological properties⟩ from the lexical array (LA)[6] and builds them into a structure by a succession of *merge* operations. Merge is external when either or both of the items are selected directly from the LA and merged to form a syntactic unit and internal when any of the items is already in the derivation and

---

[6] A lexical array is a finite set of lexical item tokens (Collins 2016: 47).

undergo scrambling/displacement via head movement, subject movement, cyclic movement and/or remnant movement to form a syntactic object. At the point of spell-out, the derivation splits into two where the phonetically relevant materials are transferred to PF interface and the grammatical and semantically relevant features transferred to LF interface. In this model, there are two points of *Transfer*[7], Transfer$_{PF}$ and Transfer$_{LF}$ which are assumed to be separate operations taking place at the same point. Two main things have to take place at Transfer$_{PF}$: (i) ordering of terminals for appropriate interpretation following the principle of the linear correspondence axiom (LCA)[8] (ii) and spelling out of occurrences/copies. The rule for spelling out copies says that only the last created occurrence is spelled-out. For Igbo type languages, tonal modification also takes place at Transfer$_{PF.}$ At Transfer$_{LF,}$ parts of the occurrences are deleted to create interpretable structures (i.e. structures that have meaning). Occurrences enable one to determine the scope of quantifiers and source of moved items for the purpose of reconstruction. The computational procedure continues to apply similar processes to build fully formed structure at the SM and CI interfaces. At these points, the syntactic objects are presented for appropriate interpretation. If the PF is phonetically interpretable and the LF semantically interpretable, the derivation converges, otherwise, it crashes.

In addition to the assumptions above, the notion of phase was introduced in post-2000 Minimalism to show that the interaction of the language faculty with the two cognitive

---

[7] *Transfer* means creating representations that can be read by the interface. This shall be discussed fully in a subsequent sub-section. *Transfer* is also associated with the notion of phase.

[8] The LCA proposed in Kayne (1994) assumes that phrases are ordered similarly across languages in. S>H>C order. Every other kind of arrangement is as a result of movement.

systems, SM and CI, takes place at very specific points during syntactic derivations. To capture this observation, Chomsky (2000) assumes that at some point in the derivation, part of the structure under construction becomes fixed and is inaccessible to external probe. The implication is that an element which was not moved at any point before then would not be moved from that point forward. In the literature, these points are regarded as *Phases* (see also Chomsky (2001:4). Consequently, there was the motivation to change the basic workings of the computation system to accommodate the notion of phase. Instead of having a situation where the entire structure is built and sent to the interface levels (PF and LF) at a singular point, the derivation is *spelled out* in parts or chunks (such as vP or CP). Once a part of the derivation is completed, it is sent to the interface levels for interpretation. The derivation may continue to build structures upon the fixed part of the structure pending when another phase is completed and sent to the interface levels for further interpretation. This process is repeated until the full structure is derived. Cook and Newson (2007:302) represent this computational procedure as in (12) below.

(12)
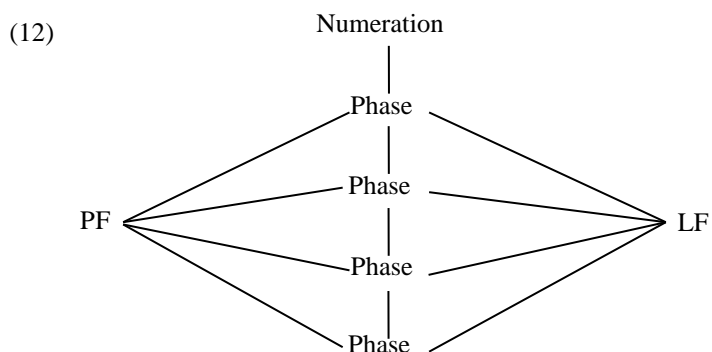
Observe, in the schema above, the multiple points at which structures are spelled-out for both phonetic and semantic

interpretation. Once the operations that apply within a given phase are completed, its domain (i.e. the complement of its head) becomes impenetrable to further syntactic operation. This condition is referred to as the Phase Impenetrability Condition (PIC) which states that the c-command domain of a phase head is impenetrable to an external probe (i.e. a goal which is c commanded by the head of a phase is impenetrable to any probe c commanding the phase (see Radford 2009:380).

In the subsequent sub-sections, this study discusses how these and other assumptions[9] of MP accounts for Igbo ACs. The study also employs the V-movement approach which assumes that verb affixes are attached syntactically as the verb moves from one head position to another head position via successive cyclic movement. The movement operation allows the verb to value its [-valued] features on the appropriate head.

