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# Insertion strategies used with lone English verbs in otherwise Igbo utterances

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Using examples of tape recorded conversational data from fifty educated adult Igbo-English bilinguals resident in Port Harcourt, Nigeria, this paper demonstrates that lone English verbs are typically inserted into otherwise Igbo utterances by means of Igbo verbal inflectional morphology. Other verbs are adjoined to a helping verb from Igbo, specifically involving an adapted form. Yet, a few English verbs are inserted into a position corresponding to an Igbo verb without any adaptations. To answer the question as to why the verbal inflectional morphology of Igbo rather than that of English should be used, we show that this is predicted by the Matrix Language Frame (MLF) model, according to which integration into the bound morphology of the base language is expected. Also, the paper identifies that the un-adapted English verbs occur in Igbo serial verb constructions (SVCs). The only type of structure where a full Igbo verb may occur without verbal morphology. Consequently, this paper concludes by arguing that the un-adapted English verbs in Igbo SVCs do not occur in codeswitching (CS) because of the activation of a 'CS-specific' compromise strategy, rather they, like the English verbs bearing Igbo verbal inflectional morphology occur in clause structure with restrictions imposed by the base language grammar.

**Key words:** Igbo, codeswitching, grammar, insertion, verbs, Matrix Language Frame model.
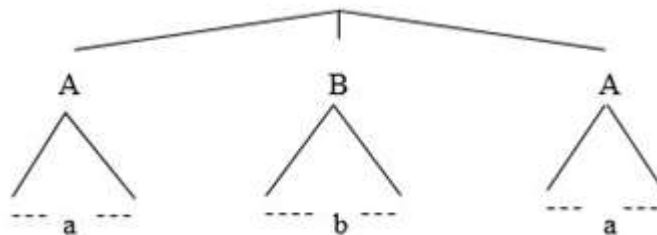
## INTRODUCTION

Igbo is a Benue-Congo language spoken natively by over 25 million people in South-Eastern Nigeria. According to Ihemere (2016), the native speakers of Igbo are in five south-eastern states of Nigeria, namely Abia, Anambra, Ebonyi, Enugu, Imo, and significant parts of Delta and Rivers States. There are also minority populations of Igbo speakers in parts of Akwa Ibom, Benue, Cross River, Edo and Kogi States. Most Igbo city dwellers are employed as civil servants, business owners, traders, and a good number are students at various levels of education in the local institutions of learning. English is the official language of Nigeria and every educated Nigerian is bilingual in their native tongue and English. Obiamalu and Mbagwu (2008: 34-37) report in their social-psychological study of Igbo-English CS that CS is used mostly consciously by educated Igbos to showcase their mastery of a prestigious language, English. This said, it is important to state that our present concern is not with uncovering the motivations for CS by Igbo-English bilinguals; rather it is with the characterization of the

insertion strategies used by Igbo speakers to insert lone English verbs in otherwise Igbo utterances. The premise for such a study is predicated on the fact that both Igbo and English are typologically distinct languages, therefore outlining the mechanisms utilized by Igbo-English bilinguals to insert lone English verbs in otherwise Igbo utterances is bound to add to our understanding of how two distinct grammars can combine in CS.

## Aims and objectives

In the book *Bilingual Speech: A Typology of Code-Mixing*, Muysken (2000: 184) observes that there are four main ways in which verbs from one language are integrated into another:

(1) The new verb is inserted into a position corresponding to a native verb, in adapted form or not;
(2) The new verb is adjoined to a helping verb;
(3) The new verb is a nominalized complement to a causative helping verb in a compound; and
(4) The new verb is an infinitive and the complement of a native auxiliary.

Considering these observations, the main aim of this paper is to demonstrate that:

(1) Lone English verbs are typically inserted into otherwise Igbo utterances using Igbo verbal inflectional morphology;
(2) Others are adjoined to a helping verb from Igbo, specifically involving an adapted form;
(3) Yet a few English verbs are inserted into a position corresponding to an Igbo verb without any adaptation. The latter occur in serial verb constructions (SVCs).

These processes appear to conform with patterns (1), (2) and (3) of Muysken (2000: 184). The main objective stems from the desire to answer the key question of why the verbal inflectional morphology of Igbo rather than that of English should be used? We shall show that this is predicted by the Matrix Language Frame (MLF) model (Myers-Scotton, 2002), according to which integration into the bound morphology of the base language is expected. Furthermore, this paper will outline that the un-adapted (or bare forms) English verbs inserted into otherwise Igbo utterances do not occur because of the activation of a *codeswitching-specific* compromise strategy as claimed in Myers-Scotton and Jake (2001, 2014). Instead, they, like the lone English verbs with Igbo verbal inflectional morphology, occur in clause structure with restrictions imposed by the base language grammar.

## LITERATURE REVIEW

The literature is replete with issues of terminological confusion concerning the use of the terms *code-mixing* versus *codeswitching*. Therefore, it is important that we clarify how these terms are employed here. For some researchers codeswitching (CS) refers to what they term as inter-sentential code-alternation (Matras, 2009). It occurs when a bilingual speaker uses two (or more) languages in a single utterance above the clause level to appropriately convey his/her intents (Cárdenas-Claros and Isharyanti, 2009: 68).

On the other hand, code-mixing is a cover term for what is variously referred to in the literature as intra-sentential CS or intra-sentential code-alternation (Clyne, 2003). This occurs when bilinguals use two or more languages within the bounds of a single clause.

Muysken (2000: 3) identifies three types of code-mixing: insertion, alternation, and congruent lexicalization. The issue in this paper is *insertion*, which he explains occurs when lexical items from one language are incorporated into another. Figure 1 shows the process of insertion.

