CHAPTER ONE

INTRODUCTION

1.0 Introduction

This thesis examines the use of the preposition *of* in the Nigerian component of the International Corpus of English (ICE-Nig.) and makes a comparison with the British component (ICE-GB) as a reference corpus. In this chapter, the background of the study with regard to the roles of English in the Nigerian society is briefly explained. This is followed by statement of the problem, the aim of the study and research questions. The chapter also presents the significance as well as the scope and limitations of the study.

1.1 Background of the Study

Nigeria has the largest population of speakers of English in Africa (Grims, 2000). English came into Nigeria as a result of trading activities between residents of the coastline of West African and British traders in the sixteenth centuries. This interaction gave birth to the present-day Pidgin, as the claimed antecedent of contemporary Nigerian Pidgin English. According to Bamgbose (1996), Nigeria only established the link with English around the middle of the nineteenth century. Before that time, Nigerians used Pidgin English for cross-ethnic medium of interaction. Early missionaries' locations were well-known in the 1840's, and the initial formal institutions were opened around late 19th century in Lagos and early 20th century in Kano.

There are debates on what constitutes Nigerian English. Some are of the opinion that there is no such thing as typical Nigerian English (English understood by Nigerians despite their levels of educational attainment) broadly recognized to date. Although

Received Pronunciation (R.P) and/or British English (Br.E) has been currently the standard used within colleges and examinations, some empirical findings have defined the basic characteristics of Nigerian English (Kujore 1985; Gut and Coronel 2012).

Today, English has gained a wider coverage across Nigeria. English has the formal status in the country (Jowitt, 1997). It is the medium of instruction from the middle basic (Primary Four) up to the tertiary education in the country. It serves as the medium of official settings such as government, education, literary texts, trade, and exchange, and as a lingua franca in societal relations amongst the well-educated (Bamgbose, 1996). Furthermore, the widespread domestic newspapers such as New Nigeria, Vanguard, and Daily Trust are printed in English in particular British English.

Just as the case in most of the countries that use English as a second language (L2), several sub-varieties exist (Kachru, 1981). Uniformity of a given variety is usually adopted and Nigeria is not an exception. Nigerian English is sub-divided into regional varieties controlled by the users' mother tongues as in the three major Nigerian languages (Hausa, Yoruba and Igbo) as well as the diverse past accounts of colonial process and administrative process (Jibril, 1986; Jowitt, 1991). This is coupled by the educational training within the three regional parts of the country (South-East, South-South and the Northern region) (Awonusi 1986). Besides, the users' literacy and educational training serves as a leading issue controlling the variety of English used within the country (Gut, 2013).

English language in the Nigerian context demonstrates certain features that make it different from other varieties around the world (Gut & Coronel, 2012). The circumstance emerges from the various ethnicities, social and linguistic constrictions due to the second

language context within which the language operates. The term "Nigerian English" can be generally defined "as the variety spoken and used by Nigerians" (Adeniyi, 2006:25). Among other features that distinguish Nigerian English from other varieties worldwide are: "lack of distinguishing strong and weak syllable, stress misplacement and tendency to match orthography with pronunciation" (Jowitt, 1991:90-92), "phonological interference: negative transfer of what is obtained in source language to the target language" (Ofuya,1996: 151), "misuse of prepositions, poor knowledge of agreement, lack of class differentiation, omission of article, misuse of countable and mass nouns, wrong conjugation of the progressive forms" (Jowitt, 1991: 111-123) and from lexico-semantics: " transfer, analogy, acronym, semantic shift, coinages" (Adebija, 1989: 7). Jowitt observes that, mother tongue influence from the three major Nigerian languages (Hausa, Yoruba and Igbo) affects Nigerian users of English in wrongly conjugating verbs. Example of these verbs are those on perceptions of progressives such as: "I am hearing you", "I am understanding you" which is expressed in Standard English as "I understand you, etc." (Adebija, 1989: 7).