4. Distribution of the Applicative Morpheme in relation to the Verb root

One of the contentious issues concerning the applicative morpheme is its position in relation to the verb root especially in past constructions where it often occurs with the morphemically similar -rV past. Therefore, it is pertinent to examine the behaviour of the applicative morpheme in different constructions. Consider the imperative constructions below:

(13)   a.   sì-e   nrī   ahụ
                Cook-IMP   food   DEM
                'Cook the food.'

---

[9] Other assumptions that are relevant to the study are split VP and Split TP hypotheses and the Predicate Internal Subject Hypothesis.

    b.   E-si-lā   nrī   ahụ
            Pre-cook-NEG   food   DEM
            'Don't cook food.'

(14)   a.   sì-e-**re**   Mmā nri
            cook-APPL   M.   nri
            'cook (food) for Mma.'

     b.   E-sì-la-**ra**   Mmā nri
            Pre-cook-NEG-APPL   M.   nri
            'Do not cook (food) for Mma.'

Data (13) is a representation of imperative constructions. (13a) is a simple imperative construction while (13b) is its negative counterpart. The imperative is marked by the vowel suffix 'e' as shown in (13a) while the suffix, –*la* marks negative in (13b). Data (13b) also shows that the Neg marker replaced the imperative morpheme. Data (14) are imperative applicative constructions. Observe the presence of the bolded applicative morpheme which occurs verb final in (14a&b). Once again, the negative morpheme replaces the imperative morpheme in (14b). Consider also the future and progressive constructions below:

(15)   a.   Ọ̀   gà   è-si   nri?
            3SG   FUT   PART-cook food
            'Would s/he cook (food) for Mma?'

     b.   Ọ̀   gà   è-si-**ri**   Mmā nri?
            3SG   FUT   PART-cook-APPL M.   food
            'Would s/he cook (food) for Mma?'

(16)   a.   Ọ   na   e-si   nri
            3SG   PROG PART-cook food

'S/he is cooking for Mma.'

b.   Ọ   na   e-si-**ri**   Mma nri
       3SG   PROG PART-cook-APPL   M.   food
       'S/he is cooking for Mma.'

(15a&b) are future interrogative constructions as indicated by the auxiliary, *ga* while (16a&b) are progressive constructions marked by the presence of the auxiliary, *na*. Examples (15b) and (16b) are the applicative versions of these constructions. The examples show that the applicative morpheme occurs as a verbal suffix with no other affix attached. Consider the perfective-applicative constructions (PAC) below where the applicative morpheme occurs with the PST and PERF morphemes.

(17) a. Odò   è-gbù-o-**rā**-la   m   ewu.
      O.   PRE-kill-PST-APPL-PERF 1SG   goat
      'Odo has killed a goat for me.'
                            (Mbah 1999:174)

    b. Ọ   gà-è-zì-cha-a-**rā**-lā
      3PL   FUT-PART-send-COMPL-PST-APPL-PERF
      ya   ozī.
      3SG errand
      'He/She would have finished the errand for him.'
                           (Mbah 1999:174)

  c. Madùekwē à-tà-a-lā-**rā**   ya   ahụhụ
    M.   PRE-suffer-PST-PERF-APPL 3SG   suffering
   'Madụekwe has suffered for him.'
                          (Ubesie 1979: 77)

d. Ọ   gba-a-la-**ra**   ha   egwu.
   3SG dance-PST-PERF-APPL   3PL   dance
   'S/he has danced for them.'

The PACs above show that the APPL morpheme can precede the PERF morpheme as in (17a&b) or follow it as in (17c&d). The two forms are adjudged grammatical. However, the *la-ra* form is common in the standard while the *ra-la* form is predominant in the Northern Igbo Group of Dialects (cf. Onukawa 1994). The data show that APPL and PERF markers can switch positions. Note that the vowel suffix[10] (VS) intervening between the verb on one hand, and the APPL and PERF morphemes on the other hand, marks the PST. Therefore, one can tentatively state that the surface order of these morphemes is PST-PERF-APPL as in (17c&d). This order is plausible based on the interaction of the morphemes as shown in the examples below.

(18) a. Madù   à-tà-a-lā-**ra**‾   ya   ahụhụ.
        M.   PRE-suffer-PST-PERF-APPL   3SG   suffering
        'Madụ has suffered for him.'