In the diagram, "*a*" represents lexical items of the base language and "*b*" stands for the lexical item of the embedded language that has been inserted in the utterance by the speaker. This is further illustrated in Example 1 as follows:

(1)   na' iish-crash         lá
      1sg:pass out-crash     EMPH
      'I am about to pass out.'
          Navaho-English (Muysken, 2000: 5)

In Example 1, the lone English verb stem *crash* is used in a complex Navaho verbal complex. Furthermore, Muysken (2000: 5) explains that with insertion, there is embedding. So, the English verb is inserted into an overall Navaho structure. In some sense, he adds that insertion is like (spontaneous) lexical borrowing, which is limited to one lexical unit. Without getting embroiled in the 'borrowing' versus 'CS' debate, which is outside the scope of this paper. It is rather interesting to note that in various publications since 1993, Carol Myers-Scotton has explored the notion of insertion within her highly influential Matrix Language Frame (MLF) model.

The MLF model makes the case for a distinction between the matrix language (ML) or base language and the embedded (EL). The ML plays a dominant role in shaping the overall morphosyntactic properties of mixed utterances. In other words, the model posits two hierarchies about mixed constituents: both languages do not participate equally; only one language is the source of the abstract morphosyntactic frame. This language (and the frame) is called the ML and the other language is called the EL. This idea is formalised as the morpheme order principle (MOP): "in mixed constituents of at least one embedded language word and any number of matrix language morphemes, surface word (and morpheme) order will be that of the matrix language"; and the system morpheme principle (SMP): "in matrix language and

**Figure 1.** Structural representation of insertion.
Source: Muysken (2000: 7).

embedded language constituents, all system morphemes which have grammatical relations external to their head constituents (that is, which participate in the sentence's thematic role grid) will come from the matrix language" (Myers-Scotton, 1993a [1997]: 83, 2002: 59, 2006: 244). Based on these principles only one language (the source of the frame) supplies both morpheme order and frame-building system morphemes to the frame.

Importantly, the MLF model makes a distinction between content and system morphemes. The earlier are those that either assign or receive thematic (semantic) roles. Myers-Scotton (2002, 2006) explains that content morphemes are semantic in the sense that they refer to such relations within the sentence as whether a noun is the *Agent* or the *Patient* of the verb. Linguists say that verbs "subcategorise" for different thematic roles. For example, the verb *give* subcategorises for (meaning "can take") three thematic roles, an Agent, a Patient (the element that is given) and a Beneficiary or Recipient (for example, *John gave the man a pen*). Because verbs most typically assign thematic roles and nouns typically receive them, verbs and nouns are prototypical content morphemes. System morphemes, on the other hand, are prototypically affixes (bound morphemes) and certain function words that stand alone (e.g. determiners and clitics).

Moreover, with the introduction of the Four-Morpheme (4-M) model (Myers-Scotton and Jake 2000a, b, 2009; Myers-Scotton, 2002) system morphemes are said to divide into 'early system morphemes', 'bridge late system morphemes', and 'late system morphemes'. It is important to note that Myers-Scotton uses the term 'morpheme' to include both the abstract element in language production that underlies surface forms and the actual surface level forms. The terms *early* and *late* are used with reference to whether the system morphemes are conceptually activated or directly linked to the speaker's intentions. Early system morphemes have in common with content morphemes the fact that they are conceptually activated but differ in that they do not receive or assign thematic roles. Examples of early system morphemes are determiners such as *the/a/an* in

English, which add information about definiteness, and plural morphemes, e.g. *–s* in English, which add information about number.

Of particular relevance to the examples discussed in this paper are late system morphemes (Myers-Scotton 2002: 75). Examples are subject-verb agreement and case affixes. Unlike English, both structures are not found in Igbo grammar (Emenanjo, 1978; Obiamalu, 2013). Therefore, for the purposes of this paper, we shall re-define late system morphemes to mean that only the language identified as the ML (that is, Igbo) will contribute such functional categories as auxiliary verb, tense, aspect, mood and sentence negation, which are associated with the verb in both languages (Ihemere, 2016).

## METHODOLOGY

Unless otherwise acknowledged, the examples of lone English verb insertions in otherwise Igbo utterances discussed in the paper come from the conversational CS data collected in the summer of 2011 from 50 educated adult Igbo-English bilinguals resident in the city of Port Harcourt, Nigeria (Ihemere, 2016). Since CS occurs most frequently in informal conversations among in-group members (Deuchar, 2005, 2006; Eze, 1998; Gumperz, 1982; Park, 2000; Poplack, 1980), the social network method based on a pre-existing friendship network was used for the data collection.

The main advantage of this methodology is that the researcher can attach him/herself to a group and, by making use of the group dynamics which influence patterns of language use, obtain very much larger amounts of spontaneous speech than is generally possible in interaction with a single individual who is isolated from his/her customary social network (Milroy, 1987: 35). Furthermore, as Ihemere (2016: 72) observes, the social network method permitted the collection of authentic natural language in interactional situations. The entire corpus contains many examples of different types of CS. In this paper, however, the central focus is on

**Table 1.** Summary of Igbo verbal morphology (Adapted from Ihemere 2016: 59).

| Inflectional category | Affix used to express category |
|---|---|
| Imperative | This is formed by attaching the harmonizing open vowel suffix to the verb root / stem: zụ-ọ 'buy!' |
| Negative imperative | This is formed by attaching the prefix a- / e- and the suffix – le / -la to the verb: a-zụ-la 'do not buy!' |
| Infinitive | This is formed by prefixing a harmonizing i- / ị- to the verb stem: ị-zụ 'to buy'. |
| Indicative affirmative | This is formed by attaching the –rV suffix to the verb, where V is the last vowel of the verb stem / root: zụ-rụ 'bought'. |
| Negative indicative | This is formed by attaching the harmonizing –ghi/-ghị suffix to the verb: a-zụ-ghị 'did not buy'. |
| The participle | This is formed by prefixing: e- / a- to the verb: a-zụ 'buying'. |
| The perfective | The perfective is formed by attaching the suffix –(V)la / -(V)le to the verb: zụ-ọ-la 'has/have bought'. |
| The inceptive | This is formed by attaching the inceptive extensional suffix -we / -wa to the verb: zụ-wa-la 'starting to buy'. |

characterizing the strategies used by Igbo speakers to insert lone English verbs in otherwise Igbo utterances.