This research discloses that prepositions take the highest occurrence of the word classes in the English language of Nigerian speakers as observed from the ICE-Nig. Based on the first 10 tokens from the word list in ICE-Nig. (as observed by the author), this claim can be substantially proven where the researcher observes that, in frequencies of the first ten words in the corpus, four of the words from the word frequencies are prepositions (40.23%), two of them are articles (34.59%) , one of them that is a conjunction (11.70%), two are verbs (8.45%), and one is a pronoun (5.04%). This can be seen in Table 1.1 which shows the frequency distributions of the first ten most frequent words in ICE-Nig.

Table 1.1 Distribution of the Top Ten most Frequent Words in ICE-Nig.

No	Word	Frequency	Part of speech	Frequency per group	Percentage (%)
1	Of	14,648	Preposition	-	-
2	To	11,899	,,	-	-
3	In	8,425	,,	-	-
4	For	4,233	,,	39,232	40.23%
5	The	27,190	Article	-	-
6	A	6,535	,,	33,725	34.59%
7	And	11,408	Conjunction	11,404	11.70%
8	Is	5,504	Verb	-	-
9	Be	2,740	,,	8,344	8.45%
10	That	4,919	Pronoun	4,919	5.04%
	Total	**97528**	**-**	**97,528**	**100%**

Several books on English grammar contain basic information and guide on the usage of prepositions and their characteristics as a word class. For instance, Huddleston and Pullum (2002) and Quirk et al. (1985) see prepositions as a group containing a series of meanings which express several relations.

Therefore, this research offers a contrastive analysis of the prepositional usage in ICE-Nig. in comparison with ICE-GB. Gut and Fuchs (2013) study the progressive aspect in Nigerian English comparing the use of progressives in ICE-Nig. to those in ICE-GB. In the context of ICE-GB and other corpora, Disney (2010) studies the patterns of the use of the definite article (the) in ICE-GB and ICE-HK. No single study has been conducted on prepositions from the ICE-Nig. as contrasted with the data from ICE-GB such as this study aims to examine.

Corpus linguistics is an advanced development of the old-fashioned text approach with the use of sophisticated technology. Schmied (1990) defines corpus linguistics as;

> "a further development of the traditional text approach where a modern computer technology offers additional possibilities for automatic data analysis on non-native English"(p 57).

In view of the statistics from the list of the ten most occurring words in ICE-Nig., one can see that the prepositions group has the highest instances. Groom (2007) counteracts the view that keywords of closed-grammatical classes are given less attention by linguists, as viewing such classes appears to have less semantic value. As he further observes that the preposition *of* establishes a brilliant test-bed for the assertion that closed-class keywords are manageable for semantic analysis which are quantitative in nature. In support of this claim, Bondi and Scott (2010) assert that corpus linguists are interested in empirical findings which are only supported by levels of statistical significance.

1. 2 Statement of the Problem

The ICE-Nig. released in June 2013 has only been examined by few researchers so far. As stated earlier, the only explored areas have been the progressive aspect in Nigerian English by Gut and Fuchs (2013) prosodic aspects in Nigerian English by Gut Ulrike (2002) and very few other topics have been examined so far (Gut and Fuchs, 2013). Although, much research has been done on prepositions, research on prepositions using corpus methodology with reference to ICE-Nig. in particular is not yet heard of.

Some mainstream linguists are of the view that closed-class words (preposition, conjunction, determiners and pronoun) have only grammatical functions without any semantic content. Groom (2007) counter-argues this view by proving in his work that the

closed-class words have not only grammatical functions and semantic contents, but also serve as a new area that attracts linguistic investigations, stylistics and inter varietal distinctions. Kperogi (2012) opines that, "prepositions are those pesky little words" such as to, on, from, for, of, with, etc. that connect parts of sentences. Many speeches may either lose weight or contradicts their intended direction due to poor usage of prepositions.

This study aims to examine the use of the preposition *of* in ICE-Nig. The idea that the preposition *of* has been the highest frequency preposition in most texts is supported by Sinclair (1991) that the high occurrence of the preposition *of* shows that there is enough evidences to rely on. He maintains that, within the contemporary stage of linguists capability in processing language texts, too much substantiation exist, where some kinds of selection becomes crucial as the preposition *of* happens to be the 50th word, being at least 2% of the whole words regardless of the kind of text observed.

