A Morphosyntactic Investigation of Functional Categories in English and Izon

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Dedicated to

My father, Chief Isaiah Bumiegha Kwokwo (late)

who sowed the seed

and

Professor Kay Williamson (late)

The doyen of Izon language studies

CERTIFICATION

I certify that this work was carried out by Mr Odingowei Macdonald Kwokwo in the

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ABSTRACT

Existing studies on Izon language have concentrated on unilingual application of traditional grammar in constructing well-formed sentences, thereby neglecting critical descriptions of the ways morphosyntactic features ensure the derivation of convergent structures. A contrastive examination of English, (a standard for universal grammar analysis) and Izon languages can properly characterise these syntactically significant features. This work, therefore, investigates the morphosyntactic features in English and Izon languages with a view to identifying and describing the morphosyntactic features that make the structures of the two languages converge.

The study adopts Chomsky's Minimalist Program, which emphasises *checking* of morphological features. The research is based on Standard English and the Kolokuma dialect of Izon, used in education and the media, and is mutually intelligible with other dialects. Data on English were collected from various books on English grammar and those on Izon were collected from native speakers in Kolokuma and Opokuma clans in Bayelsa State where the dialect is spoken, and complemented with the researcher's native-speaker's introspective data. Since the study is competence-based, completely grammatical structures from each language were used for the analysis. Clausal and phrasal syntactic structures of English and Izon languages were comparatively analysed based on the feature-checking processes of the Minimalist Program to identify shared and idiosyncratic features.

Universal features common to both languages include phrases, clauses, syntactic heads and wh-fronting. However, English and Izon opt for different head parameters. Heads in English precede their complements while heads in Izon follow their complements. Although Nominative Case licensing occurs in Spec-head structures in both languages, Accusative Case is licensed in head-complement relationship in English and complement-head structure in Izon. Both English and Izon permit wh-fronting at Spec-CP, but Izon wh-expressions obligatorily co-occur with focus particles ki or ko, which are functional elements that licence wh-elements. Whereas English constructs relative clauses with overt and interpretable complementizers such as 'who', which precede their complement clauses, Izon constructs relative clauses without overt interpretable wh-expressions except an overt amee (that) which follows its complement clause. Agreement and Case features are intrinsic in determiners and pronouns in both languages. Whereas referential determiners in English have referential features only, some referential determiners in Izon also have gender agreement features. English verbs have interpretable number agreement feature, but Izon verbs lack this: the verb in Izon does not inflect for number and is uninterpretable. Therefore, movement of the verb for checking of +N feature is overt and occurs before Spell-Out in English, but it is covert and occurs after Spell-Out in Izon. Nevertheless, Izon permits the projection of multiple XPs within a single DP in which two determiners participate in DP-internal Agreement relations with the noun.

Phrasal and clausal structures, heads, Case and wh-movement are common features of English and Izon languages. The interpretability of morphosyntactic features, head directionality and nature of wh-movement licensing constitute peripheral features to the two languages. This study provides a systemic characterization of the interface of functional morphological features and syntactic derivations in English and Izon languages.

Key words: Functional categories; Universal features; English/Izon; Feature-checking:

Parametric variation.

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List of Abbreviations

Adj/AP Adjective Phrase Acc. Accusative Case

Agr Agreement

Agro Object Agreement

Agro^I Object Agreement (Intermediate) Projection

Agrs Subject Agreement AgrP Agreement Phrase

AgroP Object Agreement Phrase AgrsP Subject Agreement Phrase

Agrs^I Subject Agreement (Intermediate) Projection

AUX Auxiliary

CA Contrastive Analysis C/COMP Complementizer

CP Complementizer Phrase

Cpl Complement

CGG Contrastive Generative Grammar

D Determiner

DP Determiner Phrase EC Empty Category

ECP Empty Category Principle
EPP Extended Projection Principle
EST Extended Standard Theory

Foc Focus

GB Government and Binding

Gen. Genitive Case

I/INFL Inflection

Idp Ideophone Phrase
Ipa Immediate past tense
IP Inflectional Phrase
Imperf. Imperfective Aspect
L₁/MT Mother Tongue
L₂ Second Language
LF Logical Form

MP Minimalist Program
Neg Negation (element)
NegP Negation Phrase
Nom Nominative Case
NP Noun Phrase

Oblq Oblique Case

PP Projection Principle

PP Prepositional/Postpositional Phrase
PPT Principles and Parameters Theory
PF Phonetic/Phonological Form

Perf Perfective Aspect

PNP Preposition +Noun Phrase

POSS Possessive (Genitive) Case marker
PRO Null subject of a non-finite clause
Pro Null subject of a finite clause
Prog Progressive (Imperfective) Aspect

PRON Pronoun
Pst Past Tense

REST Revised Extended Standard Theory

S Sentence

SC Structural Change SD Structural Description

Spec Specifier

Spec-AgrsP Specifier of Subject Agreement Phrase Spec-AgroP Specifier of Object Agreement Phrase

Spec_I Specifier of Inflection Spec_TP Specifier of Tense Phrase

Spa Simple past tense (as used in Williamson, 1969)

ST Standard Theory

SOV Subject-object-verb syntactic structure

SVC Serial Verb Construction

SVO Subject-verb-object syntactic structure

T/Tns Tense

TGG Transformational Generative Grammar

TP Tense Phrase

T^I Intermediate Projection of Tense

UG Universal Grammar

V Verb

VP Verb Phrase

V Intermediate Projection of a Verb

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

The syntactic configuration of an utterance in any natural language consists of lexical and functional categories. These two categories of words are intricately related and contribute mutually to the construction of grammatically acceptable sentences. The relationship between content words and function words is basically to ensure grammaticality since lexical words possess idiosyncratic descriptive and semantic content while functional categories lack lexical or descriptive content but carry information about grammatical properties. These grammatical properties are represented by morphological features such as the Phi-features of person, number and gender, and the categorial feature of case.

Syntax, as it is generally understood, is concerned with the formation and interpretation of phrases and sentences (Radford, 1997:2), or with the external relationship of words and groups of words (Crystal and Davy, 1969:18), or the structure and order of components within a sentence (Yule, 1996:100). Crystal (1987:94) describes it as the way in which words are arranged to show relationships of meaning within the sentence.

Beyond these basic postulations on syntax, further studies (especially by Chomsky 1986, 1995, 1998; Radford 1997, 2004, Chomsky and Lasnik 1995, 2005, etc) have revealed the existence of universal principles of language which form part of human nature. In the words of Radford (1997:14), 'these universal principles tend to determine the very nature and structure of language' because they govern the kinds of linguistic operations which are permissible in natural languages. The universal principles refer to the principles of Universal Grammar, and they relate to such processes as the derivation of phrases and clauses, interrogation and negation, as well as movement of constituents. Universal Grammar, according to Chomsky (1986), "is a characterization of the genetically determined language faculty which is an innate component of the human mind that yields particular languages through interaction and experience". Consequently, UG allows a child to acquire any language as its mother tongue (MT) if it is brought up in that language

community. In other words, "every normal child is ... endowed with some linguistic knowledge which enables it to acquire the complex system known as language" (Ndimele, 1992:1).

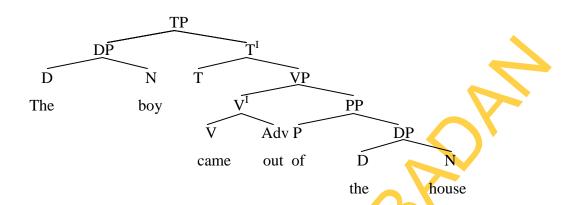
The phenomenon of Universal Grammar (UG) presupposes that grammatical structure is substantially similar in all languages. Universal Grammar is a theory of linguistics stipulating principles of grammar shared by all human languages (Campbell 2001:65). Universal Grammar or language universals are central to Chomsky's generative theory of language. In this theory, linguistic universals are regarded as abstract constraints that govern the form or structure of languages.

In spite of the universal principles, in the Principles and Parameters Theory (PPT), the existence of structural differences between languages is also recognized. Radford (1997:16) argues that all aspects of the grammatical structure of languages cannot necessarily be determined by innate grammatical principles because, were it to be so, all languages would have been characterized by the same grammatical structures. This line of thought points naturally to the existence of interlinguistic variations among languages.

There are universal principles which determine the broad outlines of grammatical structure of words, phrases and sentences in every natural language, there are also language-particular aspects of grammatical structure which children have to learn as part of the task of acquiring their native language (p17).

Linguistic variations are also acknowledged in Smith (2005:38) who affirms that languages differ along different dimensions. Izon, being a natural language, shares in the broad linguistic principles - the principles of UG. For instance, the structural categories of phrase, clause or sentence are observable in the syntactic arrangement of words in English and Izon as in the following examples.

1. The boy came out of the house



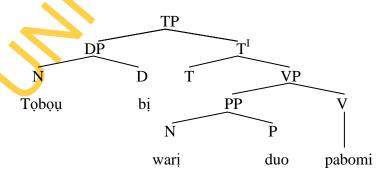
2. Tobou bị wari duo pabo-mi
Boy the house from out come+pst
'The boy came out of the house'

The identifiable phrases in example 2 are:

i.	a determiner phrase	Tọbọụ bị
ii.	a prepositional phrase	wari duo
iii.	a verb phrase	pabo- mi

The phrasal composition of the sentence is represented on the tree diagram below

3.



The illustrations from English and Izon languages above show that these languages share in the general principles of language as UG postulates. Yet, there also exist many areas of interlinguistic variations between Izon and English. The sentence structure of Izon which has the subject-object-verb (NP + NP + VP) or SOV sequence is remarkably distinct from the English subject + verb + object (NP + VP + NP) or SVO sequence. The phrases identified in the Izon example above tend to suggest that functional heads such as determiners and prepositions follow their complements while the complements precede their heads. This observation is at variance with similar phrasal structures in the English example.

Whereas the organization of language is primarily based on phrasal and clausal categories, these categories are derived from lexical and, very importantly, functional categories. A functional category is a category whose members are words which do not have descriptive or lexical content but possess information about grammatical features. Functional categories are closed classes of words and do not permit the admission of new members. A functional element refers to an individual member of a functional category. They include words or morphemes which perform on grammatical function. This study is therefore interested in the configurations and, indeed, the derivation of these phrasal and clausal categories and the roles played by functional categories in Izon and English languages. Our interest is based on the Chomskyan theory of principles and parameters of language which has postulated that although all languages are certainly not identical, they seem to choose their syntactic structures from a limited set of options that are universally available and that language variations come from parameters (Baker 1995:283).

The question may be asked why the need for a CA between two languages when UG has already presumed the natural existence of varying parameters among languages. It is true that similarities across languages and differences among languages are assumed in UG as Comrie (1989) also explains, but if language, is considered to be a cognitive science it is proper to ascertain the extent of similarity and variation between any two languages. The i-languages of English and Izon, that is the internalised grammar or system of rules native speakers unconsciously use in speaking and listening, cannot be distinguished by a generalized assumption but through a scientific analysis of syntactic structures.

This explains the necessity for carrying out a morphosyntactic analysis of functional categories within the purview of Universal Grammar (UG) and the Minimalist Program (MP). It is aimed at identifying and accounting for the shared properties of human languages (principles) and the interlinguistic variations (parameters) that exist between Izon and English. In this regard, the study provides structural descriptions and morphosyntactic analyses of functional categories in relation to lexical categories in English and Izon languages.

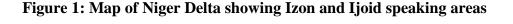
1.2. The Izon language

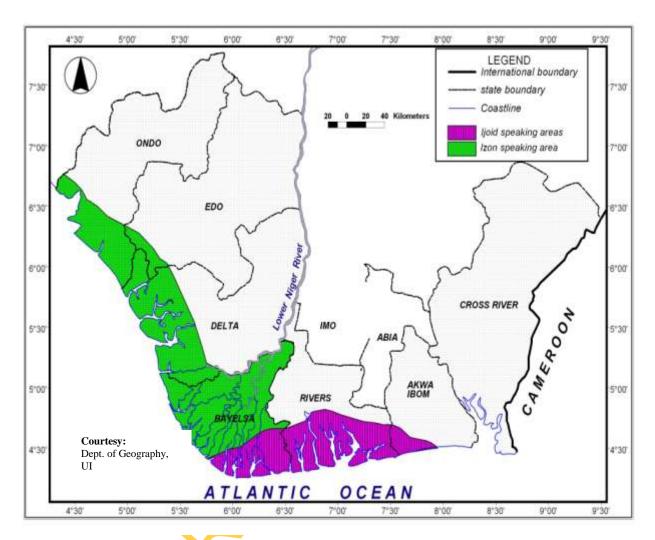
Izon is a language spoken by the Izon people who live mainly in the Niger Delta basin of Nigeria and along the coastline to the west of the basin. According to Donwa-Ifode (1995)

The Ijo-speaking people spread from Nkoro in the extreme east of Rivers States, westwards to the towns of the Arogbo clan in Ondo State of Nigeria, and from the Atlantic Coast in the South to Elemebri in the Niger (p137)

The name Izon is preferred in this study to *Ijaw* and *Ijo* because it is, historically, the original spelling. The reason is that Izon phonetics does not have the sound /dʒ/ nor is the letter "j" found in its orthography. The word Ijaw is an anglicization, a corruption of the original spelling (Izon). In an attempt to revert to the native spelling, Williamson (1969) unsuccessfully used the spelling 'Ijo' but Egberipou and Williamson (1994) eventually adopted *Izon*. However, the Anglicised form, "Ijaw" is still used to refer to the people in many circles in spite of the fact that Izon refers to both the language, as in *Izon beeli* (Izon language), and the people as in *Izon otu* (Izon people).

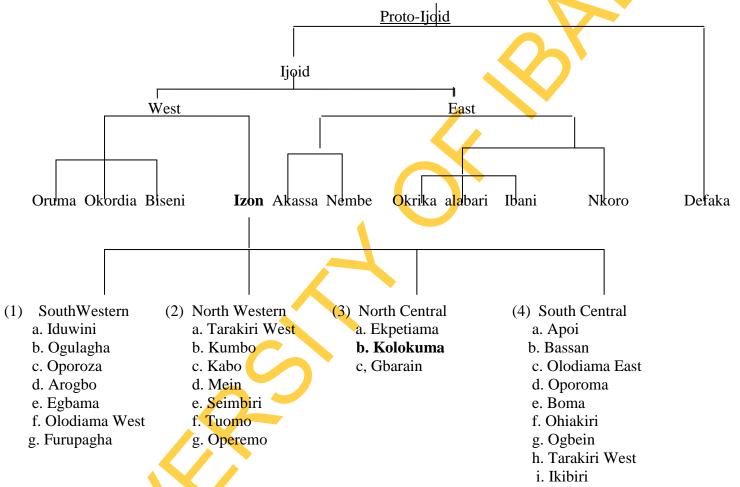
The Izon speaking people, strictly speaking, are in Bayelsa, Delta, Edo and Ondo states. The population of the Izon people in these four states, based on the 2006 national population census figures (as contained in the Federal Republic of Nigeria Official Gazette 2009) is approximately 2.3 million. This figure is deduced from across fifteen (15) Local Government Areas of the four states mentioned above. The map below shows the Izon speaking areas of Nigeria.





Williamson (1990) classifies Izon as belonging to the Ijoid sub-group of the Niger-Congo family of languages. Its classification as one of several Ijoid languages is also restated in Williamson and Blench (2000). There are many dialects of Izon. The classification of dialects follows clan divisions. Derefaka (2003) lists twenty eight dialects of Izon as the classification below shows. This classification follows Lee and Williamson's (1990) lexicostatistic classification of Ijo dialects and Williamson and Blench's (2000) Proto-Ijoid (Niger Congo) languages.

Fig. 2: Chart showing classification of Ijoid languages and Izon dialects



An adaptation of Lee and Williamson (1990) and Williamson, K. and Blench, R. (2000)

These are considered as dialects because they are mutually intelligible. The extent of mutual intelligibility amongst them, however, varies according to the length of linguistic separation as well as the geographical distance, just as Fromkin and Rodman (1993:277) observed, that "dialect differences tend to increase proportionately to the degree of communicative isolation between groups".

This study has adopted the Kolokuma dialect. The reasons for the choice of this dialect are that it is of the central Ijoid classification and has been used extensively in previous studies, especially by Kay Williamson and Egberipou as well as the Izon translation of the Christian Bible (yet to be published). Moreover, it is used by the mass media because it is intelligible to other dialectal speakers. Kolokuma is regarded as a central dialect along with its most contiguous neighbours, namely Gbarain and Ekpetiama. A phonostatistic survey of Izon dialects conducted by Williamson (1987) reveals a 99% similarity between Kolokuma and Gbarain, and 98% similarity between Kolokuma and Ekpetiama. Kolokuma dialect is basically spoken by the large Kolokuma clan and Opokuma clan. Both clans constitute the Kolokuma/Opokuma Local Government Area of Bayelsa State.

1.2.1. **Izon orthography and phonology**

The orthography of Izon consists of a set of thirty alphabetical symbols. Seventeen of these letters are consonants, nine of them vowels and the remaining four, digraphs. The alphabet as contained in Williamson (1969) and Agbegha's (1996) *Izon – English Dictionary* has been widely used as the standard form. The orthography of Izon consists of twenty three consonants and nine vowels. Out of the twenty three consonants, four are digraphs. Digraphs are pairs or combinations of letters representing one sound which do not correspond to the distinct sounds of the individual letters. The following are the alphabetic symbols of the Izon language.

```
a b d e e f g gb gh h i i k kp l m n ng o o p r s t u u v w y z

Consonants: b d f g h k l m n p r s t v w y z
```

Digraphs: gb kp gh ng

Vowels: a e e i i o o u u

The phonology of Izon is based on the sounds or phonemes represented by these thirty letters which are common to the various dialects of Izon. The general sense of phonology which means the abstract set of sounds in a language which allows speakers/listeners to distinguish meaning (Yule 1985, 1996) is applied here. The consonantal sounds approximate to their equivalent phonemes in English but the digraphs of Izon do not have corresponding sounds in English. Noticeably, the Izon language does not have Dental Fricatives (θ, δ) and Alveolar-palatal Affricates (dʒ, tʃ, ʃ), and this is a source of pronunciation difficulties for Izon speakers learning to speak English. On the other hand, the Izon digraphic sounds gb, kp and gh do not have corresponding sounds in English. The vowel sounds are more or less the same except that English does not apply diacritics to mark phonemes. Moreover, Izon is a tonal language and uses tone marks on its vowels when it is written. What is relevant to this study, however, is the effect of tone on phonemes in creating contrast in the meaning of homonyms or words that have similar spelling and pronunciation. Tone-induced contrasts are quite legion in Izon. Figure 4 below is a chart showing the consonant sounds of Izon.

Fig 3. Chart showing consonants (including digraphs) of Izon

rig 5. Chart	rig 5. Chart showing consonants (including digraphs) of izon								
	Bilabial	Labio-	Alveola-	Palato-	Palatal	Velar	Labial-	Uvular	Glottal
		dental	dental	alveolar			velar		
Nasal	m		n			Ng			
Plosives	p b		t d			k g	kp gb		
Affricates		f v	S Z						
Central					y		W		h gh
Approximants									
Lateral			1						
Approximants									
Trill			r						

1.2.2. Tone in Izon

Tone refers to the pitch with which a sound is produced. Izon has three tones, namely high, low and mid (Egberipou and Williamson 1994). High tone is usually marked with the symbol ('); and low tone in Izon is either marked with (') or left unmarked while mid tone is unmarked. These tone patterns are used to create significant contrasts in meaning and person agreement features especially of pronouns, pronominal determiners and anaphors (reflexives and reciprocals). Although detailed discussion and illustrations are provided in section 3.7, some examples will suffice here.

Table 1: Tones in Izon

	Words in	English	Tone	Case
	Izon	Translation		
1	àrị	I	LM	Nominative
2	árị	You (sg)	HM	"
3	ómini	You (pl)	HMM	"
4	òmini	They (pl)	LMM	"
5	ò	Them (pl)	L	Accusative
6	ó	You (pl)	Н	"
7	inè	My (sg)	ML	Determiner
8	iné	Your (sg)	MH	"
9	órọ	Your (pl)	HM	"
10	òrọ	Their (pl)	LM	"

The data provided above in Table 1 are in pairs. Each pair is a set of homonyms. The difference in meaning between the words in each pair arises from the pitch or tone with which they are pronounced. This is in consonance with Ladefoged's (1982:285) assertion that tone is a pitch that conveys part of the meaning of a word. First person and third person pronouns attract low tone while the second person pronoun attracts a high tone. Tone is most commonly marked on the initial syllable. The syllable structure of Izon could be 'V' or 'CV'. This means that a syllable could consist of a single vowel or a consonant and a vowel. A syllable in Izon does not end in a consonant. This explains why native Izon-speakers pronounce English words with a final vowel sound as in 'biredi' (bread), 'kerosini' (kerosene), 'Davidi' (David), 'Zosefu' (Joseph), Zoni, (John), etc.

1.3 Previous studies in Izon

Izon is an understudied language. There is paucity of books and research works on the language. It is classified among the Niger-Congo language family and spoken by the Izon people of the Niger Delta basin of Nigeria. Although there is a dearth of literature on the language, a few general works exist. One of these is the *Izon-English Dictionary* by Agbegha (1996). A significant contribution to the Izon syntactic structure is the series of readers published by the Izon Readers Writers Committee. This project has produced basic readers for primary and Junior Secondary School classes. It was commissioned by the Bayelsa State Government. The publications are entitled *Izon Beeli Bolou Go Fun* (2006), and are meant to promote the Universal Basic Education. This work does not involve analyses of sentence structure but concentrates on expressing basic sentences to identify, describe or define objects. The entries on *yam* and *leopard* for example are given in (4) and (5).

- 4. (a) búrú yam
 - (b) bei keni búrúThis one yam'This is a (tuber of) yam
 - (c) bei inè búrú
 this my yam
 'This is my yam'
 - 5 (a) edulé leopard
 - (b) bei keni edulé

 This one leopard

 'This is a leopard'
 - (c) edulé námaLeopard animal'The leopard is an animal'.

The simplicity of the entries demonstrates that the readers are meant for basic literacy purposes. The sentences show that Izon lacks overt copula. Alazigha (2004) has also produced a translation of a Christian prayer book entitled *Kari Oru;* while there is also a translation of St John's Gospel of the Christian Bible published by The Bible Society of Nigeria (2004).

Egberipou and Williamson's (1994) *Izon Tolumo - Learn Izon* is another book of elementary Izon language study. This book is actually prepared for Nigerian university students and members of the National Youth Service Corps who are not native speakers of Izon. The book provides information necessary for lexical and grammatical learning. Lexical learning involves identification of body parts, things such as household wares, trees, economic activities, wildlife, etc. In terms of grammar, the book provides simple declarative, interrogative and imperative sentences as well as negation and greetings. This book neither carries out syntactic analysis of phrases and clauses nor discusses their derivation processes. The purpose and orientation of the work does not necessitate a rigorous syntactic analysis. It does not explain how the sentences are computed or generated in the mind of the native speaker as regards the grammatical functions performed by functional categories in ensuring the derivation of well-formed sentences.

1.3.1 Kay Williamson's study of the Izon language

In spite of the apparent lack of scholarly works on the language, a book that needs to be discussed is Williamson's (1969) A Grammar of the Kolokuma Dialect of Ijo. This monograph provides considerable insight into the structural descriptions. It is a publication which Emenanjo and Ndimele (1995) describe as the first book applying transformational grammar on an African language. In this work, Williamson provides descriptions and analyses of the phonology of Izon, its phrase structure rules, verb and noun phrase transformations, as well as sentence transformations and morpho-phonemics in respect of tone and elision. The following sections highlight Williamson's description of Izon phrases and clauses which falls short of the feature checking processes of recent grammatical theories such as the minimalist program which this present study has adopted in its analyses.

1.3.1.1 The sentence

Under the phrase structure rules, Williamson (1969) identifies that the Izon sentence comprises a noun phrase (NP) and a predicate (P). This means that

The pronoun *Omini* (they) serves as the subject NP; the remaining part of the sentence serves as the predicate. The predicate constituent is re-written as complementation (Cp1) which is followed most often by a verb phrase (VP), but sometimes by a predicate noun phrase (PNP) or an ideophone phrase (Idp). This is summarized as

7.
$$P \longrightarrow Cpl$$
 $\begin{cases} VP \\ PNP \\ ldp \end{cases}$

The predicate in example (8) therefore is

keni bila eri-mian elephant see + Spa'saw an elephant'

The predicate in this sense consists of a complementation

9. kẹnị bịla 'an elephant'

and a verb phrase which is represented by a verb

10. eri-mi See + pst

In some sentences, the predicate may just be a verb phrase as in

11. Arau koko bodouShe actually come + ipa'She has actually come'.

Although Williamson characterizes bodou as immediate past tense, it would seem to be more appropriate to describe it as an expression of perfective aspect following Greenbaum and Quirk (1990:57) who describes Aspect as a grammatical category that reflects the way in which the action of the verb is viewed with respect to time. Indeed, the present perfective is said to refer to a situation set at some indefinite time with a period beginning in the past and leading up to the present. Therefore, the verb phrase koko bodou in which koko is an adverb modifying the verb bodou expresses the present perfective aspect. The enclitic element which expresses perfective aspect is usually non-sensitive to number and therefore could function as 'has or have' irrespective of the number status of the subject noun phrase. We illustrate this in

- 12. Omini koko bo-dou

 They actually come + have.

 'They have actually come'
- 13. Arau koko bo-dou
 She actually come + has
 'She has actually come'

It is observed that the word bo-dou translates to come + have in [12] above which has a plural subject, and come + has in [13] which has a singular subject. The reason is that verbs do not inflect for number in Izon. This subject is discussed extensively is section 3.4.2.

1.3.1.2. The noun phrase

Williamson (1969) identifies two configurations of a noun phrase in Izon. The first of these is the NP that consists of a noun followed by ideophones such as 'se', 'ò' or 'òó'. According to her, these ideophones provide emphatic meaning to the noun. Following this formulation, the structure of the NP is:

14. NP
$$\longrightarrow$$
 NP + $\begin{cases} -se \\ -\delta \\ -\delta \acute{o} \end{cases}$

This structure of the NP is shown in the following sentences.

15a. ama-sę potopotoTown-all muddy'The town is all muddy'

15b. erein-ò, wéléwélé

Sky *emph* bright

The sky/weather is bright

(Williamson 1969:41)

The NPs in these examples are *ama-se* meaning 'the whole town' and *erein-ò* which is translated literally as 'sky' but should more appropriately mean 'the day' or 'the weather'.

The second type of noun phrases identified by Williamson is one which consists of what she characterizes as a noun group (NG). This type of noun phrase is optionally preceded by a determiner, or consists of first or second person pronoun which is followed by a noun suffix (ns). These are illustrated in the following phrases.

16. NP
$$\longrightarrow$$
 [D +] NG or Pro [+ns]

17. bei wárị-mò sé

This house +pl all

All these houses

18. àri-kumò

I only

Only I (Williamson 1969:41)

In English, demonstratives and quantification particles are classified as determiners. It is therefore proper to consider both 'bei' (this) and 'se' (all) in [17] above as determiners.. This means that the NP should have a structure like Det + Noun + Det and both determiners could be optional. The plausible explanation for this structure is to consider the phrase as a recursive DP in which one DP (wári-mò sé) is embedded within another DP (bei wári-mò sé). Therefore there are two heads in this 'complex' DP. It is not a Split-DP like that in Hausa, as suggested by Amfani (1996). Williamson does not consider functional categories as heads of phrases nor does she take into account Abney's (1987) characterization NPs as DPs. Functional categories are classes of words (morphemes) which lack descriptive content but carry grammatical properties such as phi-features. This is revealed in the consistent use of the NP notation in the work. Finally, and more importantly, feature checking in the minimalist tradition is not applied in the description of the syntactic structures.

The role of linguistic theory is to explain how the grammar of a language computed in the human Language Faculty of the brain and the mind, two properties of human beings which are often interchangeably assumed to the home of the Universal Grammar by Chomsky (1986, 1995). Radford (2004), and the psychologist, Pinker (1994). The Language Faculty which contains UG is a cognitive component of the brain which stores linguistic information and a computation component which accesses and uses the stored linguistic information to generate an infinite number of well-formed sentences in a particular language. Chomsky (1995:3) reiterates that linguistic theory is to clearly spell out the notion of grammar in the mind of the native speaker which enables him to generate well-formed expressions. Clearly, Williamson does not consider these theories and processes that lead to the generation of well-formed expressions. These gaps could be excused since her study predated Chomsky (1986) and Abney (1987).

In transformational grammar, transformations are derived by moving constituents in the structure derived from phrase structure rules. A transformation can be defined as the mapping of sentences generated by a set of phrase structure rules at the D-structure to the S-structure through the application of transformational rules (cf Pinker 1994:482). Yule (1996:108) agrees that transformations involve the movement of a 'branch of a tree' (a phrase marker) away from one part of the tree diagram and attaching it to a different part. Simply put, a syntactic transformation is a process os structural change in a sentence while fundamentally retaining the meaning of the derivation, as in the transformation of an active sentence to a passive form.

In respect of transformations of the noun phrase in Izon, Williamson's work discussed coordination and subordination as some of the processes of transformations (cf Tomori 1977:69). In Williamson's postulation, when noun phrases are coordinated, each phrase is followed by the element 'mo' which corresponds to the English conjunction 'and'. In such derived syntactic structures, the first occurrence of the linker 'mo' links two noun phrases while the second can be repeatedly applied in order to allow additional phrases. Coordination is illustrated in the examples in (I9).

- 19 a Iwiri bó-dou

 Tortoise come + has

 'Tortoise has come'
- 19b Mbeléi bó-dou Lizard come + has 'Lizard has come' Transformation (co-ordination)
- 19c. Iwiri mo mbeléi mo bó-dou

 Tortoise and lizard and come + have

 'Tortoise and lizard have come'

The apparent deduction that can be made from the above noun phrase transformation is that when independent clauses are coordinated, the new or derived structure becomes a single simple sentence whereby all the erstwhile subject NPs collectively constitute one compound subject as in (19c). The noun phrase in this generalized transformation is *Iwiri* mo mbelei mo which means 'Tortoise and lizard'. In some other transformational processes, a noun phrase (NP) can be deleted when it is understood from the context.

Sentence transformations, in another dimension, according to Williamson, fall into two large groups, namely, those which involve re-arrangement of a single string otherwise known as singulary transformations, and those which arise from the linking of sentences together otherwise known as double-base transformation. Coordination as seen in [19] above is an example of double-base transformation.

20a Arau bo-mi
She come+pst
'She came'

20b Arau bo-gha
She come-not
'She did not come'

Negation is an example of singulary transformation involving re-arrangement of a single string. Negation in Izon is done by the introduction of the '-gha' or '-kumo' morpheme as a suffix of the verb. The negation morpheme also displaces the aspect marker of a verb if there were any. According to Williamson (1969), negation of optative sentences, which are sentences containing a verb in the optative mood expressing a wish, and are translated by 'let', 'may' 'should', etc, are formed by deletion of the aspect marker and change of '-a' negative morpheme to '-kumo' as in [21] below.

Tọbọụ-ma mu ngimi

Girl – the go will

'The girl will go'

21b Tobou-ma mu kumo Girl the go not 'The girl (should) not go' 21c Arau mu
She go
'She should go'

21d Arau mu kumo

She go not

'She (should) not go'

Williamson's work also explains other types of transformations. These transformations include interrogatives and subordination using relative subordinating conjunctions

1.3.1.3. The verb phrase

The Izon verb phrase in Williamson's work is characterized as consisting of a verb (V) and an auxiliary (aux); that is

$$VP \longrightarrow V (+ Aux)$$

It is generally understood that the VP consists of the V-head, an optional auxiliary element and the object of the verb where the verb is transitive. For instance, in [22] below, the VP is not only the verb *nadou* but 'egberi bi nadou'

22. Àrị egbéri bị ná-dọu

I story the hear + perf

'I have heard the story'

Transformations could also be derived from linking two source sentences or kernel strings as we have noted earlier. One of the most noticeable features of verb phrase transformations in Izon, according to Williamson (1969), is the tendency to combine several verbs in one verb phrase, and most of these combinations involve verbs of motion. The implication is that there is a cluster of verbs not only in transformed structures but also in transformed sentences. These could be characterized as Serial Verb Constructions

(SVCs). In such occurrences, one verb serves as an adverbial modifier to the other. Example (23) illustrates this phenomenon where [23c] is a transformation of [23a] and [23b].

- 23. (a) Tọbọụ bị pá bo-mi

 Child the out come + spa

 'The child came out'
 - (b) Tọbọụ bị bángi pá-miChild the run out come/go + Spa'The child ran out'

The transformation of (a) and (b) is (c) below.

(c) Tobou bi bángi pá bo-mi
Child the run out come + Spa
'The child came running out' (p48)

Williamson's description of the verb phrase transformation is elucidating as it aptly depicts the phenomenon of verb clusters but the morphological texture of the verb representing 'came out' is incongruous with the natural usage and semantic content of the words. 'Bo' is an independent/free morpheme and indeed, a word in its own right, meaning 'come'. 'Pa' is an abridged form of the word 'pábó' (come out) whose opposite is 'pá mù' (go out). Therefore, it is inappropriate to isolate 'pa' and 'bo' as different words when expressing the meanings of *come-out* and *go-out*. Related expressions but in semantic opposition to $p\acute{a}$ $b\acute{o}$ and $p\acute{a}$ $m\ddot{u}$ are suo $b\acute{o}$ (come in) and suo mu (go-in). Antipodal or directional opposition is involved here. The person who utters the expressions $suob\acute{o}$ and $pam\ddot{u}$ is supposedly inside or within while the speaker of the imperative statements $p\acute{o}b\acute{o}$ and $suom\ddot{u}$ is supposedly outside or without the enclave or abode. These are summarized in the following data.

Suobó - come-in - speaker is inside
Suomù- go-in - speaker is outside
Pábó - come-out - speaker is outside
Pámù - go-out - speaker is inside
Mu - go - general sense

The foregoing sections represent the sparse literature of previous works on Izon language. They constitute a foundation which other researches including the present one could build upon. Izon being a Nigerian language may have morphosyntactic relationships with other Nigerian languages

1.4. The present study

The present study is a morphosyntactic analysis of functional categories in English and Izon languages. This study focuses on identifying and describing functional categories in English and Izon. Functional categories consist of functions words which carry grammatical information, and morphological features of content words all of which contribute to the derivation of grammatically acceptable sentences in the two languages. This will lead to distinguishing parametric variations on how English and Izon derive convergent syntactic structures in their i-languages. The i-language is the internalized grammar of particular natural languages.

The locus of UG is that all languages share common universal principles and they have language-particular, idiosyncratic features. This study adopts the Minimalist Program (MP) model in carrying out its analysis of the principles and parameters about the two languages under study. Smith (2005:38) explains that the child is born with the principles that determine the general features of language. These principles include the existence of linguistic elements and structures such as lexical, phrasal and clausal categories.

The child also possesses knowledge of linguistic processes such as operations Select, Merge and Move, among others. The concept of parametric variations identifies the idiosyncratic aspects of language which the child acquires on the basis of experience in his linguistic community. Smith (2005:39) further explains that "the locus of typological variations is the set of functional categories such as Determiners, Tense and

Complementizer". This is corroborated by Kayne (2005:4) that syntactic parameters are features of functional elements. Some of the issues this study investigates are derivational processes involving functional elements; how features of functional elements such as the Determiner, Agreement and Tense are checked in the Minimalist tradition; head, Specifier and complement features; as well as the head parameter and wh-parameter. The other issues being investigated are case feature checking and negation.

The minimalist program is adopted in this work for two reasons. Although both the PPT and the MP could be used for a comparative analysis of two natural languages, and the PPT is not necessarily inadequate in this regard, the latter is adopted because it is the more recent of the two theories and could also account for the morphosyntactic features that different i-languages used in their syntax. Chomsky (1995:170) expressed this point by stating that "the more recent principles and parameters approach ... takes steps towards the minimalist design". This design also recognizes the fact that "UG provides a fixed system of principles and an array of valued parameters and that language-particular rules are choices of values for the parameters". These options, according to him are restricted to functional elements (which consist of the features that are checked in the MP). However, with some aspects of PPT is also used, especially is discussing head parameter os the phrasal structures of the two languages.

1.5. Statement of the problem

Universal Grammar postulates the existence of general principles among all natural languages. UG also acknowledges the existence of idiosyncratic parameters specific to different languages. This means that Izon language also shares in these universal features such as a lexicon or mental dictionary, phrasal and clausal categories, Case, Agreement and Tense features as well as wh-movement. Although, there have been contrastive studies of some Nigerian languages and English, no similar attempt, so far, has been made on Izon and English. Therefore, this study is motivated by the need to understand how much of Izon morphosyntactic features and processes in terms of feature checking correlate to those of English grammar within the framework of linguistic universals. Morphosyntactic features are morphological features which carry grammatical information such as phi- and tense features Cinque and Kayne (2005) argue that what is common to all human

languages can hardly be understood in isolation from an understanding of how those languages can differ.

Existing studies on Izon language have concentrated on unilingual application of traditional grammar in constructing grammatical sentences, neglecting a critical description of the ways morphosyntactic features ensure the derivation of convergent syntactic structures. Morphosyntactic features are those morphological features or functions elements such as Agreement, tense and definiteness, wh features as well as the categorial feature of case A contrastive examination of English and Izon provides a proper characterization of these syntactically significant features. This study, therefore, investigates the morphosyntactic features in English and Izon with a view to identifying and describing the universal and idiosyncratic application of the features which constitute parametric variations between the two languages.

Some aspects of syntactic derivations this work discusses are the checking of Tense and Agreement features of DPs and verbs. In English, the verb agrees with the subject of a sentence by inflection of the main verb or the auxiliary verb. In Izon, auxiliary verbs (particularly, the copula) seem to be non-existent. How does the verb, therefore agree with the phi features of the subject DP? Moreover, following Abney's (1987) DP hypothesis, the determiner is the functional head of a DP, and the head precedes its NP complement. Is this the case in Izon also? If not, why is it different? Carnie (2007) has also posited that because determiners are (functional) heads of DPs, only one of them can project onto a single DP. Izon DPs tend to permit the occurrence of multiple functional heads. The issue to unravel here is the relationship of the determiners to the NP complement in terms of Agr feature checking.