**The nature of Igbo verbs**

Drawing on Ihemere (2016: 58-62, 68-69), Igbo verbs like those of English are found immediately preceding their complement(s) in the verb phrase (VP). The verbs can be classified as either active or stative. Active verbs are used for expressing action or activity, while stative verbs (e.g. the copulas: bụ, wụ dị and nọ) are used for expressing qualities/states and existential notions of being. There are also several auxiliary verbs which are unlike those of English. For instance, they are all bound morphemes in the language. That is, an Igbo auxiliary verb can only be used in obligatory combination with a verbal derivative which makes it complete and meaningful. Emenanjo (1978: 127) gives a list of seven such Igbo verbs. Here, however, we only list the three that are used by the speakers in the examples (Ihemere 2016: 58-59):

(i) *na-* marks the progressive:

(a) Progressive affirmative

Nnenna na-a-bịa
     AUX-V-come
'Nnenna is coming' ('Nnenna usually comes')

(b) Progressive negative

Nnenna a-na-ghị     a-bịa
     V-AUX-NEG     V-come
'Nnenna is not coming' ('Nnenna does not usually come')

(ii) *ga-* marks the future:

(a) Future affirmative

Nnenna ga-a-bịa
     AUX-V-come
'Nnenna will come' ('Nnenna is going to come')

(b) Future negative

Nnenna a-ga-ghị a-bịa
     V-AUX-NEG     V-come
'Nnenna will not come' ('Nnenna is not going to come')

(iii) *gaa-* marks the unfulfilled:

Nnenna gaa-ra a-bịa
     AUX-IND V-come
'Nnenna should have come.'

The Igbo bound auxiliary verbs behave like modals in English because they mark tense and aspect and assist to differentiate the different verbal constructions. Furthermore, it is important to point out that the verb is the only grammatical category in Igbo that can take inflectional affixes, shown in Table 1.

Note also that Igbo has three dependent, short and weak pronouns: ị-/i- 'you (2nd sg)', ọ-/o- 'he/she/it (3rd pl)' and a-/e- 'some person(s) (non-person-number specific or non-definite)'. Each of the three weak PRNs has two forms and each form is conditioned by the vowel quality of an immediately following verbal element (Ihemere, 2016); this will give a detailed discussion of vowel harmony in Igbo. Given the restricted subject position of occurrence of the pronominal forms, we shall analyse them as pronominal subject clitics (CL for short). Borer (1986) notes that clitics serve as syntactic constituents but are phonologically bound to adjacent elements of lexical categorial status. However, different from lexical items clitics do not constitute prosodically autonomous elements and in this regard, they pattern like affixes (see the descriptions of Igbo affixes in Table 1). Also, the dependent, short and weak pronouns in Igbo can be

viewed as special clitics (Zwicky, 1977) since they appear at the subject position before verbal elements as proclitics (Anyanwu, 2012). Some examples of the Igbo subject CLs in constructions are as follows:

(2)  ọ-da-ra        ule
     3SG.CL-fail-IND exam/test
     'He/she/it failed (the) exam/test'.

(3)  ị-zụ-rụ            efe
     2SG.CL-buy-IND shirt/dress
     'You bought (a/the) shirt/dress.'

(4)  a-rụ-rụ         ụlọ
     CL-build-IND house
     'Someone built a house.'

Anyanwu (2012) observes that the Igbo dependent pronominal elements can only occupy *pro*-argument positions in the constructions where they appear, though superficially they seem to appear at subject argument position. Furthermore, he states that the Igbo pronominal subject clitics possess the features of *pro* in pro-drop languages (Ihemere, 2016: 68-69). We will return to these clitics in subsequent sections of this paper. It will suffice to say for the moment that all Igbo verbs obligatorily receive verbal inflectional morphology, except in serial verb constructions (SVC) where some verbs may appear bare (that is without verbal inflectional morphology).
     Amaechi (2013: 156-157) observes that 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. An important feature of SVC is that the sequence of verbs shares the same subject noun phrase. They may have an intervening object between the verbs as illustrated in the Igbo example.

(5)  o    ji$_{V1}$ aka  vọọ$_{V2}$
     He *hold* hand *weed*
     'He used his hands (to) weed.'

In Example 5, the object of $V_1$ is understood as the object of $V_2$ in the clause; and both verbs share the same subject in the example. Crucially, Ihemere (2016: 61) identifies that Igbo serial verbs have the following properties:

(a) The two or more verbs with their complement (if any) in an SVC do not have any marker of coordination or subordination (Amaechi, 2013: 157).
(b) The verb phrases (VPs) in the sequence are construed as occurring within the same temporal frame. Some verbs may appear with or without morphology that indicates past tense, but the sentence obligatorily receives a past interpretation (Example 5).

a. Auxiliaries, negation, tense and aspect markers of the sequence of verbs are found with the first verb
b. of the SVC. However, extensional affixes and the open vowel suffix may be found on the other verbs in the SVC, as in Example 6 (Ihemere, 2016: 61):

(6) ọ  ga$_{V1}$-ra ahịa  zụ$_{V2}$-ọ efe
    She go-IND market buy-V dress
    'She went to (the) market and bought (a) dress.'