In another context, Groom (2007) reports that the preposition *of* alone comprises 4.34% of the total words that appear in the HistArts corpus. To confirm the above discovery by Sinclair (1991), this study finds that the preposition *of* features in about 1.68% of the total words in ICE-Nig. This study is the first of its kind that attempts to look at the use of the preposition *of* from the ICE-Nig.

1.3 Aims of the study

The objectives of this thesis are twofold:

1. To analyze the use of the preposition *of* in the ICE-Nig.

2. To compare the patterns of use and usage of the preposition *of* in ICE-Nig. to those in ICE-GB.

1.4 Research Questions:

The study addresses the following research questions:

1. What are the patterns of the use of the preposition *of* in the ICE-Nig.?

2. How do the patterns of use of the preposition *of* in ICE-Nig. compared to those in ICE-GB?

1.5 Significance of the Study

Many studies have been conducted on prepositions using a more descriptive approach. Very few have been conducted using a corpus linguistics methodology. Hence, this study is important as it fills the gap in research to analyze the preposition *of* in ICE-Nig. and to compare it with ICE-GB. Therefore, this is a novel contribution to the field of corpora as it will be resourceful to language teachers who will teach their students the various semantic uses and usage of the preposition *of*. Researchers/corpus linguists can use it as a relevant literature and a basis for further research. Textbooks writers can use the findings in this research to update their resources in the areas of prepositions and semantics.

1.6 Scope of the Study

The scope of this study is limited to carrying out the analysis on ICE-Nig. (English used by educated Nigerians) and ICE-GB as reference corpus. It should be noted that not all the patterns of the preposition *of* are included in this study. Nonetheless the analysis is done within the parameters of academic files of the written sub-corpus. Other patterns that may exist beyond the corpus will not be examined as it is beyond the scope of the study.

1.7 Limitations of the Study

The ICE-Nig. consists of a variety of files among which are edited and unedited. The edited files (materials from published sources) are used in this study as they seem to be more

formal and refined. For specificity and easiness, not all the edited files are searched from the two corpora (ICE-Nig. and the ICE-GB). Academic files are found to be the largest of all the edited files from among the number of files that exist within the two corpora. For this reason, the academic file is found to be most suitable for the comparison across the two corpora. The files supply a larger amount of data than all their counterparts. Therefore, the preposition *of* is searched from the academic files of the two corpora.

1.8 Summary of the Chapter

This chapter shows the background of the study and presents the role of English in the Nigerian society. The chapter presents the Rationale of the study, Statement of the problem, Objectives, Research questions, Significance of the study, and the Scope and limitations of the study.

1.9 Organization of the thesis

This thesis is divided into five chapters. While Chapter One introduces the thesis, Chapter Two presents relevant literature on previous studies and the theoretical framework in the corpus linguistics methodology. Chapter Three describes the methodology and the categorizations used in this study. Chapter Four describes the corpus and the SPSS analysis of the data respectively by comparing the use of the preposition *of* in ICE-Nig. and ICE-GB. In Chapter Five, the researcher presents the summary, findings and conclusion and the implications of the research for further studies.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This section presents a review of literature most related to the study. First, it introduces a brief history of Nigerian English as a variety of English and discusses studies on Nigerian English. Concepts and types of prepositions are briefly discussed. Corpus linguistics studies and the studies of prepositions are also described in the chapter. Downing & Locke (1992) and the Cambridge Advanced Learners (2008) categorizations are also explained. The chapter also describes ICE-Nig. and ICE-GB as the two sources of corpora used in the study.

2.1 Nigerian English and Studies on Nigerian English

The term "new Englishes" could be best described in the following ways as stated by Bolton (2009):

> English as an International (auxiliary) language, global varieties of English, non-native varieties of English, second language varieties of English, world English(es), new Englishes, alongside such more traditional terms as ESL (English as a Second Language), and EFL (English as Foreign Language). In second narrow sense the term is used to specifically refer to "new Englishes" found in the Caribbean and in West African and East African societies such as Nigeria and Kenya, and to such Asian Englishes as Hong Kong English, Indian English, Malaysian English, Singaporean English and Philippine English (p 240).

Bolton characterizes his study among those that focus on national and regional varieties of English. He emphasizes his findings on describing the linguistic features of the varieties of English considered to have autonomy in certain countries. This study considers Nigerian English as one of the independent national or regional varieties of English in Nigeria.