Also intriguing is the nature of wh-movements in languages. What indeed motivates wh-movement and what features do they carry along when they move from one syntactic environment to another? These and other similar issues create parametric variations between English and Izon. This work intends to identify the precise ways in which the nature and syntactic behaviour of functors in English differ from functors in Izon. The study also addresses the implication of identified parametric variations for syntactic theory and second language acquisition. Apart from wh-movement, the study also

discussed Agrs- movement in relation to VP-internal hypothesis, Agro-movement for checking of accusative case feature checking as well as Serial Verb Constructions (SVCs)

1.6. Aim and objectives of the study

Universally shared grammatical properties are referred to as principles of universal grammar which manifest in the same way in all languages. In other words, all languages derive their basic or general grammatical principles from a common pool provided by universal grammar. However, in spite of the existence of common principles of grammar in all languages, there are also parameters or grammatical features which are not shared by other languages. The present study is a contrastive analysis of the morphological features and syntactic structures of English and Izon. Izon is a relatively under-studied language whose linguistic structures have not been extensively studied on the basis of the Minimalist Program. Therefore, the aim of this study is to provide a description of Izon and English syntactic structures such as the phrase and the clause, and such operations as movement, mergers and feature-checking. The fundamental objective of the study is to characterize the role of functional morphological elements in the derivation of syntactic structures of English and Izon, Agr relations, Case feature checking, wh-movement, etc. These activities will enable the study to determine the extent of the shared universal principles and parametric variations between the two languages in contrast. The second objective of the study seeks to identify the extent of learning difficulties occasioned by parametric variations and encountered by Izon speakers learning English as a second language and vice versa. The pursuit of the aim and objective stated above will lead to the realization of the objectives of this study.

1.7. Scope of the study

The scope of this study is confined within the precinct of comparative syntax, whereby the nature of feature checking processes of the syntactic derivation of English and Izon are contrasted in order to determine the universal applicability of the syntactic principles propagated in universal grammar. The analysis basically involves morphological features of lexical items especially. Of course, there is no gainsaying that there is a strong interface between morphology and syntax. For instance, Case assignment and checking of

Agreement and tense features involve an interaction between morphological features and syntactic processes. The study also takes into cognizance the pedagogical implications of contrastive analysis by establishing the ways in which knowledge of the principles and parameters of universal grammar existing between English and Izon could either interfere with or facilitate the teaching and learning of English by Izon speakers.

1.8. Significance of the study

This study is expected to contribute to the expansion of the frontiers of syntactic theory and practice with the scientific study of the Izon language as it will form a corpus of knowledge about the language within the general discipline of linguistic study especially when it is conducted within a current analytic model such as the Minimalist Program.

The ultimate goal of this study is to characterize the internalized linguistic system or I-language which makes the native speaker proficient in his language. Therefore, the present study is significant for its attempt to reveal the internalized linguistic systems of native speakers of English and Izon within the ambiance of UG. Data on Izon were gathered through observation of and participation in real-life events and interviews with native speakers and recorded in communities in Kolokuma and Opokuma clans in Bayelsa State where the dialect is spoken, and complemented by native-speaker competence of the researcher. Data on English were derived from various books of English grammar. Moreover, it has been suggested that language is a perfect system with optimal design for grammars to interface with other components of the mind, namely, speech and thought (Chomsky 1998, 2002; May 1985; Uriagerika 2000; Radford 2004). Lasnik (2005:79) identifies the interface level of language and sound as Phonological Form (PF) and the interface level between language and meaning as Logical Form (LF). If this notion is to be followed, then this study will provide an understanding of the nature of interaction between the grammars, speech and thought systems of native speakers of English and Izon languages and how their thought systems select varying parameters for their grammars. This implies an analysis of the knowledge of the innate grammatical rules which a competent native speaker possesses of his language.

In a bilingual situation, positive and negative transfers, especially of MT or L_1 features to L_2 utterances occur (Lamidi 2004). James (1980) has highlighted the

significance of contrastive analysis as being a study of bilingual competence and performance of an individual in a foreign language which facilitates teaching and learning of the foreign language. He contends that CA is a device for predicting points of difficulty and some of the errors that L_2 learners make. Consequently, by identifying interlinguistic differences between English and Izon, this study will hopefully contribute to the facilitation of teaching and learning of English by Izon speakers.

1.9. An overview of the model of analysis

The Minimalist Program pays attention to categorial and functional features such as T(ense) and AGR(eement), merger and movement operations, as well as levels of projection of a head. It also shows how the computational component works by building up piece by piece the phrasal structures from the lexical resources by the operations of *Merge* and *Move* (*cf* McGilvray 2000:216).

The principles and parameters of languages could also be distinguished between languages using techniques of Minimalist Program such as determining overt and covert movement and the interpretability of morphological features. Therefore, this theory is suitable for our analysis. This research is conducted with the aim of determining how much of the universal features or principles of human language propagated by Chomsky in Universal Grammar are common to both English and Izon languages. Moreover, being a study in contrastive analysis or comparative syntax, the study seeks to also establish what syntactic differences exist between the two languages. Some parameters are the head parameter and wh-parameter, the +interpretable and –interpretable Agreement parameter, which, in other word could be equated to a distinction between strong and weak features. Therefore, the MP is a suitable tool for a comparative study of the morphological features and syntactic processes of English and Izon.

1.10. Summary

This chapter provides a background for the morphosyntactic analysis of functional categories in Izon and English. These are languages in two divergent language families, namely, Niger-Congo (or more recently, Ijoid) and Indo-European respectively. The study is premised on Universal Grammar which postulates that all languages are built on a

common grammar with common language universals. The core assumption of UG is that the human brain/mind contains a limited set of rules for organizing language. Different languages make idiosyncratic choices or parameters from these limited set of universal rules. An extant bilingual possesses two i-languages.

The distinction between the brain and the mind in terms of language acquisition and processing is somewhat hazy. Many linguists have used the two terminologies interchangeably, and these include Chomsky (1986:3), Pinker (1994:22) and Jenkins (2000:21). However, if UG is a biological endowment of human beings and if according to Chomsky (1986:2), language is genetically determined, and grows like normal body parts, it is in the physiology of human beings – the Language Acquisition Device (LAD) of the human brain. But the mind is the imaginative and cognitive attribute of humans. On the other hand, the I-language is characterized as being mentalistic: all the lexical items of a language are in the lexicon or mental dictionary (in the mind) of the native speaker/hearer The words in a derivation are selected from this mental dictionary and pushed to the computation or syntactic component of language, the LAD which is in the brain. The brain, therefore, interfaces with the mind in processing language. People of the same language community possess communal linguistic imagination and cognition, and therefore process language by choosing particular parameters available in UG and using the same innate grammatical rules of their language as determined by their collective experience. Every member of the language community possesses competence of the language of his community although the level of accurate and appropriate usage of the language, i.e. performance, may vary among individuals. A study of language, therefore, is a study of the internalized grammar of a particular language.

This chapter has also discussed the pioneering work of Williamson (1969) on Izon grammar which provides ways in which Izon syntactic structures are derived. The aim of this study is to identify areas of parametric variations between English and Izon. It is believed that a comparative study of these languages would reveal the general principles of language or language universals shared by them, and the parameters which differentiate them. Such a study would provide useful hints on how the learning of English by an Izon speaker could be facilitated. Ultimately, the study contributes to the expansion of the frontiers of linguistic knowledge.

CHAPTER TWO

THEORETICAL BACKGROUND

2.1. Introduction

In Chapter One, the background for the morphosyntactic analysis of functional categories in English and Izon languages was established. The objective of the research was stated as the identification and characterization of specific parametric or interlingual variations that exist between the two languages. The study is predicated on the postulations in Universal Grammar in respect of language universals and language-specific parameters. Some previous studies on the subject were reviewed especially Williamson (1969) A Grammar of the Kolokuma Dialect of Izon which is basically a description of Izon syntax.

In this chapter, we discuss the theoretical basis of this study. Contrastive analysis is both a synchronic and diachronic study of linguistics involving two languages. In one dimension, it is synchronic if the analysis is a comparison of existing linguistic structures of two languages at a particular period. On the other hand, it is diachronic if the contrastive analysis is a process, a psychological process of studying how a monolingual individual becomes bilingual by studying a second language. Odlin (1989) shares this view that in diachronic linguistics, the interest of the linguist lies in the process of bilingualisation of the individual.

Some important concepts of sociolinguistics are also discussed in this chapter. These include concepts of languages in contact, bilingualism and multilingualism, transfer and interference theories within the ambit of the theory of contrastive analysis. Some of the syntactic concepts and theories that are discussed are the Chomskyan theory of grammar from Standard theory through Government and Binding (GB), Principles and Parameters Theory (PPT) to the Minimalist Program. The issues within syntax that are discussed involve projection principle, transformational processes of NP-movement (e.g. Agrs and Agro), Wh-movement in wh-questions and, relativization, auxiliary inversion in yes/no questions, Verb-movement and negation. The discussion extends to X-bar, Theta and Case theories as well as feature checking of the Minimalist Program. These transformations are selected because parameters can be determined from them.

2.2 Languages in contact and bilingualism

There are two broad dimensions about languages coming into contact. A contact situation arises whenever there is a meeting of speakers who do not share the same language and who have the need to communicate with each other (Odlin 1989; Romaine 2001:576). The other dimension is that two or more languages are said to be in contact if they are used alternatively by an individual and in which case, the individual (and not the languages themselves) are the locus of the language contact situation. In almost all cases of language contact, the language of superior influence tends to dominate the other(s) whose speakers then find it expedient or are compelled to learn the dominant language. This scenario is a vivid characterization of the situation in most African countries, including Nigeria, where the indigenous languages were deprived and relegated to the background (Adegbite 2003). Consequently, the indigenous languages lost their pre-eminent position to colonial languages, such as English, French, German and Portuguese. This situation is corroborated in Romaine (2001:576) who explains that

Some of the connections between individual and societal bilingualism become evident when we consider some of the reasons why certain individuals are or become bilingual. Usually, the more powerful groups in any society are able to force their language(s) upon the less powerful.

Usually, the result of such imposition of foreign languages was the transfer of the linguistic features of the indigenous language (L_1) to the foreign language (L_2) as well as borrowing of words by the indigenous language.

2.3. Bilingualism

As earlier hinted above, language contact situation is a veritable source of bilingualism. There is a general understanding that bilingualism is 'the ability of an individual to communicate in two languages' (Haugen 1974, Romaine 1995), the ability to use two languages with equal or nearly equal fluency (Fabbro 2001) or the normality of speaking and using more than one language (Beardsmore 1986). Adegbite (2003:153) summarizes the various definitions of bilingualism as the concept of having two languages, and multilingualism as the concept of having more than two languages. Romaine (2003)

explains that bilingualism (and multilingualism) exists within the cognitive systems of the individual as well as in families, communities and countries

A distinction is usually made between individual and societal or group bilingualism. Individual bilingualism is defined as the condition of an individual's possession of linguistic competence in more than one language while societal bilingualism refers to the co-existence of more than one language in a community. Apart from these two typologies of bilingualism, Haugen (1974) has also identified coordinate bilingualism on the one hand, and compound or subordinate bilingualism on the other. When two or more languages co-exist distinctly without merging in a society, or when an individual alternatively uses two languages with appreciably corresponding amount of proficiency or competence, the languages are said to be coordinate, and a situation of coordinate bilingualism exists. However, where there is some form of merging, a compound or subordinate bilingualism subsists.

2.3.1 Bilingualism in Nigeria

Multilingualism is a situation in which more than two languages are alternatively spoken in a language community or by an individual. Nigeria is a multilingual country, because of the existence of a multiplicity of indigenous language. Indeed, many linguists, including Hansford et al, 1976, Akindele and Adegbite (1991), Wolff (2000), Egbokhare (2001), Ogunsiji (2001), and Oyetade (2001), have asserted that about 400 indigenous languages exist in Nigeria. The 'linguistic ecology' of Nigeria is further compounded by the presence of some exoglossic languages such as English, French, and Arabic. Of these exoglossic languages, Banjo (1969) and Akindele and Adegbite (2000) reaffirm that English serves not only as official and national language but also functions as the language of education, of business and commerce as well as the language of internal and external communication. Indeed, in Nigeria, English is the language of upward social mobility while Pidgin complements the indigenous languages and English for communication purposes especially in cities in the Niger Delta area such as Port Harcourt, Calabar, Warri, Sapele and Benin, as well as in other major cities of the country (Oyetade, 2001:252)

In this congested linguistic ecology, it is expected that so much cross-linguistic influences do occur. For instance, Bamgbose (1995:11) delineated some major linguistic

influences of English on Nigerian languages as the existence of a large vocabulary of English in the indigenous languages in the form of 'loans or loan translations'. In a similar manner, indigenous languages have also influenced the English language as it has absorbed some loan words from these languages into its vocabulary. Some of such loan words as identified by Ogunsiji (2001:160) are *baba* (king), *dodo* (fried plantain), *seriki*, *megida*, *obi* (royal titles) and *ogbono* (a type of soup ingredient).

Although, the exact time of the advent of English in Nigeria seems to be shrouded in mystery, Elugbe and Omamor (1991) are of the view that Nigeria was already in contact with Europe as early as 1469. According to them, the first contact situation between a Nigerian population and a European group was between the Portuguese and the coastal peoples of the Niger Delta and that the English became the effective trading partner of Nigeria from the beginning of the 17th century (Elugbe and Omamor 1991:8; Banjo 1996:2). The English introduced and implanted the English language through commerce and later through missionary work and education.

A greater impact was however made by the agency of religion which could be said to have firmly implanted the English language in Nigeria. In addition to commerce and religion was the colonial policy. Akindele and Adegbite (1999:46) aver that "...English has become a Nigerian language. The language has become an invaluable legacy of the British which has provided Nigerians with yet another means of expressing their culture".

2.4.2. Linguistic consequences of bilingualism

Linguistic study has established the fact that natural languages conform to some general principles or design. This implies that every human being possesses some knowledge of how language is structured and what they do. This knowledge of the general principles of language is what Chomsky has dubbed Universal Grammar. Nevertheless; languages differ in a number of ways. McDonough (2002:57) has specified some of the differences as:

- a) the order of basic units of verb, subject, object
- b) the order of nouns and pronouns
- c) the ways in which sentences are linked together to make relative clauses,
- d) The position of the main 'head' noun in a noun phrase, and

e) The ways by which they divide up time relations in their tense systems.

As a result of the micro-differences between languages, the learning of a second language becomes a major cognitive task.

The effects of bilingualism and multilingualism are manifested at different levels of language. These are the levels of phonology, grammar, lexicon, pragmatics and discourse. According to Clyne (2000:311), by a normative definition of bilingualism, linguists expect 'bilinguals to be double monolinguals'. This means that they are expected to possess equivalent level of competence in both languages and thus were not expected to mix the linguistic systems of both languages when using either of them at any particular time. Nevertheless, in the light of performance realities, researchers have observed significant cross-linguistic influences, especially lexical borrowings, phonological, structural and pragmatic interferences. Lexical items are borrowed or transferred where exact equivalents do not exist in the learner's L₁. Phonological integration and replacements also occur when certain sound sequences are non-existent in the learner's L₁. Clyne explains further that contact situations may also cause grammatical change, for instance, from *subject-object-verb* structure to *subject-verb-object* structure. Other major forms of linguistic impact of contact situations are the well-known code-switching and code-mixing.

2.5. Contrastive analysis

Contrastive analysis has been an old field of bilingual studies. One of the earliest published works in this area of study was that by Grandgent in 1892 entitled *German and English Sound Systems*. The field, however, is said to have lacked prominence and significance until Weinreich's (1953) publication of *Languages in Contact*. This work is said to have inspired other publications such as Haugen's (1956) *Norwegian Languages in America* and Lado's (1957) *Languages Across Cultures*. Both of Haugen's and Lado's works are studies in migrant bilingualism, and are generally regarded as the parents of modern contrastive analysis. Contrastive analysis is generally defined as the systematic study of pairs of languages with a view to identifying their differences and similarities. Sajaavara (2000:140), for example, characterizes contrastive analysis as an area of comparative linguistics that is concerned with comparing two or more languages or subsystems of languages in order to determine the differences and similarities between

them. James (1980) however points out that CA is more concerned with the differences existing between languages than their similarities.

Modern contrastive analysis is carried out with the goal of producing effective foreign language (FL) teaching materials through scientific description of the distinctive features of L₁ and L₂ to be taught. The general principles of CA involve two steps, namely, description and comparison of linguistic feature. Contrastive linguists first describe the linguistic features of a second language learner's L₁ and L₂, and then proceed to compare these features. Following this explanation, it becomes obvious that the goal of CA would appear to be pedagogical. Its aim is the facilitation of learning of a second or foreign language. Following this inclination towards pedagogy, the goal of CA is generally said to belong to psychology while its techniques are linguistic. Lado (1957) asserts that the degree of difference between the two languages correlates with the degree of learning difficulty, and that similarities between languages provided facilitation of SL learning.

Two main types of contrastive analysis have been identified by linguists (Sajaavara 2000:141). These are theoretical and applied CA. Theoretical CA studies produce extensive accounts of the differences and similarities between languages that are being contrasted which add to the information about the characteristics of individual languages or about linguistic analysis in general. Theoretical CA is not necessarily a pedagogical instrument but is an intrinsic exercise in linguistic analysis. In contrast, the prediction of learner's difficulties is the main concern of applied CA. This orientation of applied CA, then, according to Waudbaugh (1970), cited in Sajaavara (2000:142) is called "the strong hypothesis of contrastive analysis". Its aims are basically pedagogical. However, there has been serious criticism on the validity of the predictive powers of CA. The Contrastive Analysis Hypothesis claimed that all the errors made in learning the L₂ could be attributed to 'interference' by the L₁. However, this claim could not be sustained by empirical evidence that was accumulated in the mid- and late 1970s. It was pointed out that many errors predicted by CA were inexplicably not observed in learners' L₁ and some uniform errors were made by learners irrespective of their L₁ (Elllis 1994). This meant that CA could not predict learning difficulties, and was only useful in the retrospective explanation of errors. These developments weakened the appeal of Contrastive Analysis. This led to the emergence of error analysis (EA) as an alternative approach to second language

learning whereby the analyst classifies learner's errors. CA was thus assigned an explanatory role.

In spite of the criticism from proponents of error analysis, CA has continued to be a useful tool in second language learning and cannot be ignored. The nature of CA may be said to be microlinguistic, considering the fact that its main concern is the description of the formal codes of L_1 and L_2 without reference to the functions and contextual variables of the codes. The contrastive analyses carried out in this study follow this path, and is tilted towards theoretical CA.

2.5. Linguistic models of contrastive analysis

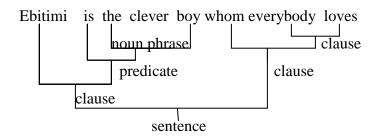
Languages may be contrasted by using different linguistic analytical models. Four of such analytical models used as tools for contrastive analysis, according to James (1980), are 'universal and are necessary and sufficient as a basis for the description of any language' The following are identified by James as models of analysis:

- i) Structural grammar model
- ii) Contrastive generative grammar model
- iii) Case grammar model, and
- iv) Transformational generative grammar model

2.5.2. Structural grammar model

Structural grammar is a model expounded by Bloomfield in 1933, and was used by linguists such as Fries, Lado and Harris (who are all structural grammarians) to measure the differences in grammatical structure and to establish maximum differences that existed between any two language systems. The tool of structural grammar was the immediate constituent analysis of Scale and Category Grammar, the precursor of Systemic Functional Grammar. Within the Scale and Category Grammar, language was organized in taxonomy of ranks which consisted of immediate constituents. The category of *unit* was utilized to analyze given constructions. For example, a sentence could be reduced to its barest constituents as shown in [24] below.

[24] Ebitimi is the clever boy whom everybody loves



This taxonomic system of analysis, according to James (1980:37), is ontogenetic because consideration is not given to meaning; it hinges strictly on the notion of distribution of elements. He explains that the units of grammar that enter into the description in a contrastive analysis are the sentence, clause, phrase, word and morpheme. This is normal since it is the formal structures of languages that are being compared. In structural grammar, four categories are readily used as important tools of interlingual comparison and contrastive analysis. These are unit, structure, class and system. The structural model of linguistic analysis confines itself to descriptions of surface structure such as the devices of form and arrangement. Its strongest point, therefore, is the ability to reduce a sentence to its barest constituent elements.

2.5.2. Contrastive generative grammar

The Contrastive Generative Grammar model (CGG) was propounded by Kzeszowski (1979) in reaction to the inadequacies of the structural and Transformational Generative Grammar models. These models were used to conduct contrastive analysis as a phased endeavour that involved independent analyses or description of the two languages after which the results from both analyses were juxtaposed for comparison and contrast. Kzeszowski's (1979) contention is that the descriptive phase of CA was a mere preliminary, rather than an integral part of it. He also faulted the comparative phase as being determined by input in the form of two independently executed descriptions.

Kzeszowski's (1979) proposition therefore is that CA would be more satisfactory if L_1 and L_2 structures were generated from some common base and were compared and contrasted during the process of generation. Contrastive Generative Grammar was

described as having a vertical approach to CA which placed emphasis on a single bilingual grammar (of the individual) as against classical CA's two monolingual grammars being compared. CGG has also been criticized on the grounds that it placed excessive premium on extant bilingualism in disregard of certain factors that may prevent a person from becoming bilingual The argument is that there can hardly be a balanced bilingual who possesses equal competence in both languages

2.5.3. Case Grammar

The cardinal assumption of Case Grammar Theory is the claim that two types of deep structures exist. One of these deep structures is called 'infrastructure' which underlies the surface structure of any particular language. It is useful for the explanation and resolution of instances of ambiguity and synonymy between pairs of sentences in that language. The other type of deep structure is 'profound structure'. While 'profound structure' is assumed to be universal, 'infrastructure' is said to be language specific. The existence of universal linguistic categories such as Noun, Verb, Noun Phase, subject, object, and so on, enables the contrastive analyst to compare and contrast the idiosyncrasies of L_1 and L_2 on the same (profound) deep structure.

The cases are Agentive (A), Objective (O), Instrumental (1), Dative (D) and Locative (L). 'Verbs' in case grammar, according to Blake (2001) are classified according to the case-specified nouns they can co-occur with. Below is an example on the verb 'open'. Its classification depends on the kind of case combination that co-occurs with the subject noun (or NP) as in

25(i) The door opened (objective case)

(ii) <u>John</u> opened <u>the door</u> (agentive + objective)

(iii) The wind opened the door (instrumental + objective)

(iv) John opened the door with a chisel (agentive +objective +instrumental)

(James (1980:56)

A subtle similarity exists between examples (25iii) and (25iv). The NP 'a chisel' in (25iv) is case-marked by a preposition 'with' which allows it to be classified as instrumental case.

Similarly, 'the wind' in (25iii) is also in the instrumental case but does not appear or cooccur with a preposition as does 'a chisel' in (25iv). This is because 'the wind', though is marked as *instrumental* case at the profound deep structure, appears as the surface subject of the sentence and therefore, has to shed its case-marking preposition. Otherwise, (25iii) would have been,

26. The door was opened by the wind.

James (1980:58) identifies some advantages of Case Grammar as the following.

- i. A pair of sentences of L_1 and L_2 with different surface structures can be traced to a common deep single case configuration
- ii. Understanding Case positions in different languages could be a source of facilitation of second language learning

These advantages notwithstanding, there are also some weaknesses that have been identified in the Case grammar approach. The main criticism seems to be the inadequacy of the number of cases to adequately account for the differences in subject selection possibilities in some cases. This inadequacy makes it necessary to continue to generate and add more cases

None of these analytical models is specifically used in this study although each of them provide pertinent insight to the task of CA.. CGG is not relevant for its emphasis on a single bilingual grammar since prefect coordinate bilingualism is practically unattainable. Case Grammar is more relevant in resolving structural ambiguity. Moreover, this work is primarily concerned with structural similarities and differences. Furthermore, none of these models considers linguistic features of functional elements.

2.6. Chomskyan theory of grammar

Chomskyan grammar is Transformational Generative Grammar (TGG). It has been modified so much that within the canopy of TGG, there are various models. Chomsky (1995:8) has claimed that the revisions have been necessitated by the need for

simplification of the principles and processes of linguistic description. These revisions, in a way, are intended to achieve descriptive and explanatory adequacy. Although this research adopts the Minimalist Program model as a tool for analysis, a brief overview of some aspects of the precursors of the Minimalist Program is provided here.

The Standard Theory of Transformational Generative grammar is the formal description of the organization of natural languages proposed by Chomsky in *Aspects of the Theory of Syntax* (1965). Lasnik (2005:70) is of the view that standard theory was presented as an alternative way of explaining, interpreting and constructing complex sentences and that the idea was to achieve simplification of theory and explanatory adequacy. This theory was developed because of the inadequacies of the preceding theory of LSLT (Logical Structure of Linguistic Theory) which relied basically on phrase structure rules generating mono-clausal sentences. Since language was conceived as being capable of generating infinite structures, it became necessary to adopt a theory that would adequately capture the recursive components of grammar.

For example,

- 27a. Preye reads books.
 - b. John thinks that Preye reads books.
 - c. Tarila said John thinks that Preye reads books.

2.6.1. Principles and parameters theory

The Principles and Parameters Theory (PPT) seeks to explain the similarities and variations between natural languages. Apart from lexical differences, languages also vary in word order or syntactic structure. Smith (2005:38), while explaining the diversity of languages in the proper perspective of Principles and Parameters Theory states that although languages differ along various dimensions, the principles and parameters have been there from the beginning and children are born with the principles with some specifications of the range of variations in possible human languages. Therefore, the child learning the grammar of any particular language has to find out the permissible values or parameters in his language. This is an affirmation of Chomsky's postulation that;

The fundamental properties of grammar which learners attain is not necessarily determined by evidence available to the language learner. Therefore the ability of the learner is an inherent one and must be attributed to universal grammar. (Chomsky 1981.4)

He extends this line of thought by contending that

The grammar of a language can be regarded as particular values for the parameters available in UG while the overall system of rules, principles and parameters is UG which may be taken to be an element of human biological endowment, namely the 'language faculty' (Chomsky, 1982:7).

This means that a language is a system of specifications for parameters in an invariant system of principles of Universal Grammar. Therefore, as Ali ((2007) explains, linguistic diversity is determined by a variation in the setting of certain values. In other words, parametric variations are determined by the parameterized choices languages make in different dimensions. They include word order, head directionality parameter, Null-subject or pro-drop parameter and wh-parameter.

Head directionality is a parameter that also classifies word order. It describes the position of the head in relation to its complement within phrases. It is a universal principle that every phrase or maximal projection must have a head which determines the nature and function of various categories within the phrase. There are usually lexical heads such as noun, verb, adjective, adverb and preposition, and in more recent work, functional heads such as Determiner (D), Agreement (Agr) and Tense (T), Complementizer (C), Negation (Neg), etc. The syntactic or categorial properties of the head are usually transferred to the phrase and this accounts for the denotations of Noun Phrase (NP), Verb Phrase (VP), Adjective Phrase (AdjP/AP), Adverb Phrase (AdvP), Prepositional Phrase (PP), Determiner Phrase (DP), Agreement Phrase (AgrP) and Negation Phrase (NegP). In English, heads canonically precede their complements. There are also head-last languages which consistently position complements before their heads. Crystal (1987) opines that SOV languages which include Izon, are usually head-last languages.

The wh-parameter is yet another binary parameter that causes language diversity. This parameter is based on whether languages permit wh-movement or movement of wh-expressions to the front of a sentence when a declarative sentence is transformed into an interrogative. This parameter seems to be applied universally even when the interrogative words of a given language do not start with wh- like the English wh-expressions what, which, where, when, why and how. In Izon, for instance, wh-expressions do not have words that contain wh- but it has a set of words that could be classified as Complementizers. English is a language that features wh-movement. When a normal declarative sentence is transformed into an interrogative, the direct object, if there is one, is first replaced with a wh-expression and then moved to sentence initial position. The following data explicates the movement and trace phenomena.

- 28a John borrowed some money?
 - b. John borrowed what?
 - c. What did John borrow t?

Principles and Parameters Theory is a useful instrument for CA as it also extends to the linguistic choices made by languages with regards to the interpretability or otherwise of features, and the feature checking processes of the Minimalist Program, as it will be seen later in this study.

2.6.2. Before the Minimalist Program

Government and Binding (GB) is the direct predecessor to the Minimalist Program. Haegeman (1997:6) characterizes *Government* as an abstract syntactic relation which concerns the assignment of Case. GB depends on the projection principle (PP) which provides that the properties of lexical items are preserved and represented at every level of projection. One way of meaning interpretation is the licensing of DPs in A-positions by Case, which is an abstract relation holding between *arguments* and governors (Massam 1985). In GB, a sentence is construed as a projection of Inflection (INFL). It means that the IP is the head of the derivation. INFL consists of Tense and Agreement features and mediates between the categories by ensuring that requirements for grammatical concord

are observed. Agr and Tense play important roles in the derivation of sentences not only in GB but also in the Minimalist Program (MP).

Two of the modules in these previous theories are the X^I Theory and the Case Theory. The central idea of X^I Theory is the recognition of the fact that phrasal constituents have heads and that other elements in the constituent do not only congregate around the head, but are dependent on it. The X^I Theory provides principles for the projection of lexical and functional categories to phrasal categories as it is assumed that phrasal categories project from lexical entries (*cf* Gleitman and Fisher, 2005:132).

Sells (1985:27) has said that the fundamental and central concept in all contemporary syntax is the **concept of head**: this is true of the X^I theory. Headedness or endocentricity provides explanatory adequacy to the theory of grammar. The head is significant in X-bar theory because it is an obligatory element in the phrase and therefore endows the phrasal construction with its existential character. Every other element in the construction clusters around the head as modifiers thereby specifying or limiting its reference. These modifiers are called satellites. The X-bar theory works with the Projection Principle. A head is said to project from the D-structure to the S-structure (in GB terminology) and then to the LF and PF.

The X-bar Theory demonstrates the concepts of endocentricity and obligatoriness in phrase structure analysis. Endocentricity is the concept of headedness. It has been demonstrated that every phrase in English has a head, and going by the theory of UG, every language must have heads. The head is also unique because it is a word whose lexical properties are projected to the phrasal category. Endocentricity and obligatoriness are themselves obligatorily inherent in the X^{I} analysis. In view of UG precepts, it is apt to demonstrate this theory with some Izon phrases.

An important fact about nominal structures in relation to the X^1 theory is that 'heads' of phrasal structures subcategorize complements which are, as a result, more intimately related to the heads than adjuncts (Radford 1988:235). This means also that where heads co-occur with a complement and an adjunct, the former precedes the latter. Chomsky (1995:52) also explains that the X-bar theory has largely restricted the configuration rules of particular languages to specification of the parameters that determine the head-complement and head-specifier ordering.

2.6.3.1 Case Theory

The theory of Case deals with the assignment of *Case* to elements that are in Casemarking positions. Case-marking positions are identified by Chomsky (1982:6) as the objects of transitive verbs and prepositions as well as subjects of tensed verbs. Subjects are usually obligatory elements. One of the most important principles of case theory is said to be Case Filter which is the requirement that all DPs must be marked with a case (Chomsky 1982:6). This is a principle that requires all arguments in a derivation to be case-marked or occupy case-marked positions. In fact, Webelhuth (1995:46) relates Case Filter to Theta role assignment and the Theta Criterion. Case has been described by linguists as an obligatory requirement for DPs. A sentence which contains an overt DP without a Case assigned to it is an ungrammatical construction (cf. Chomsky, 1982, 1995, Horrocks 1987, Radford 1997). Case is assigned under the concept of government in GB whereby the choice of the Case is determined by the governor of a given sample of language. Governors are either lexical heads or functional heads. Certain heads such as verbs and prepositions are governors of their respective complement DPs and therefore determine the Cases of, or assign Cases to their complement DPs. It must be noted, however, that Case in MP is not assigned but checked.

Some authors (e.g. Radford 2004:136; Hayward, 2000:89) identify only three Cases in English, namely, nominative, accusative and genitive, and in which case the complement of a preposition is assigned an accusative case by the head. Nominative Case is assigned to the subject DP of a finite clause or more properly, finite verb by Agreement; the object of a transitive verb is assigned an accusative Case by the verb while the object of a preposition or postposition (in some languages such as Izon) is usually assigned an oblique (or accusative) Case (Chomsky 1995:110). It is not inappropriate to say, therefore, that oblique case is a type of accusative case. Genitive Case is assigned either by the preposition 'of' or 's-genitive (Kroeger 2004). Genitive case marks the possessive relationship of DPs. It is therefore, also called Possessive case. In all cases the receiver of the case must be properly governed.

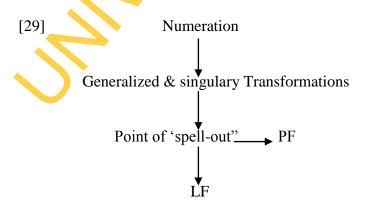
In summary, the X-bar and Case theories still hold some significance in current linguistic analyses It is within the X-bar theoretical framework that endocentricity or headedness of syntactic projections is established. Chomsky (1995:172) explains that 'the

X-bar structure is composed of projection of heads and that, in a minimalist theory, the crucial properties (of heads) and (syntactic) relations will be expressed in terms of X-bar theory'. This is seen in the utilization of the unified X-bar theoretic phrase marker. Similarly, Case theory remains important in the semantic interpretation of syntactic structures in the MP, except that its focus has changed from case assignment in GB to case feature checking in the MP.

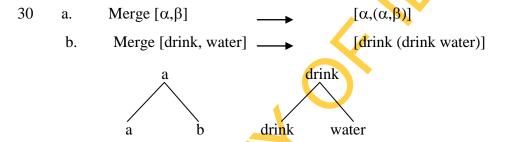
2.6.4. The Minimalist Program

The Minimalist Program (MP) is a model of linguistic description in Transformational Generative Grammar. It has been evolved by Chomsky to achieve simplicity of expression of language. Simplicity of expression involves structural descriptions of the syntactic expressions. The goal of MP is to minimize constraints, principles and other grammatical complexities.

In the Minimalist Program, language is characterized as being embedded in performance systems which Chomsky (1995) has denoted as *Articulatory-Perceptual* (*A-P*) and *Conceptual-Intentional* (*C-I*). These two systems are related with the interface levels of PF and LF respectively. This means that the Articulatory-*Perceptual* (*A-P*) has representation in the Phonological Form (PF) while the *Conceptual-Intentional* (*C-I*) finds representation in the Logical Form (*LF*). Apart from the performance systems, there is also a cognitive component. This is the syntactic component which consists of a computational system and a lexicon. The way in which the components of language are arranged in the brain or mind (Chomsky 1986:3) is illustrated in Lasnik (2005:81) and reproduced below in [29].



The lexicon consists of the finite number of lexical items in a language, and so specifies the items that enter into the computational system. There are some general operations involved in the derivation process in MP. These are operations *select, merge* and *move*. Operation *select* takes place at the *Numeration* which is also called computational system (Lasnik 2005:131, Lamidi 2000:62). The computational system in turn uses the lexical items that have been selected from the lexicon to generate derivations and structural descriptions (SD). Operation merge refers to the combination of syntactic objects (lexical items) selected from the lexicon. Operation merge is a generalized or singulary transformation. It therefore generates basic phrase structures since it takes two or more syntactic objects and combines them. For example, operation merge may create a structure like [30].

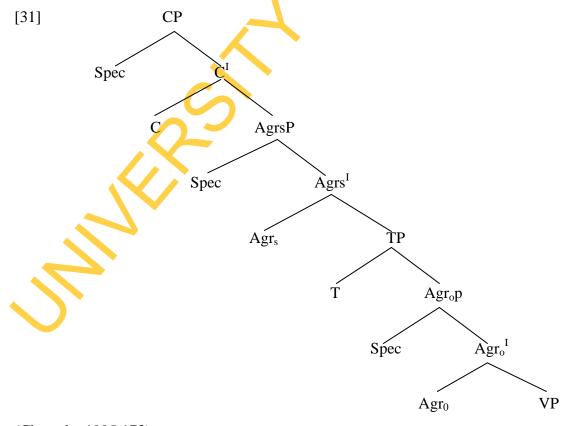


After merge has combined items selected from the lexicon as seen in [30] above, it further maps these resultant derivations to *Spell-Out*. At the point of *spell-out*, *operation move* applies and moves the merged syntactic objects to LF and PF for semantic interpretation and phonological representation respectively.

In pursuance of minimalisation of grammatical complexities, MP has reduced the four levels of representation in GB to two. These are the interface levels of Phonological Form (PF) which is an abstract representation of sound, and Logical Form (LF) which is an abstract representation of meaning. The output of *Operation move*, which are called *bare output* or structural descriptions are to be interpretable by A-P and C-1 systems. This means that the bare output generated by these derivational operations must have representations of sound and meaning. Ultimately, the derivations are deemed *to converge* if they are legitimate: otherwise they *crash* if they are ungrammatical. Legitimacy or grammaticality is licensed by *feature checking*. This is a process of checking categorial features such as case, and the morphological features of Agr and tense of lexical items against the corresponding functional categories of Agrs/Agro and Tense. This arises from

the assumption that lexical items selected from the lexicon are fully inflected. Derivation of structures is based on the notion of specifier-head relation. Consequently, in MP, case assignment has been replaced by **case** (**feature**) **checking**. All these are necessitated by the introduction of the "unified X-bar theoretical terms" under spec-head relation which is based on the theory of inflection (Chomsky 1995) in which *Agr* and *Tense* play significant roles.

AGR is a collection of Phi (ϕ) features specifying gender, number and person. These features manifest between subject-verb, subject-object and verb-object relations. Hence, the relation between NP and VP is mediated by Agr which itself is determined by the Phi (ϕ) features. Therefore, Agr checks the case of arguments which operation merge combines. Feature checking is to ensure that the derived structures do not crash but converge at PF and LF. The modification of the X-bar theory in Principles and Parameters theory and the introduction of the unified X-bar under spec-head relationship made it necessary for Chomsky (1995:173) to propose a new clause structure which has a CP as the head of the clause as shown (30) below.