---

[10] This suffix is generally recognised as Open Vowel Suffix in Igbo. It includes -e/-a and o/ọ. Green and Igwe (1963) assert that the suffix is so called because it is always drawn from the set of non-close vowel. It harmonises with the vowel of the preceding syllable usually the verbroot. It occurs in imperative, conditional, perfective and serial verb constructions (see also Emenanjo 2015). This study observes that the label open vowel is misleading for the fact that only 'a' is an open vowel in the real sense of it. 'e' and 'o' are half close while 'ọ' is half open. Secondly, the term does not indicate the actual feature of the root vowel inherited by the suffix. Thirdly, it makes it difficult to determine the phonological process that yields the suffix (e.g. glide formation or lengthening). Therefore, this study adopts the neutral term vowel suffix (VS) for ease of analysis and clarity.

b. Madụ̀ a-tā-bē-ghī̠-**rī̠**   ya   ahụhụ.
M.   PRE-suffer-PST.PERF-NEG-APPL 3SG suffering
'Madụ has suffered for him.'

(19)   a. Ọ   gba-ā-lā-**rā**   ha   egwu
3SG   dance-PST-PERF-APPL   3PL   dance
'S/he has danced for them.'

b. Ọ   gba-bè-ghị̀-**rị̀**   hà   egwu
3SG dance-PST.PERF-NEG-APPL 3PL   dance
'S/he has not danced for them.'

In the PACs above, the bolded elements attest to the fact that the applicative morpheme occur verb final in perfective affirmative and negative constructions. The negative marker replaces the perfective morpheme in (18b and 19b) while 'be', a joint negative suppletive of the past and perfective morphemes, surfaces in the construction. Considering that applicative occurs verb final in all the constructions examined so far, it is logical to also to argue that it occurs verb final in the past constructions as the examples below show.

(20)   a.   Uchè   sì-ì-**rì**   ànyị̀   ofe
U.   cook-PST-APPL   1PL   soup
'Uche cooked soup for us'

    b. Uchè e-sì-ghì-**rì**[11]   ànyị   ofe
        U.   PRE-cook-NEG-APPL   1PL   soup
        'Uche did not cook soup for us'

(21)   a. Ọ   gbà-a-**ra**   ànyị   egwū
          3SG dance-PST-APPL   1PL   dance
           'S/he danced for us'

        b. Ọ   gba-ghī̄-**rị**   anyị   egwū
          3SG dance-NEG-APPL   1PL   dance
        'S/he did not dance for us'

Data (20&21) are past applicative constructions. Following the behaviour of the applicative morpheme in other constructions, this study argues that the bolded morphemes mark applicative while the medial VSs mark the past. Recall that in the future, progressive, imperative and perfective constructions discussed so far, the applicative morpheme is realised in full as –rV and it occurs verb final. Therefore, it is logical to posit that the verb final –rV marks applicative. The negative constructions in (24b and (25b) also lend support to this claim in that the negative morpheme replaces the medial vowel which marks the past and not the applicative morpheme as is the case in other instances of its occurrence.

---

[11] Note that in simple NEG constructions, the NEG marker also replaces the PST morpheme (see also Nwagbo 2003). For instance:

a.   O   jè-rè   ahịā
         3SG   go-PST   market
         'S/he went to the market'

b.   O   je-ghī̄   ahịā
         3SG   go-NEG market
         'He did not go to the market'

Considering the interaction of applicative with other elements, this study proposes that overt applicative morpheme in Igbo has strong T features which enables it to co-occur with other inflectional categories in the TP domain. Contra Uwalaka (1995), Emerenini (2001), Mbah (1999, 2010), Uchechukwu and Mbah (2010) and Mmadike (2010), the interactions of applicative, perfective, past and the negative morphemes as discussed above strongly show that in a sequence of -rV past and applicative -rV the medial -rV marks T while the final –rV marks applicative (see also Onukawa 1994).
.

5. The Structure and Derivation of Igbo Applicative Constructions

ACs may be sub-categorised based on the elements that occur in the TP domain and the number of VP internal arguments. With regard to the elements that occur in the TP domain, future and progressive applicative constructions involve auxiliary verbs while other constructions do not. Consider the examples below:

(22) a. Nnwa   a   na   a-da-ra   ya
     girl   DEM   PROG   PART-PST-APPL   3SG
     'The girl is falling for him'

   b. Uchè   gà   è-si-ri   ànyị̀   ofe
     U.   FUT   PART-cook-APPL   1PL   soup
     'Uche will cook soup for us'

   c. Uchè   sì-ì-rì   ànyị̀   ofe
     U.   cook-PST-APPL   1PL   soup
     'Uche cooked soup for us'

   d. Ngọzị   nyè-è-rè   yà   Ebùka egō
       N.   give-PST-APPL   3SG   E.   money
       'Ngozi gave Ebuka some money for him'

In these examples, (22a&b) represent the progressive and future applicative constructions where the auxiliaries *na* and *ga* indicate progressive and future respectively. Observe that the applicative morpheme is the only suffix attached to the verbs *da* 'fall' and *si* 'cook' respectively. When (22a&b) are compared with (22c&d), it would be observed that the applicative morpheme co-occurs with the past tense morpheme. It may also occur with other morphemes such as the perfective and negative as earlier observed. This dichotomy simply indicates that the applicative morpheme manifest both in the VP and TP domains. This assertion is manifest in the generative procedure (GP) explained below. Consider the numeration of (25b) sketched as (23) below.