The status of English in the African continent has been observed by many writers. Amongst them is Akare (1998) contends that English is regarded as a second language, lingua franca and language of instructions in education in the following West African countries: Sierra Leone, Gambia, Ghana and Nigeria. (See Fig. 1.1)

Figure 1.1 Map of West African Sub-region containing Serra Leon, Gambia, Ghana and Nigeria.

The above map in figure 1.1 is shown to enhance readers understanding of the West African sub-region within which the country (Nigeria), is located. The status of English as a foreign language in the West African sub-region has a quick spread. This is considered a vital feature of the language planning policy as the quick spread of the language leads to the

emergence of the policy which is necessary for its growth. The growth of the English language from one geographical stage to another in the region has to do with some kinds of uniqueness within which the language could be learned and functioned. Environmental features which comprise social, cultural, economic, political and linguistic factors have been mixed up to form the variety of English in the region.

In view of the above assertion, Akare (1998: 408-421) opines that "The emergence of West African dialects of English is a combination of both linguistic and sociological processes of change in language used and functioned in a contact situation". Here, one can clearly note that factors such as physical, social, economic, politics and linguistic have a direct influence on a second language adopted in a particular nationality. This leads to the rebirth of a given dialect or variety of the language. In the case of Nigeria, sociological factors have led to the emergence of sub-varieties of English. This could be noticed easily depending on the speaker's geographical environment. For instance, the Hausa speakers from the northern part of Nigeria have a sub-variety which is distinct from the other sub-varieties spoken by Yoruba in the Western region as well as the Igbos in the Eastern region.

Varieties of language emerge due to the existence of a number of factors. Akare (1998) observes that varieties of language are due to dissimilarities in a number of linguistic and non-linguistic phenomena just as slight or wide differences may be found in the British and American Standard English. The English spoken in West Africa slightly varies with one another despite its resembling nature. This is due to the contact situation between the African countries and the process of colonization. Besides linguistic interference, some other phenomena are traceable as factors responsible for the differences between standard British English and the varieties of English in West Africa. These could

be socio-cultural factors of the linguistic/ethnic group that practice English as a second language.

In view of the above, researchers such as Schmied (1995) have conducted a research where he describes the variety of English in Nigeria. He further categorizes English in Africa as either item-based or text-based. According to Schmied, item-based research records features of African English at the level of pronunciation, grammar, vocabulary, discourse etc. from the daily language experiences of the participants or the records of their performance. A number of features of Nigerian English have been compiled on the basis of this methodology. On the other hand, text-based research collects written and/or spoken texts from various fields, domains or situations and analyzes features of these texts.

In a similar study carried out by Bamiro (1991), he describes the lexical features of Nigerian English and consequently reveals that the lexico-semantic feature of Nigerian English demonstrates some kind of linguistic behavior associated with speakers of English in Nigeria. For instance, they exhibit the habit of direct translation from their local languages observing the principles of the slightest effort and economy of expression, showing insufficient acquaintance to English and exposing forms and norms of English language to the logics and imperatives of socio-cultural styles of Nigerian situations such as the use of *presido* for president, *motto* for motorcycle, and Naija for Nigeria. Bamiro further states that the lexico-semantic features of Nigerian English have been categorized into ten linguistic classes such as “acronym”, “analogical”, “clipping”, “coinage”, “conversion”, “ellipsis”, “lexico-semantic duplication and redundancy”, “loan shift”, “semantic under differentiation” and “translation equivalent”. Despite the fact that Bamiro

conducted this research three decades ago, all the features described are still present in the Nigerian variety of English (Schmied, 1995).

There are many studies on Nigerian English which report the situation on the localization of English language that aims at suiting the Nigerian way of living (their cultures and traditions). One of such studies is the "Nigerian English usage: Its lexico-semantic features in (the novel) "The joys of motherhood of Buchi Emecheta," examined by Adebileji and Araba (2012). They observe that English language is localized and has embraced the culture of the Nigerians in the fields of culture, tradition, religion, and food. The status of English language in Nigeria is far from being just a language of communication. This is in line with Bamgbose (1996: 89) who observes that "in a situation where two languages are brought into contact, and where one of them serves an official function, the language is vulnerable to the influence of the other languages from both cultural and linguistic point of views according to the reciprocal influence of language variation". This reflects the nature of the English language in Nigeria as well as what distinguishes Nigerian English from other varieties of English worldwide.