In the language, there are different types of serial verbs as outline briefly after Ihemere (2016: 62):

**Instrumental SVC:** The verbs *ji* 'hold' and *were* 'take' are used to express instrumentality in Igbo. Both verbs are said to be syntactically similar and occur in a complex structure [- NP VP], typical of SVCs, where it obligatorily takes a complement and a VP. We see this in Example 5, where the object of $V_1$ *aka* 'hand' is also the instrument used to carry out the action of $V_2$.

**Multi-event SVC:** In a multi-event SVC different events which are related are formed and all the verbs share a single subject. This is illustrated in Example 6.

**Dative SVC:** Igbo dative SVCs indicate and distinguish the recipient of something given or transferred. They normally surface as V-V compounds, as in Example 7.

(7) ọ zụ$_{V1}$-ta-ra efe            nye$_{V2}$  m
    She buy-ENCL-IND dress/shirt give 1SG.ACC
    'She bought (a/the) dress/shirt (and) gave (it to) me.'

**Resultative SVC:** In Igbo, resultative SVCs like dative constructions also surface as V-V compounds as in Example 8 (Ihemere, 2016: 62):

(8) Nze me$_{V1}$-re    nwunye      ya       a-zụ$_{V2}$-ọ efe
    Nze make-IND wife          his        V-buy-V dress
    'Nze made his wife to buy a dress.'

It was observed in Example 8 that $V_2$ expresses the result of $V_1$ and the object of $V_1$ is seen and understood to be the subject of $V_2$. With respect to the analysis reported in this paper, it is only in SVCs that a full Igbo verb that may appear without verbal inflectional morphology. Therefore, our expectation is that all lone English verbs used in Igbo utterances will obligatorily receive Igbo verbal inflectional morphology apart from those found to occur in serial verb constructions.

## INSERTING LONE ENGLISH VERBS IN OTHERWISE IGBO UTTERANCES

Concerning the earlier stated aims and objectives in the introduction, lone English non-finite verbs  are  inserted in

Igbo in two main ways:

(1) The verbs are either inserted in synthetic constructions, where the sole verb is inflected for tense, aspect and negation by the base language, or
(2) They are inserted in periphrastic constructions in which the finite auxiliary comes from the base language (Ihemere, 2016: 130).

In the sections that follow immediately, attention is turned to illustrating how the these two strategies are effected in Igbo-English bilingualism.

**Insertion by Igbo verbal inflectional morphology**

The following are some utterances from Igbo-English which illustrate the integration of English verbs by means of Igbo verbal inflectional categories (Table 1).

(9) ha  *miss-ị-rị*        flight    ha…
   they  miss-V-IND      flight    ha
   'They missed their flight…'

(10) maka na    ha   *register-ra* na the wrong desk …
      C     C      they register-IND PREP the wrong desk
      'because they registered at the wrong desk…'

(11) ma ha *book-ụ-rụ*    na      hotel
     but they   book-V-IND       PREP   hotel
     'but they booked into (a) hotel'

Examples 9 to 11 make it very clear that the English verbs are not finite forms because the speaker's intentions call for a past tense marking, but *miss-ed*, *register-ed* and *book-ed* do not occur; the past meaning comes only from the base language inflectional morphology that the English verbs do not influence. Other examples from Igbo-English are given in Examples 12 to 15.

(12) ha  *a-qualify-ị-ghị*
      They        V-qualify-V-NEG
      'They did not qualify.'

(13) anyị *ga-e-kick*      ha       niile     out of office
     we   AUX-V-kick     them     all       out of office
     'We will kick all of them out of office.'

(14) o   *clean-ị-cha-la* moto      gi
     she clean-V-ENCL-PERF (motor) car          your
     'She has finished cleaning your car.'

(15) ọ-na-a-chọ *ị-start*  ngwa ngwa
      CL-AUX-want INF-start quick quick
      'She wants to start quickly.'

In these examples, the ML only supplies all the relevant

inflectional morphology on the singly occurring English verbs. The negative inflection -*ghị* and the verbal paricles in Example 12, the auxiliary *ga-* and the vowel particle in Example 13, the perfective suffix –*la*, enclitic (meaning 'completely') and verbal particle in Example 14, and the infinitive prefix *ị-* in Example 15.

Ihemere (2016) observes that in various studies investigating the insertion of verbs from one language into another, researchers such as Backus (1996: 212), Deuchar (2005: 263-267), and Myers-Scotton and Jake (2014: 8) have noted that such verbs are usually non-finite but are made finite by 'matrix (or base) language means'. Myers-Scotton and Jake (2014: 8) observe that the reason why non-finite EL verbs are easily inserted in CS structure is due to the fact that non-finite verbs do not carry the same costs as finite forms because their levels of predicate-argument structure and/or morphological realization patterns are not salient in structure building. Furthermore, they opine that these EL non-finite verbs only salient level of abstract structure is the level of lexical-conceptual structure. Therefore, such verb forms as infinitives and present participles can take ML verbal inflections without creating any congruence problems regarding the abstract levels referring to grammatical structure.

Taking the insertion of *believe* in Example 16, we can illustrate the language production process involved in the insertion of mixed verbal expressions in Igbo-English intra-sentential CS.

(16) anyị         *believe*-*ụ-rụ*      na ihe   ha kwu-ru na ….
      we believe-V-IND PREP thing they say-IND PREP
      'We believed in the thing they said at …'

**Stage 1: Conceptual (lemma level)**

(1) Once a speaker selects an English content morpheme, such as the verb *believe* in Example 16 during Igbo-English CS, he/she also selects Igbo as the ML of the mixed verbal expression under production.
(2) The ensuing processes are triggered to commence the building of an appropriate grammatical slot for *believe* in the clause:
(i) *believe* is checked for congruence with its Igbo counterpart *kwee* at the three levels of abstract lexical structure:
(a) lexical-conceptual structure: closest to the speaker's intentions;
(b) predicate-argument structure: deals with how thematic structure is mapped on to
grammatical relations; and
(c) morphological realization patterns: this is where the morpheme order and system
morpheme criteria apply.
(3) Information from all three levels are sent to the *formulator* (including information about the full abstract lexical structure of the Igbo counterpart of believe =

kwee).