(23) N= {Uchè$_1$, si$_1$, ga (FUT)$_1$, e-PARTt, ʋ$_1$, anyi$_1$, rv-Appl$_1$, ofe$_1$,}

With the numeration above, computation begins with merging of the DO *ofe* 'soup' and the lexical verb *si* 'cook' to yield VP *si ofe* 'cook soup', satisfying the c-selection requirement of V. At this point, the θ-role [THEME] is assigned to the DP, *ofe*. The derived VP is merged with the –rV to yield Appl^I satisfying the c-selection requirement of Appl; this is followed by the merging of the AO *anyị* '1PL' deriving ApplP satisfying the EPP feature of Appl. The Appl head probes its c-command domain for a matching goal, this is satisfied by the DO *ofe* 'soup'. Hence, it values its case-feature as ACC via Agree long distance checking. At this point, ApplP being propositional is transferred to the interfaces for appropriate interpretation following PIC.

This marks the first phase in the GP. The derivation proceeds with the merging of the light υ to form υ^I. The light υ has unvalued features, so it probes its c-command domain to find a matching goal to value these features, and this is satisfied by *Uche* at the Spec, ApplP. Thereafter, the lexical V moves to head υ to value its head features. At this point, the external argument is merged with υ^I to form υP satisfying the EPP feature of υ marking the second phase. The c-command domain of the phase is transferred to the interfaces resulting to PIC. The υP is then merged with Asp to form Asp^I satisfying the c-selection requirement of Asp. Afterwards, the Asp head probes for a matching goal in its c-command domain for a matching goal. The resulting structure is presented below with arrows showing displacement and phase domains.

(24)
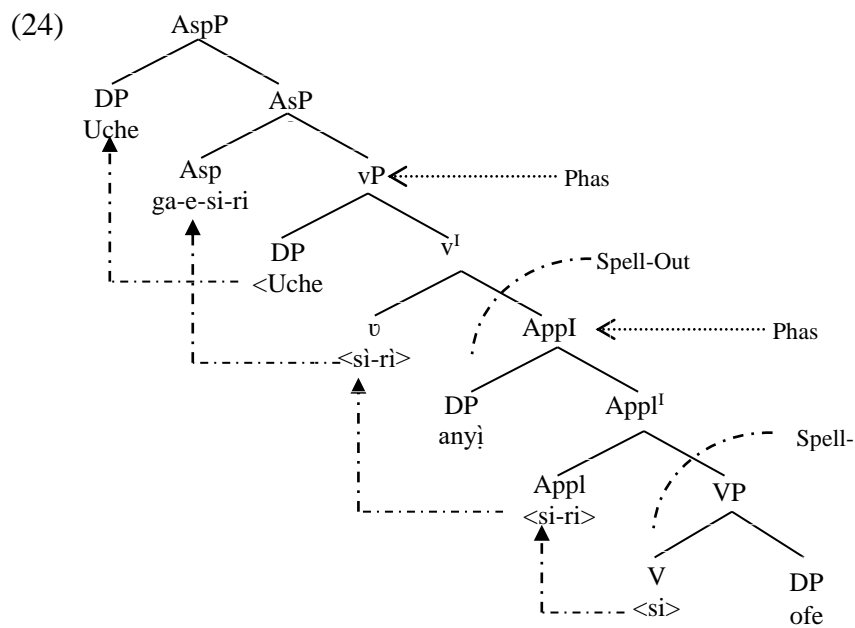
In the schema above, both the applicative head and its object entered the derivation in the υP domain. Observe also that there are two VP internal arguments, *anyị* 'us' and *ofe* 'soup'. The tri-transitive construction in (25) below also share the same GP as (24b) above because the applicative head and its object enter the derivation within the υP domain.

(25) Ọ   gà   è-nye-re   m̄   ya   egō
      3SG FUT PART-give-APPL 1SG   3SG   money
      'S/he will give him money for me.'