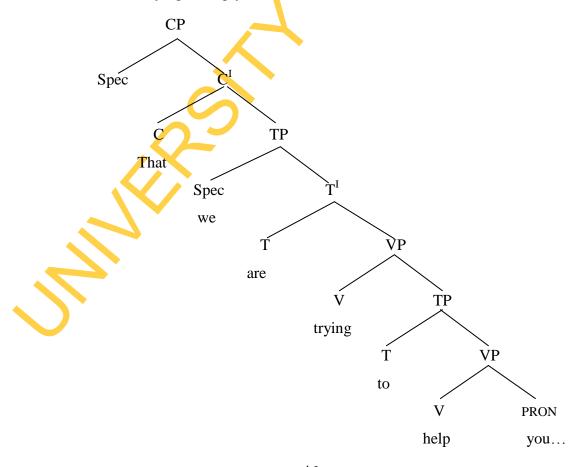


(Chomsky 1995:173)

Another important issue in the Minimalist Program is the concept of heads or headedness principle. The headedness principle requires that every syntactic structure should be a projection of a head word. Following this principle, clauses and phrases are considered as projections or expansions of head words. Phrases may have lexical heads such as a verb or a noun, or functional heads such as Complementizer, Determiner, Agr or Tense, or even negation. Such projections would result in verb phrase (VP), noun phrase (NP), prepositional phrase (PP), Complementizer phrase (CP), Determiner phrase (DP), Tense phrase (TP), Agreement phrase (AgrP) or Negation Phrase (NegP). Headedness principle makes possible for unitary analysis of the structure of phrases and clauses.

A fundamental assumption about phrases in the MP framework is that they are formed in a bottom-to-top manner. Thus, the Complementizer Phrase (CP) can be characterized as both a Complementizer Projection and a Complementizer Phrase (CP) because it is headed by the Complementizer, e.g. (that) as in [32] below.

[32]. That we are trying to help you...



The concept of headedness therefore appears to be a useful way of analyzing derivations. The relative position of heads and their complements in English and Izon provides a convenient index for contrasting the two languages.

The Minimalist Program has been explained in different ways by different authors. However, it is generally agreed that the Minimalist Program is a theory of UG that considers a linguistic expression to be an optimal realization of the interface conditions. Optimality itself, according to Lofti (1996) is determined by economy conditions. According to Lofti, MP conceptualizes grammatical representations and their well-formedness. Zwart (1998) explains that the Minimalist Program deals with the question of how to link sound and meaning. In trying to arrive at correct interpretation of the meaning, series of constraints are imposed on the processes of derivation of phrases and clauses. Usually in the derivation, the relationships between elements in a phrase structure are configured by Operation *Merge*. The relevant relations are thematic and syntactic. Zwart (1998) explains also that whereas thematic relations are signified by theta role assignment to nominal arguments, syntactic relations involve Case licensing and Agreement and tense features checking. These syntactic relations are subject to further structure building or expansion by operation *Move*. This implies that the major syntactic operations at the Computation are *Merge* and *Move*, or more recently, *Attract*.

In fact, Marantz (1995) further explains that constituents are motivated by different needs to move; failure to move in order to satisfy that need may lead to an uninterpretable derivation at the interface of LF. An uninterpretable derivation is one that could be considered to have failed to converge or has crashed.

2.6.5. Feature checking/licensing

The Principles and Parameters Theory which is the predecessor of the Minimalist Program (MP in the general theory of UG assumed that lexical items are selected from the lexicon and inserted in the derivation in their bare form in the sense that they are neither inflected for tense nor for agreement. PPT also assumed that verbs picked up their tense and agreement inflection morphemes through syntactic movement. This, according to Fakih (2006:6), is called the derivational approach.

The central concern of MP is feature checking. Marantz (1995:365) explains that morphological features are at the centre of the MP. According to him, these are features associated with tense, agreement and Case. Agr and Tense are functional heads and are also phonologically visible affixes on the verb and nouns (and pronominal DPs). These features play a role in the computation or syntactic component of language. This is why the verb raises to T and the noun moves up to Spec-Agrs (as fully inflected lexical items) to check off their Tense and Agr features. This raising movement takes place before Spell Out because the morphological features of tense and Agr of verbs and nouns are visible and interpretable. It is also argued that Agr and Tense have Case feature. Thus, DPs also move to the checking domain of these functional heads (i.e. the *Specifier* positions) to also check their Case features.

The minimalist framework postulates that verbs are inflected for tense and agreement features right in the lexicon and are picked up by numeration in their fully inflected forms in the process of the derivation of phrases and clauses. The tense and agreement features of the verb are checked against similar, corresponding features which are encoded in inflectional categories. These are the functional heads of Agr and T. The understanding therefore is that the functional categories of Agrs, T and Agro have their features to which the inflectional features encoded in DPs and verbs must correspond. It is assumed that the function of the V-features of the functional heads is to license the morphological (inflectional) properties which the verb projects with from the lexicon since it is assumed that verbs enter the numeration from the lexicon fully inflected.

The functional categories of Agr and T do not only check and license the morphological features of the verb but also the N-features of the DP that raises to their *Specifier* position (Fakih 2006:4). This is reflected in the VP-internal subject hypothesis (Pollock 1989) which provides that every subject DP originates within the VP, specifically at Spec-VP, where it receives its nominative Case feature but have to raise to Spec-AgrsP or Spec-TP for the purpose of checking and licensing same features (Radford 1997:318). Similarly, a complement DP also originates as a VP-internal argument and may move out of the VP to Spec-AgroP to check and license its accusative case status.

The phi-features and Case and Tense features are also described as categorial features. The phi features of person, number and gender usually appear on the subject DP

and on the verbal head. This allows for agreement between the subject and the verb. Chomsky points out that phi-features are overtly manifested when a DP is raised to the checking domain as in the case of subject-verb agreement. This implies that they are visible at PF. The Case feature does not show up on the (lexical) head (Fakih 2006).

The process of feature checking begins when the derivation projects from the lexicon to the Computation. The lexicon contains a collection of features and sentences are built up by a merger of lexical choices. The operations involved in sentence derivation are *Select, Merge* and *Move* or *Attract*. When words are stringed together to form phrases and clauses or sentences, constraints are imposed to ensure that such derivation converges and does not crash. These constraints are based on the morphosyntactic processes of feature checking. There are different types of features, categorial and morphological features that are usually checked. Radford (1999:300) identifies three categorial features that impose constraints on the stringing or merging of words into phrases and sentences. These are

- a. Head features
- b. Specifier features
- c. Complement features

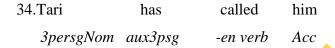
A close analysis of these features show that mergers of lexical items chosen from the lexicon are not carried out randomly but such mergers adhere to certain grammatical rules. Take the following simple sentences, for example.

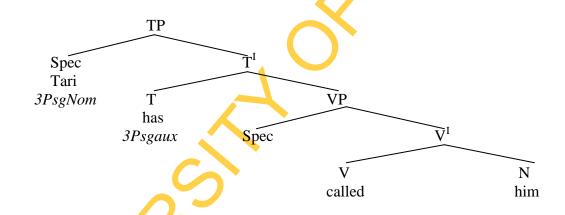
33a. Tari has called him

b. Tari will call him

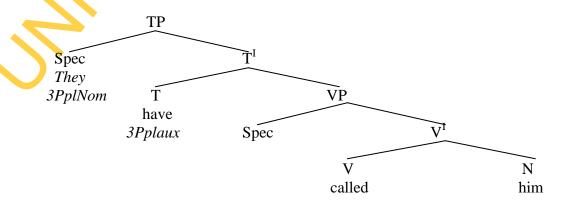
The functional heads in these examples are the auxiliary verbs 'has' and 'will'. Following the Headedness Principle which requires that all clauses and sentences are analyzed as projections of a head word (Radford 2004:75), it can safely be said that the examples above are projections of the auxiliaries 'has' and 'will' respectively. They are the heads of their respective TPs and must have Specifier, head and complement features. 'Has' in [32] above is used in the sense of Radford (2004:66-69; 134-136) and Carnie (2007:80) who analyses finite 'have/has' as capable of functioning either as a main verb at head V

position, or as auxiliaries to main verbs where they occupy an Spec-V node but can move or be attracted to head T node if this position is not already occupied by a modal. So, the head features of 'has' and 'will' are 'present tense auxiliary' and 'future tense modal auxiliary' respectively. Both auxiliaries have nominative Case NP/DP Specifier feature but their complement features are different. The Complement features of 'has' include a perfect participle form of the verb as head of a VP complement; and the complement feature of the modal auxiliary 'will' is a VP headed by a verb in its base (uninflected) form. This means that the complement of an auxiliary must be a VP. These categorial features could be represented symbolically as shown below.





35.They have called him 3perplNom aux3ppl -en verb Acc



In the first example, the functional head 'has' is a 3rd person singular auxiliary whose Specifier or subject 'Tari' is a 3rd person singular nominative case noun. These, then, are the Specifier features of the auxiliary verb. The implication is that any features apart from these, such as 1st/2nd person, plural Accusative Case feature will violate agreement constraints. The phi features of the functional head and its Specifier could be checked off against each other.

In the second example, the functional head 'have' is a 3rd person plural auxiliary verb; its specifier/subject 'They' is a 3rd person plural nominative case DP/pronoun. Consequently, the phi features of the functional head and its Specifier could be checked off against each other. This is where agreement comes about. Evidently, therefore the following sentences are ungrammatical.

```
36*They has called him

3perplNom aux3psg -en verb Acc

37*Tari have called him

3persgNom aux3perpl -en verb Acc
```

The ungrammaticality of these examples stem from this mismatch of number features of the functional heads 'has' and 'have' and their respective specifiers. We may even add other paradigmatic contrasts as specifiers in the nominative case along with it here.

```
38 Tari (3persgnom) will (modal, fut) call him
39 I (1persgnom) will (modal, fut) call him
40 We (1perplnom) will (modal, fut) call him
41 You (2persgnom) will (modal, fut) call him
```

As was noted earlier, the features of the functional head are future tense modal auxiliary. Its Specifier feature is, as usual, a nominative case DP to precede it. However, unlike the auxiliaries 'has' and 'have' which can segregate person and number phi feature, 'will' permits all and any of the phi features in the Specifier DP. This piece of evidence shows

that the modal verb, 'will', and indeed all modal verbs, are less restrictive in the choice of Specifier(s) than primary auxiliaries.

From the foregoing also, it could be noted that a syntactic structure is a projection of lexical or functional heads through a process of merger, and that in this process, the categorical properties of the individual words, according to Radford (1999:302), must be satisfied in order to guarantee grammaticality and convergence of the projection or derivation.

2.6.6. Strength and Interpretability of features

Strength and interpretability of features play important syntactic roles in feature checking. Feature checking necessitates movement, and such movements may be overt or covert. Overt movement is said to be motivated by the requirement that strong features must be eliminated. In other words, syntactic movement is driven by feature checking requirements. It is generally understood that the elements that are checked are formal features of lexical items. Checking also involves the elimination or erasure of these formal features namely phi and tense features.

Some features are strong and it is on such strong features that checking is done in order to eliminate them. Chomsky (1995:277) explains that a strong feature (or Strong F) is a feature of a functional head which is interpretable. Interpretable features, according to Chomsky, remain active and relevant even after feature checking and that only features which are not interpretable (i.e. -interpretable) at the LF interface are eliminated. Lamidi (2006) affirms that strong Agr features are visible at the PF interface even after Spell Out whereas weak features are not visible even after Spell Out.

A strong feature is also regarded as a categorial feature. Categorial features specify the syntactic (combinatorial) properties of a word, such as the head, specifier and complement features. Categorial features are also regarded as interpretable and visible after Spell Out. The distinction between interpretable and uninterpretable features is determined by their role in the semantic interpretation. Radford (2004) explains that interpretable features play a role in the semantic interpretation of a derivation whereas those grammatical features which do not play active roles in semantic interpretation are regarded

as -interpretable. For instance, in a clause like the one below, the Case feature of the pronoun 'they' is uninterpretable.

42 *The police arrested they

The pronoun 'they' is uninterpretable in terms of its Case feature because it is a nominative case item surfacing at an accusative case position. In terms of feature value, it would therefore be said that the pronoun 'they' has entered the derivation without a Case feature value. However, Radford (2004) makes it clear that pronouns which occur in their proper Case positions are interpretable since the person and number phi-features of different pronouns contrast with one another in the same position thereby contributing meaningfully to semantic interpretation of the derivations. Consider the following sentences.

- 43 They are coming 3Per Pl Nom 3Per Pl aux
- 44 He is coming 3Per Sg Nom 3Pe rSg aux
- 45 *They is coming 3Per Pl Nom 3Per Sg aux

In these examples, the pronouns and the auxiliary verbs play a role in the semantic interpretation of the respective derivations. In the first sentence, for instance, the pronoun 'they' has the third person and plural number phi features which contrast with third person singular number features of the pronoun 'he' in the second sentence and makes a clear semantic distinction between the two examples. Therefore, the pronouns are interpretable, and following Radford (2004:288), they entered the derivations already valued. What about the features of the auxiliary verbs 'is' and 'was'? Their number features are also interpretable since they respond to Agr requirements of the subject DPs which are pronouns. They also differ in their tense feature which creates semantic contrast in time reference. Therefore, tense feature is also interpretable and visible at PF.

2.6.7. Verb to T Movement for Feature checking

The minimalist assumption is that T functional head has both verbal and nominal features. According to Fakih (2006:12), T in English has the categorial features of +V and +D while the verb has Agr, tense and Case features. These categorial features determine the interaction between T and the verb on the one hand and between T and the Specifier or subject on the other. Agreement relations are said to be local and are usually in Spec-head relationship between the subject, which is the Specifier, and the verb. For the purposes of checking Agreement and Tense features, therefore, movement is mandatory. For instance, the verb must adjoin itself to each functional head up the derivational tree so that the morphological features of the verb could be checked since these morphological features should correspond with the features of the T functional head for the derivation to converge and not crash. Consequently, V raises to T to check its tense features. If the features correspond, then, licensing takes place and the derivation converges.

The subject DP has Case, Agr and tense features. Following the VP-internal subject hypothesis of Koopman and Sportche (1988), it is assumed that the subject originates at Spec-VP. From this point of the derivation, it raises to T head and checks off its tense feature first, and to Agr to check its Agr and Case features. These movements occur before Spell Out because the checked morphological features remain visible and interpretable at the PF interface after Spell Out. This conclusion is in line with an established Minimalist principle that the need for checking and licensing of morphological features triggers movement of lexical items (Zwart 1998:222). In other words, following Chomsky (1995:228), "under Last Resort condition" movement is feature-driven. Zwart (1998:215) argue that the effects of movement before or after Spell Out vary and could be a distinguishing factor between languages in terms of interpretability of features. Chomsky (1995:233) explains that if movement takes place before Spell Out, it is triggered by strong and interpretable features. Therefore, the features being checked will remain visible at PF. On the other hand, if movement occurs after Spell Out, it will be a covert movement and the features being checked are weak and will not be visible and -interpretable at PF.

Minimalist Program also specifies that syntactic relations are derived from what is called Minimal domain. Minimal domain is divided into internal domain and checking domain. These domains are specifications of how words relate with one another

appropriately. For instance, internal domain refers to the relationship between a head and its complement (head-complement relationship) while a checking domain denotes a relationship between a *Specifier* and a head (Spec-head relationship). Movement is usually undertaken by lexical elements to Specifier positions in the checking domain which is also called functional domains. Therefore, morphological features of lexical heads which need to be checked and licensed must move to the checking domain of a functional head.

Note that LF and PF are the only interface levels in MP. The two levels separate at Spell Out. Movement, it has been noted, occurs either before or after Spell Out. Movements before Spell Out affect the output or pronunciation of the derived sentence. Conversely, movements after Spell Out are deemed not to affect the output or pronunciation of a sentence. Marantz (1995) believes that it is on this basis that 'procrastinate', which is one of the economy principles, prefers derivations to hold on or delay movement until after Spell Out.

The application of Move at different points in the derivation also leads to language variation. As it is known, languages vary in different dimensions, including word order. It is assumed that word order variations among languages arise from languages applying operation *Move* at different stages of a derivation, before or after Spell Out. Languages that apply *Move* before Spell Out are those which are characterized as having overt syntax. Conversely, languages which apply *Move* after Spell Out, which is the point at which a derivation splits into the interface levels of LF and PF, are regarded as having covert syntax.

2.6.8. Economy conditions of minimalist program

In the minimalist program, derivations are subjected to a number of constraints. These constraints are called *Economy Conditions (EC)*. These conditions are to ensure that derivations are optimal and satisfy not only the bare output conditions for achieving convergence but also economy conditions. The economy conditions in MP are *Shortest Move, Procrastinate* and *Greed*. By shortest move is meant that 'a constituent needs to move the shortest distance up the clause (*cf* Fakih 2006, Lamidi 2006). *Shortest Move* constraint is visible in head-movement and wh-movement. Chomsky (1995:182) demonstrates the principle with the following examples in (46).

- 46. (a) e seems [e to be likely [John to win]]
 - (b) John₁ seems [t_1 to be likely [t_1 to win]]
 - (c) John [t t]
- 47. (a) He hopes to see his friend
 - (b) He hopes to see **whom**?
 - (c) He hopes **whom**₁ to see $\mathbf{t}_{1?}$
 - (d) **Whom** does he hope \mathbf{t}_1 to see $\mathbf{t}_{1?}$

The chain (John t t) in [46] represents a successive-cyclic movement of the complementizer 'whom' to subject DP node of the matrix clause from a position in the embedded infinitive clause. First, the DP 'John' moves to an intermediate position as subject of a non-finite clause before finally taking another step to subject DP position which had been empty (e). The successive-cyclic movements leave traces behind. A similar successive cyclic movement is also seen in [47]. Generally, in MP, DP movement is necessitated by the requirement for checking Case and morphological features (Phi and tense features) of the DP and that is why a syntactic object should move only when the movement is necessary.

Greed, according to Chomsky (1992), is a syntactic principle which keeps an element from entering a syntactic operation unless it satisfies a need of itself. The principle requires that a DP moves only when there is need for checking its Phi features, and when checking has been done, no further movement is allowed to take place. Greed means self-service. A movement must not be done for the benefit of another element other than for itself in order to avoid crashing. As Lamidi (2006) affirms, movement is feature-driven because constituents move in other to check morphological features that need to be checked. He reiterates that these features include phi-features of person, number, categorial features, tense features and case features and in some languages, definiteness. Movement for the purpose of feature checking is necessary based on the assumption in MP that lexical items are fully morphologically inflected at the lexicon prior to their selection and projection to the computation component. On the other hand, the functional category of

tense has both verbal (+V) and nominal (+N/+D) features. These features of T have to check against the tense feature of the verbal head and the +D feature of the nominal head.

Following these observations, Marantz (1995:375) contends that if a syntactic movement must take place, it must be as late as possible. "As late as possible" means after Spell Out. This is called *Procrastinate*. A delayed movement is assumed to not have an effect on PF and seems to be preferred because it is more economical. In the minimalist framework, any derivation must be subject to these economy principles in order to be optimal and convergent.

2.7. Choice of theoretical framework

All the theories of linguistic analysis reviewed in this section, namely, structural grammar, contrastive generative grammar, case grammar and transformational generative grammar have been used for contrastive analyses at one time or the other and each certainly has its advantages and disadvantages.

The immediate constituent analysis of structural grammar, for example, provides a description of the phrasal structures of language. However, it does not accommodate the principles of universal grammar such as X-bar and the projection of heads and feature checking. It is therefore not suitable for the present study. Case grammar, contrastive generative grammar and Transformation Generative Grammar all have certain elements relevant for contrastive analysis. For instance, Case Grammar considers the assignment of Case as being universal to all languages and therefore appropriate for CA. Case assignment provides semantic interpretation for syntactic *Arguments* and sentences in terms of semantic roles performed by such lexical categories as nouns, technically also called *Arguments*. Case grammar has a refined version in GB theory in which it is listed as one of the sub-theories (Chomsky 1982, 1995), and in Case features checking in the MP. Contrastive Generative Grammar, on the other hand, proposes a CA that is based on the generation of syntactic structures from a common base. This is plausible since it describes the structures of individual languages and contrasts them based on a specific model of analysis?

However, we propose to adopt the Minimalist Program. The choice of MP is predicated on its emphasis on universally applicable principles as well as language-

specific, idiosyncratic syntagmatic arrangements and processes; these are called parameters. The locus of this study is to determine the parametric variations existing between the morphosyntactic processes of feature checking in English and Izon languages.

This study relies on features analysis in Universal Grammar within the Minimalist Program. These are Agreement, Tense and, Case licensing/checking which provide binary parameters for languages to choose from. Other parameters adopted in the study include head position parameter, sometimes referred to as head directionality parameter, the Projection Principle and the Extended Projection Principle (EPP) as well as the wh-parameter.

The head directionality parameter is based on the concept of endocentricity which requires that every syntactic derivation must have a head word, and that phrases and clauses are projections of specific head words. This parameter characterizes the syntagmatic relationship between heads and their complements. Given this *proviso*, head parameter allows languages to be classified as either head-first or head-last languages. The understanding, Baker (2001) and Radford (1997) explain, is that head-first languages consistently place their heads before complements while head-last languages consistently position their complements before heads. Similarly, the wh-movement parameter is no less relevant in contrastive analysis. It is a parameter which determines whether wh-expressions can be fronted or can remain *in situ*.

2.8. Summary

We have reviewed various theories in this chapter. The first part of the review has been on the relationship of language and society. This is done primarily because language is a tool by which human beings interact and interpret realities in their societies. A linguistic expression is fundamentally an expression of man's perception of his environment. When widely divergent languages come into contact, the result is a situation of bilingualism. *Bilingualism, diglossia, interference* and *inter-language* are reviewed not because they would form the theoretical basis of our analysis but just to reflect the sociolinguistic situation of the Nigerian society of which English and Izon are part.

We have also reviewed different forms of linguistic analysis that are relevant or were relevant at some point in time in contrastive analysis. TGG has progressively moved from Standard Theory, Principles and Parameters or Government and Binding to the latest Minimalist Program. In Chomskyan theory of language, including the MP, it is assumed that language is a biological endowment of all human beings and is configured in the language faculty of the human brain. It is further assumed, therefore, that the basic principles of language are universal to all natural languages, hence the postulation that the I-language is the configuration of the basic principles of Universal Grammar. I-language is characterized by the performance components (A-P and C-1) and cognitive (structural descriptions) component. The Minimalist Program accedes to the fact that every language has idiosyncratic primary linguistic data (PLD) in their individual lexicons, and the categorial properties of these lexical items constitute a basis for parametric variations between languages. The focus of this study is to identify such parametric variations that exist between English and Izon languages.

The next chapter focuses attention on how the MP conceptualizes grammatical representations and well-formedness based on the checking theory and economy principles. Of specific interest is the nature of checking of Agr (Phi-), Tense and Case features in English and Izon. The work also adopts the head position parameter of the PPT especially in the discussion of head parameter.

CHAPTER THREE

FUNCTIONAL CATEGORIES IN ENGLISH AND IZON

3.1 Introduction

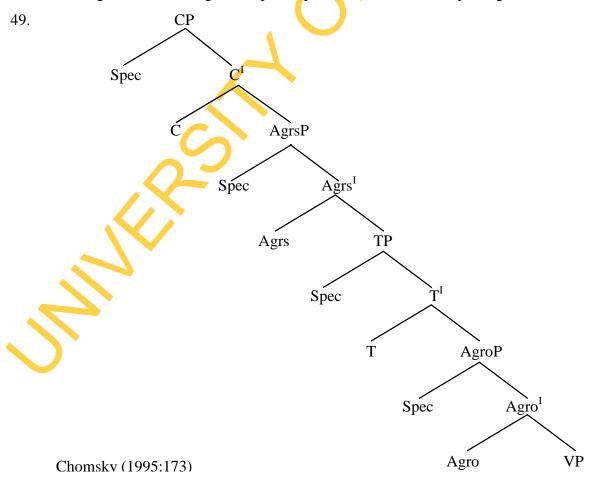
Chomsky (1995) proposed an articulated clause structure that could be used to describe the derivation of sentences in natural languages. This structure is based on the 'fundamentals of X-bar theoretical relations' of Spec-head and head-complement relations (Chomsky 1995:178). This universal articulated clause structure recognizes and provides for linguistic idiosyncrasies and possible parametric variations among languages. As a result, linguists from different regions of the world have adapted this clause structure in the way applicable to their languages, and where necessary, with modifications. In recent times, Amfani (1996, 2006) has applied it to Hausa; Yuka (1997, 2000) applied it to Lamnso, a language in Cameroon while Ajongolo (2005) applied it to the Ao dialect of the Yorùbá language.

The analyses in the present study primarily focus on the morphosyntactic analysis of functional elements in English and Izon especially, as regards the checking of morphological features. Functional elements are words (and morphemes) which lack lexical or descriptive content but carry grammatical features that contribute to sentential convergence. Functional elements in English are basically Determiners (Det), Complementizers (COMP), Pronouns/Agreement (Agr), Auxiliaries/Tense (T), Negation, Conjunction and some prepositions. An analysis of functional elements will illuminate how tense, Agreement, Case features and referential features of definiteness and indefiniteness are checked, and how these elements contribute to the ultimate convergence of derivations generated in the language. This analysis will reveal parameters Izon and English opt for and describe how the grammars the two languages are organized. This is relevant when considered against the strength and interpretability of features. MP assumes that strong features are checked before Spell Out which means that they are interpretable at PF, while weak features are checked after Spell Out because they are uninterpretable at PF. The analysis will determine the relative strengths and interpretability of morphosyntactic features such as Agreement and Tense in the two languages and how variations affect general concepts of UG.

In the Government and Binding (GB), functional elements such as the inflectional morphemes of Agreement and Tense are base-generated independent of the lexical words

such as verbs and nouns which are raised to the functional nodes to 'pick up' their inflections in a transformational process known as adjunction. In the MP, it is assumed that the base-generated lexical words are fully inflected at the lexicon before they enter into the computation. These formal features are morphological features which play syntactic roles and must be checked against similar features associated with the functional nodes (i.e. the abstract +V and +N features of Agr and T) by raising to the *Specifier* positions of the functional heads. Case-assignment is now substituted by Case-feature-checking. Uninterpretable features (such as those for Case), if unchecked, will cause a derivation to crash and 'fail to converge' at the interface levels of PF and LF.

The analyses in this study shall be relying on Chomsky's universal clause structure (Chomsky (1995), as well as Pollock's (1989) Split-INFL hypothesis. This hypothesis implies that Agr and Tense which previously were regarded as projecting to one XP, as INFL are both phrasal heads and as such do not project to a single phrase. This diagram [49] shows Agrs, Tense and Agro as separate phrasal heads after the splitting of INFL.



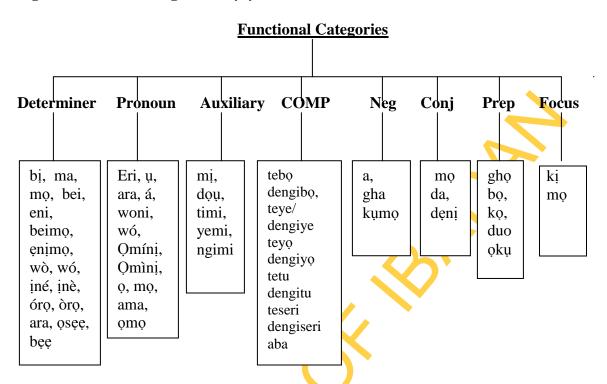
3.2. Forms and Functions of Functional Elements in English and Izon

Functional categories, according to Radford (1997:45), are those elements which carry information about grammatical properties of expressions within a sentence. Functional words are also called functors lack substantive descriptive content. They contrast with content or lexical words; these are words with descriptive content. Content words are the traditional parts of speech such as the noun, verb, adverb and adjective. Content words are also called contentives. Chomsky (1995:149), Belletti and Rizzi (1996:3), Radford (1997:45) and Hudson (1997:1) identify four major functional categories, namely Determiners (D), Pronouns /Agreement (Agr), Auxiliaries/Tense (T) and Complementizers (C). Other functional elements are Negation (Neg), Coordinating Conjunction (Radford et al 1999:298) and prepositions (cf Carnie 2007:46). Below is a diagrammatic representation of the classification of functors in English and Izon.

Functional Categories Determiner Pronoun Auxiliary COMP Negation Conj Prep he, him A, an, be, do if and, not at, on, the,this, she, her have, that but in, to, that, we, us can, who while of. these, could what either, from they, those, them, it shall, which out, or, so, his, her, should when yet with, our, their will. where by, for your would how over, each, may, why above might any, under between must some many, its

Fig 4: Functional Categories in English

Fig 5: Functional Categories in Izon



The determiner is a functional category which expresses referential and quantificational properties of nouns. Determiners include such expressions as *the*, *this*, *these*, *that*, *those*, *my*, *his*, *their*, *all*, *some* and *any* among others as shown in the diagram. In Izon, these determiners would translate to *bi*, *bei*, *beimo*, *enimo*, *enimo*, *eni*, *iné*, *wó*, *òro*, *osee* and *bee* respectively. The quantificational determiner 'any' does not seem to have a neat equivalent in Izon. Determiners are associated with nouns. All referential determiners provide definite or indefinite reference for their noun complements. Demonstratives and pronominal determiners encode additional grammatical agreement properties of person, number, gender (technically called phi features) and Case features (cf Burchfield 1996:629). These features must be checked to ensure convergence of a derivation.

The functional categories of Auxiliary/Tense and Negation (Neg) are associated with verbs. Tense is a morphological property of verbs and it expresses events in relation to time. In MP, T is also a functional head of Tense Phrase (TP). It is assumed to have abstract +V and +N features. A verbal lexical head moves to the Specifier of TP to check its tense and Agreement features against the features of T. Similarly, auxiliaries have the semantic function of marking grammatical properties associated with the relevant verbs.

These grammatical properties are tense, aspect, voice and modality as well as definiteness. It is understandable then that the auxiliary usually occupies the T position. On the other hand, the Negation element expresses the opposite of an affirmative statement.

Agreement (Agr) is a bundle of grammatical featutes, namely, person, number and gender. These are +N features inherently carried by the abstract Agr head of AgrsP and AgroP. These features are also carried by nouns and pronouns which occupy the Spec-Agrs and Spec-Agro positions, as well as by verbs. For a derivation to converge, the noun at Spec-Agrs and the verb must have similar features.

Coordinating conjunctions and some prepositions are also classified as functional elements. For example, prepositions such as 'at', 'on', 'in', 'to' or 'from' which do not possess lexical content perform functional duties in the structure of language. Their role in a derivation is more grammatical than semantic. They signal different kinds of relationships between nouns. Prepositions possess complement features which is that they must have a DP as a complement. Functional *focus* particles which are significant in syntactic derivations seem to be common only in Izon and not in English.

The Complementizer, on the other hand, is a word that introduces a complement clause and also functions as a subordinating conjunction. Common examples of Complementizers are 'that', 'which', 'what', 'where', 'who', 'whom', 'if', and 'whether', etc. These functional elements are discussed here since they are relevant for our analyses.

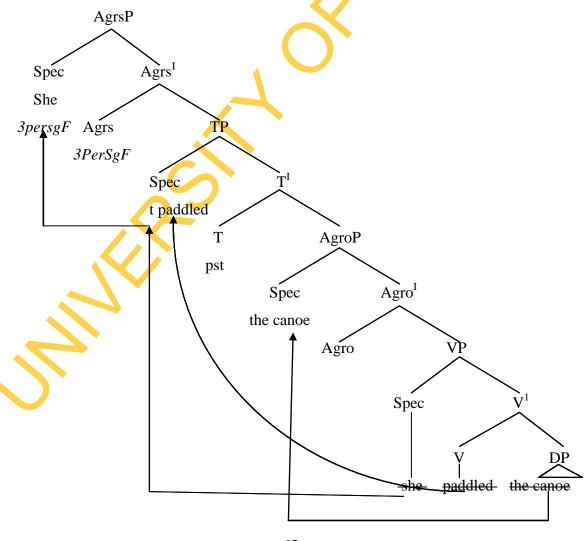
3.3. Agreement in English

Agreement in the literature is described as a bundle of grammatical features called phi features. Phi is a composite of three grammatical features, namely person, number and gender. Person feature consists of 1st, 2nd and 3rd person features; number is the system of singular and plural, while gender is the system of masculine, feminine and neuter. These features are usually encoded in such functional elements as determiners and pronouns. They are also encoded in the functional head of Agr which checks the phi features of determiners and pronouns. Referential and pronominal determiners in English could be singular or plural. They usually function as heads of determiner phrases (DPs) and their number features have to agree with the number features of their complement nouns which

in turn must agree with the verb. English nouns form their plurals with three morphemes in different contexts, namely's', 'es' and 'ies'.

Checking is a necessary morphosyntactic process of comparing and eliminating identical morphological features between lexical verbs and nouns on the one hand, and functional elements of Agr and T on the other. Verbs and nouns have tense and agreement features which motivate their movement up a derivation to check these features against the +Noun and +V features of the abstract functional heads of Agr and T. Consequently, a DP in the Spec-VP position moves up to Spec-TP to check its tense features by T, and then to Spec-Agr node to check its phi-features by Agrs. The verb, on the other hand, raises to Spec-T to check its tense features.

50. She (3persgfemnom) paddled (pstT) the canoe



The derivation in [50] above is conceived and initiated in the language faculty as a process of verbalization of thought. The individual words project from the lexicon and enter the computation with morphological and categorial features which carry grammatical information. The subject DP (she) is assumed to originate at Spec-VP where it receives nominative case. It also has phi-features of person, number and gender, as well as tense feature. For instance, the DP 'she' has the phi-features of third person, singular number and feminine gender (3PerSgFem). These are morphologically represented features which must be checked by the functional elements of T and Agrs. The need for checking of features motivates the movement of the subject by Move α to Spec-TP. This is where its tense feature is checked. Move α then moves it further up the derivation to Spec-Agrs where its agreement and case features are checked. It is these checking operations that guarantee the convergence of a derivation. When constituents move, they leave a trace (t) at the extraction site, although, in recent syntactic discourse, movement is described as copying whereby a null copy of the moved constituent remains at the extraction site. Both trace and null copy are there for recoverability of information. This information shows that the Agreement and Tense features of DPs and verbs are strong and interpretable; hence their movement out of VP is overt and takes place before Spell Out

3.4. Agreement features in Izon

A salient question in this section is whether Agreement/Phi-features in Izon are overtly morphologically marked. Our response is that Agreement features are overtly marked in Izon pronouns. The number system, for instance, is morphologically marked with two plural morphemes, '-ama' and '-mo', both meaning more than one. They are allomorphs. Apart from being plural markers, they respectively also represent the indefinite and definite articles (determiners). This means that when the plural form of a noun in Izon is marked with the morpheme '-mo', the speaker is referring to some definite and specific entities because '-mo' is the equivalent of the English determiner 'the' in terms of referential features. And when a noun takes '-ama' as its plural marker, the reference is indefinite. This means that these plural morphemes have two grammatical values, number and (definite or indefinite) reference. These are illustrated in Table 3 below.

Table 2: Plural Morphemes - Number Agreement

	Nouns in Įzon	English translation	Plural forms in Įzon	Plural forms in English	Semantic values of plural morphemes in Izon
a	wari	house	wari-ama	houses	Num+indef. det
b	wari	house	wari-mo	the houses	Num+def. det
С	fun	book	fun-ama	books	Num+indef. det
d	fun	book	fun-mọ	the books	Num+def. det
e	arų	canoe	arų-ama	canoes	Num+Indef. det
f	arų	canoe	arų-mọ	the canoes	Num+def. det
g	kimi	man	kimi-ama	men	Num+indef. det
h	kimi	man	kimi-mo	the men	Num+def. det
i	egberi	story	egberi-ama	stories	Num+indef. det
j	egberi	story	egberi-mo	The stories	Num+def. det

3.4.1. DP-internal agreement in Izon

Agreement features are the phi features of person, number and gender. In this study, two types of agreement are salient. They are DP-internal agreement and subject-verb agreement. DP-internal agreement is that which occurs between a functional head such as a determiner and its noun complement. There are two different morphemes that mark plural number in Izon. These are 'ama' and 'mo' as shown in the table (3) above. The difference between the two functors arises from the fact that they carry dual values. They have both agreement features and referential features. Whereas 'ama' is both a plural marker and an indefinite determiner, 'mo' is a plural marker and a definite determiner. This means that while both provide Agr feature for their nominal hosts, they respectively also provide indefinite and definite reference for the host.

One unique feature of these plural markers in Izon is that they do not only apply to nouns but also to some determiners, and it is in this sense that DP-internal agreement becomes imperative. For instance, whereas English referential determiners inherently express plurality such as 'these', 'those', etc, external morphemes are used to express plurality in Izon referential determiners as in 'beimo' (these) and 'enimo' (those).

Therefore, in respect of number Agreement feature, these Izon determiners behave like lexical nouns. Consequently, also, Agr feature checking is focused on the enclitics. The morphological compositions of these referential determiners are shown below.

These features are illustrated in the following sentences.

- [52]a. Bei fun bi imbele-ngimi

 This book *the+sg* interesting+*fut*This book will be interesting'
 - b. Bei bi imbele-ngimiThis (the+)sg interesting+fut'This will be interesting'
 - c. Eni fun mo dubamiThat book the+pl big'Those books are big'
 - d.. Eni mo dubamiThat (the+) pl big'Those are big'

'Bei' is a determiner meaning 'this'. It has singular number and referential features and premodifies 'fun bi' (book the). On the other hand, 'bi' meaning 'the' has singular number and definite referential features. 'Bei fun bi' together is the Specifier DP of the derivation. This DP is a projection of 'bei' which therefore is the head functor; but what provides its number Agreement feature is 'bi' which itself is the head of another DP within the larger

DP. There is no interpretable DP-internal agreement between the two determiners. Since they do not have interpretable impact at PF, checking of these features is delayed until after Spell Out. Because they do not have interpretable impact at PF, when either of these determiners is changed, it does not affect the other morphologically. This view can be seen in the following examples.

