

# **A PRELIMINARY STUDY OF TONE IN IGBO QUESTIONS: ÒWERÉ SATELITE DIALECT IN VIEW**

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## **Abstract**

This paper focuses attention on question formation processes in the Igbo language spoken by Òweré people (Òweré satellite dialect of Igbo - OSD). This preliminary study attempted to descriptively examine the grammatical role of tone in OSD content questions. It also tried to trace the sources of development of the question morphemes employed in these content questions. The researchers used native speaker intuitive knowledge to generate the data. Also used was a body of data collected from chance comments from different contexts and conversations with other adult male and female native speakers of not less than fifty years of age, who have lived in their communities for the greater part of their lives. The data were compiled over a period of time. It is discovered that in Igbo, a terrace-level language, OSD exhibits certain peculiar tonal characteristics and questioning techniques lacking in other dialects. Among other things, in fast or spontaneous speech, OSD has the feature of pitch lowering in slow, emphatic speech, and pitch raising or heightening likened to upstep. The paper shows that the raising and lowering pitch features are very essential and add some pragmatic meaning to utterances in OSD. Introducing, in the Standard Igbo taught in schools, the linguistic art of identification and analysis of these pragmatic features of tone will enrich the Igbo language.

## **1.0 Introduction**

Human utterances are naturally varied and could be in the form of declaratives, imperatives, interrogatives, or exclamations, among others, each of which has its peculiar structural features and types and serves different purposes according to the context of use. Man is also known to express each of these utterance forms differently with resultant vocal modulations, manifesting as tone or intonation according to the language involved. Studies of these utterance forms abound in different perspectives. Phonological and syntactic studies of tone have led to varied definitions of the concept. In phonology tone is seen as an intersegmental, a prosodic or suprasegmental feature of speech (cf. Ashby & Maidment, 2007; Aziza 2007; Fromkin, Rodman & Hyams, 2003; Okolo & Ezikeojiaku, 1999 and so on). In the same vein, Clark, Yallop & Fletcher (2007) see tone as the choice of a pitch pattern and melody, a fact that is very prominent in OSD. But tone can simply be defined as contrastive pitch levels; that is, using pitch to contrast meaning as it applies to many tone languages like Igbo. Some other authors see tone as a feature of the syllable (cf.

Anagbogu, Mbah & Eme, 2010; Akmajian, Demers, Farmer & Harnish, 2004; Ikekeonwu, Ezikeojiaku, Ubani & Ugoji, 1999; Oluikpe, 1997; Laver, 1995; Gimson, 1991; Lyons, 1984 and 1979; Falk, 1978; Hyman, 1975; Green & Igwe, 1963). Some of these authors have also described the various functions of tone in different languages. For instance, Akmajian *et al* (2004:140-2) cite the role of tone in English in identifying nouns and verbs. Laver (1995: 465ff), describing what he called “syllable-based tone systems” also cites the various roles (lexical and grammatical) tone plays in “the majority of all of the known languages of the world” including American languages like Tlapamec, Texmelucan dialect of Zapotec, Copala dialect of Trique; Southeast Asian languages like Mandarin, Thai and Vietnamese; European Norwegian; Sweddish; African languages like Bafang in Cameroon, and Efik, Etsako, Urhobo, Edo and Yoruba in Nigeria. In the same vein, a host of authors have examined the phenomenon in the Igbo language. In these languages tone is contrastive and plays a lot of other roles.

In tone languages, tone is also environmentally conditioned and can change according to context (Okolo & Ezikeojiaku, 1999: 342). Early literature on tone in Igbo, like some of those cited in this work, refers to the phenomenon of inherent lexical tones changing to grammatical ones in associative constructions. But, Mbah (2005) sees this notion as superfluous because ‘lexical’ function is irretrievably ‘grammatical’. This paper agrees with Mbah because whether the discussion of tone is based on individual words or groups of words, it is in relation with the grammar of the language being described. Nwachukwu (1995) associates this characteristic with Igbo SVO word order and its minimal inflection of only the verb.