Bamiro (1991) explores the influence of Nigerian indigenous languages (i.e. Hausa, Yoruba, and Igbo) over English language spoken in the country. This is traceable in the artistic contributions of the Nigerian writers in order to adopt the linguistic situation considered as typically Nigerian. These varieties consist of distinct aspects of Nigerian cultures. Lexical items that contribute to the stream of Nigerian variety of English are found in the works of the Nigerian artistic writers such as Chinua Achebe, Ola Rotimi, Wole Soyinka, Ahmed Yerima and Buchi Emecheta.

Examples of the observable linguistic areas of reference in Nigerian English include lexical transfer. The influence of lexical transfer into the streams of Nigerian English comprises words from the streams of music, food, clothing, religious beliefs, traditions, customs and occupations. Examples of such lexical items include; "agbada" (native dress), "afro juju" (a local music), "amala" (a local sticky food), "babalawo" (native doctor), "buba" (a kind of women dress), "eba" (a sticky food), "efo eko" (solid palp/vegetable), "iro ogun" (spatula), "otin" (alcohol), "sango" (god of thunder), "tuwo" (a commonly sticky food).

The influence of culture is considered an effective yardstick for measuring what constitutes varieties of English. This reflects what Kachru (1981) believes that the cultural influence English language undergoes exposes it to a number of degrees of acculturation/cultural inclinations. The more culturally inclined it becomes, the wider the proximity is generated between it and the native varieties. This is what has been observed by the researcher through the items that suits what Kachru observes:

1. Direct lexical transfer: "abiku" (a dead child), "agbada" (native dress), "amala" (a sticky food made of yam), "dodo" (leafy food), "eba" (sticky food made from cassava), "tuwo" (sticky local food). These lexical items which are within the domain of food are today being transferred directly to the Nigerian variety of English.
2. Loan blends: "kia-kia" (bus), "akara balls" (food from beans), "bukateria" (a traditional wear), most of these words are blended from the Yoruba language and are today used in Nigeria English.

3. Lexico-semantic variation such as:

(i) Transfer: e.g. “Bushman” (uncivilized person). Here is a direct transfer from Hausa language to English (Dankauye or Mutumin Kauye) which is transferred directly to English thus: bushman.

(ii) Acromyns: “SAP” refers to Structural Adjustment Program.

(iii) Semantic shifts: “Machine” refers to motorcycle.

(iv) Analogy: “Invitee” refers to invite.

(v) Coinage: “carry over” refers to repeating a course. All these morphological processes occur in Nigerian English and have been used in almost all the sub varieties of Nigerian English.

Other examples of direct lexical transfer in Adegbija (1989:171) include the use of “Chi” (one’s personal god); “Ona” (necklace); “Dibia” (deviner); “Obi” (chief in Igbo community); “Olisa” (God Almighty); “Nnua” (welcome); “Ogogoro” (locally made alcohol); “Pikin” (child); “Iyawo” (new bride) and “Kpokpo” (local cassava flour with lump). Nigerians express their cultures through names which denote specific meanings e.g. ‘Nnu ego’ (twenty bags of cowries); “Nnaife” (father is important); “Adaku” (daughter of wealth); “Kehinde” (last of twins). These expressions are mostly typical or common with Igbo speakers of English than other native Nigerian speakers.

Coinages are used to reflect Nigerian cultural items which are not recognizable by English cultures. For instance, Nigerians coin words to refer to their own valuable aspects of cultures such as: ‘waist lappas’ (coral beads used round waist and neck); ‘medicine man’ (powerful magician); ‘senior wife’ (first among many wives); ‘unspoiled virgin’ (simply a virgin) and ‘bride price’ (dowry).

Buchi Emecheta (2011) describes in her choice of lexis in "The joys of motherhood the contact between English and Igbo cultural situation. Igbo is among the three main Nigerian languages. She tries to establish a good link between Igbo language and English so as to enhance the understanding of her work to the Igbos and the non-Igbo readers. Besides, she shows the influence the Igbo language has on the English language in the Nigerian context. So, nativization or culturalization of the English language in Nigerian societies enhances the comprehensibility of the intended messages as exhibited by Emecheta.