[53]a. Eni wari bi ofin

That house the+sg sweep

'Sweep that house'

- b. Eni wari mo ofinThat house the+pl sweep'Sweep those houses'
- c. Bei wari mo ofin

 This house the+pl sweep

 'Sweep these houses'
- d. *Bei wari ofinThis house sweep* 'Sweep house'

In all these sentences, the number agreement feature of the entire DP complement of the verb is encoded in the determiner (either **bi** or **mo**) postmodifying the nouns, that is, 'wari'. If the noun 'wari' or any other noun occurs without an overt determiner, as in (53d), the native speaker will assume the presence of an understood or null determiner for it to be accepted as convergent. The person and gender agreement features are inherently interpretable in anaphors, possessive determiners, pronominals and reflexives. The reason is that Izon has an elaborate system of pronouns (anaphors and reflexives) which distinguish person, gender and number as the tables below show.

Table 3: Nominative Case Pronouns in Izon

S/N	Pronouns in İzon	Pronouns in English	Gender	Person	Number
1	àrị	I	Neuter	1st	singular
2.	árị	You	Neuter	2nd	singular
3.	èri	Не	Masculine	3rd	singular
4.	èri	It	Neuter	3rd	singular
5.	araụ	She	Feminine	3rd	singular
6.	´omini	You	Neuter	2nd	plural
7.	`omini	They	Neuter	3rd	plural
8.	woni	We	Neuter	1st	plural

Table 4: Accusative Case Pronouns in Izon

S/N	Pronouns in Įzon	Pronouns in English	Gender	Person	Number
1	ì	me	Neuter	1st	singular
2	í	you	Neuter	2nd	singular
3.	á	her	feminine	3rd	singular
4.	ų	him	Masculine	3rd	singular
5.	,Ó	them	Neuter	3rd	plural
6.	Ó	you	Neuter	2nd	plural
7.	wò	us	Neuter	1st	plural
8.	ų	it	Neuter	3rd	Singular

Table 5: Pronominal Determiners/Possessives in Izon

S/N	Pronouns in Izon	Pronouns in English	Gender	Person	Number
1	inè	my	neuter	1st	singular
2	ịné	your	neuter	2nd	singular
3	ara	her	feminine	3rd	singular
4	wó	his	masculine	3rd	singular
5	Órọ/Óre	your	neuter	2nd	plural
6	Òrọ/Òre	their	neuter	3rd	plural
7	wó	its	neuter	3rd	singular
8	wò	our	neuter	1st	plural

Table 6: Possessives in Izon

S/N	Possessives in Izon	English Equivalent	Gender	Person	Number
1.	inèi	mine	neuter	1st	singular
2.	woi	ours	neuter	1st	plural
3.	inéi	yours	neuter	2nd	singular
4.	órei	yours	neuter	2nd	plural
5.	wói	his	masculine	3rd	singular
6.	arei	hers	feminine	3rd	singular
7.	òrei	theirs	neuter	3rd	plural
8.	wói	its	neuter	3rd	singular

The pronouns and pronominals contained in the tables above encode Agreement features. It needs be noted that Izon does not have specific pronouns for non-human inanimates like the English 'it' (Table 4') and the pronominal possessive determiner 'its' (Tables 6 and 7). Consequently, for instance, 'èri' in Table 4 goes for both 'he' and 'it', as in (54) below. It needs be noted also that the possessive pronoun 'wói' as in (5) and (8) in Table 7 is used

for humans and non-humans. However, there is no grammatical differentiation between 'èri' for 'he' (+human) and 'èri' for 'it' (-human) other than the context in which it is used especially when there is an overt antecedent.

- 54a. Douyé fiyai fiyemiDouyé food eating'Douyé is eating food'
- 54b. Éri fiyai fiyemi He food eating 'He is eating food'
- 54c. Bugo bị tịn bị woudoụ

 Monkey the tree the climb+perf

 'The monkey has climbed the tree'
- 54d. Éri tin bị uwoudou

 It tree the climb+perf

 'It has climbed the tree'

Similarly, 'wo' in Table 6 goes for both 'his' and 'its' as in example [55] and [56] below.

- Tari pen the foc him give

 'Give Tari his pen'
- Wó geegbasá bị nị ụ pịrị
 His pen the foc him give
 'Give him his pen'

56a. Obori bụọ bị káká

Goat leg the tie

'Tie the goat's leg'

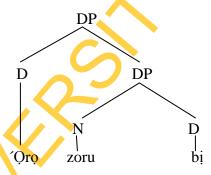
56b. Wó bụọ bị káká

Its leg the tie

'Tie the goat's leg'

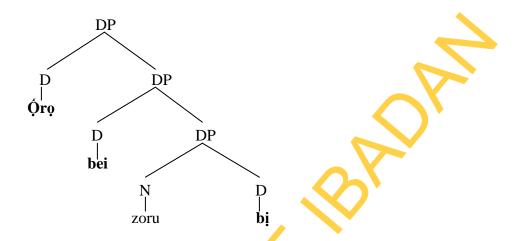
An interesting feature of Izon DPs is the presence of more than one determiner, one prenominal head and one postnominal head, in some instances, and both functional heads participate in DP-internal Agr relations with the noun. This is common with demonstratives and referential determiners as the examples below demonstrate.

[57] **Oro zoru bi** ebidou Your play the (is) enough 'Your play is enough'



The pronominal determiner '**Qro** has 2nd person and plural Agr features and serves as Specifier to the DP, *zoru bi*. It refers to the persons participating in the *zoru bi* (the play). On the other hand, the post nominal determiner 'bi' has singular number Agr feature which specifies *zoru* as a singular entity. The same functions apply to the determiners in the following examples also.

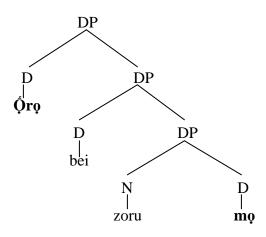
[58] **Órọ bei** zoru **bị**Your this play the
'This play of yours'



There is an occurrence of multiple DPs within the larger DP in [58]. This gives the picture of a recursive. The singular number feature of the post-modifying determiner bi affects both the noun zoru and the demonstrative bei. This means that bị has Agr control over the noun and the demonstrative determiner because like the noun, the demonstrative does not possess inherent Agreement features but the terminal determiner bi does not have Agreement control over the pronominal DP, $\hat{Q}ro$, obviously because pronouns possess inherent Agr features. Therefore, $\hat{Q}ro$ is not dependent on and is not controlled by bi. This can be confirmed by substituting it with the plural determiner mo as in [59] below.

[59] **Öro** bei zoru **mo**Your this play the+pl

'These plays of yours'



The determiner mq which has the two values of plurality and definite reference confers plural number features on both the noun (zoru) and the demonstrative determiner (bei) thus making them to be interpreted as *these* and *plays* respectively. As a plural marker, mq could function as an enclitic to both the demonstrative bei and the noun zoru independently. There is therefore, the permissible occurrence of bei-mq (these) and zoru-mq (the plays) as separate entities. Therefore, when *the* DP, 'q or q bei zoru q moves to Spec-TP, it is the phi features inherent in q and q or q that are checked by Agrs. To further confirm that these functional elements (bi and q and q have dual values, let us consider two simple examples.

- [60]. Tobou = child
- [61] Tọbọu bị Child the 'the child'
- [62] Qwou = children
- [63] Owou mo children the 'the children'

'Tọbọụ' in [60] above is a singular noun just like any other common noun. In [61], it projects into a Determiner Phrase. In [62], 'Owou' is a plural noun; in [63]. This plural noun is selected by *Operation Select* and projects into a determiner phrase. In this case, there are two words with plural number phi feature, i.e. the noun 'Owou' and the determiner 'mọ' both of which must agree and be checked. Furthermore, the functor 'mọ' also has another interpretable referential feature which also must be checked by Agrs. It is remarkable that pluralisation of the singular noun 'tọbọu' to 'owou' is an irregular form in Izon similar to the English 'child' and 'children' and this is a unique coincidence Meanwhile, other examples of multiple functional heads in DPs are provided in the sentences below.

- [64] [DP Ḥni tin bị [VP kingi koromo]]

 'That tree the [cut down]'

 'Cut down that tree'
- [65] [DP **Wó** (3persgM) tobou **bi** (sgMdet) [ebi kami]]

 'His son the [handsome very]'

 'His son is very handsome'
- [66] [DP **W6** (3persgM) tobou **ma** (sgFdet) [ebi kami]]

 His daughter the [beautiful very]

 'His daughter is very beautiful'

The words in bold letters are determiners in the same DP. These are everyday usages in Izon. The determiner 'bi' has multiple Agr features including definite reference and neuter gender features when used with non-human things but has masculine gender features when used with a human DP complement. It means that 'bi' as head of a DP has head features of singular, masculine definite reference, and complement feature of a masculine noun. If the complement noun is replaced with a feminine noun such as 'táa' (wife), agreement rules will be violated and the derivation would crash because the Agr features of the noun táa and those of the determiner bi which heads the DP would not match at the point of

checking. Considering the complexity in the selection specification of **bi** for humans and things, it can be suggested that the Izon has both a +human and -human specifications in the lexicon from where native speakers select the one appropriate for +human and -human noun complements. A similar argument could be advanced for the pronominal determiner 'w**ó**' which is also used with +human and -human complements as [67] to [69] below.

Similarly, 'ma' in [68] above is a determiner with feminine gender feature along with the definite reference feature. These are its head features. Its complement features include singular, feminine noun. If the complement noun of 'ma' is masculine as in [68] above, and perhaps plural or neuter gender as in [69], agreement rules will also have been violated and the derivation will fail to converge. These DP-internal features are checked by Agrs functional head ostensibly before Spell Out because they are interpretable features and are visible at PF.

The important general implications is that Izon syntax permits the projection of multiple determiners – that is more than one functional head – in a single determiner phrase (DP), but only one of the functional elements participate in Agreement relations with the noun. Maybe, a more appropriate explanation is that the DP in Izon permits the projection of more than one DP within itself as it has been shown in [59] – [66] above. This complex DP structure may be interpreted in two ways. First, it may be considered as a

Split-DP in the sense of Amfani (1996) with regards to Hausa. In in sense, the two or three determiners (D) are a unified whole at the D-structure and projects to S-structure as a Split-DP. But this does not sound very convincing for the Izon DP since the individual determiners do not enter the computation at the time. Moreover, the two determiners do not necessarily have to agree but each of them relates independently with the noun complement. It is more plausible, therefore, to characterize the Izon DP as an instance of excursiveness in which a minimal DP selects a demonstrative/referential D and projects into a larger DP. This larger DP could also, but not obligatorily, select a pronominal D and project yet into another larger DP as shown in the diagrams in [58] and [59] above. Its derivation therefore defers from the Hausa Split DP. This is an idiosyncratic syntactic feature of DPs in Izon language and a notable parametric variation from English DPs.

3.4.2. Subject-verb agreement

The agreement relation between a subject DP and the verb in the VP is usually morphologically marked in English. This is why a verb inflects to agree with the number feature of the subject or Spec-AgrsP. However, subject-verb agreement in Izon is not morphologically realized. This is so because the verb in Izon does not inflect for number to agree with the number feature of the Specifier DP. Minimalist syntax stipulates that T functional head has both verbal and nominal features. According to Fakih (2006:12), T in English has the categorial features of +V and +N while the verb has Agr, tense and Case features. These categorial features determine the interaction between T and the verb on the one hand and between T and the Specifier or subject on the other. Data in this study (e.g. 70 - 73) below reveal that verbs in Izon do not inflect for number.

The number feature of Agreement in the Izon language is encoded in the form of noun inflections. These plural forms are marked with two different morphemes namely, $m\varrho$ and ama varying reference. The first is a plural morpheme with a definite reference while the second is a plural morpheme with an indefinite reference. However, Agr features are inherent and internally interpretable in pronouns. But neither the verb nor the noun inflects for Agr.

What emanates from the foregoing data is that the Agreement features of person and number are not overtly marked in respect of subject-verb agreement in the syntax of Izon. This accounts for why the verb feeyemi (buying) in [70] and [71] remains morphologically unchanged in spite of the changes in its subject DPs. Similarly, the verb feedou in [72] and [73] which has perfective feature does not inflect to reflect the number of the Specifier DPs such as 'Arau' (she) and 'Woni' (we). This would mean that there is no overt agreement between a subject DP and the verb in the sentence. The implication is that these are features that are interpretable only at LF and that checking of the features occurs only after Spell Out. This is to say that movement of the Specifier DP and the Verb up the syntactic tree for checking of +N feature of the verb is a covert operation and occurs only after Spell Out since it is not interpretable at PF. It can then be concluded that movement of a verb to check its +N feature is a covert operation and takes place after Spell Out. It therefore follows the economy principle of procrastinate. This constitutes a major variation from the Agreement pattern in English whereby a verb must inflect to agree in number with the subject DP. In English, movement of a verb to check its +N feature is an overt operation which takes place before Spell Out because it is interpretable and remains visible at PF.

3.5. Tense (T) in English and Izon

Agr mediates between subject DP and VP. Therefore, there is need to discuss the tense (T) feature which is both a property of the verb and, until Pollock's (1989) Split-INFL hypothesis, was a co-hyponym of Agr. Following the split, both elements have become independent functional heads of their respective maximal projections namely, AgrP and TP.

Comrie (1985:9) defines Tense (T) as a grammatical expression of time. As such, tense specifies what took place in the past, what takes place in the present, or what will take place sometime in the future. Greenbaum and Quirk (1990:53) refer to time as a line on which is located the present moment; anything ahead of it is in the future, and anything behind it is in the past. In English and Izon, tense is a grammatical category that is realized by morphological inflection of a main verb or an auxiliary verb. Therefore, T has three basic values of past, present and future time relations. In Chomsky's (1995) articulated clause structure, T node also contains aspect (Asp) whose values are specified in Baker (1978:20) as perfective and progressive (or imperfective). This notwithstanding, some linguists also characterize Asp as head of Aspect Phrase (AspP). In the literature, then, it is assumed that Agr and T features check off or eliminate corresponding features in DPs and verbs respectively. In other words, verbs move up and adjoin to T for checking of their tense features while DPs raise to Spec-Agrs positions for checking of Phi-features. English has two major tenses, namely present tense and past tense. Every other tense or expression of time is usually derived from a combination of an auxiliary and a verb. These expressions more appropriately express Aspect. Tense and ASP are morphologically derived by inflection of verbs in Izon just as in English as in the following examples

74. Pr	resent T	Past T	Future	Progressive Asp	Perfective Asp(-en)
	Eat	ate	will eat	eating	eaten
	Write	wrote	will write	writing	written
	Talk	talked	will talk	talking	talked
	Walk	walked	will walk	walking	walked
	Die	died	will die	dving	died

From the information above, it is noted that the verbs in English inflect for tense and employ the assistance of auxiliary and modal verbs to express Aspect. In order to express future tense, for instance, a verb will need the support of a modal verb such as 'will' and 'shall'. To express progressive Aspect, a verb takes on the '-ing' form, while it takes on the '-en' form to express perfective Aspect. T(ense) morphemes in Izon language are shown in some examples of verbs in [75] – [80] below.

[75]	base f	form :	for	present	tense	as	in
------	--------	--------	-----	---------	-------	----	----

tụò	(cook)
fęé	(buy)
zorù	(play)
gęę́	(write)
dáwàị	(learn), etc.

[76] '-mi' for past tense as in

tụòmi	(cooked)
fęę́mi	(bought)
zorùmi	(played)
gęémị	(wrote)
dáwàimi	(learnt), etc.

[77] '-ngimi' for future tense as in

tụọ̀ngimi	(will cook),
fęę́ngimi	(will buy)
zorùngimi	(will play)
gęę́ngimi	(will write)
dáwàingimi	(will learn), etc.

[78] **'-yemi'** for Present Progressive or Imperfective Aspect as in

tuọyemi (is cooking), feéyemi (is buying), zorùyemi (is playing) geéyemi (is writing) dáwàiyemi (is learning)

[79] **'timi'** for Past Progressive or Imperfective Aspect as in

tuòtimi (was/were cooking)
feétimi (was/were buying)
zorùtimi (was/were playing)
geétimi (was/were writing)
dáwàitimi (was/were learning)

[80] 'dou' for (both present and past) perfective ASP as in

tuòdòu (has/have cooked)
feédòu (has/have bought)
zorùdòu (has/have played)
geédòu (has/have written)
dáwàidòu (has/have learnt)

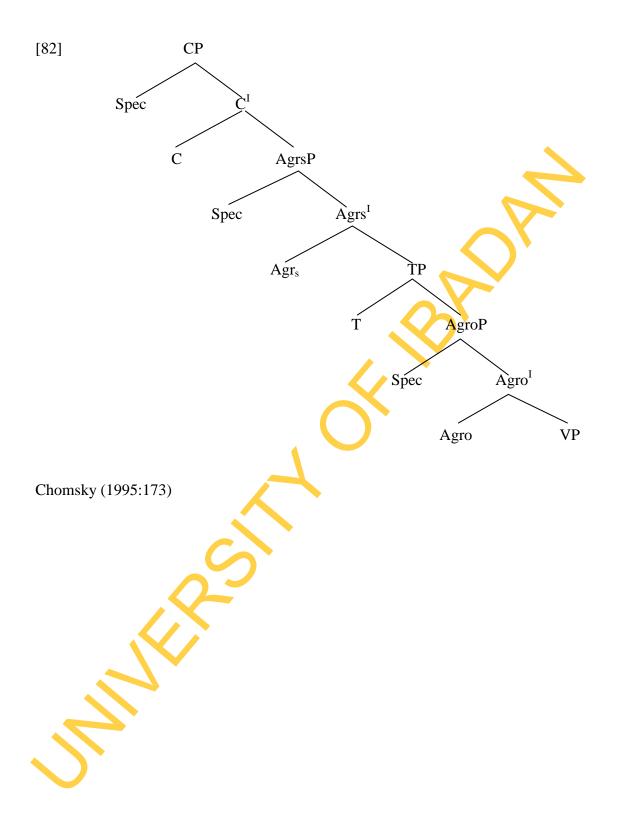
The tense and Aspect forms in Izon are summarized in a tabular form in (81) below.

81.	Present T	Past T	Future	Pr Prog Asp	Pst Prog	Perf Asp(-en)
	tụọ	tụọmi	tụọngimi	tụọyemi	tụọtimi	tuodou
	fęę	fęęmi	fęęngimi	fęęyemi	fęętimi	fęędou
	zoru	zorumi	zorungimi	zoruyemi	zorutimi	zorudou
	gęę	gẹẹ mị	gęęngimi	gęęyemi	gęętimi	gęędou
	dawai	dawaimi	dawaingimi	dawaiyemi	dawaitimi	dawaidou

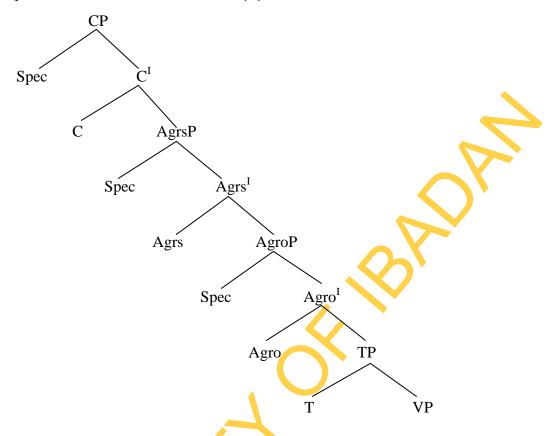
The data in [75] to [81] above shows the various tense and aspectual forms in Izon verbs. Future is marked by a morpheme, -ngimi. Although, in the data, it is translated as 'will', it is really not strictly so. This morpheme could even be translated as 'shall'. But in Izon, there are really no different words that translate neatly to the English 'shall' and 'will'. At this point, it is pertinent to discuss the clause structure of Izon to enable us to demonstrate movement of DPs and verbs motivated by the need for checking of Agr and tense features

3.6. The clause structure of Izon

The phrase and the clause are universal structural categories. In current linguistic theories, these structural categories are referred to as derivations or projections. The phrase is understood to be a maximal projection (XP) and the clause, a combination of a number of maximal projections. The idiosyncratic ordering of lexical items within the phrase and the clause or sentence provides grounds for parametric variations among languages. English and Izon have varying structural configurations. The subject and object positions of the clause is usually occupied by a DP. The DP, until Abney (1987) was a projection of a noun but now generally treated as a projection of the determiner, hence, Determiner Phrase (DP). Structural variations impose significant constraints on the syntactic processes of the two languages. This reflects in their articulated clause structures. The articulated clause structures of English and Izon are shown respectively in the trees [82] and [83] below.



[83] Articulated Clause Structure of Izon



The clause structure of both English and Izon are headed by a CP. This means that the sentence is a projection of the complementizer which, of course is an abstract node that is only filled when there is a wh-movement or an auxiliary inversion in interrogative transformations. This constituent is followed by the Subject Agreement Phrase (AgrsP) which consists of the subject DP and the abstract Agrs functional head. From this point, a variation is observed. In English, the next constituent in the clause structure is the TP, which has been split from Agrs following Pollock's (1989) Split-INFL hypothesis. However, the Izon clause structure is dictated by the natural contiguity of the subject DP and the object DP. So, AgrsP is naturally followed by AgroP. Izon, remember, is an SOV language. Therefore, V occupies the lowest rung of its clause structure. The points of variation between the clause structures of the two languages may be specified as follows.

i. Within the VP of the Izon clause, the complement DP precedes the V and V occupies the clause final position. The English complement DP follows the verb.

- ii. In the English articulated clause structure, AgroP is the constituent directly above the VP, but in the Izon articulated clause structure, TP is the constituent directly above VP. This contiguity between T and VP achieves Shortest Move for V when it raises to T to check its tense features.
- iii. In English, AgrsP and AgroP are separated by TP, but in Izon, AgrsP and AgroP are contiguous and Agro is above TP in the derivation.
- iv. In both clause structures, the CP remains the abstract head of the derivation.

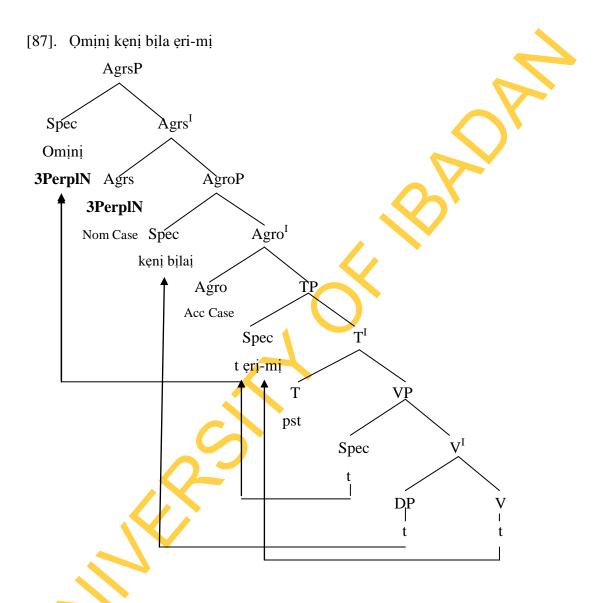
We now illustrate the articulated clause structure of Izon with some data to demonstrate feature-driven movements.

- 84. Omini (*3Perpl*) keni bila eri-mi
 They one/an elephant see + ea
 'They saw one/an elephant'
- 85 Araụ (*3PersgF*) arụ bị yọụ-ngimi She canoe the paddle-*will* 'She will paddle the canoe'
- 86 Eri (*3PersgM*) ugbele bi akibo-dou

 He staff the bring + *perf Asp*'He has brought the staff'

Taking example [84] above, the lexical items available at the lexicon are the heads of the two DPs, $\acute{o}mini$ (they) and $bil\acute{a}$ (elephant), the adjectival numeral or determiner, keni, and the head of the verb phrase, eri (see). The other element (-mi) is a past tense morpheme. It is a morphological inflection of the verb. In the MP, it is assumed that the verb has been fully formed and inflected for tense. Operation Select selects the lexical items each of which, according to Radford (1997), comprises sets of phonetic, semantic and grammatical features. These features are relevant for interpretation of PF and LF representations and the operations of computation of the human language (C_{HL}) respectively. The standard

assumption in the MP is that the lexical items that are selected are fully inflected at the lexicon. Therefore, the clauses given in [84] above may have the following representations in [87].

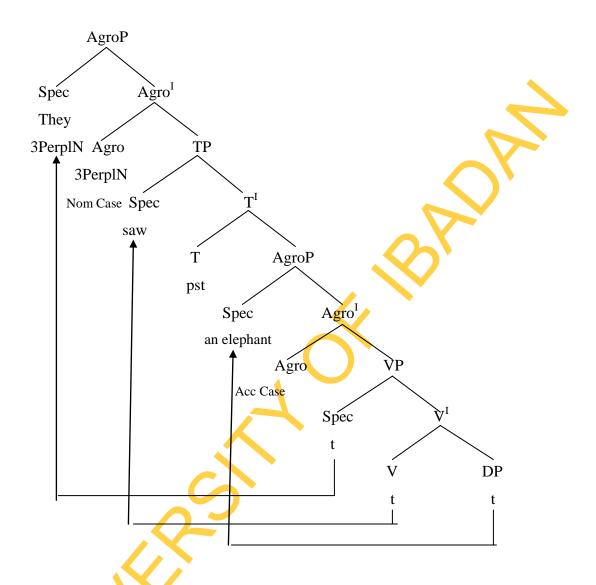


Going by Minimalist principles, *Qmini*, being the subject DP originates as Specifier of VP. It already has 3rd person, plural number and neutral gender features right from the lexicon, as well as nominative case. These features need to be verified or checked and licensed by Agrs which is a functional head and contains abstract phi features. For this reason, the subject DP at Spec-VP raises to Spec-Agrs node to check its Agreement features. The motivation for this raising operation is based on the reasoning that lexical items at the

lexicon are fully inflected before projection to the working area and are imbued with tense, Agreement and Case features. In a similar manner with the subject DP, the object DP keni bila which is observed to precede the verb in the derivation also raises to Spec-Agro node in order to also check its Agr and Case features. This derives from the fact that the verb occupies the clause-final position in Izon. The remaining lexical item selected from the lexicon is the predicate 'eri-mi which is assumed to have been fully inflected for tense. The tense morpheme is -mi for simple past tense. It functions as an enclitic to the verb. Since tense and aspect features are found in a position above the VP in the derivation, the verb also necessarily moves up to T node for tense feature checking. When the morphological features of tense and agreement have been checked and similar features eliminated, the derivation is said to have converged. If uneliminable features remained after checking, then the derivation would crash.

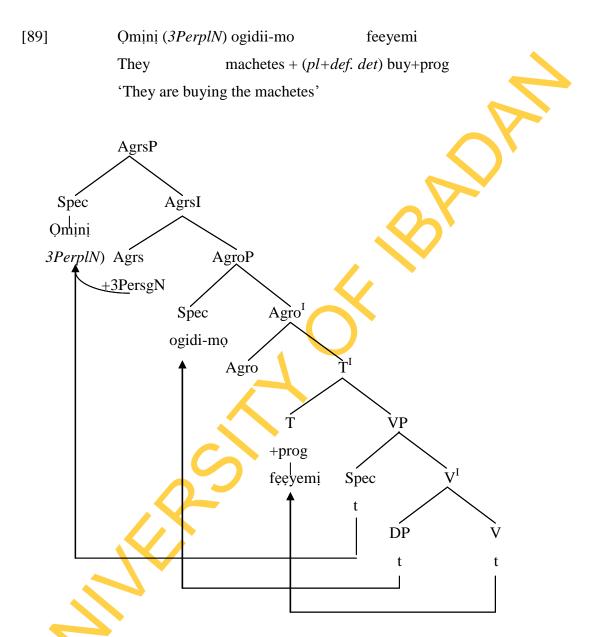
Minimalist syntax currently assumes that Operation move is an operation of attraction (Chomsky 1995:297ff, Radford 1997:229). This is plausible since the DPs and the V that moves or raises to functional nodes are more or less attracted by the abstract features of those functional heads. This is why movement is said to be feature-driven. Therefore, some linguists prefer to label checking movement as *Attract*.

It is important to note that the SOV configuration of Izon syntax obligatorily places the functional element of Agro or object Agreement above TP. If the structure maintained the TP-Agro c-command arrangement, raising of the DP complement and the V for feature checking would have resulted in ungrammaticality because the operation would reverse the linear word order of the language, that is, to the SVO linear order known for English. Consider



The VP nodes of [88] and [89] show the syntactic variance of the two languages and this also shows in the syntactic processes such as Agreement checking and Case checking. For instance, in English, V c-commands DP in the regular order because the accusative DP follows the V. But could we reasonably say the same of Izon in which the accusative DP precedes V and therefore seems to c-command V. It is, however, reasonable to conclude that c-command in English is effective rightwards, while in Izon, it is effective leftwards since the verb occupies the clause–final position. Indeed, V c-commands DP because V still checks the Case of the DP which is within its checking domain, and assigns theta role.

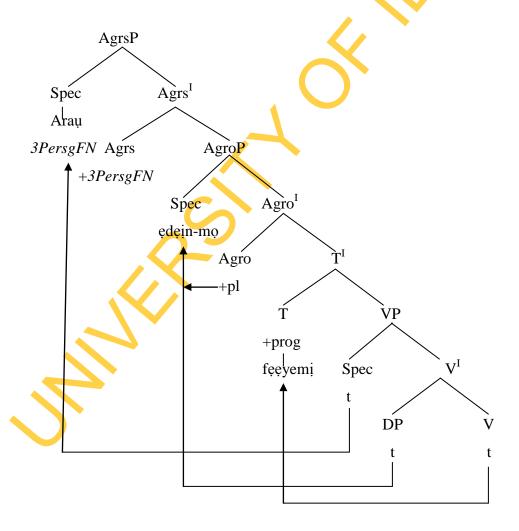
This is obvious evidence that the clause structure of Izon is significantly different from that of English.



What this structure explains is the derivation of a basic declarative clause in Izon whereby the full lexical items selected at the lexicon are the subject DP *omini*, the object DP *ogidimo* and the verb *feeyemi* fully inflected for tense at the lexicon (Chomsky 1995). The subject DP is characterized as 3rd person, plural and genderless (neuter) pronoun. It originates at Spec-V and raises to Spec-Agrs node for checking off of its Phi-features by Agrs since Agrs contains similar Phi-features. This abstract operation of feature checking

is shown with an arrow pointing from *Agrs* to *Spec-AgrsP* (Omini) in [89] above. The arrow pointing to Spec-Agrs indicates the direction of the covert operation of feature checking to eliminate corresponding features (cf Radford 1997; Amfani 2005).

The verb 'feeyemi' raises to adjoin T in order to check its tense features. The object DP or complement of V raises to Spec-Agro node. Let us also examine a clause which has a subject DP that has a singular number feature and an object DP that has plural number features such as [90] below.



The plural morpheme of the noun (edein) in this derivation is '-mo'. It has two different values and functions. First, it has plural number value which adjoins to the head and is checked by object Agreement (Agro). Secondly, it also has the features of a definite article or determiner 'the' similar to the specific definite article 'bi'. Consequently, the DP 'edein-mo' means 'the knives'. The multiple features of this functional element must thus have dual interpretations at LF but projects to a single affix at PF. Again, it may be noted that the verb *feeyemi* does not inflect for number in order to agree with the subject DP. This leads us to conclude that the number Agreement property V in Izon is a weak feature which is interpretable only at LF but not at PF, and that movement of constituents for checking of Agr features is a covert operation which takes place after Spell Out.

3.6.1. The Imperative clause

Imperative sentences are characteristically known to be derived without an overt subject DP. The overt constituents in such clauses are an obligatory VP and an optional object Determiner Phrase (DP), Adverbial Phrase (Advp) or Prepositional Phrase (PP). In such derivations, the verb controls or c-commands the other constituents that follow as its complement. There is no movement for checking of features since an imperative clause lacks an overt Spec-Agrs DP. This observation is applicable to both English and Izon. Some examples of imperative clauses in English are given below in [91] and [92] below. It will be observed that in all the examples, the derivation commences at VP. This is because the subject NP is a null or covert category and therefore lacks phonetic representation but is interpretable at LF by strong Case features (Chomsky 1995, Yuka 1997).

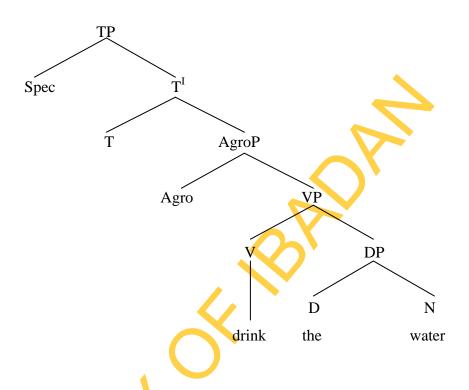
- [91] a. Come
 - b. Come here
 - c. <u>Drink</u> (the) water
 - d. Go to the house
 - e. Give the boy his book

Again, when these clauses are translated into Izon, the syntagmatic arrangement is significantly different, although the fundamental constituents of the clause are similar. The

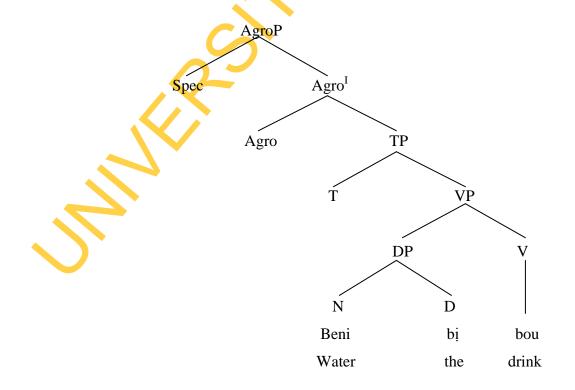
derivation again commences not with V but with other constituents following it in each clause. [92a-e] are Izon equivalents of [91a-e].

[92]a.	Bó	[VP]
	'Come'	
[92]b	Beiyo ghọ bó	[AdvP + VP]
	Here to come	
	'Come here'	
	
[92]c.	Beni bou	[DP + V]
	Water drink	
	'Drink water'	
)
[92]d.	Wari ghọ mu	[PP + VP]
	House to go	
	'Go to (the) house or Go home'	
[92]e.	Wó fún bị nị ụ pịrị	[DP + foc + VP]
	His book the <i>foc</i> him give	
	'Give him his book'	

Izon subject DP position in an imperative clause, as in these examples is not overtly filled with a DP. This Null DP has strong Case features that are interpretable at LF and are also recoverable at PF. Native speakers intuitively understand and assume the presence of null 2nd person nominative DP at that position. Below are diagrammatic representations of imperative clauses in English and Izon.



94. beni bị bou (IZON)



In an imperative clause, the need for subject-verb agreement does not arise since it is a null DP. The functional elements in the structures above are the Determiners *the* in [93] and *bi* in [94]. These Determiners perform the referential function in both languages. However, the significant difference between them is their relative positions to their complement nouns. Whereas in English, the Determiner is prenominal, it is postnominal in Izon. These are parametric choices the two languages make at the computation.

3.6.2. Serial verb construction (SVC)

Izon clauses also exhibit multiple verb projections to the PF. What are involved here are Serial Verb Constructions. Serial verbs are a common occurrence in Izon syntax. Serial verbs help the derivation of complex clauses characterized by a conglomeration or string of verbs. A Serial Verb Construction has been characterized as containing more than one morphologically independent verbs neither of which is an auxiliary (Kroeger 2004:227). The verbs in a SVC share common semantic arguments and refer to a single event. The characteristics of SVCs as explained by Nooman (1985) and Aikhenvald and Dixon (2006) are:

- a. They express simultaneously a consecutive event or action and thus, mono-clausal
- b. Their intonational properties are mono-verbal and have no connective markings
- c. They have a single grammatical subject (overt or covert), and
- d. They have the same grammatical properties of tense, aspect, mood and polarity (i.e. negativity or positivity)

Though an SOV language, Izon uses SVCs in its syntax and selects more than one verbal element at the lexicon to be combined with a single nominal element or an adverbial element by Operation Merge. The SVC projects accordingly to both the LF for appropriate interpretation and the PF for appropriate representation. In an imperative clause with SVCs, the initial verb may be optional and could be dropped in some cases. The following data provide insight into the projection of SVCs

[95] VP Mu benimo
Go stoke
'Go (and) stoke (eg. the fire)'

[96]	VPBang	_{VP} Bangi _{VP} bo		
	Run	come		
	'Run o	lown here'		

[97]	$_{VP}W$ enį	mu
	Walk	go
	'Walk a	away'

[98] VP Koro bụnụ
Fall sleep
'Lie down'

In the examples above, a verb initiates the clause and another terminates it. In all of them, there is no overt subject. It is merely understood that there is a null subject at the clause-initial position that is not phonologically realized. The object is also only implied in [95]. Also noteworthy is that negation and question markers are usually adjoined to the second of the two verbs in an SVC. Negation Phrase (NegP) will be discussed in detail in sections 3.11 and 3.12, but some examples of negation in Serial Verb Constructions will suffice here.

[99]. VPMu VPbenimo kumo

Go stoke not

'Do not go (and) stoke (eg. the fire)'

[100] VPBangi Advpbeiyo gho VPbo kumo Run this place (here) to come not 'Do not run down here'

[101] VPWeni mu kụmọ
Walk go not
'Do not walk away'

It would be ungrammatical for the negation element (*kumo*) to collocate with the verb that initiates the clause instead of the second verb as in the reproduced data below.

[102]. *VPMu kụmọ VPbenimo

Go not stoke

[103] *VPBangi kụmọ gho VPbo

Run not to come

[104] *VPWẹnị kụmọ mu

Walk not go

The occurrence of multiple verbs in the imperative clause shows that Izon allows serial verb constructions whenever necessary.