One major characteristic of tone which is of importance to this paper is its role in question formation (QF), especially in content question (CQ). Several authors, especially many of those already cited, have different definitions of question. For the purpose of this paper, only a simple definition can suffice. Crystal (2007: 384) defines question as a term for classifying sentence functions. Its roles include: bridging communication gap, emphasizing or clarifying a point, eliciting a response, and the like. Thus, it is very essential in human communication, sharpening the intellect, since an inquisitive mind is a creative mind. It is an utterance that stands in contrast to a declarative. Syntactically, it differs because unlike the declarative, it uses various question morphemes (QMs) or pronouns; and has different word order and intonation or tone, and so on (cf. Fromkin *et al*, 2003; Radford, 1984; Lyons, 1979). In intonation languages (like English) intonation differentiates between interrogatives and declaratives; while tone performs the function in tone languages (for the different types of question in English see Radford, 1984: 108f, and so on.).

Questionformation involves varying transformations in languages. In many tone languages, tone is actively involved in the process, as in Igbo, Hausa andUrhobo (cf. Amfani, 2007: 157; Aziza: 2007, 281f; Mbah 2006: 81f, 182), contrary to the situation in tone languages like Chinese and Yoruba, even though different QMs are

utilized (cf. Yuan & Church, 2004: 148, 230, 282, 289; Akmajian *et al*, 2004: 211f; Fromkin *et al*, 2003: 260). One major feature observed in Yoruba is a high tone (H) pronominal copy (PC) *ó*, focusing the agent in CQs. But Standard Igbo (SI) has the low tone harmonizing PC, *ò/ò̃* (cf. Yusuf, 2007: 268; Nwachukwu, 1995). Amfani (2007) notes that Hausa raises the tone of the last syllable in yes-no question while different QMs are used in CQ.

In the case of SI, many scholars have studied the role of tone in QF (cf Mbah, 2006 and 1999; Oluikpe, 1997; Nwachukwu, 1995; Green & Igwe, 1963; and so on). They all attest to tonal changes between Igbo declaratives and interrogatives, for instance, the low tone harmonizing PC, *ò/ò̃* occurring in questions with nominal subjects, which is non-existent in declaratives. However, to the best of the researchers' knowledge, the peculiar functioning of tone in questions in OSD has not been investigated. The paper attempts to descriptively examine this phenomenon in OSD with particular reference to CQ, in order to discover their pragmatic implications. It also tried to trace the sources of development of the question morphemes employed in these content questions. The motivation for the study stems from the researchers' belief that this area of Igbo studies deserves adequate attention. The researchers used native speaker intuitive knowledge to generate some data. Also used was a body of data collected from chance comments from different contexts and conversations with other adult male and female native speakers of not less than fifty years of age, who have lived in their communities for the greater part of their lives. The data were compiled over a period of time. There are different types of question in Igbo: yes-no; tag; content; echo; rhetorical; direct and indirect questions. However, this paper discusses only the CQs. The next two sections take a statement about tone and question in Igbo and examine tone in CQs in OSD, drawing insight mostly from Mbah's (2006), Nwachukwu's (1995) discussions of SI and Radford's (1984) classification. The final section is the conclusion. Note that Mbah (2006) is based on the Government and Binding theory of syntax while Radford is based on the generative theory of syntax. But this preliminary study is purely descriptive.

The tone-marking convention adopted for the data is PAN (Nwachukwu, 1995). PAN recognizes two contrastive tones in Igbo (high and low, and down step (S), an allotone of the high). PAN states that only two tone marks are used, that is, the acute accent / ´ / for high tone (H) and the grave accent / ` / for low tone (L). For economy sake, it marks only contrasts. In the case of downstep (S), the macron / ¯ / is used. Note that the upstep arrow '↑' (Laver, 1995) indicates the rising pitch feature while the lowering tone is indicated by the L tone occurring serially. The data will be glossed in English, both word for word or morpheme by morpheme and sententially. Also note that the OSD used in this study is the variant spoken in Òweré North and Municipal Local Government Areas of Imo State. The OSD is located in Nwaozuzu's (2008) East Central Group of Dialects (ECGD). In the analysis, the paper also highlights important and interesting tonal behaviours of other segments in CQs;

and where necessary, SI equivalents are matched with the OSD variants. Important abbreviations and meanings are: pst.perf 'past perfect'; impr. 'impersonal pronoun'; pro. 'pronoun'; ecl. 'enclitic' (cf. Nwankwere, 2014); pers.sg 'singular personal pronoun'; pers.pl 'plural personal pronoun'; pref. 'prefix'; pl.pro 'plural pronoun'; tns 'tense'.