Emechita (ibid) appraises the status of Nigerian English. Similar efforts are offered by Jowitt (2012). In "Nigerian English usage: An introduction", observes the relationship between the popular Nigerian English and the relationship between the standard form, popular Nigerian English, close to standard Nigerian English, and what is considered as the standard English. The study attempts to tap on the standardization of Nigerian English using predated data to the ICE-Nig.

2.2 Concepts of Prepositions

Prepositions are such words that appear between objects, persons, persons and objects. Linguists view prepositions in different ways. According to Quirk and Greenbaum (1973: 143), "a preposition shows an association between two items, one represented by the prepositional complement, and the next part of the sentence". Huddleston and Pullum (2002) observe prepositions as head of phrases that increase the head words that are habitually assigned to the category of prepositions and allow them to be dependents other than noun phrase. Besides these, the function of prepositions is observed by Downing and Locke (1992) that,

> "the grammatical role of prepositions is to express variety of syntactic and semantic relationships between nominal entities in: (a) other nominal; e.g. *the bridge over the river,* (b) verbs; e.g., *he ran into the room,* (c) clauses; e.g. *Support for rising the description,* (d) adjectives; e.g. *Angry at his refusal,* (f) adverbs; e.g. *Up to the top.(p 951)*

Furthermore, Downing & Locke describe the semantic feature of the prepositional group as:

> The selection of preposition that are determined by (i) a given noun, verb, adjective that precedes it; (ii) a choice from a group of preposition expressing different relationships; e.g. Look at/for/out of/into/ after/ around/ behind/ up/ down. The set of the prepositional words can be used depending on what the speaker wants to express. For instance, "look for" could be in terms of expressing the idea of setting eyes on something or someone, or refers to search for (p 952).

Downing and Locke (1992) also offer 55 far-reaching relationships illustrated by some 140 prepositions in which each of them may refer to 2 or more of the given relationships (e.g. for) or different aspects of a single relationships (e.g. with). Among the 13 categories used in this research, eight have been chosen from the ten categories proposed by Downing and Locke. Justification for the selection has been explained in Section 3.14. They further express that the semantic boundaries of the prepositional meanings could be difficult to define despite the rigorous efforts made by various researchers in the field of grammar without stating the reasons for its difficulty.

2.2.1 Types of Preposition

Carter and McCarthy (2006) observe that there are over 100 prepositions in English including complex and marginal prepositions. All prepositions are generally divided into two classes according to their compositions:

1). Simple prepositions: such as 'at', 'before' 'in', into', 'on', 'about', 'out', 'over', 'through', 'to', 'under' and, 'with', etc.

2) Complex prepositions such as (two words) ‘because of’, ‘due to’ ‘instead of’ (three words) ‘in spite of’, ‘as far as’, ‘in accordance with’, ‘on behalf of’, and ‘with regards to’.

Another classification of prepositions is according to the relations they establish. It has been noted that prepositions express more than one meaning, so, they can be used to show various relations in accordance with the context within which they occur. Quirk et al. (1985) offers the following categories:

1. Prepositions expressing spatial relations such as position, “at”, “on”, “in”; destination such as “to”, “in(to)”, “out of”; passage such as “across”, “through” or orientation such as “beyond” and “across”.

2. Prepositions expressing time such as time position; “at”, “in”, “on”, duration such as “for”, “until”, “up to”, or measurement into the future such as “in”.

3. Prepositions expressing the relations as the cause such as “because of”, reason such as “for”, motive such as “out of”, purpose “for” destination such as “for”, target such as “at”.

4. Prepositions expressing the relations as the means/agentive spectrum such as manner “with”, motive “out of”, instrument “with” and agentive “by”.

5. Prepositions expressing the relations as complement “with”.

6. Preposition expressing the relations of support/opposition “for” and “against”.

7. Prepositions expressing other relations such as concession “in spite of”, or respect such as “with regard to”.

Downing and Locke (1992:591) observe that prepositions can be categorized into two according to their meanings thus:

1. Those in which the choice of the prepositions is determined by verbs, nouns, or adjectives that precedes them and the meaning of its completive such as in sentences like: (i) I agree *with* you. (ii) They believe *in* God. (iii) It is ideal *for* them.