**Stage 2: Formulator:** The formulator decodes the information sent from the lemma level

(1) Regarding lexical-conceptual structure, the formulator identifies that *believe* and *kwee* are sufficiently congruent because:
(a) They encode identical concept, that is, they have analogous lexical-conceptual structure;
(i) They have the same predicate-argument structure:
(b)They are both verbs (*believe* is used as a transitive verb in Example 16: 'the speaker considers what is being said in the example to be true') that assign the same thematic roles to their arguments, i.e. to the subject (Agent) and to the object (Patient);
(2) In relation to morphological realization pattern, they both require no case-marking of their arguments;
(a) Igbo is the language in control of functional level processes, therefore the late system morpheme criterion ensures that only Igbo supplies all the required inflectional morphology in the mixed verbal expressions.
(b) In Example 16, for instance, *believe* receives the Igbo indicative affirmative inflection marking past tense.
(c) Also, the morpheme order criterion ensures that Igbo morphosyntactic procedures are used in framing the mixed verbal expression. Igbo, like English, is typically an SVO language as reflected in the above examples. Hence, there is no conflict in word order in the examples as far as the switched elements are concerned.

**Stage 3: Surface realization**

Consequently, *believe* in Example 16 is inserted into the verbal slot intended for the Igbo verb *kwee*.

**Insertion by pronominal subject clitics and verbal inflectional morphology**

As outlined earlier on the nature of Igbo verbs, the language has three singular, three plural and one impersonal pronoun. The three singular pronouns have each an independent and dependent form. In some contexts, the place of the pronoun can be occupied by what may be called a pronominal prefix (or pronominal subject clitics (PSC), after Anyawu (2012), *i-/ị-* 'you (singular)', *o-/ọ-* 'he/she/it' and *a-/e-* 'nonperson-number specific', harmonizing with an immediately following verb stem vowel. As PSCs, they can only occupy *pro-*argument positions in the constructions where they appear in subject argument position.
The Igbo PSCs, like pronominal subject clitics in French (Jaeggli, 1981), must be adjacent to either the main or auxiliary verbs unlike the independent pronouns and

lexical NP subjects, which pattern differently (Anyanwu, 2012: 379-380):

(17a) Ọ-*naanị ga-ra    ahịa
      3SG.CL   only    go-IND market

(17b) Eze/Unu naanị    ga-ra    ahịa
      Eze/2PL.PRN    only    go-IND market
      'Only Eze/you went to market.'

Example 17a is unacceptable because the Igbo PSC is split from the verb by the introduction of *naanị* 'only', which can correctly post-modify an Igbo noun or pronoun, as in Example 17b. Another feature of the Igbo PSCs is that they always occur on their own without modification, while the independent pronouns can be modified by numerals, as shown in Example 18 (Anyanwu, 2012: 380):

(18a) Ọ-     *atọ ka ha    chọ-rọ
      3SG.CL NUM FOC 3PL  want-IND (self benefactive)

(18b) Ya atọ  ka  ha chọ-rọ
      3SG NUM FOC 3PL want-IND (self benefactive)
      'It is the three (of them) that they want.'

Unlike both lexical NPs and independent pronouns, Igbo PSCs cannot be topicalized. This accounts for why Example 19a is ungrammatical (Anyanwu, 2012: 380).

(19a) *Ọ-, ka   Ada    nye-re       ego
      3SG.CL   FOC   Ada    give-IND  money

(19b) Ya/Ha/Unu/Eze, ka  Ada nye-re    ego
      3SG/3PL/2PL/Eze FOC Ada give-IND  money
      'It is him/they/you/Eze that Ada gave money.'

In Igbo, both the independent pronouns and lexical NPs can be clefted, but the PSCs cannot as indicated by the ungrammaticality of Example 20a (Anyanwu, 2012: 380).

(20a) *Ọ bụ ọ-       ka   Ada nye-re ego
       It BE 3SG.CL   FOC   Ada give-IND money

(20b) Ọ bụ ya/ha/unu/Eze   ka   Ada nye-re ego
      it BE 3SG/3PL/2PL/Eze FOC Ada give-IND money
      'It was him/them/you/Eze that Ada gave (some) money.'

Whenever there is emphasis on the subject, an independent rather than a PSC is used. This can explain the unacceptability of Example 21a (Anyanwu, 2012: 380).

(21a) *Ọ-     bịa!
      3SG.CL   come!

(21b) Ya/Unu/Ha  bịa!
      3SG/2PL/3PL        come
      'Let him/you/them come.'

An Igbo PSC cannot be conjoined with an independent pronoun or lexical NP. This is unlike the independent pronouns and lexical NPs that can be conjoined with each other, as in Examples 22a-c (Anyanwu, 2012: 380).

(22a) *Ọ-      na      Ada      bịa-ra
       3SG.CL   and     Ada      come-IND

(22b) Ya  na   unu    bịa-ra
      3SG  and  2PL    come-IND
      'S/he and you came.'

(22c) Ya/Ha    na     Ada/gị  bịa-ra
      S/he/they and    Ada/you come-IND
      'S/he/they and Ada/you came.'

With these information in mind, consider the singly occurring English verbs in Examples 23 to 26 from Ihemere (2016: 136-137).

(23) *ọ-study-rị*   na       London in the 70s
     3SG.CL-study-IND  PREP   London in the 70s
     'He studied in London in the 70s.'

(24) ị-sị  na     *ị-lodge-ị-rị*  na   guest house ahụ
     2SG.CL-say C 2SG.CL-lodge-V-IND PREP   guest house DEM
     'You said that you lodged in that guest house.'