Take the numeration of (25) as (26) below:

(26)   N= {Ọ$_1$, ga (FUT)$_1$, e-PART, rv-Appl$_1$, υ$_1$, nye$_1$ m$_1$, ya$_1$, ego$_1$,}
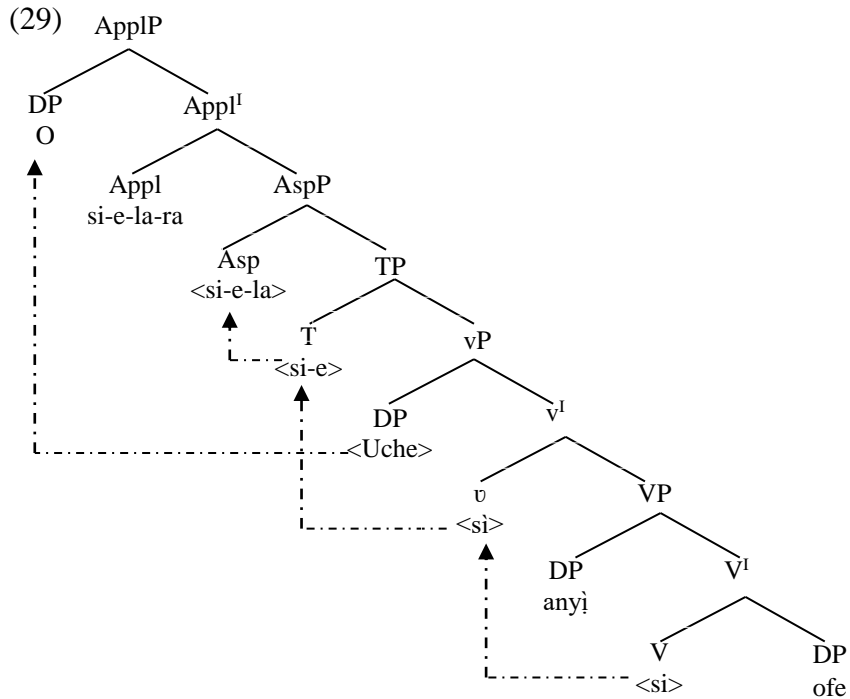
Successive application of select and merge will yield (27).
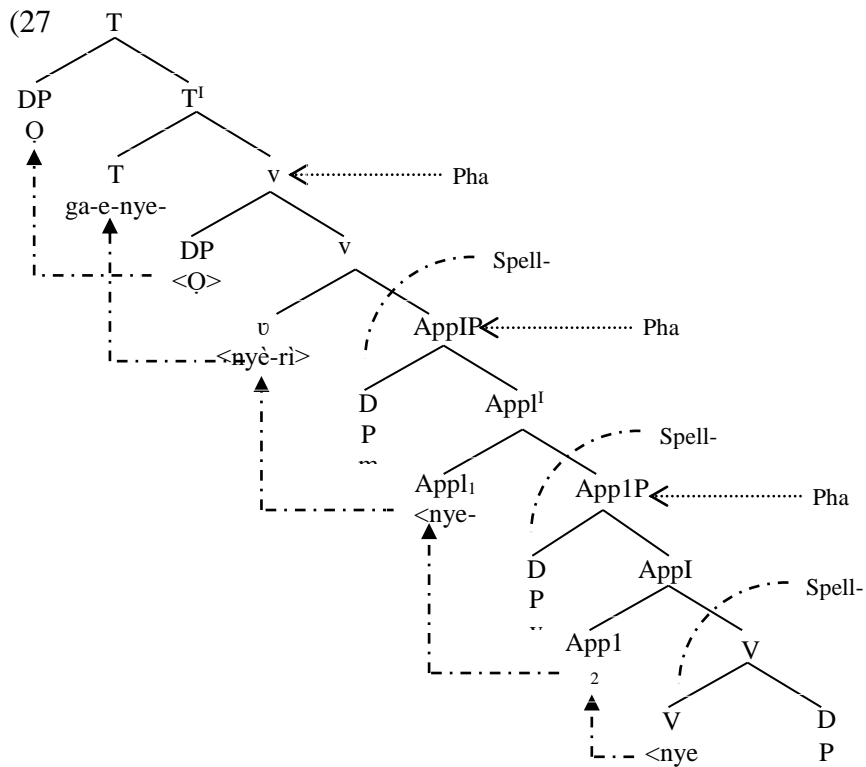
The schema above, is the structure of a tri-transitive AC. There are three phases: vP, ApplP₁ and ApplP₂. The V *nye* 'give' assigns θ-role to *ego* 'money'; ApplP₂ introduces the AO *ya* 'him/her' and values the phi features of the DP *ego* 'money'; the ApplP₁ introduces the IO *m* 'me' and values the phi features of the AO, *ya* 'him/her'; while the light vP introduces the external argument and values the phi feature of the IO *m* 'me'. The lexical verb values the head features of the relevant heads via head to head movement without violating the head movement constraint and MLC. These structures adequately accounts for the scenario where the Applicative morpheme is the only morpheme suffixed to the verb.