2. Those in which the choice of the prepositions can be varied independently in accordance with the speaker's intention. E.g. He flew out *of/into/ through/in/ above/ near/close to/below/a long way/*from the clouds.

Downing and Locke henceforth assume that the listener has been familiar with those prepositions which are independent on/determined by nouns such as *attack on, quarrel with, damage to, liking for,* etc. This is for their frequencies in daily usage, verbs, such as; *insist on, pay for, amount to, hope for*, etc. and adjectives, such as *lacking in*, *opposed to, compatible with* and, *free of/from*. Other forms of prepositions could be complex in nature such as *in conformity with, with respect to,* and *by dint of,* etc.

2.3 History of Corpus Linguistics

Corpus contains sealed information, but the information is fully interpretable by linguists. Corpus incorporates information beyond the exhaustion of a single genre at a time. It provides data for diversified approaches under a particular term. With this, a corpus has proven to be an empirically-based scientific area for which every linguist could afford the potentiality to extract from the corpus stream.

Stubbs (1996) criticizes the structuralists' approach that offers or interprets data which is purely improvised (invented data). In this case, the researchers are the alpha and omega of their theoretical concepts without open door for objective observations. The Chomskian critiques which nearly kicked corpus into the backwater in the late 1950s, was primarily to survive the introspective perceptions in linguistic investigations. On the other hand, the concept of competence and performance of Chomsky was heavily criticized by Sinclair (1994). In his article "trust the text", he claimed that texts were sound basis for hypothesis testing as against the former which fabricated observed and verified hypothesis.

Many allegations are attributed to fabricated sentences such as; 1. They may not be practicable in real communicative contexts. 2. They usually stick to rules-governed and static not going in line with language (dynamic in nature) in real social contexts. Corpus linguistics is mainly concerned with how language is practically in use in a natural context than what linguists feel it should function.

In support of the above therefore, Leech (1992) also adds that Computer Corpus Linguistics (CCL) describes not only a newly evolving methodology for studying language, rather a fresh research enterprise, and in fact a new philosophical approach to language investigations. It is clear that language study based on Corpus-based approach has revolutionized the focus of many linguists from introspection and fabrication and henceforth moving towards authenticity based on empirically evident data. New description of language is attainable through Corpus approach especially by making linguistic theories focus towards a direction, where they will be answerable to observations in data-based situations.

2.4 Definitions of Corpus Linguistics

There is no precise definition to the term corpus linguistics. Different scholars look at the term corpus linguistics from their individual point of view. McEnery and Wilson (1996: 9) for instance make emphasis on representativeness. The sense they try to make reads that, a corpus is a body of text which contains a careful sample that appears to have a maximum representation of a language. Defining corpus based on representativeness may hardly be appropriate in an attempt to verify a corpus. This depends on the type of corpus being observed. A definition with similar shortcoming has been offered by Bowker and Pearson (2002: 9) observed corpus as, “a large collection of authentic text that has been gathered in electronic form according to a specific set of criteria”. Though, Bowker and Pearson’s

conceptualization of the corpus is weak compared to McEnery and Wilson (1996:87) even that, their claim holds that the corpus is planned to be "used as a representative sample of a particular language or subsection of that language" The latter allows for a certain amount of flexibility for accuracy than the closed-ended representativeness description of McEnery and Wilson's description of the term corpus.

A more accommodating definition has been given by Leech (1992: 106) who looks at corpus linguistics as "a helluva lot of text, stored on a computer". Leech lays his emphasis on size and medium, but no condition is presented as to what distinguishes a corpus from other bodies of texts. Leech seems to suggest that there is no need for such a differentiation. A related approach is followed by Kilgarriff and Grefenstette (2003: 334): "A corpus is a collection of texts when considered as an object of language or literary study." In this focus, the concept of linguistic inquiry can be taken for granted in corpus linguistics, so this does not really account for what forms a good corpus as different from what forms just a corpus. The idea of composition with regard to representativeness has not been given appropriate consideration in this definition.