(25) *e-send–ị-rị*   invitation card            iri
     CL-send-V-IND     invitation card           NUM
     '(Some person/s) They sent ten invitation cards.'

(26) *e-decorate-ị-rị*   hall     anọ
     CL-decorate-V-IND hall NUM
     '(Some person/s) They decorated four halls

Ihemere (2016) suggests that the PSCs can be analyzed in two ways. They can be analyzed just like the English subject pronouns, in which case the PSCs are arguments in the spec of AGRsP, as in Example 27, representing the structure in Example 25.

The structure in Figure 2 (Example 27) represents the 'substantive argument analysis of PSCs' (Anyanwu, 2012: 383). It can be argued that the PSC is generated at Spec, VP from where it raises to Spec, AGRsP for nominative case marking. Additionally, given the morphosyntactic status of the PSCs outlined above the argument analysis implies that the subject pronominal clitic having undergone a Spec-to-Spec move operation is at some point lowered to AGRs by a syntactic operation or by a purely phonological process of cliticization (Ihemere, 2016: 137).

On the other hand, it can be argued that the PSCs cannot occupy Spec, AGRsP argument position but just a mere functional element generated at AGRs which, identifies a null pronominal in subject position (cf. Rizzi 1986, cited in Anyanwu 2012: 383). This type of analysis, the *pro* analysis Figure 3 (Example 28), entails that the PSC is base generated at AGRs while its Spec, AGRsP is occupied by *pro*. Thus, the PSC is a spell-out of subject agreement features (cf. Campbell 1998, cited in Anyanwu 2012: 383; Ihemere, 2016: 137-138).

The examples just considered clearly demonstrate that the base language (that is, Igbo) is in complete control of how verbal inflectional morphology is realized in Igbo-English CS. That is, as Ihemere (2016: 133-134) notes, the examples appear to confirm the view expressed by Myers-Scotton and Jake (2014: 7) that the EL is active in CS at the level of lexical-conceptual structure, when an EL verb is selected as the lemma that best satisfies the speaker's intentions, the EL verb brings along its meaning, but it is the ML that integrates it into predicate-argument and morphological realization patterns. In other words, how thematic roles are realized in the syntax is determined by the base language.

## Lone English verbs inserted without Igbo verbal inflectional morphology

Here, we account for the lone English verbs in otherwise Igbo utterances inserted without any verbal inflectional morphology. Such verbs are termed 'bare forms' in the literature. Recall from the discussion in the section above, on the nature of Igbo verbs, that, in Igbo, verb serialisation is the only situation when a full Igbo verb may appear bare (that is, without verbal inflectional morphology) as one of a succession of verbs. That the first verb in the series is usually marked for temporal reference. However, we must note that it is not the case that every initial verb in a SVC bears morphology. Some verbs in a SVC may take extensional affixes. Crucially, an important feature of SVCs in connection with Igbo is that one of the verbs bears morphology while the others may occur as bare forms. As it turns out, all the bare EL verbs in our examples occur in SVCs.

Several of the lone English verbs occur in 'multi-event SVCs'. In this type of SVC, different events which are related are formed; and all the verbs share a single subject as in (29-31) from Ihemere (2016).

(29) o-me$_{V1}$-re    campaign$_{V2}$ nye$_{V3}$ anyị
     CL-do/make- IND campaign  give us
      manifesto ya
      manifesto his
      'He campaigned and gave us his manifesto.'

(30) commissioner abụọ ka$_{V1}$ e-me$_{V2}$-re arrest$_{V3}$
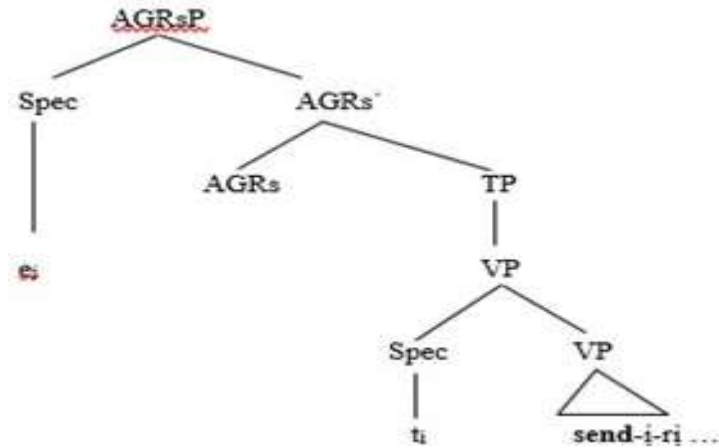     commissioner two BE V-do/make-IND arrest

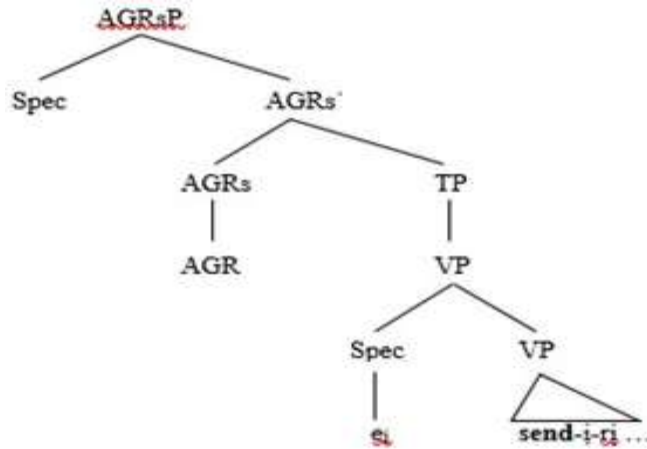**Figure 2.** Substantive argument analysis of PSCs (27).