## 2.0 Tone in Igbo question formation

Nwachukwu (1995: 33f) asserts that every Igbo statement with a pronoun as the subject is the same with its question counterpart except in tone, to the effect that the tone on the pronoun in the question is always L or LL; while the tone of its statement counterpart may be H, LH or HL. He further states that when the subject of a statement is not a pronoun, the difference between the statement and its question is twofold: it could be a natural difference or, it could be the tone pattern difference. Examination of how far content questions in OSD conform to these conditions follows shortly.

### 2.1 Content or wh-question

Wh-question derives the name from English where such questions start with certain morphemes whose spellings begin with 'wh' (except 'how'). According to Radford, the speaker is requesting information about the identity of some entity in the sentence. SI also has question morphemes (QMs). Each demands for the identity of a particular person (*ònyé*), place (*òléé/èbéé*) and so on. Each QM can also take one word, phrase, clause or a whole sentence for an answer. For Igbo, Mbah (2006: 134-5) posits that trace of wh-movement belongs to lexical government, that is, proper and antecedent government, because a lexical head should govern its complements since they are intimately related. He holds that Igbo tone plays many functions in marking the wh-element, to the effect that it is mapped unto the constituent it immediately dominates (cf. Mbah, 2006: 192-206). Nwachukwu (1995) identifies the wh-morphemes for SI.

### 3.0 Content questions (CQ) in OSD

The SI QMs and their OSD equivalents and glosses are listed side by side below:

	<b>Òweré</b>	<b>Standard Igbo</b>
	<b>Gloss</b>	
1a.	Màka nínì 'Why?'	Màka gínì
b.	Nínì? 'What?'	Gínì?
c.	Òléé/Òléé ebe? 'Where?'	Èbéé?
d.	Ònyé (sg)? 'Who?'	Ònyé?





- What is it/that (thing)?
- d. Òléē he wụ he a?                      e. Hé nị?                      f. Nịnị?
- where thing be thing thatQ                      thing whatQ                      whatQ
- What is that thing/it?                      What is it/that/What?                      What is it/that/What?

These ones seek to know a particular thing or reason. In OSD, **á**, the short form of **áhụ** (that), is normally used; the full form is for emphasis. Its counterpart **à** (this) is assimilated (è, ì, ï, ù, ù) according to the vowel of its preceding syllable. Again, OSD says **hé** and not **ihe** (thing). In 4a-c, OSD has H/S. Note that 4e-f are verbless (the verb is covert). The L tone of the PC is for normal or slow speech. In spontaneous or fast speech, the tone is raised.

### 3.2.3 'Where?'

The following are expressions of 'where?' in OSD. They seek information about the identity of a particular place. Below are illustrations.

- 5a. Ébe a ↑ò wụ ↑òlé ēbe/↑òléē?                      b. ↑Ò wụ ↑òlé ēbe/↑òléē?
- place that it be where place/whereQ                      it be where place/whereQ
- Where is that place/Where is it/Where?                      Where is that place/Where is it/Where?
- c. ↑Òléē ebe wụ ebe a?                      d. ↑Òléē wụ ebe a/↑Òléē ebe/↑Òléē?
- where place be place thatQ                      where be place that/where place/whereQ
- Where is that place/Where is it/Where?                      Where is that place/Where is it/Where?

In 5a-d, the L pronoun and the initial syllable of the QM (òlé/òléē) are perceived as H all through; whereas evidence from emphatic speech shows the H manifesting as L in OSD. The copula verb is either H or S. The rising tone feature, caused by fast or spontaneous speech (or in fact normal speech), is very prominent here. It could be likened to what Laver (1995: 472) reports of as upstep, "a phonological feature where successive high tones can spread upwards", which occurs in languages like Zulu and Acatlán Mixtec. In the OSD case in 5b-d, upstep feature starts from the beginning of the sentence, spreading rightwards to the end of the sentence such the L tones manifest as H and the spreading feature makes syllables around it higher than usual.