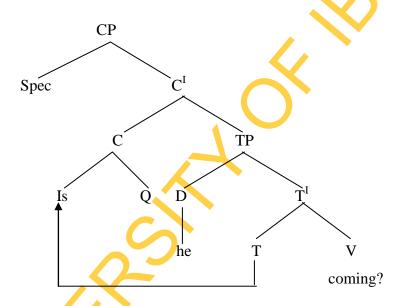
3.6.3. The Interrogative clause

Radford (1997:513) defines an interrogative clause or sentence as one which asks a question. The interrogative clause may be an entire sentence or a complement clause of a sentence. It may also be a *wh*-question, a yes-no question, echo or tag. A *yes-no* question is one that is derived by preposing the auxiliary verb to the front of the clause while the subject DP moves down to the second position or node in the derivation. The subject DP may be a single lexical item or a noun phrase consisting of a noun head and its modifiers. This is an operation called 'interrogation inversion' or 'auxiliary inversion' (Chomsky 1995; Radford 1997) and it leads to a change in word order. Other types of questions such as *echo* and *tag* questions also exist in Izon syntax.. While we shall discuss the derivation of *yes-no* questions *echo* and *tag* questions in this section, *wh*-questions shall be discussed later under movement operations in Chapter Four.

- [105] a. Will₁ Douye t_1 help us?
 - b. Can_1 Ebi t_1 drive a car?
 - c. Is₁ it t_1 raining?

The sentences in [105] (a) – (c) are yes-or-no These interrogatives rely on auxiliary inversion where the auxiliary verbs 'will', 'can' and 'is' are moved out of their original positions and fronted to CP. It assumed that the clause structure has an abstract CP at the highest rung which has a Complementizer (C) as its functional head. The Complementizer is endowed not only with wh features but also with tense feature. It is the tense features of C that attracts and accommodates the auxiliary and wh-expressions at C. Radford (1997: 294) provides a representation of the derivation of an English interrogative clause in the minimalist format following Chomsky (1995) as in [106].

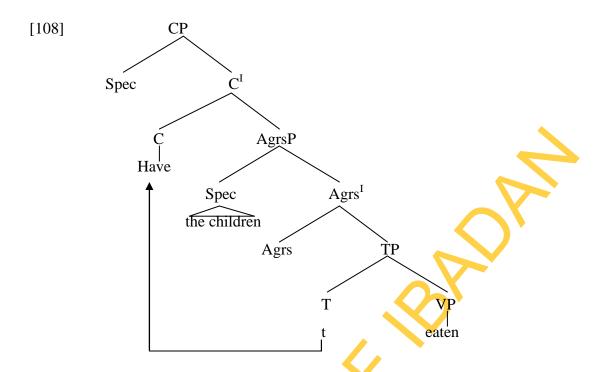
[106]. Is he coming?



Another example is as [107a]. It is further illustrated with a phrase marker

[107]a The children have eaten.

b. Have the children eaten?



The auxiliary 'can' originates at T(ense) in the declarative clause and moves to C node above the subject DP while the subject DP originates as Spec-V and moves to Spec-Agrs node. What attracts the auxiliary to raise to C is the tense feature in C. As we shall see in Chapter Four, this is the position that provides a landing site for wh-expressions.

Atkinson et *al* (1989:217) assert that SOV languages, to which Izon belongs, lack characteristic position for question words. In Izon, *yes-no* question is marked by ideophonic suffix \hat{a} – pronounced with a high rising tone. Moreover, the interrogative affix projects as an enclitic to the verb which usually occurs at the clause-final position. The data below illustrate the foregoing.

[109]a. Sukulu owou-mo waibodou

School children +the return +perf Asp + T

'The students have returned'

[109]b.Sukulu owou-mo waibodou $-\acute{a}$?

School children-the return + perf Asp + T + Q

'Have the students returned?'

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[110]a. Qmini zoru-yemi They\ play + T + imperf\ Asp
```

'They (are) playing.'

They play + inperf Asp + T + Q

'Are they playing?'

[111]a. Oro yengi fiyai tuo-ngimi.

Your mother food cook-will (future T)

'Your mother will cook food.'

[111]b. Oro yengi fiyai tuo-ngimi- á? (pronounced tuo-ngima?, 'i' is elided)

Your mother food cook-will + Q

'Will your mother cook food?'

[112]a. Owou-mo fiyai fi-dou

Children – the food eat + perf Asp

'The children have eaten.'

[112]b. Owou-mo fiyani fi-dou-á

Children- the food eat + perf Asp + Q

'Have the children eaten?'

[113]a. Ebiyé eré naná-dou

Ebiyé woman marry+ perf Asp + T

'Ebiyé has married a wife'

[113]b. Ebiyé eré naná- dou-á

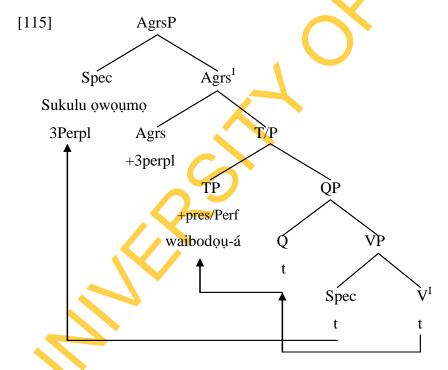
Ebiyé woman marry + Perf Asp + T + Q

'Ebiyé has married a wife?'

The data in [109] to [113] are arranged in pairs of declarative sentence and interrogative derivations. In all cases, the verbs occupy sentence-final positions as usual. The transformation of the declarative sentence to an interrogative involves a simple process of adjunction of the interrogative marker 'á' to the verb as enclitic.

The kind of auxiliary inversion movement operation observed in English interrogatives is not applicable to the Izon interrogative clause which preserves the structure of the declarative clause. Let us revisit a few of the examples cited above in [109] to [113] and see how they are represented on the derivation structure.

- [114] a. Sukulu owou-mo waibodou-a?
 - b. Omini zoruyem'a?
 - c. Ebiyé eré nanadou-a?



The tree diagram shows that the interrogation marker [-á] is not an existing constituent in the declarative clause that needed to undergo auxiliary inversion in order to derive an interrogative; neither is it an auxiliary item. The auxiliary in the example is *dou* and it is realized as an enclitic affix to the verb 'waibo'.which is base generated In order to account for the interrogative element in Izon, it is reasonable to suggest that the verb and the

question affix enter the computation and are merged here by *Operation Merge*. The verb now marked as an interrogative projects from the D-structure to S-structure and is interpretable at both the LF and the PF. Consequently, the verb will have two point of checking in the transformational process. First, it raises to Question phrase (QP) to check its interrogative features and then to T to check its tense feature. The negative morpheme [-á] is an idiophone. This idiophone, indeed, is the parametric question marker for yes/no questions in Izon. The idiophonic affix in yes-no questions in Izon is not a manifestation of wh-in-situ parameter because there explicit examples of wh-in-situ situation in Izon as will be seen in Chapter Four.

There are also echo questions in Izon. These are derived by a declarative statement with a rising tone on the final syllable of the verb. The following examples illustrate echo questions.

[116] a. Ebiere bodoù (declarative sentence)

'Ebiere has come'

b. Ebiere bodoú,? (echo question)
'Has Ebiere come?'

[117]a. Kimi bi tin bi kiindoù. (declarative sentence)

The man has felled the tree'

b. Kimi bị tịn bị kịindoú? (echo question)
Has the man felled the tree?'

c. Timi aru feedou? (echo question)
'Timi has bought a car?'

Tag questions are derived by the question words $\mathbf{m}\phi$ and $\mathbf{m}\phi\mathbf{p}h\dot{a}$, with high tone on the last vowel. The same words mark both questions and answers. As answers, the final vowels receive low tone. $\mathbf{M}\dot{\phi}$ means yes while gha is the standard negation marker. Therefore, $\mathbf{m}\phi\mathbf{p}h\dot{a}$ morphologically consists of two morphemes the first of which denotes affirmation and the second, negation. An affirmative answer to a statement is $\mathbf{m}\dot{\phi}$ meaning 'it is so', while a negative answer is $\mathbf{m}\phi\mathbf{p}h\dot{a}$ meaning 'it is not so'. Tag questions are illustrated below.

[118]a Timi arų fęędoų. (Statement/proposition)

'Timi has bought a car'.

(Positive tag question) b. Mó? (Is it so/true?) (Positive answer) c. Mò. (Yes) d. Moghà (negative answer) (No) e. Moghá? (Is it not so/true?) (Negative tag question) f. Moghà (negative answer) (No) c. Mò. (Yes) (Positive answer)

3.7. Case Checking in English

The ultimate convergence of a derivation depends not only on the mediation of Agr between a subject and its verb complement but also on case licensing. Case is a morphosyntactic property or feature of noun phrases or Determiner Phrases. The purpose of Case is to encode the function of a determiner phrase in a sentence; and, to be licensed, the Case feature of the DP has to be checked against a corresponding Case feature on a Case-licensing syntactic head. In the same way as Agr checks Phi-features of DPs, so are their Case features checked by licensing heads such as verb, prepositions and Agrs in English. Santorini and Kroch (2007) posit that if every Case feature stands in proper relationship with matching partners, then the sentence is sure to converge. Case features include nominative, accusative/objective and possessive/genitive.

A general assumption in the literature is that the subject of a finite clause is in the nominative Case and the complement of a finite verb is in the accusative Case. These are

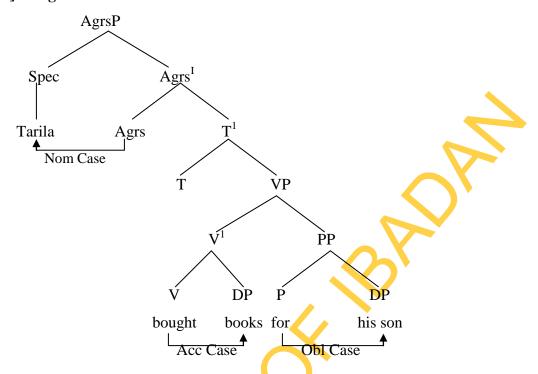
semantic Arguments of the predicate. The Nominative Case identifies a word as the subject of a sentence. The accusative case marks a DP as the object or complement of a verb. Thus, the syntactic positions occupied by the subject and the complement of the predicate are described as A-positions, which are Case-marked positions and are occupied by arguments (Branigan 2004). It does seem therefore, that syntactic knowledge is organized around verbs. This is the focus of Case which analyzes sentences in terms of the semantic relations of the nouns or determiner phrases and other components to the main verb.

The genitive indicates the possessor of something, and is also called possessive Case. The object of a preposition is assigned accusative or oblique case. In this study, oblique case is understood as a kind of accusative case, an indirect accusative case assignment. In MP, Case licensing is done in Spec-head, head-spec and headed-complement configurations (Santorini and Kroch 2007). The nominative case is licensed and checked by inflection or Agrs/T. Some examples are given in Table [7] below. Genitive assignment is shown on a separate Table, [8].

Table 7: Case-marking in English

S/N	Nominative Case	Agr/T	Verb	Accusative Case	Accusative (Oblique) Case
1	Tarila		bought	books	for his son
2	Tari	has	sold	his car	to his friend
3	People	must	clean	their surroundings	
4	Dayo		plucked	oranges	for his friends
5	The police		shot	the thief	

[119] English



The DP 'Tarila' and Agrs are in Spec-head relationship where Agrs, as an inflectional head, governs the Spec- Agrs node occupied by the DP. It is in this respect that. Agrs checks and licenses nominative Case of the subject DP. In the VP, V and DP are in head-complement relationship in which the head (bought) licenses accusative or objective Case to the complement DP (books). The tree diagram also shows that oblique (Accusative) Case in English is assigned by a preposition as seen in the PP where P and the DP are also in head-complement relationship.

Pronouns function in the same syntactic positions as lexical nouns. This means that they function in case-marked positions. Case feature is inherent in pronouns. This, according to Radford (2004) is inherent case. Consequently, pronouns are not necessarily assigned structural Case but they have to choose to operate in the case-marked syntactic position that corresponds with their inherent Case features. The Case features of a pronoun which is in a wrong case-marked position will be deemed to be uninterpretable. Let us illustrate this argument with the following examples.

[120]a. We saw them

b. *We saw they

The verb 'saw' is the head and focal point of the derivations in [120]. It has head, Specifier and Complement features. Its head feature is 'a simple past tense verb'; its Specifier feature is 'a Nominative Case DP', while its Complement feature is 'an Accusative Case DP'. In [120a], the derivation satisfies the Case feature requirements or the Specifier and Complement features of the verb. Or, that the pronouns with inherent Case features are occupying the appropriate Case-marked positions in the structure. And this implies that all the pronominal DPs are interpretable at both at LF and PF. The Nominative and Accusative Case features are checked by Agrs and Agro respectively. Conversely, the derivation in [120b] fails to converge because there is an uninterpretable Case of the Complement DP. The pronoun 'they' has Nominative Case feature but it is found in a position case-marked for an Accusative DP and its features are uniterpretable and ineliminable. This conclusion is in line with the 'Feature Visibility Convention (Radford 2004:289) which states that 'an uninterpretable feature in the syntax is invisible to the semantic component but remains visible in the syntactic component

3.8. Case-marking/checking in Izon

The verbal category occupies the sentence—final position in the Izon clause structure by virtue of the SOV syntactic structure. This is to say that the subject and the object DPs, which are the two main *Arguments* of the verb, are contiguously located and both precede the verb. Therefore, although the verb occurs at clause-final position, it has positions that are licensed for the various Cases preceding it. The following sentences illustrate this contention.

[121]a. Tobou ma (Nom) alala-mo (Acc) surumi (V)
Girl the plate+pl det wash+pst
'The girl washed the plates'

[121]b Inbigidi mọ (Nom) furukimi bị (Acc) tein-ngimi (V)

Police the thief the shoot+fut

'The police will shoot the thief'

[121]c Kimi bi (Nom) ogbein-mo (Acc) kati-dou (V)

Man the mangoe+pl det pluck+perf

'The man has plucked the mangoes'

[121]d Ebiere (Nom) fun (Acc) goyemi

Ebiere book a read+prog

'Ebiere is reading a book

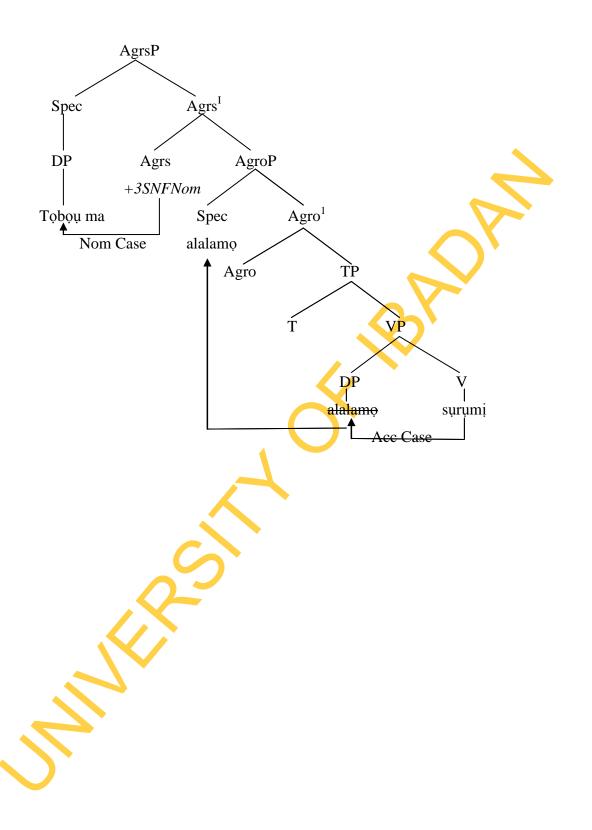
Table 8: Case –marking in Izon

S/N	Nominative Case Subject NP	Case Assigner (Agrs)	Accusative Case Object NP	Verb/Case Assigner
1	Tọbọụ-ma	ma	alala-mo	suru-mi
2.	Įmbigidi mo	mọ	furukimi bi	tein-ngimi
3.	Kimi bi	bị	ogbein-mo	kati-dou
4.	Ebiere	Ø	fun bị	go-yemi

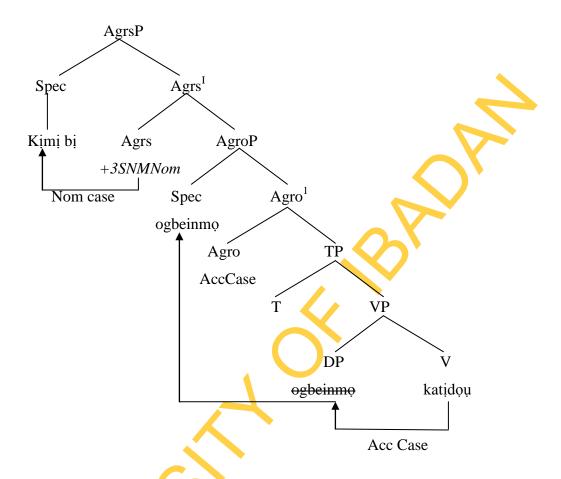
The verbs in these sentences are *surumi*, *tein-ngimi*, *katidou* and *goyemi*. As we have noted above, all the arguments are located to the left of the verb. Therefore, Case-marking by the verb is done leftwards as against what is obtainable in English syntax where Accusative and oblique Cases are assigned to the right by V and P respectively. Therefore, case directionality and control differs in the two languages.

In English, Case licensing is done under Spec-head, head-spec and spec-complement configurations (Santorini and Kroch 2007). This is not exactly the case in Izon. The Spec-head relationship that enables nominative case licensing by Agrs is similar in English and Izon because in both languages, the subject DP occupies the Spec-Agrs position at the head of the derivation. However, the relationship of the verb and its complement in Izon is not one of head-complement but complement-head relationship. Nevertheless, the head of VP still licenses accusative case to its complement DP but the directionality of the checking differs from what obtains in English. This ordinarily should be a feature of SOV languages since the object precedes the verb. The trees in [122] and [123] below illustrate the assignment of Case in Izon.

[122] Tobou ma alala-mo surumi (Izon)



[123] Kimi bi ogbeimo katimi (Izon)



Directionality of Case and theta-marking has been identified as a parameter that could differentiate languages. Our analyses above has also shown that directionality of Case constitutes a parametric variation between the syntactic configuration and rules of English and Izon This distinction which is common to both Case and Theta licensing has been alluded to in Ndimele (1992). English is a head-initial language while Izon is a head-final language (Ndimele, 1992:38-9). This means that in Izon, the complements precede their heads in the syntactic arrangement. The following illustrations with various types of phrases illuminate this contention.

With this lexical arrangement, it follows that while the English verb and preposition license theta and Case-marking properties to the right, since it is the head that performs this function, the Izon verb and preposition license theta and Case-marking properties to the left. Ndimele (1992:39) confirms that "in languages like Kolokuma and other Ijoid group of languages spoken in Nigeria, the Case and Θ-marking properties of the verb are

assigned to the left of V'. This, according to Ndimele, is a common feature of SOV languages.

3.9. The 's genitive case in English

There are two types of genitives (or possessives) in English. One is the 'free' or 'of' genitive. This one uses the preposition 'of' to mark the possessive relationship between NPs. The other is called construct or s-genitive. The s-genitive qualifies as a functor in the sense that it can occupy the position of the functional head, D in a determiner phrase in just the same way as an explicit determiner or a pronoun. This means that the possessive (POSS) which expresses the semantic content of 'who owns what' is in complementary distribution with other determiners in the same DP (Chomsky 1995:59; Carnie 2007:200).

Table 9: Genitive Case in English

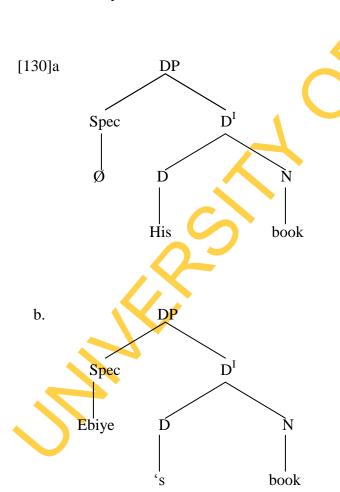
S/N	Possessor	Case	Possessed	of-Genitive	Case
		Assigner		Assi <mark>g</mark> ner	Possessor
1	People	's	Parliament		
2	Men	's	Club		
3	God	's	Glory		
4			Parliament	of	the people
5			A club	of	men
6			The book	of	Job
7			The glory	of	God

Table [9] shows that genitive is assigned either by 's-genitive (1-3) or of-genitive (4-7). Some linguists (eg Riemsdijk and Williams 1986; Ndimele 1991) contend that genitive Case in English is assigned by a noun but following the DP Hypothesis, it does seem that the genitive case assigner is the 's-genitive or of-genitive. Abney's (1987) DP hypothesis ensures that NPs are characterized as DPs headed by determiners. Carnie (2007:200) characterizes the 's-genitive as a determiner because it is in complementary distribution with determiners. It follows, therefore, that the 's-genitive heads DPs such as **People's**, **Men's**, **and God's**. Ndimele (1991:44) also agrees that Case assigners are heads of projections. If heads assign case, and Webelhuth (1995:89-90) and Carnie (2007:198) have

posited that the 's-genitive is a determiner and therefore heads a DP), it is reasonable to believe that genitive Case is assigned by the 's-genitive, and the of-genitive by the preposition 'of'. This argument is not necessarily applicable to Izon as we shall see in the following section.

As a functional head, the s-genitive assigns genitive Case to the Specifier. The paradigmatic relationship between the POSS and other determiners and its Case assigning role are expressed in the phrases below.

- [129] a. His book
 - b. That book
 - c. Ebiye's book



In [129] above, the genitive case assigners are the determiner 'his' and the genitive 's'. Both of these are considered to be heads of their respective DPs. There are divergent views

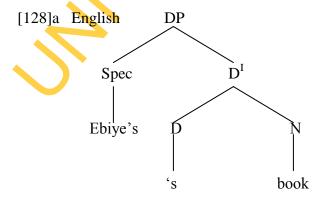
on genitive case assigners. While some linguists (eg. Riemsdijk and Williams 1986) say that a noun assigns genitive case, others such as Carnie (2007:200) argue that genitive case is assigned by s-genitive since it is categorized as a functional head and in complementary distribution with other determiners in the DP. If a DP is the projection of a determiner, then a DP with a genitive determiner is a projection of the genitive 's'.

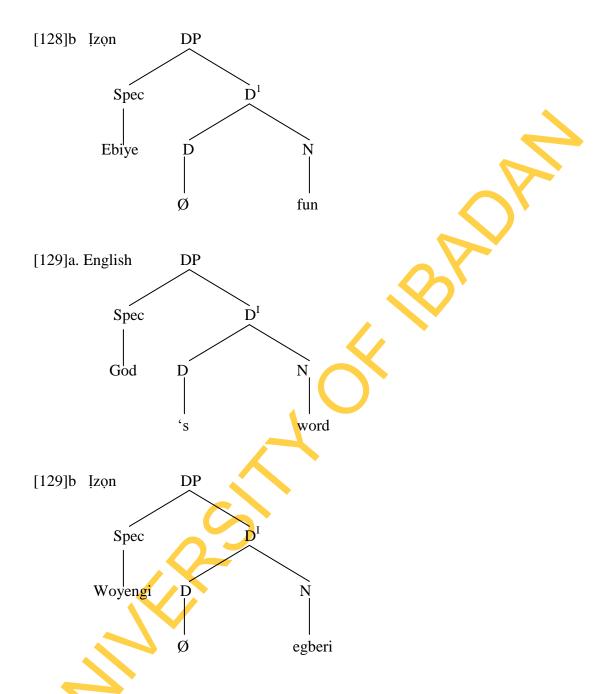
3.10. The 's-genitive Case in Izon

In Izon, however, the genitive is a covert element. It lacks morphological content and so does not have phonological representation at PF. Therefore, it can only be interpreted at the level of LF. For instance, the DP involving an s-genitive simply consists of the possessor and the possessed. The theoretical implication is that the POSS in Izon is implicit in the Specifier of DP and its Case assignment function is covertly performed. In essence, therefore, the projection of the possessive in Izon has LF representation but lacks PF representation. It is plausible to argue that genitive case in Izon is assigned by the noun since there are no overt genitive markers. Consider the examples below.

[127]a . Ebiye fun
Ebiye book
Ebiye's book

b. Woyengi egberiGod wordGod's word





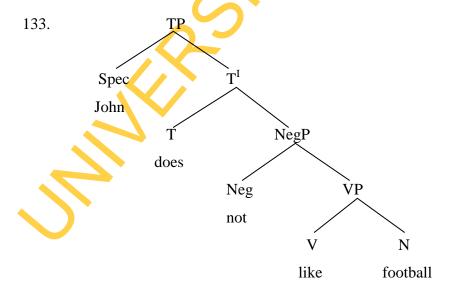
From the foregoing illustrations, it could be inferred that the projection of possessive element (POSS) in Izon is covert while it is overt in English. There is no overt morphological element or associative phoneme that serves as a POSS marker. The problem then is the determination of the features of the head of a maximal projection. This fundamental issue finds a plausible solution in Owolabi (1976) and Yuka (1997) who characterize possessive case-marking in Yoruba and Lamnso respectively as a noun-noun

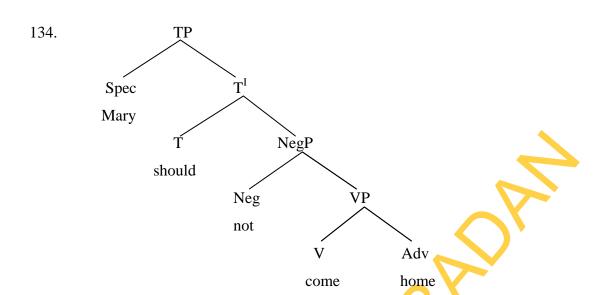
construction in which the first noun is the possessor while the second is the possessed. This is applicable to Izon as the data suggest. Therefore, the diagrams in [128b] and [129b] are not appropriate representations of possessive case in Izon.

3.11. Negation in English

Negation is regarded as a functional head which projects maximally into Negation phrases {NegP}. Radford {1997: 232} explains that negation is expressed in English mostly by the use of the negative particle 'not' with the assistance of the 'do'. This is called 'do support'. The following are some examples.

- 130a. John likes football
 - b. John does not like football
- 131a. John likes playing football
 - b. John does not like playing football
- 132a. Mary should come home
 - b. Mary should not come home





The negation particle 'not' heads NegP in the above derivations. But the derivations could not have converged without the do-support. Radford (2004:174) further explains that T has an 'unattached tense affix with a weak V-feature'. This free tense affix must be attached in order for the derivation not to crash. This requirement motivates the introduction of the do-auxiliary at T node which now provides tense features for the main verb, 'like'. This explains why [135a] is ungrammatical while [135b] is grammatical.

135a. *John not like football

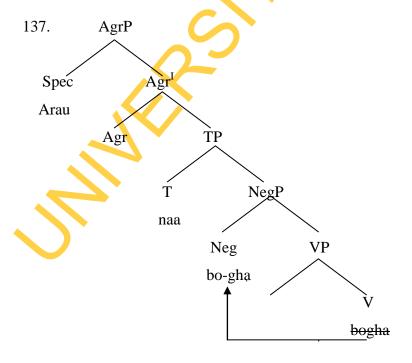
b. John does not like football

3.12. Negation in Izon

There are two particles that mark Negation in Izon. These are *gha* and **kumo**. The Negative operator *gha* is used for expressing the negation of declarative and interrogative clauses while *kumo* is used to express the negation of the interrogative and imperative clauses. The illustrations in {136} below show the derivation of negation in Izon.

- b. Arau bo-gha {Negative}Subj come+Neg + pst'She did not come'
- c. Arau naa bo-gha {Negative}Subj yet come + Neg'She has not come'

The derivations in [136] consist of subject DP and VP. The Head features of the verb in [136]a are singular, present tense and perfective aspect. The number feature is, however, not morphologically realized since Izon verbs do not have +N Agr features and, therefore, do not inflect for agreement. Agr is only interpretable at LF. Tense is also not morphologically marked in a negative construction because it has been noticed that tense and aspect do not function together with the same verb. Similarly in the negative derivations in [136] a and b, tense is not morphologically realized. The difference in (b) and (c) is the presence of an overt aspect marker *naa* in (c). This word is the equivalent of the English modal verbs **has/have.** Following minimalist assumptions, the verb is negated at the lexicon like verbal inflections and is attracted to Negation node to check and license the negation feature as shown in the diagram [137] below.



[138] below provides further data to illustrate negation in Izon.

[138] a. Arau bo {Imperative}

She come

'She should come'

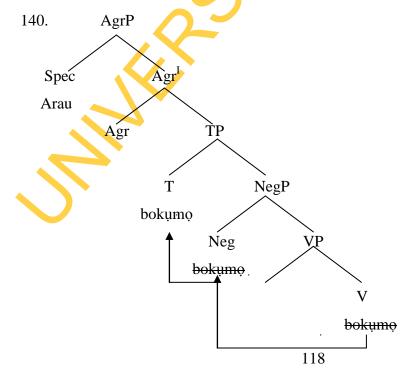
- b. Arau bo-kumo {Negative}Subj come + Neg'She should not come'
- [139] a. O bee da you

 Them tell to paddle

 'Tell them to paddle'.
 - b. O bee you kumoThem tell paddle not'Don't tell them to paddle'
 - c. O bee da you kumo

 Them tell to paddle not

 'Tell them not to paddle'



Our observation is that the negative particle, like the question affix, enters the computation and gets merged with the verb before projecting to the interface levels of LF and PF. The initial state grammar of Izon must be configured that way; that is why it targets the verb and gets a merger with it. Since the negative operator is an affix to the verb, the node V has to move up to NegP for checking and licensing of its negation features. The movement does not terminate there. The verb is also carrying tense features; therefore, it further moves up to T to check these morphosyntactic features. This conclusion is supported by the position of Waters {2000:206} that one of the common ways to negate a sentence among some Niger-Congo languages is to modify the verbal word. This modification uses an affix in the formation of the verb, changing it from positive to negative. He refers to this process as 'negation internal to the verb'. We may summarize this section by stating that:

- (1) the suffixes 'gha' and 'kumo' are the standard negation operators in Izon;
- (2) The negation operators are postverbal;
- (3) in the negation operation of a clause with perfective aspect, the auxiliary enclitic transforms to *naa* which itself has negative features. It means something like 'has not yet' and transposes to T node.

There is a fundamental difference between the expressions of negation in English and Izon in the sense that Izon expresses negation synthetically with particles that are morphologically suffixed to the verb. This means that the initial state grammar of Izon which resides in the Language Faculty of the brain is configured project negative markers as post-verbal affixes. On the other hand, English initial state grammar is configured to express negation analytically with a particle that is external to the verb and it is pre-verbal. In other words, the English negation operator is a free morpheme while the Izon negation operator is a bound morpheme. Secondly, the negative particles in Izon are post-verbal {being suffixes} while in English the negative particle is preverbal.

These morphosyntactic parametric variations are actually anticipated in UG. Haegeman and Raffaella {1996:118} explain that different languages adopt one or more of a number of strategies. One of them is the placement of the negation marker to precede the finite verb in a linear order. This negative marker is regarded in the literature as the head of

negation phrase {NegP}. This is used in English. Another strategy for expressing sentential negation is the use of two negation markers, one preceding and the other following the finite verb. This, according to Haegeman and Raffaella (1996), is common with French and other Romance languages. A third strategy is the use of post-verbal negation marker. This study reveals that Izon belongs to this group. The various examples and diagrams above illustrate these parametric variations between English and Izon.

3.13. Summary

This chapter looked at some functional categories in English and Izon. The data which represent natural occurrences and instantiation of both languages was analyzed based on the Minimalist Program. The aim has been to identify parametric variations between the morphosyntactic features and processes of English and Izon, especially using the Unified-X-bar theoretical universal articulated clause structure. Izon is an SOV language and this feature determines almost every morphosyntactic process in the language.

Agreement {phi} features are encoded in determiners and pronouns in both English and Izon. These categories elaborately distinguish person, number and gender features. One major parametric variation the study revealed is that whereas English referential determiners inherently express plurality such as 'these', 'those', etc, enclitic suffixes are used to express plurality in Izon as in 'beimo' (i.e. this+pl = these), 'enimo' (i.e. that+pl = those). In respect of number Agreement features, these Izon determiners behave like lexical nouns by inflecting for number. Consequently, also, Agr feature checking is focused on the enclitics.

Agreement features are also encoded in pronouns in both languages. Number in DPs is expressed with the use of bound morphemes in English namely, 's', 'es' and 'ies', and by two enclitic suffixes - 'mọ' and ''ama/omọ/' in Izọn. The former is definite plural and the later indefinite plural. The implication is that Izọn plural morphemes possess dual semantic values of number feature and reference. This duality also marks a parametric variation between English and Izọn since definiteness and indefiniteness are not values of English determiners.

Izon syntax permits the projection of multiple determiners in a single DP in which both functors participate in Agreement relations with the noun. This phenomenon necessitates the derivation of Agr from multiple sources (Zwart 2003). Carnie (2007:198) argues, for instance, that determiners are heads of DPs and there can only be one head in a DP. The more notable parametric variation is that while English verbs inflect for agreement, Izon verbs do not. Also noteworthy is the fact that movement of lexical DPs for checking of their morphological features at inflectional heads occurs before Spell Out because these features are interpretable and visible at the PF after Spell Out.

Tense and Aspect are similarly expressed synthetically (and not analytically expressed) with the help of enclitic suffixes '-mi' and 'ngimi' for past and future tenses respectively. Perfective aspect is marked with '-dou'; present imperfective is marked with 'yemi' while past imperfective aspect is marked with 'timi'. However, whereas English verbs and auxiliaries inflect for number to agree with the number feature of the Specifier DP, Izon verbs do not. Consequently, therefore, movement of verbs to T node for checking of tense feature in English occurs before Spell Out, the reverse is the case with verbs in Izon.

In Case licensing, the issue which determines parameters is directionality. While Accusative Case licensing is done on constituents on the right of the verb and the preposition in English, the reverse direction is observed in Izon syntax. This is understandably conditioned by the SOV configuration of Izon clause structure, and is a demonstration that English is a head initial language while Izon is head final.

CHAPTER FOUR

THE COMPLEMENTIZER AND FEATURE CHECKING

4.1. Introduction

The Complementizer (COMP or C) is a functional category which introduces a clausal complement of a verb. Complementizers are otherwise referred to as wh-operators. In minimalist syntax, every clause is believed to contain a Complementizer node as a presubject constituent. This constituent may be overt in some languages and covert in some, such as English (Radford 1988, 2004). It is argued that the presence of the Complementizer constituent makes it possible for auxiliary inversion in interrogative clauses. The COMP, according to Pesetsky and Torrego (1999) and Branigan (2004) possesses wh feature, an uninterpretable tense (T) feature as well as Agreement (Agr) features which attract wh-operators and motivates their movement. This movement is to enable the COMP to check its features.

Fundamentally, wh-movement involves movement of wh-expressions such as 'who' or 'which house' into the Specifier position of Complementizer Phrase (CP) so that their wh-features could be checked against corresponding wh-features of C functional head. Wh-expressions also function as subordinators. They include such words as *who*, *what*, *which*, *where*, *when*, *why* and *how*, *if* and *whether*. A CP comprises a head C and Agr Phrase (AgrP) or Tense Phrase (TP). C can be filled by a Complementizer or a preposed auxiliary. The Complementizers 'who', 'what' and 'which' also have DP features such as third person, neuter gender and nominative Case, but only 'who' has +human feature. Some others such as 'when', 'why' and 'how' are adverbial in nature.

A related issue to wh-operator movement is V-movement and I-movement. The crux of this chapter is to explore how these movement operations take place especially in relation to tense feature checking in English and Izon languages. This chapter also discusses some other functional categories such as prepositions/postpositions and coordinating conjunctions. The aim is to identify how these elements perform their syntactic functions in the two languages under study. Finally, attention is also given to passive constructions, focus and topicalization.

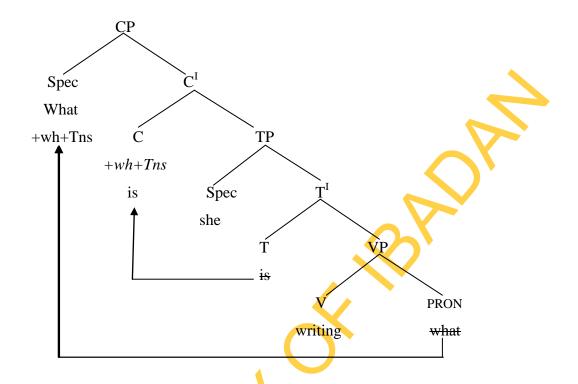
4.2. Wh-Movement in English

In this section, we discuss why and how the COMP moves in syntactic derivations. Wh-movement is a kind of movement in which linguistic constituents move from one position in a derivation to another position. Wh-movement generally occurs in interrogations transformations; that is, questions and Complementizer phrases headed by wh-expressions as shown in the following examples.

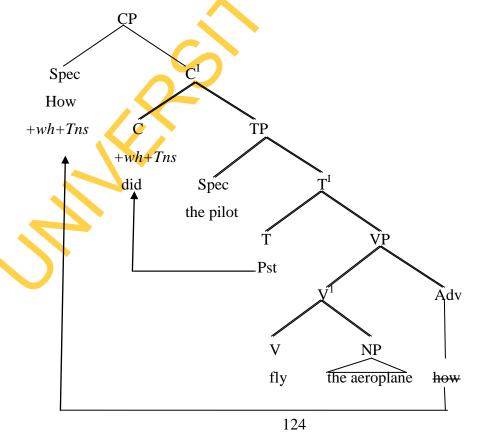
- [141]. a. She is writing a letter.
 - b. She is writing **what**?
 - c. **What** is she writing?
- [142] a. He is a pilot.
 - b. He is **what**?
 - c. **What** is he?
- [143] a. The pilot flew the aeroplane acrobatically
 - b. The pilot flew the aeroplane **how**?
 - c. **How** did the pilot fly the aeroplane?
- [144] a. The students will go on an excursion to Obudu Cattle Ranch.
 - b. The students will go on an excursion to where?
 - c. Where will the students go on an excursion to?

The wh-expressions in the examples above are 'what', 'where' and 'how'. There is an overt movement of these expressions from sentence-final position to sentence-initial position. The sentence-initial position in these sentences is neither Specifier of Agrs or of TP but the Specifier of CP. The CP exists as a pre-AgrsP or pre-TP position. C which is the head of CP is said to have wh- feature and tense feature. It is these features that attract wh-expressions to Spec-CP. Radford (2004) and Branigan (2004) affirm that the landing site of wh-expressions is the Specifier of the preposed CP while inverted auxiliaries occupy the head C position. These movements are illustrated in the Tree diagrams below.

[145]. What is she writing?



[146]. How did the pilot fly the aeroplane?



Note that the wh-expression at the extraction site is not represented by a trace but simply crossed with a strikethrough. This is to show that movement is a copying operation whereby a moved item leaves a trace or drops a null copy of itself at the original position and forms a chain with the item at the landing site. Trace or copy possesses the Agr properties of the moved constituent, but not lacks phonetic form.

4.3. Asymmetry in subject and non-subject wh-movement in English

A basic assumption in wh-movement is that there is an asymmetry between subject and non-subject wh-movement (Pesetsky and Torrego 2000, Branigan 2004, Chomsky 2001, Rizzi 1990, 1997, etc). This asymmetry refers to subject and non-subject wh-movement. This means that long distance wh-movement occurs with non-subject wh-operators while subject wh-operators are exempted from long distance movement. Pesetsky and Torrego (2000) suggest that when wh-operators move, the movement is motivated by T(ense) to C movement for the purpose of checking off the tense and wh-features of the moved constituent. The following data provide some examples of root wh-questions in English generated from affirmative sentence.

[147]a. CP [TP [DP John] [VP [v washed] [DP the car]]]

b. CP [Spec What [C did [TP [DP John] [VP [V wash] [DP t]]]]

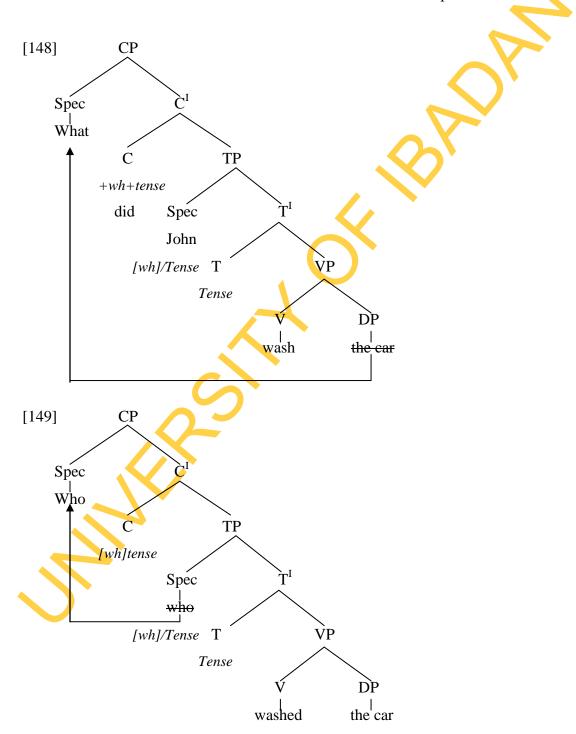
(Non-subject wh-operator)

c. CP [Spec Who₁ [TP [DP t₁ [V washed] [DP the car]]]

(Subject wh-operator)

In [147b], the wh-expression *what* moves up to Spec-CP node after replacing the subject DP *the car* which was the complement of V with Accusattive case feature. By virtue of the movement, the wh-operator is now the subject of the interrogative or what is technically called Specifier of the Complementiser Phrase. Following Branigan (2004), Agr or T checks the case features of the wh-operator. Number feature is either uninterruptible or may be regarded as indeterminate. As it has been noted earlier on, the Complementizers 'who', what' and 'which' possess not only wh and tense features but also agreement

features of person (third), neuter gender and nominative case. In [147c], the subject DP makes a short movement up the derivation form Spec-TP to Spec-CP node and becomes the subject of the interrogative clause. This movement ensures that the case, tense and whfeatures of the operator are checked. This is why the auxiliary *did* in [147b] moves from T to C above TP. Tense raises to C node to be accessible to the wh-phrase.



In [148] and [149], the movement involves object DPs that have been transformed into whexpressions. Following Branigan (2004:32), the tense and wh-features of C simply attract the wh-expression from within the VP to Spec-CP in order to check its wh- and tense features. But in [149], the moving constituent is nominative and subject DP which moves up to CP and becomes the subject and head of the interrogative clause. Does wh-movement occur in Izon? Would there also be an asymmetry between subject and non-subject wh-movement? These questions will be answered in the next few sections.

4.4. Wh-movement in Izon

The structure of the wh-interrogative clause in Izon corresponds to the structure of the English interrogative. In the derivation of an interrogative from a conventional declarative sentence, the wh-expression is usually transposed to the sentence-initial position (Spec-CP) of the sentence. In the MP, the sentence has an abstract CP at the highest rung above the subject DP The CP is headed by an abstract C which has EPP, wh and tense features. Following minimalist principles, it is the abstract EPP features and morphosyntactic features of the C, (that is wh- and tense features) that attract the wh-expressions to move to Spec-CP and leaves a null copy of the moved wh-expression at the extraction site. Wh-expressions in Izon do not necessarily begin with the letters wh but qualify to be described as such because they function as interrogative operators and there is a certain uniformity among them. They are outlined below.

[150]	Dengi	 which
	Dengiye/Teye	 what
	Dengibo/Tebo	 who/whose
	Dengiyo/Teyo	 where
	Dengitu/Tetu	 why
	Dengibara/Tebara	 how
	Dengiseri/Teseri	 when

The pairs of wh-expressions above are synonyms. Both are used interchangeably in Kolokuma dialect while other dialects of Izon make use of either of them. There is a

morphological and semantic uniformity about these interrogative operators. First, they all begin with 'dengi' or 'te' consistently. The morphemes *dengi* and *te* are interchangeable in the context of interrogatives. But if taken independently, they are different. For example, *dengi* is a free morpheme, indeed, a lexeme which has an independent meaning in *which*. On the other hand, *te* is a bound morpheme and does not have an independent meaning when it is not prefixed to other words or morphemes. These morphemes combine with other morphemes to derive the various interrogative operators in Izon. The morphological composition and semantics of the words can be better explained in the illustrations below.

b. Dengi + bo = dengibo

$$Te + bo = tebo$$
 who
 $Which + person = which person$

The morphological constitution of the words firmly establishes them as wh-expressions. These interrogatives also perform (simple) movements operations from either subject DP or object DP positions to CP. The data below would illustrate these movements.