**Figure 3.** The *pro* analysis of PSCs (28).

kpọrọ$_{V4}$ ga$_{V5}$-wa Abuja
take go-ENCL Abuja
'Two commissioners were arrested and taken to
Abuja'

(31) councillor anyị baV1-ra government bido$_{V2}$
councillor our enter-IND government start
me$_{V3}$-we embezzle$_{V4}$ ego
do/make-INCP embezzle money
'Our councillor entered government and started to
embezzle money.'

Other EL verbs in the data occur in what is termed
instrumental SVC, as in Examples 32 and 33 (Ihemere,
2016).

(32) mụ na nwunye m ji$_{V1}$ aka anyị mee$_{V2}$
Me/I and wife my hold hand our do/make

dismantle$_{V3}$ the leaking roof
dismantle the leaking roof
'My wife and I dismantled the leaking roof with our
hands.'

(33) e-ji$_{V1}$    ha ụgbọ ṃ miri mee$_{V2}$ survey$_{V3}$ ebe
CL-hold they vehicle water do/make survey place
a-ga$_{V4}$-a-rụ$_{V5}$ oil rig ahu
V-FUT-V-build oil rig ahu
'They used a water vehicle (ship) to survey the
location where they will build that oil rig.'

In Igbo, the verb *ji* 'hold' is used to express
instrumentality and it usually occurs in a complex
structure [- NP VP], typical of SVCs, where it obligatorily
takes a complement and a VP, as in Examples 32 and
33. For instance, the object of V$_1$ *aka anyị* 'our hands' in
Example 32 is also the instrumental argument of V$_3$.

Example 34 occurs in what may be termed a dative SVC.

(34) nwunye  m  ga$_{V1}$-e-me$_{V2}$      gị invite$_{V3}$ gwa$_{V4}$-kwa
   wife my FUT-V-do/make you invite tell-ENCL
   gị ụbọchị m ga$_{V5}$-a-pụV6-ta ọrụ
   you day I FUT-V-leave-ENCL work
   'My wife will invite you and tell you what day I will get
   off work.'

In Igbo, dative constructions typically surface as V-V compounds; and indicate/distinguish the recipient of something given or transferred, as in the above example. The fourth type of SVC is the resultative SVC, as in (35) below.

(35) *o-meV1-re          ṃma ya sponsorV2 ya a-gaV3*
   *3SG.CL-do/make-IND mother his sponsor she V-go*
   *Canada*
   *'He sponsored his mother and she travelled to Canada.'*

As in monolingual Igbo resultative SVCs, in example 35, we observe that V$_3$ expresses the result of V$_2$ and the object of V$_1$ is regarded and understood to be the subject of V$_3$. Additionally, in the example, V$_2$ is analysed as incorporating into V$_1$ to give the complete predicate.

An important feature of verb serialization in Igbo according to Ihemere (2016: 152) is that the sequence of VPs in the construction act together as a single predicate, without any marker of coordination, subordination, or syntactic dependency of any kind. This is exactly the situation with all the verbs in the bilingual SVCs. For instance, the verbs *me-re* 'did', *campaign* and *nye* 'give' in Example 29; *ka* 'copular', *e-me-re* 'did', *arrest, kpọrọ* 'take' and *ga-wa* 'start to go' in Example 30; *ba-ra* 'entered', *bido* 'start', *me-we* 'start to do' and *embezzle* in Example 31; *ji* 'used', *mee* 'do' and *dismantle* in Example 32; *ji* 'used', *mee* 'do' and *survey* in Example 33; *ga* 'will', *mee* 'do', *invite,* and *gwa* 'tell' in Example 34; and *me-re* 'did' and *sponsor* in Example 35, are all contained within a single clause (as far as Igbo is concerned). As well, the verbs share syntactic subject and object within their clauses.

Conversely, in the monolingual English translations of the same examples, the mono-clausal bilingual SVCs are expressed as multi-clausal constructions linked by the conjunction 'and'. Also, other elements of the mono-clausal bilingual SVCs now appear in the monolingual English translations as DP complement of a PP in Example 32, 'with our hands' and ADV clauses in Example 33, '… where they will build that oil rig'; and Example 34, '… what day I will get off work'.

Also, in the monolingual English translations of Examples 31 and 33, the English verbs *embezzle* and *survey* appear as 'to + infinitive' construction. This is absent in the bilingual SVCs where the two verbs are not inflected with the Igbo infinitive prefix *i-*. Thus, the structural configuration of the bilingual SVCs resembles that of Igbo (see the monolingual Igbo SVCs in Examples

5 to 8) rather than English (Ihemere, 2016: 152).

As well, we noted earlier that in Igbo SVCs the VPs in the sequence are construed as occurring within the same temporal frame. Some verbs in the series may appear with or without morphology. Auxiliaries, negation, tense and aspect markers of the sequence of verbs are found usually with the first verb of the SVC. These requirements, it would seem, can account for why all the English verbs in the earlier examples occur without the base language verbal morphology even though a past or future tense reading is implied. Notice that in the monolingual English translations the EL verbs receive the appropriate finite verb inflections, which are missing in the bilingual SVCs. Moreover, we can observe in the bilingual SVCs that auxiliary, negation, tense and aspect markers are found with the first verb in the series. For example, the Igbo auxiliary verb *ka* 'BE' in Example 30, the −*rV* indicative affirmative suffix on the Igbo verb *me* 'do' in Examples 29, 30, and 35, on *ba* 'enter' in Example 31; and the Igbo bound auxiliary *ga-* and the verbal particle *e-* on *me* 'do' in Example 34. In Examples 32 and 33, the Igbo instrumental verb *ji* 'hold/use' is bare but obligatorily receives a past tense reading. From this, it seems that the English verbs are bare only because this is what is expected according to the grammar of Igbo, the ML (Ihemere, 2016: 152-153).