#### 3.2.4.1 'Who?' (sg.)

The expressions of 'Who?' are both singular (sg.) and plural (pl). OSD variants of the singular forms include:

- 6a. ↑Ònyé wụ onye a?                      b. ↑Ónye a ↑ò wụ onye?/↑Ónye a ↑wụ onye?
- pers.sg be pers.sg thatQ                      pers.sg that it be pers.sgQ/pers.sg that be pers.sg
- Who is it/that/that person?                      Who is it/that/that person?
- c. ↑Ò wụ onye?                      d. ↑Òléē onye/↑Òlé onye ↑wụ onye a?
- it be pers.sgQ where pers.sg be pers.sg thatQ Who is it/that/that person?                      Who is it/that/that person?

- e. ↑*Ò wù* (dì) onye (dì) wù (dì) onye a (dì)? f. *Ònyé* (dì)?  
 it be pers.sg (ecl) be person thatQ pers.sg (ecl) Q Who is it/that/that person (for  
 God's sake)? Who?

No.6 expressions all refer to singular person. Except 6f, the rest manifest the tone raising or upstep which is clearly rendered in the environment of H in 6b, the condition defined in Laver (1995: 472). In 6a, for normal or spontaneous or fast speech, OSD has ↑LHSSS. Note that the second QM has H in both syllables as in its declarative. Its reverse is 6b, with PC added, and the QM clearly manifests as HH in OSD. All through, the verb has H/S for OSD. Only in emphatic speech is the optional PC really perceived as L as in no.5. No.6e has a repetition of the clause *wù onye*, with tonal changes: LHHHSSSS. Lastly, the QM could be used alone as in 6f.

In OSD, if personal pronouns are subjects, the position may not be reverted as shown in no.7 below. In 7a the pronominal subject (PS) has the raising of tone as usual and the verb has H. 7b is not possible because OSD does not use *kà* as in that structure; but can say; *Ònyé wù gị?*(cf. no.8.)

- 7a. ↑*Ì/Ò wù* onye?  
 You/he/she be pers.sgQ  
 Who am I or he/s?
- b. \**Ònyé kà m'anyí/í/ínwù/ó wù/áwù hù?*  
 \*pers.sg that I/we/you/you/she/he be /pref be theyQ  
 Who am I or are we/you/they or is he/she?

### 3.2.4.2 'Who?' (pl.)

The OSD plural form of 'Who?' expressions go with the plural pronoun *nde* (*ndi* for SI), as in,

- 8a. ↑*Nde* a ↑*àwù hù* ↑*nde* *òle*?  
 pers.pl that pref.be pl.pro pers.pl whereQ  
 Who are they/those people?
- b. ↑*Nde* *òle* (*dí*) *wù* (*dí*) *nde* a (*dí*)?  
 pers.pl where (ecl) be (ecl) pl that (ecl)Q  
 Who are they/those people by the way?
- c. ↑*Àwù hù* *nde* *òle*?  
 pref be pl.pro pers.pl whereQ  
 Who are they/those people?
- d. ↑*Òléé/Òlé* *nde* *wù* *nde* *wù* *nde* a?  
 where pers.pl be pers.pl be pres.pl thatQ  
 Who are they/those people?
- e. ↑*Ò* *wù* *òle* *nde* *wù* *nde* a?  
 it be where pers.pl be pers.pl thatQ  
 Who are they/those people?
- f. ↑*Òléé/Òlé* *nde/Nde* *òle*?  
 where pers.pl/pers.pl whereQ  
 Who are they/Who?

There are different structures involving movement and focusing (cf. Mbah, 2006) and arising in tonal changes and varying degrees of emphasis. But *òle* maintains HH/SS except in 8d,f in the subject slot. A L prefix (pref) attaches to the L verb in 8a,c for emphasis and heightens in normal or fast or spontaneous speech as against the declarative. The verb has S/H in 8d,e. Note the changed positions (movement) of the verb and the plural pronoun in 8a. In the case of 8b, the movement enforces H on the verb. Note that the structure (↑)*Ò wù ... wù ... ?* can be used for all members of this question type, in different positions and repeatedly too. Observe that the rising tone phenomenon is rather used for emphasis in SI, such that 8e is rendered as LHHHSSSSSSL (the last two syllables are for *áhù*).