```
[152]a. [CP [TP [DP Iné ere bi] [DP teye?]]]

Your name the what?

'Your name is what?'
```

- b. [CP **Teye** ki [TP [DP ine ere t?]]] (Interrogative)
 What foc your name?
 'What is your name?'
- c. [CP Dengibo ki [TP [DP fulou bi [VP tuomi?]]]]

 Who foc soup the cooked?

 'Who cooked the soup?'
- d. [CP Dengiyo ko [TP [DP [VP muyemi?]]]]

 Where foc going?

 'Where (are you) going?'
- e. [TP [DP Árị [CP **dengiy**o **ko** [TP [DP [VP muyemi?]]]]]]

 You, where foc going?

 'Where (are) you going to?'

The data of [152b] is a transformation of [152a] for the fact that the wh-expression 'teye' moves from within the VP to CP above AgrsP or TP. Similar movements are observed in [152d] and [152e]. There are, however, two significant observations. First, the movement of wh-expressions to CP compels their occurrence with a functional particle ki (for nominals) or its allomorph $k\rho$ (for adverbials). These functional particles seem to license the landing of the wh-expression at CP. The second observation is the permission of null or

covert DP in [152d] which, in English, is not permissible and cannot be a convergent derivation.

Example [152d] lacks an overt DP whereas [152e] has an overt pronoun. The elision of DPs in these interrogatives means that Agreement, tense and Case features are covert, and feature checking could only be done covertly at LF after Spell Out. This is in agreement with what has been observed in chapter three that verbs in Izon do not inflect to agree with the number feature of its Specifier DP. This means that the agreement feature of verbs is uninterpretable and not visible. Moreover, Izon also seems to lack auxiliary verbs. Consequently, in these and similar derivations in Izon, Agreement features are interpretable only at the level of LF but uninterpretable at PF. The implication for linguistic theory is the parametric variation this phenomenon creates between English and Izon syntax because in similar derivations in English, the Specifier DP would be obligatorily projected to PF in line with the EPP. As a result, Agreement and Tense are interpretable at PF in English.

Also to be noted is the fact that the movement of the interrogative operator to CP leads to an obligatory insertion of either of the functional particles 'ki' or 'ko' immediately below the operator. These functional elements have multiple functions. For instance, ki is a focus marker and a Nominative Case assigner. It collocates with interrogatives relating to things (teye – what; dengi - which) as in [152a & b] and persons (dengibo - who) as in [152c]. On the other hand, ko collocates with adverbial whoperators relating to places (dengiyo - where) as in [152d & e], and those that express reason (dengitu – why). This researcher holds the view that the obligatory pied-piping movement and collocation of the focus particles 'ki' and 'ko' with wh-expressions implies that they possess wh-features. In reality, without either of these functional particles, the wh-expression is not licensed and the interrogative derivation is sure to crash.

Generally, as we have mentioned elsewhere, the auxiliary verb 'to be' and its allomorphs seem to be overtly non-existent. However, its meaning is implicitly interpretable in the imperfective aspect morphemes *yemi* (is + -ing) and *timi* (was + -ing). The first marks present progressive aspect and the second marks past progressive aspect. In some cases, in addition to the interrogative operator, the adjunction of a tone morpheme to the last word of the sentence is also used to mark interrogation. Perhaps, the tone

morpheme may be better characterized as a toneme, which is a phoneme in a tone language. The tone morphemes or tonemes that are commonly used in this sense are:

- i. 'ó'
- ii. 'á'
- iii. 'é'

The following data illustrate how these interrogative operators and tone morphemes are used in Izon.

[153] a. **Dengi yowei ki** aki-ó?

Which paddle foc take?

'Which paddle should I take?'

b. **Kwokwo dengiyo ko** muyemi-ó?

Kwokwo where foc going?

'Where is Kwokwo going to?'

c.. **Dengibo ki** bo buogha-ó?

Who foc come agree-not?

'Who refuses to come?'

In [153] a, b, and c, the interrogative operators **dengi** (which), **dengiyo** (where) and **dengibo** (who) climb a rung from TP to sentence-initial position as a constituents of CP. Note that there is no subject (nominative case) DP in [153] (a) and (c). In all the examples, the interrogative marker is reinforced by a sentence terminal phoneme 'ó' as a clitic to the verb to produce an interrogative tone.

4.5. Asymmetry in subject and non-subject wh-movement in Izon

We have noted the asymmetry of subject and non-subject wh-movement in English in section 4.3, whereby subject wh-operators make short movement to CP while non-subject wh-operators undertake longer distance movements from within VP to CP. This

section is to demonstrate if and how similar asymmetry of wh-operator movement occurs in Izon. The similarity or difference will be evident from the following data.

[154] a [CP [TP [DP Ebi [VP [DP aru bi [V suru-mi]]]]]]

Ebi car the wash+pst

'Ebi washed the car'

b. [CP **Dengibo**₁ **ki** [TP [DP t₁ [VP [DP aru bi [V suru- mi?]]]]]]

Who focNom car the wash+pst? (Subj wh-movement) 'Who washed the car?'

- c. [CP **Teye**₁ **ki** [TP [DP Ebi mo [VP [DP t [V suru-mi?]]]]]]]

 What focAcc Ebi foc Nom wash+pst? (Object wh-movement)

 'What did Ebi wash?'
- d. [CP **Dengi arų** 1 **ki** [TP [DP Ebi mọ [VP [DP t₁ [v sụrụ-mị?]]]]]] (Obj wh-movement)

 Which car *focAcc* Ebi *Nom* wash+pst?

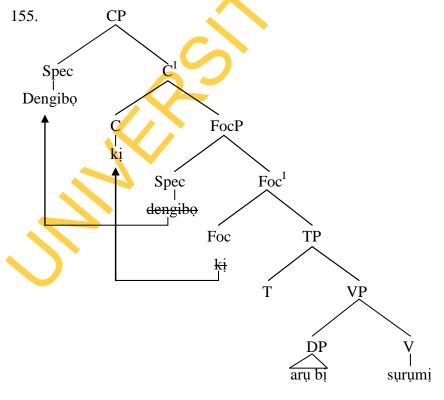
 'Which car did Ebi wash?'
- f. [CP **Dengibo aru**₁ **ki** [TP [DP Ebi mọ [VP [DP t₁ [v sụru-mi]]]]]] (Obj wh-movement)

 Whose car focAcc Ebi foc Nom wash?

 'Whose car did Ebi wash?'

[154a] is an affirmative or indicative sentence having the canonical SOV structure. [154b] to [154e] are interrogatives headed by wh-operators such as *dengibo* (who) in [b], teye (what) in [c], *dengi* (which) in [d] and *dengibo* (whose) in [e]. All the wh-expressions are in sentence-initial positions as in English interrogative sentences. There are both subject and non-subject A-movement. This is an indication of movement of the wh-expression to CP in Izon as are found in English. But how they get to CP is what this section will be exploring.

In [154b] the subject of the sentence is the constituent that is questioned. Subjects occupy the highest rung (only below the phonologically abstract CP) of the derivation in both English and Izon, that is, Spec-TP as attested to by Branigan (2004). So, as in English, the wh-question word in Izon replaces the lexical subject in Spec-TP and is attracted by C to Spec-CP node. Why? The Spec-TP node in the internalized grammar does not have wh-features to satisfy the retention of a wh-expression. In this respect, it can be inferred that subject wh-movement in English and Izon are similar. However, the derivation would not have converged if the functional agentive element ki had not been inserted immediately after or below the wh-word. However, there are some derivations that may already have the ki particle at T following the wh-operator as in [156] below. In such cases, what is experienced is pied-piping movement. This particle contributes meaningfully to the successful convergence of all derivations involving wh-movement because it has the wh and (nominative) Case features of the wh-expression dengibo (who). Not only that; it is reasonable to suggest that ki also has tense and wh-features. These features attract and necessitate the raising of the wh-expression dengibo to Spec-CP to check its wh-feature. However, because features required for checking are in the particle ki, the checking operation cannot be completed. There is therefore a minimal A-movement.



It is observed that the functional particle ki, accompanies wh-operators in Izon in order to ensure that the derivation does not crash after Spell-Out. This argument derives from the fact that wherever a wh-question operator appears, it is usually immediately followed syntactically by the 'ki' focus element, principally because, as we have suggested above, it licenses case, tense and wh-features of the wh-operator. It is plausible to suggest that the functional element ki is carrying EPP and wh-feature "belonging", so to speak, to the wh-operator, hence, the occurrence of this pie-piping movement. As soon as the wh-operator moves, ki has a syntactic responsibility to also move to C to satisfy the wh-requirements of the wh-operator at Spec-CP. This ordered movement is part of the grammar of the language

To confirm that ki has Case and wh-features, we demonstrate by deleting it in [156]. Expectedly, the sentence fails to converge as the wh-word dengibo (in 157) loses its nominative case feature and becomes a hanging constituent like a 'king without a kingdom'. Consequently, [157] is an ungrammatical sentence in Izon.

- [156]. Dengibo **ki** aru bi suru-mi?

 Who foc car the wash+pst?

 'Who washed the car?'
- * Dengibo X aru bi suru-mi?

 Who car the wash+pst?

 'Who washed the car?'

So far, our discussion has been on movement of nominative wh-expression out of TP to CP and its co-occurrence with the focus marker ki. This is a short distance movement. Another movement is one that involves an accusative wh-expression out of VP to CP. In this movement, the *focus* marker ki which moves along with the wh-expression deposits not a shadow but allows a variant of itself called 'mo' to appear at its extraction site. In this context, ki now functions as a focus marker to the accusative wh-expression at Spec-CP while mo functions as the *Patient* theta marker to the object or accusative DP as

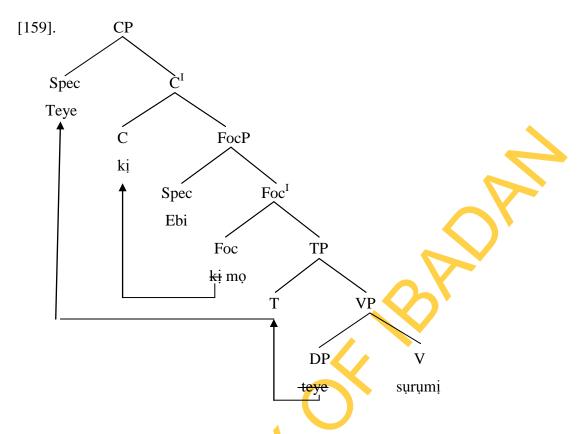
shown in the sentences below. 'Mo' has grammatical reference to, and connection with the object DP which moves out of the VP.

It is plausible to say that the wh-expression and the functional particle ki are involved in a pied-piping movement. This means that the wh-word first moves to Spec-CP and ki follows to C to save the wh-expression since the features required to be checked are in the functional particle It is therefore appropriate to assume that the wh-word and the ki functional particle form a wh-constituent. Therefore, $Move\ \alpha$ permits the movement of ki along with the wh-expression to ensure that the derived wh-interrogative does not crash.

[158]a. Ebi **teye ki** suru-mi? Ebi whay *foc* washed? 'Ebi washed what?'

[158]b. **Teye ki** Ebi **mo** suru-mi? What *foc* Ebi *foc* washed? 'What did Ebi wash?'

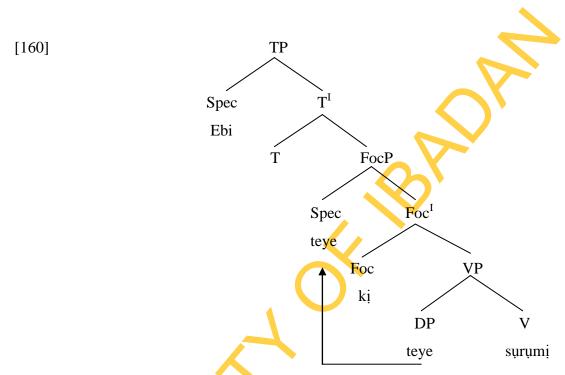
In [158a] above, 'Ebi' is the subject while 'teye' is the object or complement of the verb 'suru-mi'. 'Ki' remains as focaliser to the object wh-expression and moves along with it (as a unified wh-constituent) out of VP in a pied-piping movement to CP. It does seem that the focus/patient theta role marker is always there as a weak and uninterpretable feature in an indicative clause where the nominative DP occupies the Spec-TP node. The movement of the subject wh-expression out of TP to CP in an interrogative transformation tends to allow it to project to PF. It is plausible to suggest therefore, that ki and mo also perform Case-assigning roles to subject DPs.



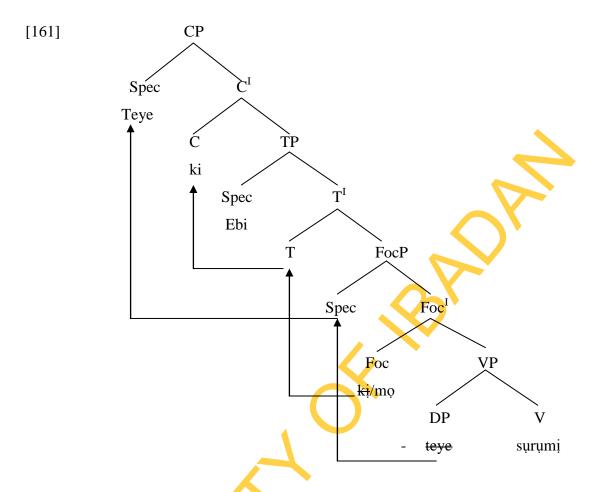
The diagram above shows that the complement of V (**teye**) which is the replacement for the lexical noun '**aru**' and which is on the left of V moves out of VP to Spec-CP through T in a *successive cyclic* movement. The wh-expressions had already received the Accusative Case of the lexical noun (aru) within the VP. This A-movement, again, is motivated by the wh-feature of C which attracts the wh-expression to Spec-CP. At the *Specifier* of CP position, the Case, EPP and the wh-features of the wh-expression would be checked. There are two *focus* particles in this derivation, namely, ki and mo. It has been noted that ki cooccurs with the wh-expression, '**teye**'. That is why both words move together to presubject (CP) position. The movement of ki allows the other functional word mo to project to PF as an overt trace of the moved object DP (the wh-expression) below an *in situ* nominative NP 'Ebi'. Obviously, ki and mo can be classified as allomorphs of the same functional elements since they lack lexical content but contribute meaningfully to the convergence and grammaticality of the sentence in Izon. Moreover, they could be said to have complementary distribution

Jayaseelan's (2004:6) view does not agree with the notion that a **focus** element moves from T to COMP. He explains that SOV languages do not move their wh-phrases

into COMP but to a fixed position to the immediate left of V. If this view is to be applied to Izon, it will show a *wh-in-situ* transformation; it is a transformation because there is a substitution the lexical noun with a wh-expression. Consequently, the tree diagram of [159] would be like [160].



This derivation shows that the wh-phrase *teye* does move to the CP at pre-subject (TP) position. Although, this too is a legitimate and convergent derivation in Izon, the focus position does not possess case, tense and wh- features to check and license the wh-expression 'teye' Since Izon permits movement of wh-expression to the CP, Jayaseelan's derivational structure could be modified, so that the wh-phrase could still move upwards in the derivation from Spec-FocP to the Spec-CP taking along with it the *foc* particle. The representation in [160] illustrates this view.



This option creates opportunity for the movement of both the wh-expression and the *focus* marker to be successive cyclic. This is a plausible derivation. T usually checks *tense* features of V. In this case, for T to check the features of V, V would need to move, first to *foc* before moving up to T node.

The implication of this conclusion is that wh-movement occurs in Izon language, and that there are two positions that serve as landing sites for wh-expressions. These are the clause-peripheral pre-subject CP, and clause-internal post-subject positions. Generally, wh-expressions move because the positions of the lexical words they substitute in interrogative transformations do not have wh-features to license their presence. But they inherit the Case and Agr features of the words they substitute and move with them. Important also is that Izon wh-expression obligatorily takes a focus phrase as its complement. The surface manifestation or PF representation of this is that the focus element associated with an operator obligatorily moves up close to the operator. This is a position immediately to its right, as corroborated in Jayaseelan (2004:15

Structurally, the Izon declarative clause has SOV structure while an interrogative clause has OSV configuration. The appropriate or correct answer to the interrogative also has SOV concatenation. However, the essential semantic content remains largely invariant since the lexical verb and at least, one of either the subject or object DP remain unchanged in a wh-interrogation since only the DP being interrogated is substituted with a wh-expression. Let us demonstrate this with some sentences.

[162]a. Ebi arų bi suru-mi? (declarative sentence = SOV)

Ebi car the washed?

'Ebi washed the car'

[162]b. Teye ki Ebi mo suru-mi? (wh-interrogation = OSV)

What foc Ebi foc washed?

'What did Ebi wash?'

[162]a. Ebi arų bi ki suru-mi? (answer = SOV)

Ebi car the foc washed?

'Ebi washed the car'

Note that even in the response to the interrogation, the DP being interrogated still projects to PF along with the **ki**. This reforces the view that the feature specifications of this focus particle include wh, and Case and Agr which properties of DP.

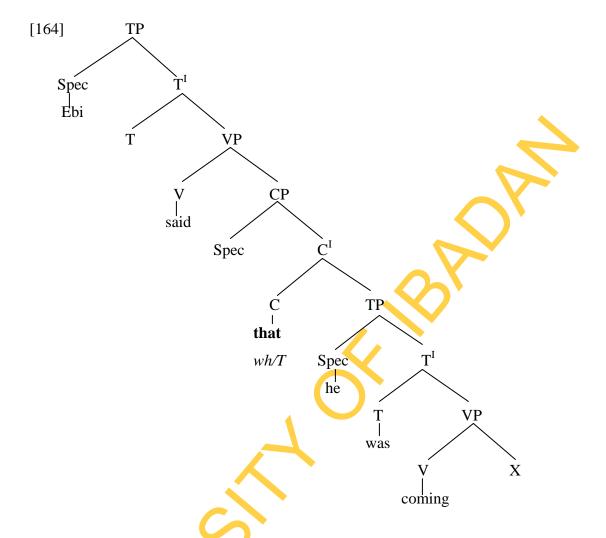
4.6. The Complementizer and feature checking in relative/embedded clauses

Relative and embedded clauses are introduced by complementizers such as *that*, *which*, *when*, *where*, *why* and *what*. This means that the entire derivation consists of two or more clauses; a matrix clause and one or more subordinate clauses. A major characteristic is the reference to an anteceded. Such relative clauses are specified as appositive relative clause (Radford 2004:233). Branigan (2004:13) posits that *Tense* is a property of wh-operators, and indeed of all Complementizers in English. Following this view, Pesetsky and Torrego (2000) have argued that COMP or C bears the tense feature

which necessitates movement of wh-expressions for the purpose of checking features because C checks either the subject DP for Agreement features or T for Tense. This means that in declarative clauses, T to C movement is realized as a placement of the Complementizer in the C position, but that C checks Tense without movement of the target in embedded questions. Examples [162a-d] shows embedded clauses in italics in English.

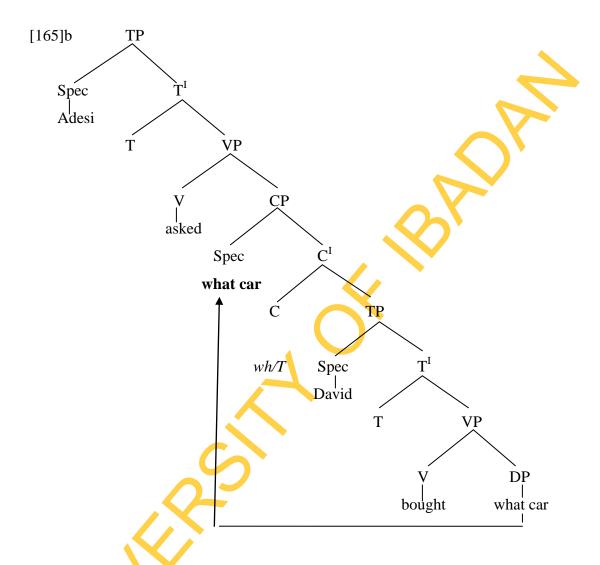
163a Ebi said that he was coming

- b Adesi asked what car David bought
- c Akpos decided [x] he would leave.
- d Preye asked why Peter was travelling



The upper TP is the matrix clause in this derivation [164] which has a CP complement headed by C⁰ (that). Pesetsky and Torrego (2000) and Branigan (2004) have suggested that C has Tense and wh features, which motivate movement for checking. Therefore, C has to target a constituent with similar Tense features, and that is the auxiliary verb *was* at T. However, overt T to C movement is barred in embedded clauses because C checks Tense without movement of the target. The auxiliary verb (*was*) is thus interpreted as 'was' at T at the point of spell-out. Apart from C checking its Tense features on T, C's wh-features are also checked on Spec-CP. All checking operations and movements take place before Spell-Out to the interface levels of LF and PF. The derivation in [163b] is similar to [163a] as an R-expression occupies the Spec-TP position within the CP. A CP is, as usual, headed by an overt and interpretable wh-phrase (such as 'what car') which moved out from TP as 'a car'.

[165]a, Adesi asked **what car** David bought? (David bought a car... Adesi asked ... David bought *t*.)



The *wh* phrase *what car* is the complement of the matrix clause as well as the head of the embedded clause. Its position in Spec-CP is justified by the fact that wh-movement is movement of wh-phrase out of TP to the Spec-CP position (Branigan 2004:17). Before *Spell-Out*, the tense feature of T checks the tense feature of C without actual movement (of T to C), after which the wh-feature of Spec-C attracts wh-operator to itself. It is at this point that Spell-Out takes place and the derivation converges at LF and PF. [163c] has an uninterpretable C in the sense that the wh-word is covert and not morphologically realized. Consequently it is an empty C category that attracts T to check its tense features.

4.7. The Complementizer and feature checking in relative/embedded clauses in Izon

In previous analysis, the SOV parameter had strong influence in creating disparities between English and Izon morphosyntactic processes. Is it true, as in English, that, C in Izon also bears the Tense feature and triggers movement for the purpose of checking? Does T to C movement exist in Izon, and is it phonetically realized? It was noted that a subject wh-phrase moves out of DP within TP to first land at Spec-Agr node, then to Spec-C. When a lexical DP is transformed to or substituted with a wh-element; it forces the insertion of a focus particle (**ki** or **ko**) which provides nominative Case features for the DP. This particle also ensures that the EPP features are satisfied at that position since a derivation must have a subject and this category must appear before spell-out (Branigan 2004). The Izon wh-interrogative derivation would certainly not converge in the absence of this focus particle. There are relative or embedded clauses (Mathews 1991:171-3)) in Izon. However, the referential function is not performed by eovert COMPs. The following data provide useful insight.

[167]a. David aru feemi (simple declarative sentence)

David car buy+pst

'David bought a car'

b. Adesi iroromi (simple declarative sentence)

Adesi ask+pst

'Adesi wondered'

c. Adesi <u>David fee</u> **aru bi** iroromi (merger of [167 a & b)

Adesi David buy car the wondered

Adesi (the car David bought) wondered.

'Adesi wondered what car David bought.'

d. Orò dau orò mietimi ye ki biimi

Their father their do+Pst prog thing foc enquired

Their father (what they were doing) enquired.

'Their father enquired what they were doing'

Example (167c) is a transformation of the indicative sentences in (167a and b) and in which (167a) has been embedded in (167b). In this complex sentence, there is no overt Complementizer which, in English, usually introduces an embedded or subordinate clause. Similarly, (167d) also lack an overt Complementizer even though the sentence contains both a matrix clause and a dependent or embedded clause (underlined). This shows that Izon does not use overt Complementizers such as the wh-expressions to introduce subordinate/embedded clauses. This confirms Waters (2000:223) view that some African languages simply have their main and complement clauses juxtaposed without an obvious Complementizer which links the two clauses. The following examples illustrate this argument.

[168]a Àrị **iné nimiwonimi kịmị mọ** gbeleimi

I your known man *foc* met

'I met a man whom you know'

[168]b **Bei kimi bi ki** ine wari korimi This man the *foc* my house built 'This is the man who built my house'

[168]c **Bei kimi bi ni** inè wari kori kimi bi This man the *foc* my house built man the This is the man who built my house'

In [168]a, the subordinate clauses is embedded in the main clause with no obvious COMP;, and in [168]b, the focus particle ki seems to perform the function of a subordinator. Then, in [168]c, another particle ni seems to be the subordinator. Therefore, a definite COMP in

relative clause cannot be determined. But it would be reasonable to suggest that the focus particles *ki* and *ni* possess wh-features which enable them to perform the subordinating function usually performed by an extant wh-expression. In sentence [168b], *ki* subordinates the clause on its left, which is *Bei kimi bi*. The copula *is* is a morphologically and phonetically null element in Izon .If this reasoning is correct, then it is the features of these particles that would be checked at C.

However, evidence from other data prove that the equivalent of the Complementizer *that* does perform the subordinating or embedding function in Izon. In fact, the data in [169] demonstrate that the Complementizer *amee* (that) heads embedded clauses.

- [169]a. Ebi gba amee eri boyemi-é (subordinate clause)
 Ebi said that he come+prog
 Ebi said that he was coming
- [169]b. Orò dau ò bii amee òmini *teye ki* mietimi-maá? Their father them asked that they what *foc* (were) doing 'Their father asked them what they were doing'
- [169]c. <u>Eri wò bii</u> amee woni *dengiseri ki* mungimi-a?

 He us ask **that** we **when** *foc* go + fut+tonal question

 'He asked us <u>when we would go'</u>

The Complementizer in Izon that performs the embedding function in [169] is amee (that). This word heads the embedded clause and, following Branigan (2004), occupies the C position. In [169] a and b, there are two instances of COMP, that is, amee and dengiseri. This means that there is a permissible multiple occurrences of Complementizers in Izon, but only amee and not dengiseri or any other wh-word has the privilege of introducing and heading the subordinate clause. This COMP amee bears both wh- and tense features, and thereby compels the verb in the derivation to appear in its base form. As a result, the verb in the clause preceding it bears no tense The COMP (dengiseri=when)

occurs in the interrogative clause and still obligatorily co-occurs with the focus particle (ki) immediately below it in the derivation. The focus particle bears COMP and case features along with the Complementizer *amee*.

The *that*-clause is a subordinate or embedded clause headed by a COMP in both English and Izon. However, the more intriguing and profound difference is that while **that** in English precedes its clausal complement, its equivalent, **amee** in Izon follows its clausal complement. These are variant configurations of the initial state grammars of the two languages. UG provides a universal clause structure but English and Izon opt for SOV and SOV structures. And, in the subordinate clause, because of their varying I-languages, the computation of the English speaker places the COMP in a position preceding its clausal complement. On the other hand, the computation component of the competent Izon speaker organizes its subordinate clause in such a way that places the COMP in a position immediately following its clausal complement. This, thus, reaffirms English as a head-initial language and Izon as a head-final language.

This conclusion receives support in Matthews (1997) who states that one of the characteristics of SOV languages is that their subordinators appear at the end of the subordinate clause. This is corroborated by Raible {2001:8} that in SOV languages, subordination markers tend to be placed at the end of the clause. The examples in [169] b and b show this clearly. In both examples, the subordinate clauses in Izon and the English translations are underlined and reproduced as [170] and [171]. Why is this so?

- 170. Oro dau o bii amee omini teye ki mietimi-ma?

 Their father them asked that they what foc (were) doing

 'Their father asked them what they were doing'
- He us ask **that** we when *foc* go + fut+tonal question 'He asked us when we would go'

The answer is that the Izon Complementizer, *amee* tends to have complement features to its left, in its initial state grammar as Matthews (1997) has also observed, and so cannot

subordinate a clause on its right. Rather, it turns to its left to subordinate the clause immediately above it in the derivation, which is the translational equivalence of the main clause in English. Bayer (2007) also supports this argument. According to him, clausal complementation displays an asymmetry between SVO and SOV languages to the effect that while in SVO languages which display an head-initial configuration, the COMP precedes its clausal complement, in SOV languages most of which (such as Dutch and Hindi) display a head-final configuration, the COMP more frequently follows its clausal complement. To demonstrate this hypothesis, let us consider the data in [170] above more closely as replicated in [172].

```
Their father them asked that

'Their father asked them (that)' (legitimate main clause + COMP)

b. *amee òmini teye ki mietimi-maa?(illegitimate subordinate clause)

that they what foc (were) doing

*'That what they were doing' (illegitimate clause)

c. òmini teye ki mietimi-maa? (legitimate main clause)
```

ò bii amee ...

they what foc (were) doing

'what they were doing'

[172]a.

Orò dau

(legitimate subordinate clause)

(legitimate subordinate clause)

In [172a], the COMP *amee* takes the clause preceding it as its complement and makes it a subordinate clause. It is legitimate in Izon. But its equivalent in English is not a legitimate subordinate clause. It is clear that the complement of *that* is missing. In [172b], the Izon COMP, *amee* is given an unlicensed clause complement to its right and the resultant supposed subordinate clause is ill-formed. Its transliteration equivalent in English has two Complementizers 'That what' which also renders the derivation ill-formed. In [172c], the equivalent of the English subordinate clause is a well-formed Izon main clause. Let us compare this proposition with an English sentence.

[173]. John said that what they were doing was wrong

Joni gba amee teye oro mietimi bi kirigha

John said that what they doing+pst the wrong

In this example also, the ill-formed clause 'John said that' translates to 'Joni gba amee'. In English, the COMP 'that' should not be part of 'John said', but in Izon, the COMP 'amee' (that) legitimately collocates with 'Joni gba' which, though, is a main clause in English, becomes a subordinate clause in Izon. In fact, a proper translation of

[174]a John said that what they were doing was wrong Should be:

[174]b Joni gba amee òrò mietimi ye bi kirigha

John said that they were doing thing the was wrong

John said that the thing they were doing was wrong

Similarly, example [175] illustrates this same proposition.

```
175a. Ebi said [ CP that he is coming]
175b. [CP [TP [DP Ebi gba] [C amee] [TP [DP Eri [VP boyemi ]]]]

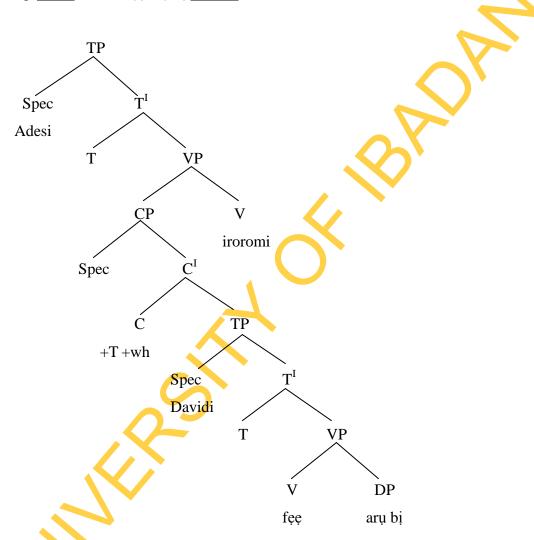
'Ebi said that he is coming'
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On a final note, what the foregoing discussions have proven is that the matrix clause in the subordinate clause in English and Izon are configurationally asymmetrical. As mentioned earlier, this proposition that the subordinator in SOV languages, as Izon is placed at the end of the subordinate clause finds support in Matthews (1997) and Raible (2001). It is obvious that the articulated clause structure which places a CP as the head of the clause does not envisage the occurrence of a CP at the end of a clause. Therefore, this can be considered to be a parametric variation between these two languages, a variation that derives from the I-grammars of the two languages.

Another interesting observation is that the verb in the embedded clause of a complex sentence in Izon does not inflect for tense but the verb in the matrix clause does. This is determined by the COMP *amee* because it carries tense and wh-features. Therefore,

tense and wh-features are checked on this COMP. But where there is no overt COMP, the verb in the matrix clause inflects for tense. The tree diagram below shows the derivation of an embedded clause.