## Conclusion

As we outlined earlier on the nature of Igbo verbs, Igbo uses a variety of bound affixes to mark the grammatical categories of tense, aspect and mood. Equally, English develops a variety of bound morphemes for verbs to mark semantic notions and grammatical categories such as number, tense and aspect. However, as the analysed examples indicate, there is no instance where an English verbal inflectional morpheme is found with any singly occurring EL verbs. Instead, all the singly occurring EL verbs in non-SVCs are obligatorily inflected with Igbo (the base language) verbal morphology. It is similarly important to note that there is no instance in all the examples where an Igbo verb is inflected with verbal morphology from English. This finding lends credence to Myers-Scotton and Jake's (2014) observation that in intrasentential CS it is EL non-finite verbs that receive ML verbal inflections.

Concerning the EL verbs that occur in serial verb constructions as bare forms (that is, without Igbo inflectional morphology), Myers-Scotton (1993b) and Myers-Scotton and Jake (2001) suggest that bare forms occur due to lack of sufficient congruence between EL forms and their ML counterparts, leading to the activation of what they term a 'compromise strategy' with the result that the EL content morpheme is not placed in a slot projected by its ML counterpart and thus such verbs are instead realized as bare forms. Congruency is very important in the MLF model. With reference to the

examples discussed in this paper, Amuzu's (2013) definition of congruence is very apt. He states that 'singly occurring content morphemes from the EL can be inserted into constituents framed by the ML only if they show sufficient congruence with their ML content morpheme counterparts at the three levels of abstract lexical structure: lexical-conceptual structure, predicate-argument structure, and morphological realization patterns' (p. 33).

Taking the EL verb *deliver* in Example 36 as an example, we find that it is sufficiently congruent with its ML counterpart *nye* 'to give'. Regarding lexical-conceptual structure, both encode identical concept, that is, they have analogous lexical-conceptual structure (to deliver a speech = to give a speech). They also share predicate-argument structure, that is, they both assign thematic role to the NP which encodes the entity 'delivering/giving the speech'. Concerning morphological realization patterns, both are verbs. Igbo already has a syntactic model (SVC) that may be used to insert bare verbs in its grammar. Therefore, regarding surface realization pattern, *deliver* is inserted into the verbal slot intended for the bare ML verb *nye*, as in the following grammatical example Ihemere (2016: 156).

(36) ọ-bia$_{V1}$-ra        deliver$_{V2}$ (nye$_{V2}$) speech gaa$_{V3}$
     3SG.CL- come-IND deliver        speech go
     lee$_{V4}$ that new unit …
     look that new unit
     'He came, delivered his speech and went to see that new unit …''

As Ihemere (2016: 156) correctly observes, the problem with the Myers-Scotton and Jake's (2001) suggestion for why bare forms occur in relation to Igbo-English CS is that in the preceding analysis, the EL bare verbs (Examples 29 to 36) do not appear to be inserted with any compromise strategies. That is, Igbo verbs can already occur as bare forms in SVCs without the need for positing any *special* strategies for the insertion of bare EL verbs. It could be argued, however, that those EL verbs inserted in the SVCs with what Myers-Scotton and Jake (2014: 11) refer to as 'do' constructions (Examples 29 to 35) can be viewed as some sort of a compromise strategy. According to Myers-Scotton and Jake (2014: 11-12), the *do* construction is found in many data sets across typologically diverse languages. They add that the *do* construction consists of an ML verb form that encodes the meaning 'do' (see for instance the Igbo verb *mee* 'do' in the examples above), but is largely bleached of any meaning; the critical meaning in the clause (according to Myers-Scotton and Jake) comes from a non-finite verb, often the infinitive, in the predicate called by the 'do' verb. All necessary ML verbal inflections occur with the 'do' verb and not the non-finite EL verbs.

In connection with Igbo-English, we generally agree with Myers-Scotton and Jake (2014) that in the bilingual SVCs the Igbo *do* verb receives all necessary ML verbal

inflections, thus, leaving the EL verbs bare. Nevertheless, we are not entirely convinced that this is a particularly unique CS strategy since the same syntactic model already exists in monolingual Igbo syntax. For instance, consider the monolingual Igbo SVC in Example 37 (Ihemere, 2016: 156).

(37) ha me$_{V1}$-re        ṃmeṃme$_{V2}$ gbaa$_{V3}$ egwu Osita
     They do/make-IND celebrate      dance song Osita
     'They celebrated and danced to Osita's song.'

In Example 37, the speaker's intentions call for a past tense marking, but the full verbs of Igbo occur as bare forms (*ṃmeṃme*$_{V2}$ = 'celebrated', *gbaa*$_{V3}$ = 'danced'); the past tense inflection is placed on the Igbo *do/make* verb instead. Ihemere (2016: 157) adds that in Igbo the verb *mee* is usually an active verb requiring a direct object as its complement. Like the other verbs of Igbo, *mee* occurs with the appropriate affix to mark grammatical relation such as the infinitive *i-me*, the participle *e-me*, the negative *e-me-ghi*, the indicative *me-re*, the perfective *e-me-la*, the imperative *me-e* and the inceptive *me-we*.

Given that all the bilingual SVCs adhere to a strategy already in place in Igbo grammar, our position is that the same language production processes implicit in the production of the EL verbs with Igbo morphology is also at work in the bilingual SVCs. In other words, the base language well-formedness condition ensures that the bare EL verbs are placed in slots intended for their base language counterparts as well as ensuring that other base language verbs in the SVCs receive all necessary verbal inflections, thereby leaving the EL verbs bare as required by Igbo grammar.

Overall, we have demonstrated in the preceding sections through patterns of affixation and the integration of EL bare verbs in bilingual SVCs that lone English verbs inserted in otherwise Igbo utterances are subject to more base language control and less embedded language independence. In future, it would be interesting to explore the social psychological factors motivating the CS practices of Igbo-English bilinguals and how such factors have implications for the study of the grammar of CS.

## CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

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