Following the verb movement approach employed for this study, it is difficult to account for the instances where the applicative morpheme is affixed to the verb with tense and aspect morphemes without proposing a functional ApplP in the TP domain. Consider the two sentences below:

(28)　a.　　O　　sì-ì-rì　　　　　　ànyị̀　　　　ofe
　　　　　　3SG　cook-PST-APPL　　1SG　　　　soup
　　　　　　'He cooked soup for us'

　　　b.　　O　　si-ē-lā-rā　　　　　　　anyị　ofẽ
　　　　　　3SG　Cook-PST-PERF-APPL　　1PL　soup
　　　　　　'S/he has cooked soup for us'.

In (28a), the applicative morpheme co-occurs with T morpheme while in (28b) it co-occurs with both T and ASP morphemes. Now, examine the structure of (28b) presented as (29) below.
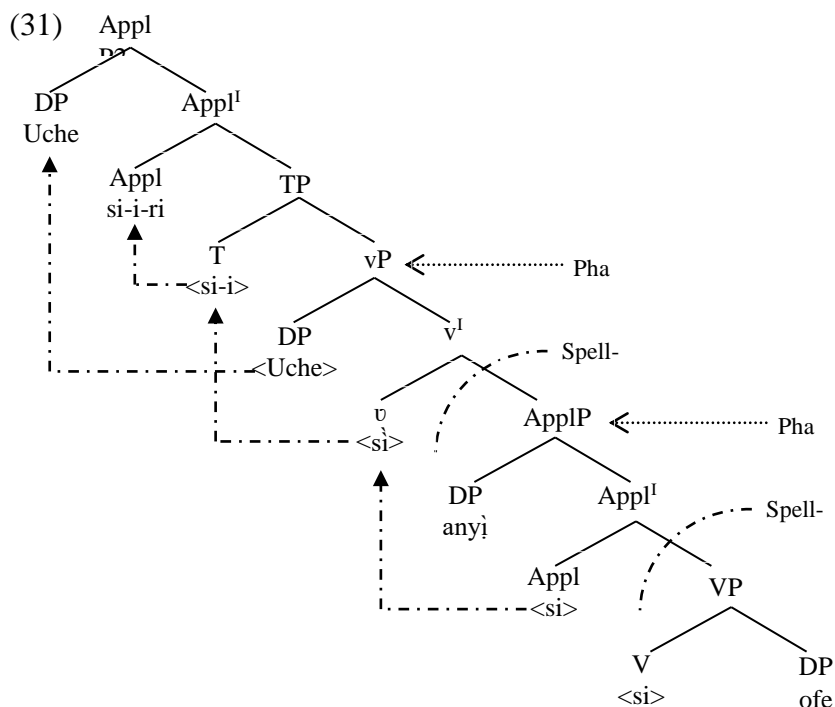
(29)

```
              ApplP
             /      \
           DP        Appl^I
           O        /      \
                 Appl       AspP
               si-e-la-ra   /    \
                          Asp      TP
                        <si-e-la> /   \
                               T       vP
                             <si-e>   /   \
                                    DP     v^I
                                 <Uche>   /   \
                                        υ      VP
                                      <si>    /   \
                                            DP     V^I
                                           anyì   /   \
                                                V      DP
                                              <si>     ofe
```

In this structure, the verb *si* 'cook' is first merged with *ofe* 'soup' cook to form V^I. The derived V^I is then merged with *anyị* to form VP. The arrows show that *si* 'cook' moved from V to υ and from υ to T where the T-morpheme is merged, from T to Asp where the Asp morpheme is merged and from Asp to Appl where the Appl morpheme is merged. Now, if it is assumed that V assigns θ-role to *ofe* while the light υ values the case feature of the DP *ànyi* 'us', the DP *ofe* 'soup' would not have its case feature valued because it is not in the same Minimal Domain with Appl head which introduced the Appl morpheme in the TP domain. So, the derivation would crash after transfer. In order to circumvent this problem, the study proposes that the functional

applicative head exists both in the vP and the TP domains. In the clauses where there is minimal interaction between the Appl and other inflectional elements, the functional ApplP introduces both the applicative morpheme and its object. Conversely, where there is high level of interaction between Appl and other inflectional elements as (28&29) suggest, the functional Appl head occurring higher in the TP domain introduces the applicative morpheme while the one in the vP domain introduces the object. Therefore, there could be multiple Appl heads in ACs to cater for the applicative morpheme and the additional internal arguments. Based on foregoing, it is argued here that the applicative morpheme is not preposition but a functional category that expresses a prepositional notion (see also Emenanjo 2010 for a related view). Its distribution shows that it may occur in the vP and TP area.