### 3.2.5 'Which?'

In OSD, 'Which?' could be expressed as follows:

- |  |  |
|--|--|
| <p>9a. Hé/Kèá ↑ò wù kē ole?<br/>thing/one that it be one whereQ<br/>Which one is it/Which is it?</p> <p>c. ↑Ké ole ↑wù ke á?<br/>one where be one thatQ<br/>Which one is it/Which is it?</p> <p>e. ↑Òléé ke wù kè á?<br/>where one be one thatQ<br/>thatQ<br/>Which one is it/Which is itQ</p> | <p>b. ↑Ò wù ke ole?<br/>it be one whereQ<br/>Which one is it/Which is it?</p> <p>d. ↑Ké ole ?<br/>one whereQ<br/>Which one/Which?<br/>Òlèè ke wù ke/Òlé kè wù ke á?<br/>where one be one/where one be one<br/>Which one is it/Which is itQ</p> |
|--|--|

OSD uses **kè** for SI **n̄ke**. In 9a-b, the verb has H in contrast to its statement and SI. The use of L on the verb indicates emphasis as can be seen in 9f. The use of the enclitic **d̄i/d̄i** (its tone depends on the tone of its host) is more emphatic.

### 3.2.6 'When?'

The OSD expressions for 'When?' include:

- |  |   |
|--|---|
| <p>10a. M̄ma á ↑ò wù mmá ole?<br/>time that it tns be time whereQ<br/>When is the time/When is it?</p> <p>c. ↑Ò wù mmá ole?<br/>it tns be time whereQ<br/>When is it?</p> <p>e. M̄ma ole wù mmá wù/wù mma ó wù?<br/>g. Òlé m̄ma?<br/>time where tns be time be time it beQ<br/>where timeQ<br/>When exactly is the time?<br/>When?</p> | <p>b. Òléé/Òlèè/Òlé m̄ma wù mma á/ó wù?<br/>where time tns be time it beQ<br/>When exactly is the time/is it?</p> <p>d. M̄ma ole wù mma á/ó wù?<br/>time where tns be time that/it beQ<br/>When is the time/When is it (exactly)?</p> <p>f. M̄ma ole?<br/>When?</p> |
|--|---|

In these examples, there are also structural and tonal variations. Importantly, note that the use of **m̄ma** time morpheme (TM)(an adverb of time) tends to block the tone raising. In 10a (almost the same thing with 10c), the repeated TM takes H in its second syllable. It is only in 10a,c that the tone heightening is perceived due to the question phrase (or clause) **↑ò wù**. In 10b, the structural change results into these tonal renditions from **m̄ma**: LHLLLH/HS. Note that the tone of **olee** can be LHS or LHL for different pragmatic implications. In 10d, the new structure gives rise to the tonal modulation LHSSLLLH/HS. No.10e shows that both the TM and the copula verb can be repeated severally for various pragmatic implications like emphasis, doubt or suspicion, and so on. The enclitic **d̄i/d̄i** can go with it or any of them to

buttress a/the fact. 10f-g with LHSS and LHLL are structural reverse of each other used either pragmatically, aesthetically or otherwise.

### 3.2.7 'How?'

The OSD expressions of 'How?' include:

- 11a. Hé a ↑è mé ya kpa òlè?  
 thing that impr. do.tns it like whereQ  
 How do we do that thing/it?
- b. ↑È mé ya kpa òlè?  
 impr. do.tns it like whereQ  
 How do we do that thing/it?
- c. Hé a ↑è me ya ańáā/òlìà?  
 thing that impr. do.tns it like howQ  
 How do we do that thing/it?
- d. ↑È me ya ańáā/òlìà?  
 impr. do.tns it like howQ  
 How do we do that thing/it?
- e. ↑È mé he a kpa òlè/ańáā/òlìà?  
 impr. do that thing /it like whereQ  
 How do we do that thing/it?
- f. Òlèé kpa/Òlèé kpá ↑ê mè yá/hé a?  
 where like impr. do it/that thingQ  
 How do we do that thing/it?
- g. Kpá òlè wụ kpa ↑ê mè yá/Kpá òlè?
- h. Àńáā/Àńáleè/Òlìà?  
 like where tns be like impr do it/Like where Q howQ  
 How in fact do we do it? How/How are you?
- i. Òlèé/Èléé/Àńáleé/Àńáleè/Àríî/Àńáríî kpa ↑ê mè yá? j. ↑È me ya òlìà/È mé ya òlìà?  
 where/how impr. do itQ impr. do it howQ  
 How exactly/in fact do we do it? How exactly/in fact do we do it?