[176]. Adesi Davidi fee aru bi iroromi



In summary, the discussion above demonstrates that both English and Izon allow who movement in interrogative transformations, but while English constructs relative/subordinate clauses with overt COMPs, Izon computes its relative constructions without an over COMP. Even where the COMP, amee (that), is used, as a functional head, it follows its clausal complement. This is in contrast to the English 'that' which precedes its clausal complement.

4.7.1. Phonosyntactic features in Izon.

By the term phonosyntactic, we refer to the interface between phonology and syntax. Izon is a tonal language like most other African languages and tone plays important syntactic roles in sentence derivation in Izon signaling 'a complex interplay of tone and grammar' (Egbokhare 2011:12). For instance, tone assigns person (Agr) to Arguments. This is evident in example [177] and [178] below. Low tone in 'Orò' in [177] assigns 3rd person Agr feature to the pronoun (Their) while high tone in o in [177] assigns 2nd person Agr feature to the same pronoun and transforms it to a 2nd person pronoun (Your) in the same context.

- [177] Orò dau <u>orò mietimi ye ki</u> biimi

 Their father their do+prog thing *foc* enquired

 'Their father enquired what they were doing'
- [178] Oró dau oró mietimi ye ki biimi Your father your do+prog thing foc enquired 'Your father enquired what you were doing'.

Many other pronouns and pronominal determiners exhibit this feature of tonal marking of person Agr. In the table below, pairs of homonyms which refer to different pronouns because of the tone with which their vowels are pronounced are presented.

Table 10: Tonal marking of Person Agr in Izon

S/No	Pronoun (Įzon)	English	High/Low Tone	Person Agr
1	Àrị	Ι	Low	1st sg
2	Árị	You	High	2nd sg
3	Ómịnị	You	High	2nd pl
4	Òmịnị	Them	Low	3rd pl
5	Oró	Your	High	2nd pl
6	Ōrò	Your	Low	3rd pl
7	Wò	Our	Low	1st pl
8	Wó	His	High	3rd sg
9	ļnè	My	Low	1st sg
10	ļné	Your	High	2nd sg

In the table, (1) to (4) are nominative Case pronouns while (5) to (10) are genitive pronouns. Between (1) and (2), low tone (LT) marks 1st person and high tone (HT) marks 2nd person. Between (3) and (4), high tone marks 2nd person while low tone marks 3rd person. Between (5) and (6), high tone marks 2nd person and low tone marks 3rd person. Between (7) and (8), low tone again marks 1st person and high tone marks 3rd person. Finally, between (9) and (10), low tone also marks 1st person while high tone marks 2nd person. If the difference between the pairs arises not from spelling but tone, it follows then that tone is significant in licensing person Agr in Izon language.

4.8. The syntax of adpositions

Prepositions and postpositions constitute a class of functional categories called adpositions. Adpositions are words which typically serve to relate objects, people or events in space and time. They are a group of functional elements which perform the same syntactic function and provide a system of parameters for different languages. Prepositions are usually found in head-initial languages such as English while postpositions are found in head-final languages such as Izon. The focus of this section is to show the parameter of

adpositions which English and Izon languages adopt in establishing the relationship of NP/DPs.

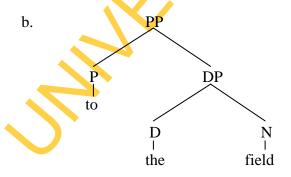
4.8.1. Prepositions in English

Prepositions are words which typically relate objects, people or events in space and time. They appear before nouns or noun phrases. Some common English prepositions are *to*, *from*, *with*, *by*, *at*, *on*, *of*, *for*, *in* and *into*. Prepositions are a closed class of words and they do not, according to Radford *et al* (1999:166), participate in derivational morphology. This means that their forms are not subject to change by inflection. Being a functional head, the preposition is the head of prepositional phrase (PP) which takes a determiner phrase (DP) as its complement. Most English PPs take the syntactic structure of a preposition at the head followed by a DP (Carnie 2007).

- [179] a. PP \rightarrow [to [DP] the field]
 - b. PP \rightarrow [with [DP an axe]
 - c. PP \rightarrow [at [DP the door]
 - d. PP \rightarrow [on [DP the floor]
 - e. PP \rightarrow [for [DP the boys]

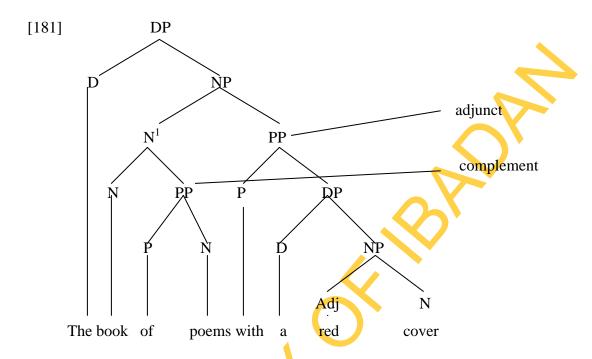
The PP rule can therefore be represented as:

[180]a. PP
$$\rightarrow$$
 [P[DP]]



Prepositional phrases can function either as a complement or an adjunct. Generally, the direct object of a verb is a complement while adverbial modifiers and in some case,

prepositional modifiers are characterized as adjuncts. These syntactic relations are represented in the tree below (181).



Carnie (2007:172)

There are two prepositional phrases in the derivation above. These are:

- a. of poems
- b. with a red cover

The first of these PPs serves as the complement and post-modifier of the DP 'the book' while the second serves as an adjunct and adverbial modifier to the phrase 'a book of poems'. Prepositions also perform the important syntactic function of assigning accusative (oblique) Case to their DP complements.

4.8.2. Postpositions in Izon

Postpositions are found in SOV languages such as Izon. Postpositions perform the same syntactic functions as prepositions. The most common postpositions in Izon are gho (with its allomorphs bo and ko), naa, da and duo. These postpositions are relatively few but they perform the syntactic functions performed by a wide range of prepositions in English. The

postposition *gho*, for instance, expresses the relations encoded by such prepositions in English as 'on', 'at', 'in' and 'to'. The word 'duo' is a postposition that functions like the English preposition 'from'. Creissels (2000:146) explains that, as the data in [182] below will show, postpositions follow their DP complements, unlike English prepositions which precede their DP complements. Since prepositions and postpositions are considered to be functional heads, this variation contributes to the argument that English is a head-first language. Following this evidence provided by the syntactic position of adpositions in Izon, it becomes particularly appropriate to categorize Izon as a head-final language.

```
[182]a. Fun <u>bi wari gho</u> emi

Book <u>the house in is

'The book is in the house'</u>
```

- b. Owoumo sukulu gho mudou
 Children school to go +perf
 'The children have gone to school'
- c. Arau <u>fou</u> <u>duo</u> bodou

 She <u>market **from** come +perf.

 'She has come (back) from the market'</u>
- d. Tebo ki waribo bo emi-6?
 Who foc door at is?
 'Who is at the door?'

An interesting observation is that a single postposition in Izon could perform the functions of several prepositions in English. In particular, the postposition, ' $gh\rho$ ', functions severally as 'on' in [182a], 'in' in [182c] and as 'to' in [182d]. The implication of one postposition in Izon expressing the kind of relationships that are expressed by several prepositions in English is that Izon lacks an elaborate system of postpositions to differentiate between these relationships expressed by different prepositions in English

such as *from*, *on*, *in*, *at* and *to*, etc. The examples in [182] above have shown this phenomenon. Postpositions in Izon could therefore be said to possess multiple interpretations. Moreover, some postpositions provide the additional semantic value of definite and indefinite reference which is a semantic function traditionally performed by the determiners 'bi', 'mo', and 'ama' in Izon and 'a/an' and 'the' in English. The referential function of postpositions in Izon can be seen in the allomorphs of 'gho' namely 'bo' and 'ko'. These postpositions operate in the same syntactic environment with the additional semantic value of definite reference to its DP complement. This referential value is expressed in the clauses in [183] below.

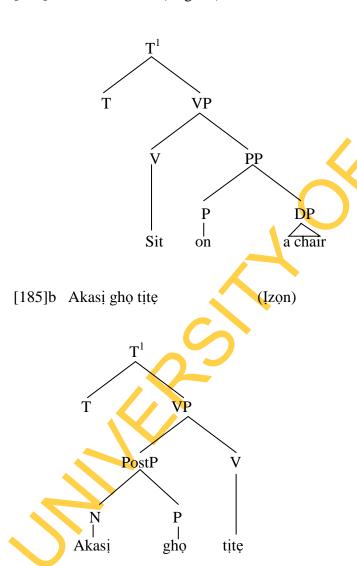
[183]a. akasi **ghọ** tite chair **on-a** sit 'sit on a chair'

akasi bo titechair on-the sit'sit on the chair'

The difference between 'gho' in [183a] and 'bo' in [183b] is that in the former, the person being addressed is requested to 'sit on a' chair (any chair), while in the latter he is requested to 'sit on the' chair available. The difference is that of definiteness of reference. Whereas 'bo' has definite referential features, 'gho' has features of indefinite reference. The other allomorph $k\rho$ is a rather strong form of 'gho'. 'Ko' has the semantic implication of exclusion of any other thing apart from the entity named. In other words, it has very strong referential value. Therefore, the interpretation of the clause in [184] below is to the effect that the person is being asked to sit, not on anything else (e.g. a bench, stool, table) but on a chair (any chair).

184. akasi **ko** tite chair **on-a** sit 'sit on a chair (not on anything else)' It has been noted earlier that the preposition in English precedes its DP complement just as the postposition in Izon follows its DP complement. This parametric variation between the two languages is captured in the tree diagrams below. Whereas the English DP has an overt determiner, its Izon counterpart does not have an overt determiner. Instead, as we have explained above, the function of determiner is inherent in the postposition.

[185]a Sit on a chair (English)



Another common postposition in Izon is 'duo'. This functor expresses semantic relationship similar to both *from* and *into* in English. The data below illustrate its usage.

[186]a. Arau fou **duo** bodou

She market f**rom** come +perf.

'She has come from (the) market.'

- b. Arau wari duo pabo-ngimiShe house from come out+fut'She will come out from the house'
- c. Arau wari duo suodou
 She house into enter +perf
 'She has entered into the house'

The dual semantic usage of this postposition is a reaffirmation that Izon lacks an elaborate system of adpositions to express the relationship between DPs or NPs.

Functional categories are those elements that do not have descriptive content. Although many prepositions in English that qualify as functors abound, others which have lexical content and are therefore not classified as functional elements also abound. These include such words as *beside*, *behind*, *under*, *above*, *near* and *across*. These are grammatically prepositional but also perform adverbial functions. In Izon, the concepts expressed by these prepositions are also usually encoded with contentives. They are illustrated in [187] below.

a. beside the house - wari oku

b. behind the house - wari toun
c. near the house - wari oku

d. above the house - wari utu/ wari ogono

e. on top of the table - tebulu ogono

f. across the river - (toru) beinmo.

'Wari' in these examples mean 'house'. The words following 'wari' may not be categorized as prepositions and postpositions. Nevertheless, the phrases express semantic

relationship between nouns. It may be apposite to say that this data also demonstrates that Izon is a head-final language.

4.9. Determiners/Articles

The determiner is a functional category which expresses referential and quantificational properties of nouns. Determiners include such expressions as *the*, *this*, *these*, *that*, *those*, *my*, *his*, *their*, *all*, *some* and *any* among others as shown in the diagram. In Izon, these determiners would translate to *bi*, *ma*, *bei*, *beimo*, *enimo*, *eni*, *iné*, *wó*, *òro*, *osee* and *dua*, (*or bee*). The quantificational determiner 'any' does not seem to have a neat equivalent in Izon. Determiners are associated with nouns.

All referential determiners provide definite or indefinite reference for their noun complements. In English, for example, the articles 'a/an' and 'the' are referential determiners While 'a/an' provide indefinite reference to their noun complements, 'the' supplies definite reference. Demonstratives and pronominal determiners encode additional grammatical agreement properties of person, number, gender (technically called phi features) and Case features (cf Burchfield 1996:629). The demonstrative determiners 'this' and 'that' have singular number Agr features. On the other hand, 'these' and 'those' have plural number features. Similarly, pronominal determiners such as *my*, *his*, *her*, *our*, *their*, etc, display either number and/or gender features. These features must be checked to ensure convergence of a derivation Radford (2004:447) avers that most determiners in English are used prenominally since English is a head-initial language.

In Izon, most determiners function postnominally. Common determiners in Izon are bi, ma, bei, beimo, enimo, eni, iné, wó, òro, osee and dua, (or bee). 'Bi', 'ma', 'mo', 'ama' (omo) are referential determiners and they post-modify their noun complements. They also possess number and/or gender Agr features in relation to the noun. The data in [188] below show these features.

```
[188]a. defiye bi = the table =definite singular reference + number/inanimate

b. defiye-mo = the tables = definite plural reference ± animate

c. defiye-ama = tables = indefinite plural reference ± animate

d. tobou-bi = the boy = definite, singular masculine reference

e. tobou-ma = the girl = definite, singular feminine reference
```

Similarly, demonstrative and quantificational determiners in Izon pre-modify their noun complements. Examples of demonstratives are 'bei' (this), 'eni' (that), 'beimo' (these) and 'enimo' (those). The singular 'bei' and 'that' are pluralized with the regular plural morpheme 'mo' like other nouns to become 'beimo' (these) and 'enimo' respectively. The following data illustrate them.

```
[189]a. bei defiye bi = this table = definite singular reference

b. bei defiye-mo = these tables = definite plural reference

c. eni defiye-mo = those tables = definite plural reference

d. dua dediye-ama = some tables = indefinite, plural reference

e. keni defiye = a/one table = indefinite, singular reference
```

I have suggested in Chapter Three that the plural referential determiners in Izon have dual values because they simultaneously function as reference and/or gender markers. This conclusion draws strength from Pinker's (1996:119) statement that function words often create parametric variations between languages, and that "although all languages have function words, the properties of the words differ in ways that can have large effects on the structure of sentences in the language". See detailed discussion of determiners in subsection 3.4.1.

4.10. Co-ordinating conjunctions in English

Coordinating conjunctions constitute a phylum of functional elements. Conjunctions are words that are used to coordinate two or more clauses. English has a variety of coordinating conjunctions such as 'and', 'but', and 'or'. Radford *et al* (1999:299) submit that only similar constituents such as independent clauses that are grammatically equal

are brought together. In other words, a coordinating conjunction shows that the elements it joins are similar in structure and importance. Such constituents must be in the same syntactic category. Carnie (2007:90) lists some common coordinating conjunctions in English as "FANBOYS"; it stands for 'for', 'and', 'nor', 'but', 'or', 'yet', and 'so'. Some examples of coordinated structures are:

[190]a. Julius was cold so he put on a coat

- b. I bought a bottle of wine **and** we all drank it.
- c. The rice was hot **but** the stew was cold.
- d. What you say **and** what you do are different

4.10.1.Coordinating conjunctions in Izon

In Izon, coordination is not exactly the same with coordination in English as not all the coordinators such as 'either----or' and 'neither---nor' seem to exist in Izon. However some forms of conjunctions are observable. These include equivalents of 'and', 'or', 'but', and 'while'. Common coordinating conjunctions in Izon are mo, enkpo, deni, ma, da, nda and enini. The coordinators correspond roughly to English coordinators as paired below.

[191]
$$mo \rightarrow and$$
 $deni \rightarrow and$
 $enakpo \rightarrow or$
 $ma \rightarrow while$
 $da \rightarrow and / and then$
 $nda \rightarrow but$
 $enini \rightarrow so$

The usages of these functors are shown in the data below.

[192]a Douye **mo** Tari **mo** kiri-gboro-otu

Douye **and** Tari **and** ground-tillers

'Douye and Tari are farmers.'

b. Douye mo Tari mo mani Ebi mo kiri-gboro-otu

Douye **and** Ttari **and** also Ebi **and** ground-tillers 'Douye and Tari and also Ebi are farmers.'

- c.. Owou-mo fiyai-mo fii **deni** Preye alala-mo surumi Children the food the ate **and then** Preye plates the washed. 'The childen ate the food and Preye washed the plates.'
- d. Preye bo-mi nda Ebikila bogha.
 Preye came but Ebikila come + neg
 'Preye came but Ebikila did not come.'
- e.. Preye, enakpo Ebikila alala-mo suru

 Preye or Ebikila plate+pl+the wash

 'Either Preye or Ebikila (should) wash the plates.'
 - f. Owou-mo wari duo pabo da dorou-mi (Williamson 1969)

 Children+ the home from out-come and shout+pst.

 'The children came out of the house and shouted.'
- g. Arau ingo deri **deni** pite-mi She trap weave **and** set it 'She wove a trap and then set it.'

[192a] is an example of compound sentences. Two clauses in [192a] are conjoined with the conjunction 'mo'. In fact, among all the coordinators in Izon, 'mo' is the most interesting. The notable variation from the English equivalent 'and' is the co-occurrence of this conjunction along with each of the subjects (*Douye mo Tari mo*) that constitute the compound DP at *Spec-Agrs* position. Where there are three clauses coordinated as in [192b], the last NP also takes a post-NP coordinator and a pre-NP additive adverb 'mani' which means 'also'. Therefore, there is a prevalence of multiple occurrence of the conjunction 'mo'. If these structures were to be with only one of the conjunctions as in

[193] below, the derivations would have crashed. However, although there is obligatory multiple occurrence of this conjunction at PF, they project to a single unit at LF.

[193] * Douye mo Tari mo kiri-gboro-otu.

The conjunctions 'da' and 'deni' (Izon) are used interchangeably, and both conjunctions tend to have two functional values. The first, 'da' expresses the meanings of both 'and' and 'but' (in English) while 'deni' expresses the meanings of both 'and' and 'then'. These conjunctions are in examples [192c], [192g] and [192h] above. The coordinators used in examples [192] (d), (g) and (h) above are illustrated below as [194].

[194]a Owou-mo wari duo pabo-mi Children + the home from came-out 'The children came out from the house'

b. Owou-mo dorou-mi
Children+ the shouted
The children shouted

c. Owou-mo wari duo pabo da dorou-mi (Williamson 1969:52)

Children + the home from came-out and shouted

'The children came out of the house and shouted'

Similarly, [195c] below is a compound sentence consisting of two coordinate clauses conjoined by the conjunction 'deni'

[195]a Arau ingo deri-mi She trap weave+pst 'She wove a trap.'

- b. Arau ingo pite-miShe trap set+pst'She set the trap'
- c. Arau ingo deri deni pite-miShe trap wove and set it'She wove a trap and set it'

Other existing conjunctions in Izon are *ma*, *nda* and *enakpo*. Each of these, is the equivalent of the English *while*, *but* and *or* respectively. Questions can also be conjoined in Izon using the conjunction, 'deni'. This functor distinctly separates the two interrogative clauses as [196) below shows.

[196]a. Dengibo ki bo-*deni* dengibo ki bogha?

Who foc come **and** who foc come+neg.

'Who came and who did not come?'

b. Dengibo kị fiyaimo tụọ-**deni** dengibo kị alalamo surumi Who *foc* food+pl cook and who *foc* plates washed Who cooked the food and who washed the plates?

4.11. Passive constructions and A-movement

Passivization is a transformation operation in syntax which is a movement from a subject or complement position to another subject position" (Radford 2004:434). It is a transformation of a sentence from active voice to passive voice; the voice system consists of active and passive. Syntactically, passive sentences are those in which the complement of the verb or logical object moves to occupy the syntactic subject position. In the process of the transformation from active to passive sentence, the subject or *Specifier* of TP (Spec-TP or Spec-Agrs) is reduced to a prepositional phrase headed by the preposition 'by'. This phrase becomes optional because it may or may not be deleted (Waters 2000:209, Carnie 2007: 292). Let as consider the following sentences.

[197]a. The policeman arrested the suspect. (active)
b. The suspect was arrested by the policeman. (passive)
c. The suspect was arrested. (passive)

[198]a. My neighbours grated cassava. (active)

b. Cassava was grated by my neighbours. (passive)

c. Cassava was grated. (passive)

The [a] sentences [197] and [198] above are active sentences with the subject in the Specifier position. The [b] and [c] sentences are passive transformations of their [a] counterparts. The syntactic positions of the theta roles are altered in the process of transformation since the *patients* move to the *agent* positions and vice versa. The agentive theta role in the passive transform is contained in a prepositional phrase headed by the preposition 'by' which now serves as the agentive marker. Carnie (2007) explains that active and passive structures have different thematic properties. Whereas active structures have an agent and a theme, passive structures lack the agentive theta role except by the presence of prepositional agentive marker in a PP.

In minimalist syntax, passivization could be interpreted in terms of A-movement or movement of syntactic Arguments. Arguments refer to DPs in subject and object positions in relation to the predicate. It is in this regard that passive transformation which involves movement of constituents could be said to be a process of A-movement. The process involves movement of constituents in A-positions.

4.12. Passive Constructions in Izon

Passive constructions in Izon are in a way similar to passives in English to the extent that A-movement occurs in both languages. Two basic processes however are involved in Izon passive constructions. First there is movement of the object DP from its post-Spec-TP or Spec-Agrs position to pre-Spec-TP position. This movement does not transform the object DP to become the subject of the sentence as it does in English passive transformations. In other words, the movement of object DP left-wards or upwards to sentence-initial position does not confer agentive theta role to it. This means that the subject and object both

maintain their semantic roles irrespective of their syntactic environments. In this respect, their a similarity between English and Izon. Let us consider some examples.

[199]a. Owou-mo indi-mo yeridou (Active) Children +the fish+p1+the sell+perf. 'The children have sold the fish' (Passive) Indi-mo b. owou-mo mọ yeridou Fish+pl+the children+the *patient* sell+perf. have been sold by the children' 'The fish [200]a. Furukimi ara aru (Active) furumi Thief her canoe stole 'A thief stole her canoe' furumi b. Ara aru furukimi mo (Passive) Her canoe thief patient stole 'Her canoe was stolen by a thief' [201]a. Woni fiyai-mo fii ngimi (Active) food+p1+the eat+ fut We 'We will eat the food' b. Fiyai-mo woni mo fii ngimi (Passive) Food the we *patient* eat will The food will be eaten by us'

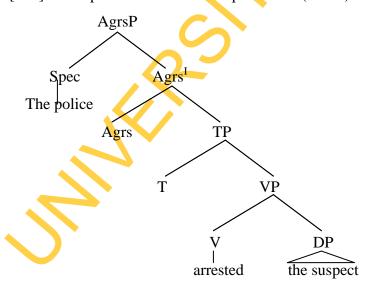
In all the examples above, the complement of the verb or grammatical object moves to sentence-initial position. Therefore, while the Izon active sentence has the canonical SOV configuration, the passive transformation exhibits an OSV structure. This contrasts with English passive construction which maintains the SV(O/A/Adv/) structure in both active and passive forms. Another significant feature is that, as Carnie (2007:292) has observed,

the passive form of the verb in English takes on a special morphology by changing to the -ed or -en form with an auxiliary verb insertion.

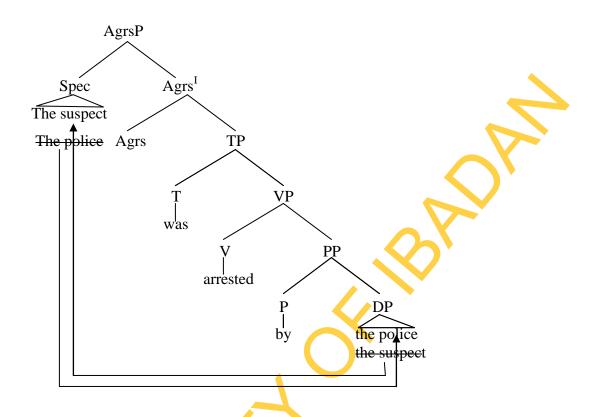
The Izon passive verb does not undergo morphological change. Its significant feature is the deposition of a functional particle, $m\rho$ at the extraction site of the object DP when it moves out of its post-subject position to pre-subject position. The syntactic function of this particle $m\rho$ may be interpreted in two ways. First it serves as a reference or overt trace of the argument that has moved out of that spot. It also marks the extraction site as a *Patient* theta position. This particle refers back to the logical object that has moved to syntactic subject position and semantically identifies it as having the *patient* theta role in the derivation. Therefore, $m\rho$ can be said to be co-referential with the *argument* that has moved out of the position.

English passive constructions use the 'by-PP' to identify the *Agent* while Izon passives use the 'mo' particle to identify the *patient*. It is instructive to note that without this overt trace *mo* in the Izon passive construction, the derivation fails to converge and therefore be ill-formed. Below are some passive constructions in English and Izon in tree diagrams.

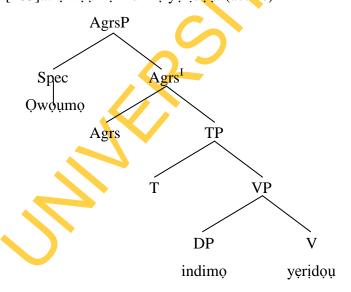
[202]a. The police arrested the suspect (active)



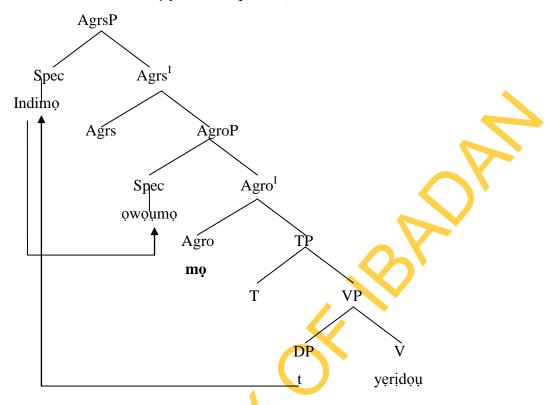
[202]b. The suspect was arrested by the police (passive)



[203]a. Owoumo indimo yeridou. (active)



203b. Indimo owoumo **mo** yeridou (passive)



Several movement operations take place in this derivation of a passive sentence. It will be recalled that subject is a VP-internal category and receives Case before moving up to Spec-Agrs for checking of its *Specifier* features by Agrs. Similarly, the object DP originates as the complement of V. The need for checking of its Case and complement features by Agro also motivates its movement upwards to Spec-Agro node. V as usual also moves upwards in order for its tense and aspect features to be checked. These are covert operations that take place before Spell-Out.

In the Izon passive transformation, the subject and object swap positions. While the subject Argument moves down to Spec-Agro node, the object Argument moves up to Spec-Agrs node. However, in spite of this movement, the object retains its *Patient* theta role or Accusative Case features.. This is made possible by the deposition of a particle 'mo' at the extraction site of the complement DP. This functional particle serves as an overt, interpretable trace of the moved complement DP and which marks this DP (now at the grammatical subject position) as a *Patient* theta feature. The particle 'mo' can be appropriately considered as a functional element because it does not have lexical content

and yet contributes to the convergence of the passive construction. Waters (2000:212) corroborates the argument here that passive construction involves a syntactic rearrangement which itself involves addition, deletion or modification.

Both active and passive constructions refer to the same event; the difference is in the way the situation is presented by the speaker. This means that active and passive sentences have the same interpretation at LF but have different representations at the PF. This variation is determined by what a speaker wishes to foreground and to topicalize, and what he decides to relegate as comment or theme of the sentence. The sections that follow will examine focus and topicalization in English and Izon. These two concepts are discussed as pragmatic functions.

4.13. Pragmatic functions

There are two important pragmatic functions in language use, namely topicalization and focus. Topic is defined as the thing about which a statement is made, and with the presumption of a shared knowledge of that thing between the speaker and the hearer (Kroeger, 2004). Radford (1997) defines topic as a constituent which receives special emphasis by virtue of being moved to the beginning of a clause by the process of topicalization (cf also Culicover 1976:279). Every language has ways of indicating whether a particular piece of information is *old* or *new*. *Old* information is one which is shared by both speaker and hearer while new information is known only to the speaker in a given context. English language usually fronts the topicalized constituent; the rest of the clause is then referred to as *comment*. Some common devices used in the process of topicalization in English as identified by Kroeger (2004) and Waters (2000:205) are shown below. The *topic* phrases are fronted to receive special emphasis.

204 (a) My neighbour grated cassava yesterday. (Neutral)

(b) Cassava, my neighbour grated yesterday. (Topicalization)

(c) **As for cassava**, my neighbour grated some yesterday. (Left dislocation)

(d) *Cassava* was grated by my neighbor. (Agent passive)

(e) Cassava was grated yesterday. (Agentless passive)

Each of the sentences refers to the same event but the way each is presented by the speaker is different. The first noun phrase in each sentence may be considered as the topic or what is under discussion. The remainder of the sentence therefore is the comment or relevant information the speaker desires to pass across to the hearer. 'Cassava' is the semantic patient of the event of grating in each sentence. In examples [204b-d], 'cassava' is topicalized and thus given emphasis by reason of its fronting.

Waters (2000: 205) expresses the view that many African languages adopt one or more of the various syntactic devices in achieving topicalization. Evidence from this study shows that Izon language adopts more than one of the devices. These forms of topicalization in Izon are illustrated below.

- 205a. Wò dau bobai ofoni báami
 Our father yesterday fowl slaughtered
 'Our father yesterday slaughtered a fowl.'
 - b. Ofoni, bobai wò dau mo báami
 Fowl yesterday our father Pat slaughtered
 'A fowl yesterday our father skaughtered'
 - c. Ofoni wò dau mo báami, bobai

 Fowl our father *Pat* slaughtered, yesterday

 'A fowl our father slaughtered yesterday'

Example [205a] is a normal, neutral, declarative sentence which maintains the canonical SOV structure. 'Wò daụ' (our father) has the agentive theta role and nominative Case. 'Ofoni' (a fowl) is the *patient* of the killing (báami). The adverb 'bobai' (yesterday) is usually a mobile constituent and is not considered as topicalization. Therefore, the normal Argument structure is maintained. In [205] (b) and (c), the complement NP is topicalized and fronted. Topicalization in Izon does not seem to be different from passive construction. This view is supported by the mere swapping of syntactic positions between the subject NP and the complement NP as well as the insertion of the particle 'mo' which

is an overt trace of the complement NP that moved out from there. From this position, 'mo' assigns *Patient* theta role to it.

4.13.1. Focus in English

Languages usually have fixed word order whereby the subject and the object occur in fixed positions in relation to the verb. For instance, English and Izon have SVO and SOV configurations respectively. However, there are also other less common syntactic arrangements as we have seen in the transformational process of topicalization. The basic word order, according to Waters (2000:194) is used to form affirmative sentences. Other marked configurations are used to express functions such as negation, interrogation, topicalization and focus or emphasis on a particular part of the sentence.

Focus is a pragmatic function of language use. It is defined as the essential piece of new information that is carried by the sentence, Kroeger (2004:138) expresses the view that some languages mark focus by intonational prominence or focal stress but some other languages use special particles or clitics. Some devices of focus marking identified by Kroeger (2004) are cleft sentences (or clefting) and pseudo-cleft (or wh-cleft) constructions. The following are examples borrowed from Kroeger (2004:138).

Clefting

[206] a. It was Mary that John gave the flower to.

- b. It is the permanent secretary that will visit us.
- c. It was in 1945 that the second world war broken out.

Pseudo- clefts

[207]a. What John gave to Mary was a bunch of flowers

- **b.** What I like for breakfast is cold pizza
- **c.** Where I would like to spend my holidays is New York.

Content question

Another device is seen in content questions. Content question involve a request for a specific piece of new information. The question word bears pragmatic focus while the rest of the question constitutes the presupposition.

- a) What did John give to Mary?
- b) He gave her a jaded necklace

The essential piece of information is fronted in clefting and pseudo-clefting. These devices involve the fronting not just of a word but whole phrases or even clauses.

4.13.2. Focus in Izon

As a language, Izon does not only topicalize but also marks focus on certain syntactic constituents. This section explores the strategies employed by Izon in marking focus. It is appropriate to state from the outset that a specific functional element which marks focus exists in Izon. The following data demonstrate focus marking in the language.

[208]a. Ebiere fiyaimo tuoyemi Ebiere food+pl cooking 'Ebiere is cooking the food'

b. Ebiere ki fiyaimo tuoyemi (clefting)
Ebiere focus food +pl cooking
'It is Ebiere (who) is cooking the food' OR
'Ebiere is the person cooking the food.'

c. Tebo *ki* fiyaimo tuoyemi? (Content question)
Who *focus* food +det cooking?

'Who focus is cooking the food?'

d. Teye *ki* Ebiere mo mieyemi? (Content question) what *focus* Ebiere *Pat* doing?'What is it Ebere is doing?'

e. Ebiere fiyai *ki* tuoyemi)Declarative sentence)
Ebiere food *focus* cooking

'It is food Ebiere is cooking.'

The data above show that Izon language expresses emphasis or focus (foc) not with intonational prominence or focal stress but with special particle 'ki'. The focus particle is canonically placed at a position immediately following the piece of new information that is being emphasized such as the *Specifier* (subject) DP or complement (object) DP, or even a fronted wh-expression in an interrogative. For instance, [206a] is a normal affirmative sentence; it does not have a focus particle. In [208b], the subject 'Ebiere' attracts the focus, which is an indication that it is being emphasized whereas in [208c and d], the fronted wh-expressions 'tebo' (who) and 'teye' (what) receive the focus. In [208e], the complement DP 'fiyai' (food) is given the focus. The implication is that the new piece of information is in the constituents that receive the focus as posited by Waters (2000) and Kroeger (2004).

Consequently, focus marking in Izon does not necessarily have to change the basic word order or syntactic configuration as it occurs in clefting and pseudo-clefting in English. However, the interpretation or translation of a focused DP in Izon is more or less similar to the English clefted sentence. Below are further examples to demonstrate this point.

[209]a. Ebiere *ki* fiyaimo tuoyemi (focus)

Ebiere *focus* food +pl cooking

'It is Ebiere (who is) cooking the food' (clefting)

b. Tobou bị beni ki boutimi (focus)Child the water foc drink+imperf'It was water (that) the child was drinking.' (clefting)

In [209a], the subject (Spec-Agrs) is the focused constituent of the sentence. In accordance with the V-internal principle, this constituent raised from Spec-V which is, of course, motivated by the requirement of agreement features checking by Agrs functional head. On the other hand, it is the complement that is focused in [209b]. It therefore has to raise from VP through *focus* phrase to Spec-Agro. This movement enables the DP to access *focus* and agreement features. The provision of a focus phrase (FocP) has been advocated by Jayaseelan (2004) and Ajongolo (2005).

4.14. Summary

This chapter discussed a variety of syntactic issues. These include the Complementizer as a functional category, wh-movement in English and Izon as well as subject extraction in wh-interrogatives. Other topics that are discussed include adpositions and coordinating conjunctions. All these are discussed from the perspective of their being functional elements. The study shows that wh-expressions in English have their equivalents in Izon except that the Izon wh-interrogative operators begin not with wh but with 'dengi' or 'te' as shown in the data reproduced below.

Dengi		which
Dengiye/Teye		what
Dengibo/Tebo		who/whose
Dengiyo/Teyo		where
Dengitu/Tetu		why
Dengibara/Tebara	-	how
Dengiseri/Teseri		when

As in English, Izon interrogative operators undergo what in English is called wh-movement. This movement is usually motivated by the wh- and tense features of COMP as posited by Pesetsky and Torrego (2000). It was noted that the asymmetry between subject and non-subject wh-movement in English also occurs in Izon. The asymmetry is that movement involving subject wh-expression is a short movement but movement of a non-subject wh-expression is a long one.

Prepositions which lack lexical content and coordinating conjunctions are also classified as functors. These are also discussed in this chapter. The study reveals that English uses prepositions while Izon uses postpositions to express the same relationships between nouns. The difference in the syntagmatic positioning of prepositions and postpositions in relation to their complement nouns also confirm English as a head-first language and Izon as a head-final language

The most remarkable conjunction in Izon is 'mo'. This word is the translation equivalent of the English 'and'. It has the potential of replicating itself as many times as there are coordinated clauses with their subjects and/or objects. The implication is that Izon permits multiple representation of this conjunction at the PF, but all of them contribute to a unitary interpretation at the LF. A typical example is reproduced here.

210. Douye **mo** Tari **mo** mani Ebi **mo** kiri-gboro-otu Douye **and** Tari **and** also Ebi **and** ground-tillers 'Douye, Tari and Ebi are farmers.'

In this study, three types of the functor 'mo' are identified. 'Mo' functions as a *focus/patient* theta role marker when an accusative *Argument* moves out of VP as a COMP along with 'ki' to CP. 'Mo' also functions in passive construction. This usage is the same as its focalizing function because they carry the same grammatical features of *focus* and *patient* theta role marker.

'Mo' also functions as a conjunction. As a conjunction, it can be regarded as a word different from the focus/patient marker since the grammatical features they carry are different. In a similar vein, 'mo' functioning as a plural marker and determiner carry features different from either the focus marker or the conjunction.

Other topics discussed in this chapter are passive constructions, topicalization and focus marking. All the movement processes have a common objective of placing emphasis on a given constituent. Passivization and topicalization do not necessarily involve functional categories. However, in focus marking in Izon, the discussion centres on a functional element 'ki'. Irrespective of alteration of word order, 'ki' remains the most useful particle that the language employs to mark focus.

CHAPTER FIVE

SUMMARY AND CONCLUSION

5.1. Summary

This work investigated aspects of the morphosyntactic features and processes of English and Izon languages. It set out to capture the syntactic characterization of the two languages and the interface between syntax and morphology. The main focus of the work, however, is on the types and functions of the class of words (and morphemes) called functional categories. Functional categories consist of words/morphemes which do not have lexical content but possess information about grammatical properties such as phi-, Agreement Case features which contribute meaningfully to the grammaticality of syntactic derivations. Phi-, Agreement and Case features are the morphosyntactic and categorial features of nouns and verbs which are the subject of features checking by functional heads of Agr, T, complementizer, and Neg. The objective of the study is to identify areas of similarity and differences in the morphosyntactic behavior of functors and the processes of feature checking in the two languages being contrasted. The term 'morphosyntactic' is used with the understanding that a great deal of interface exists between morphological features and syntactic derivations and projections in languages.