For further illustration, consider the numeration of (32a) presented is (30):

(30)   N= {Uche$_1$, rV-APPL$_2$, rV-PST$_1$, v_1, si$_1$ anyi$_1$, ya$_1$, ofe$_1$,}

Successive application of select and merge yields the structure below with arrows showing displacement operations and phase domains.

(31)

Appl

DP
Uche

Appl¹

Appl
si-i-ri

TP

T
<si-i>

vP ⬦⋯⋯⋯⋯⋯⋯ Pha

DP
<Uche>

v¹

⋯⋅ Spell-

ʋ
<si>

ApplP ⬦⋯⋯⋯⋯ Pha

DP
anyị

Appl¹

⋯⋅ Spell-

Appl
<si>

VP

V
<si>

DP
ofe

In this structure, the lexical V, *si* 'cook' assigns θ-role to the DP *ofe* 'soup' which is the DO. ApplP₁ introduces the AO, *ànyi* 'us' and values the case feature of DO while the *v*P introduces the external argument and values the case feature of the AO, *anyị* 'us'. The higher ApplP₂ introduces the applicative morpheme and licences the presence of AO. These derivational steps represent the optimal ways Igbo ACs are derived in phases.

7. Summary and Conclusion

This study has examined applicative constructions in Igbo. Based on the morpho-syntactic behaviour of applicative, it was observed that applicative is not a preposition but a functional head that expresses a prepositional notion. While the interaction

of the applicative morpheme with other inflectional elements shows that the morpheme always occurs as the verb-final suffix, analysing the constructions using the split VP hypothesis shows that the morpheme occur both in the TP and the VP domains of the clause. The verb moves via head movement, in a bottom up fashion, to value its unvalued features on the appropriate head. It assumed in the study that V introduces and assigns θ-role to the direct object, Appl introduces the indirect object and values the phi feature of the direct object, while υ introduces the external argument and values the phi features of the indirect object. The analyses also show that ApplP is a phase head in Igbo since it forms a proposition and c-selects a VP. However, it c-commands all other inflectional morphemes in the TP domain.

Abbreviations

A/APPL=Applicative, AC= Applicative Constructions, AO=Applicative Object, ApplP=Applicative Phrase, ASP=Aspect, CP=Complementiser Phrase, DEM=Demonstrative, FUT=Future, GP=Generative Procedure, IMP=Imperative morpheme, IO=Indirect Object, LA=Lexical Array, LCA=Linear Correspondence Axiom, LF=Logical Form, MP=Minimalist Program, NEG=Negation, PART=Participle morpheme, PERF=Perfective morpheme, PF=Phonological Form, PI=Prepositional incorporation, PIC=Phase Impenetrability Condition, PL=Plural morpheme, PRE=Prefix, PROG=Progressive, PST-Past tense morpheme, rV=constant 'r' and a harmonising Vowel, SUF=Suffix, T=Tense, TP=Tense Phrase, V-movement=Verb movement, VP=Verb Phrase, VS=Vowel Suffix, υ=Light verb, υP=Light verb Phrase, θ=theta, 1st First person singular, 2nd person singular, 3rd person singular.

References

Agbo, M. S. (2004) A morphosyntactic analysis of double object constructions in Igbo", M. A. Thesis, University of Ibadan, Ibadan, Nigeria.

Anurudu, S. M. (2010) "Head-Modifier Structures in the Ìgbò Language", PhD Thesis, University of Ibadan, Ibadan Nigeria.

Baker, M. C. (1998) *Incorporation: A Theory of Grammatical Function Changing,* Chicago: University of Chicago Press.

Cook, V. J. and M. Newson (2007) *Chomsky's universal grammar*: *An introduction*, Malden: Blackwell

Chomsky, N. (1993) A minimalist program for linguistic theory, Hale and Keyser (eds.).

———(1995) *The Minimalist Program,* Mass: MIT.

——— (2000) Minimalist Inquiries: the framework, Roger Martin, David Michaels and Juan Uriagereka (eds.) *Step by Step: Essays in Minimalist Syntax in Honor of Howard Lasnik*. Massachussetts: MIT Press.

——— (2001) Derivation by phase*,* Michael Kenstowicz (ed.) *Ken Hale: a life in language.* Cambridge, Mass. MIT Press.