In these examples, different QMs can be employed. Again, the varied structures result in varied tonal changes. But **Òlìà** and **àńáā** have fixed positions and tones unlike other QMs that change tone according to context or position. Except in isolation, **Òlìà** and **àńáā** do not occupy sentence-initial position. When they stand on their own as in 11h, they serve to enquire after a person's health, well-being, and so on. In other examples here, the tone rising feature is prominent to the effect that a rise-falling glide is perceived on the impersonal pronoun, **e**, as in 11f-g, which under the usual questioning condition should have L. This could be likened to the phenomenon called or "toneme 3" is referred to as "high-falling". Note that the tone of its host verb, **me**, modulates from H to L for various reasons like context, emphasis. Also, note that the QM in 11i could be used in all the questions.

### 3.2.8 'How much?'

In OSD, 'How much?' could be expressed in the following ways:

- 12a. Hé a ↑è ré ya ile/egi(o) ìlè?  
 thing that impr. sell it how many/money how manyQ  
 thing that pro tns be money how manyQ  
 How much is that thing/it?
- b. Hé a ↑ò wụ egi(o) ìlè/ìlè?  
 How much is that thing/it?
- c. ↑È ré ya egi(o) ìlè?
- d. ↑Ò wụ egi(o) ìlè?



its inherent or original LH to SS as in 14a; while the verb changes from HH to SS and the QPS is deleted.

#### 4.0 Conclusion

This paper calls for enriching the Igbo Language through its dialects. Currently, Igbo is developing towards second language (L2) status since the official backing by the National Language Policy in Education (NPE, 1977). Teaching Igbo as L2, for several reasons, demands harnessing Igbo dialects to which the Igbo L2 teachers, learners, researchers, and others should be exposed. Suffice it to say that adopting OSD's peculiar questioning techniques and tonal modulations into the teaching and learning of Igbo would enrich the language and motivate teachers and learners. In all, this paper claims not to have exhausted all the roles of tone in forming CQs in OSD. Nevertheless, the study has achieved a major success in providing substantial data for further research.

Finally, it is discovered that OSD has a peculiar type of high rising tonal feature referred to in this paper as pitch raising or heightening. It can be likened to what Laver (1995: 472) reports of as upstep. But the use of *m̩ma* blocks the tone raising as in no.10. Sometimes, a rise-falling glide is perceived in the environment of a low tone as in 11f-g. This could be likened to the third group of "naming tones" or "toneme 3", the "high-falling" tone reported in Laver (1995: 476) which he called tonal sandhi. This paper recommends that these phenomena be more properly, especially, acoustically examined for a more categorical statement on the issue.