The work is predicated on broadly on Universal Grammar and specifically on the Minimalist Program because the study of natural languages acknowledges the existence of differences in the structure and processes of linguistic derivations of different languages. Parametric variations refer to parameter based options or choices which different languages make. This view is based on Chomskyan theory that linguistic structure is based on binary parameters from which languages make their preferred choices. This proposition is the epicenter of Universal Grammar which establishes the universality of the general principles of language and also recognizes the presence of parameters that differentiate languages. In doing this contrastive study, we did not neglect the similarities the two language share. The critical analysis of both similarities and variations was instructive especially in recognition of Carnie's (2007) definition of syntax that:

Syntax is the study of the mental representation of sentence structure, and since we all have the same basic gray matter in our brains, it would be wise if our theory accounted for both the similarities and the differences among languages.

Data on English for the study was derived from standard books of English grammar. Data on Izon were gathered from the Kolokuma dialect of Izon. Kolokuma is spoken by the people of Kolokuma and Opokuma clans in Kolokuma/Opokuma Local Government Area of Bayelsa State. The choice of Kolokuma dialect is appropriate in the sense that it is the dialect of Izon which is considered to be central, and is mutually intelligible to speakers of other dialects of Izon This factor may have informed the use of Kolokuma by the late renowned British-born linguist, Professor Kay Williamson, in her studies. One of Williamson's studies (1989), a lexico-statistical analysis of the various dialects of Izon established 99% contiguity between Kolokuma and Gbarain dialects, and 98% contiguity between Kolokuma and Ekpetiama dialects. Data for the study consisted of tokens of the language from natural discussions in formal and informal situations in Okoloba, Seibokorogha (Sabagreia), Kaiama, Igbedi and Opokuma in 2007, as well as from books written in Izon language.

In deference to Carnie's (2007) notion, the study was generally hinged on the principle of universal grammar in broad outline, but based specifically on the minimalist theory. This theory is suitable for the study because current linguistic inquiry places emphasis on minimizing the analysis of the complex linguistic structures which are assumed to be optimally perfect systems (Radford 2004:462). As a result, the study involved analysis of syntactic heads, particularly, functional heads and their role in movement operations and feature checking. It is a fundamental tenet of the minimalist program that movement is a function of Attract in which abstract morphological features such as Agr(eement) and T(ense) attract lexical items such as nouns and verbs to move up the derivation to functional heads to check and license the features they have picked up from the lexicon.

Some movements are said to be covert while others are overt. Covertness and overtness of movement depends on interpretability of the morphological features carried by lexical items which require checking. For instance, both English and Izon DPs inflect for number by way of suffixes, but Izon DPs and determiners further inflect for gender

also. These phi features could be said to be strong and +interpretable in the two languages. Being so, movement for feature checking is overt and occurs before Spell Out.

The study reveals, however, that whereas verbs in English inflect to agree with the number agreement feature of their subject DPs, verbs in Izon do not. This means that there is no overt subject-verb agreement in Izon contrary to what obtains in English. The implication is that the number phi feature of the English verb is strong and +interpretable at PF and that its movement for feature checking occurs before Spell Out. Conversely, the number feature of the Izon verb is weak and –interpretable at PF. Therefore, movement for feature checking is covert and is delayed until after Spell Out. It could be said that movement of verbs in Izon for the purpose of checking number agreement features obeys the economy principle of procrastinate

Languages of the world are often categorized based on their specifiable syntactic arrangement or word order such as SVO, SOV, OVS, etc. English and Izon belong to different groups; whereas English is an SVO language, Izon is an SOV language. Our analysis of the morphosyntactic processes of derivations therefore examined these parameters and how they exerted influence on syntactic processes. Parameters are linguistic options that various languages choose from. Radford (2004) defines parameters as dimensions of grammatical variation within and across languages. Universal Grammar is not completely fixed, but allows some variation. The ways in which grammars can differ are called **parameters** (Santorini and Kroch 2007). The major parameters are head position parameter, wh-parameter and null-subject/pro-drop parameter. Our concluding statements in this comparative study are based on these parameters.

5.2. Head position (head directionality) parameter

It is a universal property of phrases that every phrase has a head word. The head word determines the nature and category of the phrase. The head is the key word in the phrase and from which the phrase derives its designation. In a technical sense, the morphological and syntactic properties of the head determine the categorial properties of the entire phrase in which it occurs.

From the work of linguists (e.g., Radford 2004:19), English consistently positions heads before complements. It is therefore classified as a head-first language. This is the

case in the English DP, VP and PP. On the other hand, this study reveals that Izon is a head-final language. This means that complements in Izon language follow their heads whereas the reverse is the case in English. These relative positions of heads and complements in the two languages constitute a major parametric variation between them.

Lexical heads are nouns, verbs, adverbs and adjectives. These lexical categories project maximally to the respective phrasal structures named after them. For instance, a noun heads a noun phrase [NP]; a verb heads a verb phrase [VP] and an adjective heads and Adjectival phrase. This is why in an expression such as 'students of English', the noun 'students' determines the type and agreement features of the phrase. That is to say that the plurality or singularity of the head similarly determines the number value of the phrase in its Agr relations with the verb and Agr feature checking. Therefore, the phrase 'students of English' is a plural phrase because the head word 'students' is plural. The complement of the noun in this phrase is the prepositional phrase (of English) whose head word is the preposition 'of'. Prepositions are variously described as lexical or functional words. That is really not the argument here, although it has been applied in this work as a functional category. The significant issue here is that the head 'of' and other prepositions precede their complements. Complements of prepositions are usually nouns or DPs.

Similarly, VPs are headed by verbs whose complements are either nouns or adverbs as in [211]

[211]a. write a book

- b. drink the water
- c. come here

Also in determiner phrases [DP], the determiner which is a functional category heads the maximal projection. Of course, the DP derives its name from the head word, being the determiner. Determiners are therefore functional heads. English generally has a head-complement structure because it is a head-initial language. As we have submitted, this study revealed that Izon uses a different parameter in the head-complement relationship. Heads in Izon consistently follow their complements. This configurational parameter could be seen in DPs such as the following:

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[212]a. Wari bi
House the + Sg
'The house'
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b. Wari moHouse the + pl'The houses'

The determiners in these examples are the functional elements 'bi' and 'mo'. The determiner in the DPs above possesses and determines the number (Agreement) feature of the entire phrase. It also provides definite and/or indefinite reference. For instance, 'bi' is a singular definite determiner while 'mo' is a plural definite determiner. These are bound morphemes in other circumstances. 'Wari' (house) in the examples [212] (a) and (b) is the complement NP and precedes the head of the phrase. But it is the determiner that projects maximally as in English. The notion of an Izon syntactic head following its complement could further be confirmed in verb phrases as in the following examples

[213]a. Beni bou

Water drink

'Drink water'

b. Fun geeBook write'Write a book'

e. Egberi gbaStory tell'Tell a story'

The heads in these VPs are 'bou' (drink), 'gee' (write) and 'gba' (tell). They are preceded by their respective complement nouns 'beni' (water), 'fun' (book) and 'egberi' (story).

In expressing relationship between nominals, English makes use of prepositions while Izon makes use of postposition. The reason is simply predicated on the fact that these relational functors are usually preceded by their noun complements. In other words, the structure of the postpositional phrase in Izon exhibits a head-final configuration as against the head-initial arrangement of an English PP.

A peculiar type of determiner phrase in Izon is one that projects multiple determiners to PF whereas the projection principle in the theory of Universal Grammar predicts the projection of only one. It is a syntactic principle that only one head occurs in a maximal projection, and determiners are heads. This occurrence could be more appropriately explained as a phrasal recursion in which a DP exists with another DP. Therefore, the multiple determiners found in the larger DP actually head different phrases at different levels. Izon is replete with such occurrences. The DPs below illustrate this phenomenon.

214a. **Bei** tobou **bi**This river the +mas+ sg 'this boy'

b. Bei tobou ma This child the + fem+sg 'this girl'

c.. Vii sukulu mo The other schools the +pl 'The other schools'

c. **Eni** owou **mo**That children the+pl 'Those children'

The derivations in [214a-c] have two functional elements projected to the Phonetic Form of the XPs in which the noun is positioned between two determiners. In all cases, the

first of the determiners preceding the nouns is referential and the second following the noun is the traditional definite or indefinite determiner which also has Agreement feature of number and in some cases, gender. The two determiners (shown in bold letters) both have features to check and are therefore significant DP-internal feature checking. In the light of the foregoing, the occurrence of more than one determiner phrase within a single DP in Izon constitutes an important parametric variation between English and Izon.

5.3 Wh-movement parameter

Another binary parameter in which languages could make choices is the wh-parameter. This is a parameter which determines whether wh-expressions are fronted or moved to the front of the derivation when normal affirmative sentences undergo transformation to interrogatives. English is a language which allows wh-movement from within VP to COMP position since in the derivation COMP possesses wh-features which attract wh-operators to it. The motivation for this movement, of course, is to enable the wh-features of the wh-operator to be checked by COMP. Both English and Izon permit wh-movements to the front of the sentence. Below are typical examples of wh-fronting in English and Izon

She is writing a letter. [215]a. (English) She is writing what? What is she writing? b. Iné bi teve? (Izon) Your name the what? What is your name?' Teve ki (Izon) iné ere bi? What foc your name the? 'What is your name?'

This observation makes it plausible to conclude that both English and Izon choose the same parameter and are similar in respect of wh-movement. There are theoretical implications for making this choice of parameter. It means that in both languages, C occupies the same pre-subject position. In spite of this similarity in wh-fronting in both languages, there is something that differentiates them. This is the licensing of wh-movement. When a wh-expression is moved to C in Izon, it must obligatorily co-occur with a particle 'ki' which we have labelled a focus particle in this study. This particle is a syntactic complement to the Complementizer as in [215c] above. If a wh-expression moves in Izon, out of the VP to CP without taking along the focus particle 'ki', the derivation is sure to crash because wh features in Izon seem to be encoded this functional element as well.

To this extent, it could be inferred that both English and Izon permits wh- fronting but they differ to the extent that in Izon, wh-movement forces the projection of a focus particle ki or its allomorph $k\rho$ immediately after the operator. For instance, 'ki' is a focus marker which has wh-features and nominative case features. It collocates with interrogatives relating to things (teye – what; dengi - which) and persons (dengibo - who). On the other hand, 'ko' collocates with operators relating to places (dengiyo - where) and reason (dengitu – why). Ki is a functional element which contributes to the convergence or grammaticality of interrogative sentences headed by wh-expressions.

Izon also permits *in situ* wh-parameter. The observation is that in many cases, movement of non-subject wh-expression proves to be a redundant process because the object NP could merely transform into a wh-word along with 'ki' and remain *in situ* at the object position. These parametric possibilities are shown in the following examples.

- [216] a. Ebi aru bị youmi
 Ebi canoe the paddled
 'Ebi paddled the canoe'
 - b. Dengi aru ki Ebi mo youmi?Which canoe foc Ebi Patient paddled?'Which canoe did Ebi paddle?'

c. Ebi **dengi aru ki** youmi?

Ebi which canoe *foc* paddle?

'Ebi paddled which canoe?'

Variation along the wh-parameter relates to whether C is strong or weak in a given language. From the revelation of this study, C could be said to be strong in both English and Izon since it motivates wh-movement. But English and Izon differ in the use of COMP in relative or embedded clause. English traditionally uses any of the wh-expressions in the construction of relative clauses but Izon does not, except in *that-clauses*. The Izon *that-clause* is headed by the COMP *ameq*. Consider, for example, the following data.

[217]a. The boy who is standing over there is my cousin.

- b. Peter has sold the car which he bought last year.
- c. The students have gone to the hall where the lecture will hold.
- d. He said that he would like to visit Ibadan.
- 218.a. Eniyo bo tienimi tobou bi ine binaowei

 There standing boy the my cousin

 The boy standing there my cousin

 'The boy (who is) standing there is my cousin.'
 - b. Peter bodei kurai bo wó fee aru bi yeridou

 Peter last year he buy car the sold+perf

 Peter last year the car he bought has sold

 'Peter has sold the car he bought last year.'
 - c. Sukulu owou-mo tolumoye bi piringi yo bo mudou
 School children+the lecture the holding place the go+perf

 The students the lecture holding place have gone

 'The students have gone to the place where the lecture will hold.'

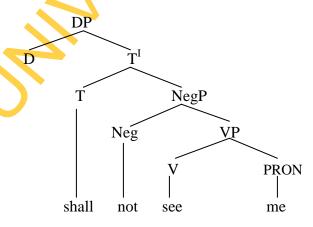
d. Eri gba amee eri Ibadan gho bo disenimi
 He said that he Ibadan to come like+T
 He said that he likes to come to Ibadan

This data in [218] a-d are translations of [217a-d respectively. The data show that only the 'that' Complementizers is used to express relative or embedded clause in Izon. The that-clause is headed by the equivalent of 'that', that is amee. Again, there is a notable difference between the syntactic alignments of that and amee. The English relativizer heads the CP with its complement following it as seen in [217]. The Izon relativizer also heads the CP but its complement precedes it. In fact, amee forms a constituent with the clause on its left. Consequently, when an English CP is translated into Izon, the complement clause in English becomes the independent clause in Izon, and the independent clause in English becomes the dependent clause in Izon. This contrast is evident in [217d] and [218d] above, and this is a notable parametric variation between the structures of English Izon relative clauses.

5.4. Negation parameter

The common way to express negative in English is by the use of a negative word or particle 'not'. One analysis of the word 'not' assumes that it serves as an adjunct to the verb or verb phrase. For instance, in a negated phrase such as [219] below, computation first merges the verb 'see' and the pronoun complement to derive the VP 'see me'. This resultant VP is further merged with the negative word 'not' to derive an expanded VP or a Negation phrase 'not see me'.

219. ...shall not see me



However, in current linguistic analysis (Radford 2004), NEG is assumed to head a Negation Phrase (NegP] above VP. This is what has made negation to be categorized as a functional element. The expression of negation in English and Izon show different mechanisms and parameters. The most remarkable differences are found in the fact that Izon has a SOV-Neg configuration like Japanese (Whitman 2005:881) as constrained by its SOV structure. And unlike English, Izon negation markers namely 'gha' and 'kumo' are bound morphemes and function as enclitics to the verb. They occur in post-verbal positions. That these Negation particles are functionally and morphologically attached to the finite verb also indicates a significant parametric variation between English and Izon

Negation is a transformation of an affirmative sentence. The auxiliary 'do' in English is usually absent in Izon. To state it more appropriately, the auxiliaries 'do' and 'be' are covert elements that are phonologically null but are interpretable at LF. Again, in English, imperative Negative sentence must have a modal auxiliary verb such as *should*, *must*, etc, in addition to the main verb. In Izon modal auxiliaries are also covert elements. This is also a parametric variation between English and Izon.

5.5. Auxiliary verbs and agreement feature checking

Izon does not seem to have auxiliary and modal verbs. Lexical and auxiliary verbs usually enter into grammatical agreement with their subject DPs in English and other agreement-rich languages by verbal inflection. Since verbs inflect for both tense and number, checking of their morphological features by functional heads is overt and interpretable. Consequently, movement for checking of features occurs before Spell Out. However, this morphosyntactic process does not take place in Izon syntax overtly. This means that there is no overt morphological inflection in respect of subject-verb agreement in Izon, and that checking of morphological features responsible for subject-verb agreement is a covert operation which takes place after Spell Out. Izon does not have the 'be' auxiliary verbs. Therefore, there is no noticeable agreement involving them. Izon can boast of Tense and Aspect markers which function as enclitics to verbs. This study shows that the function of auxiliary verbs is embedded in the various Aspect markers.

Theta roles and Case assignment also display different parameters in English and Izon. Whereas in English, Case and Theta roles are assigned to the right of the assigner, in

Izon, these features are assigned to constituents to the left of the assigner. This variation is also conditioned by their different SVO and SOV structure.

5.6. Conclusion: The Implications for language learning

The various versions of theory of transformational grammar, according to Chomsky and his associates such as Lasnik and Radford have been developed to make the learning and acquisition of natural languages easier. In these theories, language variations have been characterized in terms of a series of parameters with binary settings. It follows therefore that language acquisition, or the acquisition of the grammar of a language has the twin tasks of lexical acquisition and parameters setting. The child develops his mental dictionary of lexical items and chooses between either of binary parameters that are applicable to the syntax of the language it is exposed to.

These parameters are found in such syntactic features and processes as head and complement positional relationship, Subject-verb agreement features, wh-movement and negation paradigm as well as interpretability of features among others. A child learning Izon will have to set his parameters to align with the reality of head directionality parameter, wh-movements in interrogatives being licensed by several functional elements, construction of relative clauses without overt wh-operators, and indeed, the general word order of SOV. While the Izon child learning English sets his parameters on head-final positioning will have to learn to adjust to head-initial positioning in English, the English child who acquires the head-first parameter would need to adjust to the head-final positioning in the acquisition of Izon language.

On a wider scale, the Izon child acquires the syntagmatic parameter of subject—object—verb while the English child acquires a subject—verb—object configuration. These parameters further determine other morphosyntactic processes such as directionality of Theta role and Case assignment, and Case feature checking. Ultimately, this study contributes to an understanding of the systemic characterization of the interface between functional morphological features and syntactic derivations

5.7. Unresolved problems for further studies

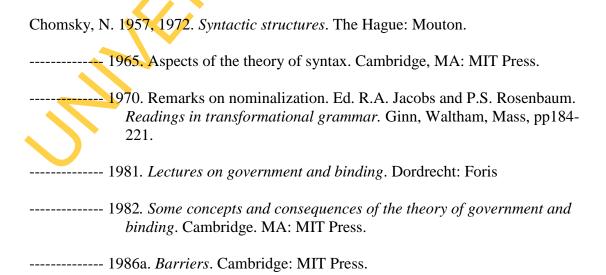
This work fundamentally investigated functional categories. Functors are important in the structure of language because although they inherently lack semantic content, they play such linguistic roles that contribute meaningfully to the convergence and grammaticality of derivations. Functors that constituted the crux of our investigation include determiners in DPs, Agreement represented in pronouns, tense represented in auxiliaries and abstract tense and Agr functional heads that perform feature checking roles. Other functors discussed in this work are negation, the Complementizer, conjunctions and prepositions, as well as focus marking elements.

The aim of CA is to identify structural and semantic differences between languages (McDonough 2002:57). However, this work did not address the semantic differences between English and Izon. The reason basically lies in the defined morphosyntactic scope of this study. It will be an interesting challenge to investigate this area. It is therefore recommended for future research. There is also interaction between phonology and syntax in Izon since it is a tonal language. The phonosyntax of Izon is only briefly discussed in this work. Further detailed research could be done in this area also. Izon does not seem to have auxiliary verb. This observation is not yet conclusive. This work dealt with Tense and Aspect markers in terms of Tense feature checking. Further study perhaps may reveal words that may be performing the function, particularly of the 'be' verb.

REFERENCES

- Abney, S. 1987. The English noun phrase in sentential aspects. PhD Dissertation: MIT.
- Agbegha, M.L. 1996. *Izon-English Dictionary*. Port Harcourt: Riverside Communications.
- Adegbite, F. 2003. Multilingualism and national development. Eds. Oyeleye, L and M. Olateju *Readings in Language and Literature*. Nigeria; Obafemi Awolowo University Press Ltd. 153-168.
- Aikhenvald, A.Y. and Dixon, R.M.W. 2006. Serial verb constructions: a across-linguistic typology. Oxford: Oxford University Press.
- Ajongolo, T. 2005. Negation in the *Ao* dialect of Yoruba. PhD Thesis; University of Ibadan.
- Akindele, F. and Adegbite, W. 1999. *The sociology and politics of english in nigeria: an introduction*. Ife: OAU Press.
- Alagoa, E.E. 2005. A history of the Niger Delta: an historical interpretation of Ijo oral traditions. Port Harcourt: Onyoma Research Publications.
- Alazigha, W. 2004. *Kari oru: ukarist be.* Port-Harcourt: Minson Publishers.
- Ali, Nabil. 2007. Machine translation: a contrastive linguistic perspective. http://www.unesco.org/comnat/france/ali.htm. Rtrd 1/2/2010.
- Amfani, A.H. 1996. Aspects of agreement relations in Hausa clause structure. PhD Thesis: University of Ibadan.
- Atkinson, M., D. Kilby and I.M. Roca. 1989. *The foundations of general lingustics*. 3rd Edition. London: Unwin Hyman Ltd.
- Babajide, A.O. 2001. Language attitude patterns of Nigeria. ed. Igboanusi, H. *Language attitude and language conflict in West Africa*. Ibadan: Erincrownfit Publishers.1-13.
- Baker, C.L. 1978. *Introduction to generative transformational syntax*. London: Pentice-Hall Inter. Ltd.. 265-294.
- -----1995. The polysynthesis parameter. Oxford; Oxford University Press.

- Banjo, L.A. 1996. *An overview of the English language in Nigeria*. Ibadan: Ibadan University Press.
- Bayer, J. 2007. Head-final languages workshop. Leipzig, 6 9 December.
- Barbosa, P. 1995. Null Subjects. Ph.D. dissertation. MIT: Cambridge, Mass.
- Barbosa, P, M.E.L. Duarte and M.A. Kato. 2005. Null subject in European and Brazilian portuguese. MIT: Cambridge, Mass.
- Belletti, A. and Rizzi, L.1996. Eds. *Parameters and functional heads: essays in comparative syntax*. Oxford: Oxford University Press.
- Blake, B. J. 2001. Case. Cambridge: Cambridge University Press.
- Burchfield, R. W. 1996. Fowler's modern Englsih usage. Oxford; Oxford University Press.
- Branigan, P. 2004. The syntax of a-bar: a study of subjects and a-movement constraints. MA: MIT.
- Bresman, J. 1982. *The mental representation of grammatical relations*. Cambridge MA, MIT Press.
- Campbell, L. 2003. The history of linguistics. Ed. Aronoff. M and J. Rees-miller. *The handbook of linguistics*. USA; Blackwell Publishing Ltd. 81-144.
- Carnie, A. 2007 Syntax: a generative introduction. Second Edition. USA: Black Publishing.
- Chesterman, A. 1998. Contrastive functional analysis. Amsterdam; Benjamins.



- ----- 1986b. *Knowledge of language: its nature, origins and use.* New York: Praeger.
- ----- 1995. Minimalist program. Cambridge, MA: MIT press
- ----- 1998. Minimalist inquiries: the frame work. MIT: Occasional Papers. Linguistics 15.
- ----- 2002. On nature and language. Cambridge: Cambridge University Press.
- Chomsky, N. and Lasnik, H. 1995. The theory of principles and parameters. Chomsky, N.: The *minimalist program*. Cambridge, Mass MIT Press.
- Clements, G.N. 2000. Phonology. Ed. Heine, B. and D. Nurse. *African languages: an introduction* Cambridge: Cambbridge University Press.
- Clyne, M. 2000. Multiligualism. Ed. Florian Culmas. The handbook of sociolinguistics. USA; Blackwell
- Connor, Ula M. 1996. Contrastive Rhetoric: Cross-cultural aspects of second language learning Cambridge, UK; CUP.
- Cowper, E. 1992. *A concise introduction to syntactic theory*. Chicago & London: Chicago Press.
- Comrie, B. 1985. Tense. Cambridge; Cambridge University Press.
- Creissels, D. 2000. Typology. Ed. Heine, B. and D. Nurse. *African languages: an introduction*. Cambridge: Cambbridge University Press.
- Crystal, D. 1987. *The Cambridge encylopedia of language*. Cambridge: Cambridge University press
- Crystal, D. and Davy, D. 1969. Investigating English style. London; Longman Group
- Culicover, P.W. 1976. Syntax. New York, London: Academy Press.
- Derefaka, A. A. 2003. Archeology and cultural history in the central Niger Delta. Port Harcourt: Onyoma Research Publications.
- Donwa-Ifode, S. 1995. Preliminary historical inferences from ijo loan words in delta edoid languages. Ed. Emenanjo E. and Ndimele O. *Issues in African languages and linguistics: essays in honour of Kay Williamson*. Aba, Naitonal Institute of Nigerian languages. 132-147.

- Emonds, J. 1993. Projecting indirect objects. *The linguistic review* 10, pp.211-263.
- Egberipou, O. A and Williamson, K. 1994. *Izon tolumo learn Izon*. Port Harcourt: Riverside Communication.
- Egbohkare, F. 2001. The Nigerian linguistic ecology. Ed. Igboanusi, H. *Language* attitude and language conflict in West Africa. Ibadan Erincrownfit Publishers 105-124.
- Egbokhare, F.O. 2011. *The sound of meaning: an inaugural lecture*. Ibadan; University of Ibadan.
- Ehret, C. 2000. Language and history. Heine, H and D. Nurse. *African languages: an introduction*. Cambridge; Cambridge University Press, 272-297.
- Ellis, R. 1994. The study of second language acquisition. Oxford: OUP.
- Elugbe, B.O. and Omamor, A.P. 1991. *Nigerian pidgin: background and prospects*. Nigeria; Heinemann Educational Books.
- Emenanjo E. W and Ndimele O. 1995 Kay R.M Williamson: A biographical profile and list of publications. Ed. Emenanjo E. and Ndimele O. *Issues in African languages and linguistics: essays in honour of kay williamson*. Aba: National Institute of Nigerian language.
- Fabbro, F. 2001. The bilingual brain: cerebral representations of language. *Brain and Language Journal* vol.79/2.
- Fakih, A.A. 2006. Licensing, movement and feature checking in standard Arabic: a minimalist approach, *King Saud University Journal of Arts* vol. 19, 37-54.
- Federal Republic of Nigeria Official Gazette. 2009. Legal notice on publication of 2006 Census Final Results; Abuja, Federal Government Printers.
- Fromkin V and R. Rodman. 1993. *An introduction to language*. 5th Edition. Holt, Rinehart and Winston.
- Gleitman, L. and Fisher, C. 2005. Universal aspects of word learning. Ed. McGilvary *Chomsky*. Cambridge: Cambridge University Press. 123-144
- Gordon, R. G. Jr. (ed) 2005. *Ethnologue: languages of the world*. Fifteenth edition Dallas Tex: SIL International Online Version: Http://www. Ethnologue.com/.
- Greenbaum, S. and Quick, R. 1990. *A student's grammar of the English language*. India: Pearson Education Ltd.
- Gruber, J.S 1990. Complex thematic structures. Mass: MIT Press.

- Haegeman, L and Zanutini, R. 1996. Negative concord in West Flemish. Ed. Belletti A. and Rizzi, L. *Parameters and functional heads*. Oxford: Oxford University press 117-180.
- Hamsford, K. Bendor-Samuel, J. & Standford, R. (eds) 1976. *An index of Nigerian languages studies in Nigerian languages* 5. Accra Summer Institutes of Linguistics
- Haegeman, L. 1997. The new comparative grammar. London; Longman
- Haugen, E. 1956. The bilingual individual. Ed. Saporta, S.1961. *Psycholinguistics: a book of readings*. New York: Olt, Rinehart and Winston. 381-395.
- Haugen, E. 1974. Bilingualism, language contact and immigrant language in the united states: a research report (1956-1970). Ed. Sebiok, T.A. Current trends in linguistics, vol x.
- Hayward, R.J. 2000. Afroasiatic. Ed. Heine, B and Nurse, D. *African languages: introduction* Cambridge; Cambridge University Press. 194-230.
- Hendricks, R. 2003. *Minimalist syntax*. Malden M.A: Blackwell.
- Hoey, M. and Houghton, D. 1998. Contrastive Analysis and Translation. Ed. Baker, M. *Routledge encyclopedia of translation studies*: London and New York. Routledge. 45-49
- Hornstein, N. 1999. Movement and control. Linguistic inquiry 30; 69-96.
- Horrocks, G. 1987. Generative Grammar. London & New York: Longman.
- Huang, J. 1995. Some current issues in bounding theory. Ed. Webelhuth, G. Government and binding theory and the minimalist program: principles and parameters in syntactic theory. Oxford, UK & Cambridge, USA: Blackwell.
- Hudson, R. 2006. Syntax without functional categories. UCL Working Papers in inguistics, 9.
- Hugo, B. B. 1986. Bilingualism: basic principles. Germany; Multilingual Matters.
- Ijo. 2008. Encyclopedia britannica, ultimate reference suite. Chicago: Encyclopedia Britannica.
- Izon Researchers/Writers Committee. 2006. *Izon beeli bolou go fun.* Pot-Harcourt: Riveride Communications

- Jackendoff, R. 1977. X^I-Syntax: a study of phrase strucure, Linguistic Inquiry. Monograph 2, The MIT Press: Cambridge Mass.
- James, C. 1980. Contrastive analysis. London: L=ngman
- Jayaseelan, K.A. 2004. Question movement in some SOV languages and the theory of feature checking. *Language and Linguistics* 51:5-27
- Jowitt, D. 1991. Nigerian english usage. Nigeria: Longman.
- Katamba, F. 1993. Morphology. London: The Macmillan Press Ltd.
- Katz, J.J. and Postal, P.M. 1964. *An integrated theory of linguistic description*. Cambridge, MA: MIT Press.
- Koopman, H. 1984. The Syntax of verbs. Dordrecht: Foris.
- Koopman, H. 1999. The syntax of specifiers and heads. Dordrecth: Foris.
- Koopman, H. and Sportiche, 1988. *The position of subjects*. Ms University of California: Los Angelis.
- Krzeszowski, T.P. 1979. Contrastive grammar: theoretical foundations. Tuningen Narr (Ars Linguistica)
- Kroeger, P.R. 2004. Analyzing syntax. Cambridge: Cambridge University Press.
- Ladefoged, P. 1982. A course in phonetics. San Diego: Harcourt Brace Jovanovich Publishers.
- Lamidi, M.T.2003. The head parameter and grammaticality in Yoruba-English codeswitching among undergraduates in selected Nigerian universities. PhD Thesis. English. University of Ibadan, Ibadan.
- ----- 2004. Agreement relations in English and Yoruba. Ibadan Journal of English Vol. 1; 35-53.
- ----- 2000 Aspects of Chomskyan grammar. Ibadan: Emman Publications.
- Lexicon. *Research in african languages and linguistics*; 2005-2006; Vol. 7. 59-81.
- ----- 2006. The minimalist program. An encyclopaedia of the arts vol. 4(2): 92-96.
- Lasnik, H. 2005. Grammar, levels and typology. Ed. McGilvary, J. *Chomsky*. Cambridge: Cambridge University Press.

- Lee, D. and Williamson, K. 1990. A lexicostatistic classification of Ijo dialects. *Research in Afrean languages and linguistics* Vol. 1 No1. University of Ibadan.
- Lofti, A.R. 2006. Feature sharing v. feature checking: an analysis of Persian pre- and post-verbal CPs; Califonia linguistic notes, volume XXXI,No 1,spring.
- Lightfoot, D. 2005. Plato's *problem, universal grammar and the language organ*. Ed. McGilvray, J. *Chomsky*. Cambridge; Cambridge University Press.
- Matthews. P.H. 1997. A concise dictionary of linguistics. Oxford, Oxford University Press
- Matthews, P. 1991. Morphology. 2nd ed. Cambridge; CUP.
- McClosky, J. 2001. The morphosyntax of wh-movement. *Journal of linguistic inquiry* 23:336-341.
- Mahajan, A. K. 1989. Agreement and agreement phrases. Ed. Laka, I. and Mahajan, A.K. *Functional heads and clause structure*. MIT working Papers in Linguistics 10, Cambridge, MA:217-252.
- Marantz, A. 1995. The minimalist program. Ed. G. Webelhuth: *Government and binding theory and the minimalist program: priniciples and parameters in syntactic theory*. Cambridge, Mass; Blackwell, 351-381.
- Massam, D. 1985. *Case theory and the projection principle*. PhD Thesis. http://web.mit.edu/mitwpl/diss/massam.htmt. Rtrd 2/3/2010.
- May, R. 1995. *Logical form*. Linguistic Inquiry Monograph 12.
- McCawly, J.D. 1976. Grammar and meaning. London: Academic Press Inc.
- McGilvary, J. 2005. Meaning and creativity. Ed. McGilvary. *Chomsky*. Cambridge: Cambridge University Press. 204-239.
- Ndimele, Ozo-Mekuri (1992). *The parameters of universal grammar*. Owerri: African Educational Services.
- Nooman, M. 1985. Complementation. Ed. Shopen, T. *Language typology and syntactic description: complex constructions* vol. 2. Cambridge: Cambridge University Press.pp40-140.

- Odlin, T. 1989. *Language Transfer: Cross-linguistic influence in language learning*. Cambridge: Cambridge University Press.
- Ogunsuji, A. 2001. Utilitarian dimensions of language in nigeria. Ed. Igboanusi, H. Language attitude and language attitude and language conflict in West Africa. Ibadan: Erincrownfit Publishers
- Owolabi, D.K.O. 1976. Noun-noun constructtions in Yorùbá: a syntactic and semantic analysi. PhD Thesis; University of Ibadan.
- Oyetade, S.O. 2001. Attitude to foreign languages and indigenous language use in Nigeria. Ed. Igboanusi, H. Language attitude and language attitude and language conflict in west africa. Ibadan: Erincrownfit Publishers
- Pesetsky, D. and Torrego, E. 2000. I-to-C Movement: causes and consequences. Ed. M. Kenstowicz, Ken Hale: *A life in language*. Cambridge; Mass.: MIT Press.
- Pinker, S. 1994. The language instinct. New York: Morrow Inc.
- Poletto, C. 1990. Three kinds of subject clitics in Bosso Polesan. Ed. Belletti, A. and Rizzi, L. *Parameters and functional heads*. Cambridge: Cambridge University Press. 269-299.
- Pollock, J.Y. 1989. *Verb movement, universal grammar and the structure of IP*. Linguistic Inquiry. 20.365-424.
- Radford, A. 1988. *Transformational grammar: a first course*. Cambridge: Cambridge University press.
- ----- 1997. Syntactic theory and the structure of English. Cambridge: Cambridge University Press.
- ----- 2004a. *Minimalist syntax: exploring the structure of English*. Cambridge: University Press.
- ------ 2004b. *English syntax: an introduction*. Cambridge: Cambridge University Press.
- Radford, A. Atkinson, M., Britain, D., Clahsen, H. & Spencer, A. 1999. *Linguistics: an introduction*. Cambridge; Cambridge University Press.
- Raible, W. 2001. The Pitfalls of subordination of subject and object clauses between Latin and Romance. University of Freiburg
- Riemsdijk, H. and Williams, E. 1986. *Introduction to the theory of grammar*. Cambridge, MA: MIT Press.

- Rizzi, L. 1997. The fine structure of the left periphery. Ed. L. Haegeman. *Elements of grammar: a handbook of generative syntax*. Dordrecht: Kluver.
- Rizzi, L and I. Roberts. 1996. Complex inversion in French. Ed. Belletti, A. and L. Rizzi *Paramaeters and functional heads*. New York, Oxford: Oxford University Press. 91-180
- Romaine, S. 1995. 2nd ed. *Bilingualism*. Oxford; Blackwell Publishers Ltd.
- Romaine, S. 2001. Multilingualism. Ed. Aronoff. M and Rees-Miller, J. *The handbook of linguistics*. USA: Blackwell Publishing Ltd. 512-532
- Roehrs, S. 2000. The syntax of determiner phrase: the boundary between morphology and syntax. Indiana University.
- Santorini, B. and Kroch, A. 2007. *The syntax of natural languages: an online introduction.* http://www.ing.epenn.edu/-beatrice/syntax-textbook. 7/7/2008.
- Sells, P. 1985. *Lectures on contemporary syntactic theory*. Standford University
- Smith, N. 2005. Chomsky's science of language. Ed. McGilvray. *Chomsky*. Cambridge; Cambridge University Press. 21-41.
- Speas, Margeret 1997. Optimality theory and syntax: null pronouns and control. MA, Oxford: Blackwell.
- Sternefelf, W. 2008. Pronominal features: how "interpretable" are they' Paper presented at the annual meeting of the Korean linguistic society, 14th February, 2008.
- Voelz, F.K.E. 1977. *Proto-Niger Congo verb extensions*. Mineo.
- Waters, J. R. 2000. Syntax. Ed. Heine, B and Nurse, D. *African languages: an introduction*. Cambridge; Cambridge University Press. 194-230.
- Weinreich, U. 1954. Languages in contact. Ed. Saporta, S. 1961. *Psycholinguistics: a book of readings.* New York: Olt, Rinechart and Winston. 381-395.
- Webelhuth, G. 1995. Ed. *Government and binding theory and the minimalist program.*Oxford & Cambridge: MA Basil Blackwell.
- Williamson, K. 1969. *A grammar of the Kolokuma dialect of Ijo*. Cambridge: Cambridge University Press

- ----- 1996. Forward in Agbeha, M.L. *Izon- English dictionary*. Port Harcourt: Riverside Communications.
- Williamson, K. and Blench, R. 2000. Niger-Congo. ed. Heine, B and Nurse, D. *African languages: an introduction*. Cambridge: Cambridge University Press 11-42.
- Williamson, K. and Timitimi O.A. 1968. The sound system and spelling of Ijo. Linguistics Department, University of Ibadan.
- Williams, Edwin 1987. Implicit arguments, the binding theory and control. *Natural Languages and Linguistics theory 12*, 124-39.
- Whitman, J. 2005. Pre-verbal elements in Korea and Japanese. Ed.Cinque, G. and R. Kayne. *The oxford handbook of comparative syntax*. Oxford: Oxford University Press.
- Wolff, H.E. 2000. 'Language and society' in Heine, B and Nurse, D. (eds) *African languages: an introduction*. Cambridge University Press 293-347.
- Yuka, C. 1997. The basic clause in Lamnso. MPhil dissertation, University of Ibadan.
- Yuka, C. 1999-2000. An articulated clause structure for Lamnso. *Research in African languages and linguistics* (*RALL*). University of Ibadan, Ibadan; Vol. 5 No 1, 1-11.
- Zanutini, R. 1990. On relevance of tense for sentential negation. Ed. Belletti, B. and L. Rizzi. *Parameters and functional heads*. Cambridge; CUP, 181-208.
- Zwart, C.J-W. 1997. Morphosyntax of verb movement: a minimalist approach to the syntax of Dutch. Dordrecht; Kluwer.
- Zwart, J-W. 2003. Comparative Germanic syntax. Dordrecht: Kluwer.
- Zwart, J-W. 1998. The minimalist program. *Journal of linguistics* 34, 213-226; Cambridge.