——— (2005) *On Phases*, www.punksinscience.org. (07/04/2012)

——— (2008) On Phases, Robert Freidin, Carlos Otero and Maria Luisa Zubizarreta (eds.) *Foundational issues in linguistic theory,* Massachusetts: MIT Press.

——— (2013) Problems of Projection, *Lingua* 130: 33-49.

———(2015) *The minimalist program (20th Anniversary ed.)* Massachusetts: MIT Press.

Collins, C. (2016) Introduction to Minimalist Syntax, Unpublished Handout of African Linguistics School 4, Ivory Coast.

Collins, C. and E. Stabler (2016) "A Formalization of Minimalist Syntax", *A Journal of Theoretical, Experimental and Interdisciplinary Research* 19, 1: 43-78.

Emenanjo, E. N. (1983) Verb Derivational Morphology. P. A. Nwachukwu (ed.) *Readings on the Igbo Verb,* Nsukka: The Igbo Language Association.

_____ (2010) "The expression of prepositional notions in Ìgbò", C. Uchechukwu and B. M. Mbah (eds.) *The Preposition in Ìgbò,* Onitsha: Edumail.

_____ (2015) *Contemporary Igbo grammar: Constituents, features and processes,* Port Harcourt: M & J Grand Orbit and Linguistics Association of Nigeria.

Emerenini (2001) The internal structure of the Igbo verb phrase, M. A. Thesis, University of Ibadan, Ibadan.

Hoffman, M. C. (1991) "The Syntax of Argument-Structure-Changing Morphology", PhD Thesis, Massachusetts Institute of Technology, Massachusetts.

Kayne, R. S. (1994) *The Antisymmetry of Syntax*, Cambridge, MA: MIT Press.

Lamoureaux, S. (2004) Applicative Constructions in Massai, M. A. Thesis, University of Oregon, Oregon.

Mmadike, B. I. (2010) "The Many Sides of the Igbo -rV Applicative Suffix", Uchechukwu, C. and Mbah, B. M, (eds.) *The Preposition in Igbo*, Onitsha: Edumail.

Mbah, B. M. (1999) *Studies in Syntax: Ìgbò Phrase Structure*. Nsukka: Price.

_____ (2010) "Category Incorporated Preposition in Igbo", Uchechukwu, C. and Mbah, B. M. (eds.) *The Preposition in Igbo,* Onitsha: Edumail.

Mbah, B. M. and E. E. Mbah (2014) "RV applicative in Igbo", *Journal of West African Languages* 41 (1): 57-71.

Malmkjaer. K. (ed.) (2006) *The Linguistics Encyclopedia,* Routledge: London and New York.

Nwachukwu, P. A. (1983) "Inflectional and Non-Inflectional Affixes", P. A. Nwachukwu (ed.) *Readings on the Igbo Verb,* Nsukka: The Igbo Language Association.

Nwachukwu, P. A. (1987) *The Argument Structure of Igbo Verbs*. Lexicon Project, Center for Cognitive Science, Cambridge, MA: MIT 02139.

Nwagbo, O. G. (2003) Negation in Ìgbò: A Morpho-Syntactic Analysis, M. A. Thesis, University of Ibadan, Ibadan.

Nweya, G. O. (2018) The Igbo Clause Structure and the Cartography of the Complementiser Phrase Domain, PhD Thesis Nnmadi Azikiwe University, Awka.

Ọnụkawa, M. C. (1994) "A Reclassification of the Igbo -Rv Suffixes"*, Nigerian Language studies (2).*

Peterson D. A. (2007*) Applicative Constructions*, New York: Oxford University Press.

Pylkkänen, L. (2008) *Introducing arguments*, Cambridge: MIT Press.

Rill, J. (2011) "A Unified Analysis of 'Dative Shift' in English and the Applicative Construction in Chichewa", M.A. Thesis, University of North Carolina, Chapel Hill.

Radford, A. (2009) *Analysing English sentences: A Minimalist approach,* New York: Cambridge University Press.

Utsumi, A. (2012) "Applicative Verbs and Applicative Construction in the Bantik Language", *Journal of the Southeast Asian Linguistics Society* 5: 107-125.

Uwalaka, M. A. (1995) "X^0 Movment and Ìgbò Complex Predicates", D. K. O. Owolabi (ed.) *Essays in Honour of Ayo Bamgbose,* Ibadan: Group Publishers.

Yasugi, Y. (2012) "A Head-Marking Grammar for Applicative Constructions", Wataru Nakamura and Ritsuko Kikusawa (eds.) *Objectivization and Subjectivization: A Typology of Voice Systems* 77: 7–22*,* Sienri Ethonological Studies.