## REFERENCES

- Akamajian, A., R. Demers, A.K. Farmer & R.M. Harnish (2004). *Linguistics: An introduction to language and communication*. India: Prentice-Hall of India Private Limited.
- Amfani, A.H. (2007). *Basic linguistics for Nigerian languages teachers*. Hausa syntax. Yusuf, O. (ed.). Aba: Linguistic Association of Nigeria: 149-161.
- Anagbogu, P.N., B.M. Mbah & C.A. Eme (2010). *Introduction to linguistics*. Awka: JFC Ltd.
- Ashby, M. & J. Maidment (2007). *Introducing phonetic science*. Cambridge: University Press.
- Aziza, R. (2007). Urhobo Syntax. Yusuf, O. (ed.) *Basic linguistics for Nigerian languages teachers*. Aba: Linguistic Association of Nigeria: 273-289.
- Clark, J, C. Yallop & J. Fletcher (2007). *An introduction to phonetics and phonology*. Oxford: Blackwell Publishing.
- Crystal, D. (2007). *A dictionary of linguistics and phonetics*. Malden: Blackwell.
- Falk, J.S. (1978). *Linguistics and language: A survey of basic concepts and implications*. Canada: John Wiley and Sons.
- Federal Government of Nigeria (1977). *National Policy on Education*. Lagos: Fed. Govt. Press.
- Fromkin, V., R. Rodman & N. Hyams (2003). *An introduction to language*. America: Wadsworth.
- Gimson, A.C. (1989). *An introduction to the pronunciation of English*. Britain: ELBS.
- Green, M.M. & G.E. Igwe (1963). *A descriptive grammar of Igbo*. London: Oxford University.
- Hyman, L. M. (1975). *Phonology: Theory and Analysis*. America: Harcourt Brace Jovanovich.
- Ikekeonwu, Ezikeojiaku, Ubani & Ugoji (1999). *Fonoloji na grama Igbo*. Onicha: Varsity Press.
- Laver, J. (1995). *Principles of phonetics*. Cambridge: Cambridge University Press.
- Lyons, J. (1979). *Introduction to theoretical Linguistics*. Great Britain: Cambridge Varsity Press.
- Lyons, J. (1984). *Languages and Linguistics*. Great Britain: Cambridge University Press.
- Mbah, B. M. (1999). *Studies in syntax: Igbo phrase structure*. Nsukka: Prize Publishers.
- Mbah, B. M. (2005). Tone and syntactic integrity in Igbo. B.M. Mbah (ed.) *Nsukka Journal of African Languages and Linguistics (NJALL) Vol. 2, No. 2*. Nsukka: University of Nigeria, Nsukka Press: 12-18.
- Mbah, B.M. (2006). *GB Syntax: Theory and application to Igbo*. Enugu: St. Jon-Afam Publication.

- Mbah, E.E. (2006). Move-Alpha in Igbo Syntax. *Journal of Igbo Studies*, 1. Nsukka: ISA: 81-89.
- Nwachukwu, P.A. (1987). Conjunctions in Igbo Syntax. Azuonye, C. (ed.) *Nsukka Journal of Linguistics and African Languages*, No. 1. Nsukka Department of Linguistics and Nigerian Languages, University of Nigeria, Nsukka: 63-86.
- Nwachukwu, P.A. (1995). Tone in Igbo Syntax: *Studies in Igbo linguistics*, Vol. 2. Nsukka: Igbo Language Association (ILA), University of Nigeria, Nsukka: i-v, 1- 61.
- Nwaozuzu, G.I. *Dialects of Igbo language*. Nsukka: University of Nigeria Press Limited.
- Nwankwere, A.U.N. (forthcoming). The verb origin of content/wh-question morphemes in Igbo.
- Nwankwere, A.U.N. (2013). A phonological analysis of the glottal stop / ʔ / in Òwèré dialect of Igbo. C. Uzoho, S.Ezeodili & J. Okoye(eds.) *The Dignity of a French Teacher: Celebrating Prof. Julie Agbasiere*. Awka: Fab Aniech Nig. Ltd.: 103-113
- Nwankwere, A.U.N. (2014.). A preliminary descriptive study of clitics in Òwèré satellite dialect of Igbo. A PhD seminar paper presented to the Department of Linguistics, Igbo & Other Nigerian Languages, University of Nigeria, Nsukka.
- Okolo, B.A. and P.A. Ezikeojiaku (1999). *Introduction to languages and linguistics*. Benin: Mindex Publishing Company.
- Oluikpe, B.O. (1997). *Igbo transformational syntax: The Ngwa example*. Onicha: Africana Publishers Limited.
- Radford, A. (1984). *Transformational syntax*. Great Britain: Cambridge University Press.
- Yuan, B. & S. Church (2004). *Oxford English-Chinese, Chinese-English mini dictionary*. OUP.
- Yusuf, O. (2007). Yoruba syntax. Yusuf, O. (ed.) *Basic linguistics for Nigerian languages teacher* Aba: Linguistic Association of Nigeria: 257-272.