Corpus linguistics examines real language use and its patterns through computer software. Kennedy (1998) observes that through the use of corpus, researchers could preserve larger quantities of data from which they could retrieve some lexical items, phrases, or text parts and extract such entities to trace their prototypical characteristics. Today corpus is considered the defaulting source for nearly everyone operating in linguistics. No introspection could assert credibility without authentication over real language data. Corpus studies can be seen as a popular methodology that supports almost all language findings. This is in line with the idea that corpus linguistics is becoming broader.

As against perceiving the meaning of a language from an individual speaker's point of view, Teubert (2005) sees corpus linguistics as a method that looks at language from a social perspective. This means that meaning stands to be the major point of focus of corpus linguists. Members of a discourse community determine what meaning of a given word or concept could be. This is against the concept of cognitive linguistics that views meaning as what is basically stored within the speakers' brain (psychology) and introspection. As opposed to this, corpus linguistics concerns the completeness of the body of texts in a particular discourse community. But, the texts which exist in prints or transcribed oral speeches are the priority of corpus linguistics.

At this length, we can infer that corpus linguistics refers to a method through which a large collection of linguistic data is stored which serves as a tool containing some characteristics of a language for the consumption of linguists which at the long run distinguishes a particular genre or language variety from another.

2.5 Corpus Linguistics Studies and Studies of Prepositions

The earlier corpus study, of 1980's, focuses at the level of frequency. Texts of written and spoken types are the main areas of comparison by general corpus on the study of prepositions. The first generation corpora were the Brown corpus and the LOB corpus with the first American corpus "the Brown corpus" targeted to be the equivalent for the LOB (Kennedy, 1998; Hunston and Francis, 2002).

Mindt and Weber (1989) investigated the 14 most occurring prepositions in the Brown corpus and the LOB, and this work was revisited by Kennedy (1991 and 1998). He made the presumption that lack of sufficient corpus may lead to higher occurrences of the English prepositional system.

Kennedy (1991, 1998) traced the outcome for prepositions *at* and *from* in the LOB corpus. He discovered the specific word classes that appear instantly to have been proceeding *at* and *from* tend to be nouns and pronouns: words that occur before *at* were 42% and those before *from* were 45% while *verb* appears at 29% tokens respectively.

Later, Kennedy (1991) in a different study provides an in-depth analysis on *through* and *between* in the one million words LOB corpus from 500 adults samples of written British English. The samples had 2,000 words produced by adults from distinct walks of lives. The Oxford concordance software package contains the information of the collocation information on *through* and *between* in the LOB corpus. *Through* had 776 instances, while *between* had 867 instances within the contexts. The research results had been described in three dimensions; occurrences with preceding words, with words after them and the semantic interpretations for *through* and *between* within the contexts.

Looking beyond simple and common prepositions, Rankin and Schiftner (2011) offer an interlanguage study on the use of marginal and complex prepositions; *concerning* and *regarding* across five learner corpora of English. The study observes that in reference to semantic fields and aboutness, the prepositions are used in diverse and collocational environments as the learners use the prepositions interchangeably in greater degrees. Comparatively, the first learner corpus patterns of overuse and underuse of the prepositions across different learners are found to be significant irrespective of L1. However, patterns of colligation and collocation and sentence structures differ in each specific learner corpora as revealed by the qualitative analysis.

On the notion of preposition and determiner error identification and correction using corpus-driven methodology, De Felice and Pulman (2008) describe the common mistake

that could be committed in the process of writing exercise of the L1 learners. They present their new approach which could lead to the automatic identification of the common errors in the usage of prepositions and determiners as well as the possible ways of correcting them in the L2 learners English writing exercises. According to the researchers, the model for the use of the parts of speech could be accurately learnt at 70% (preposition) and 92.15% (determiner) accuracy on L1 texts. Consequently, they present the result in an error identification task for the L1 writing exercises.

2.6 The Preposition *of* and the Concept of Polysemy

Polysemy refers to the variety of meanings a word could usually have. Gaëtanelle (2008) observes the prototypicality in linguistics as it covers different meanings a word may expound with regard to the most frequent language items in comparison with the most salient items in the mind. The author investigates the highly polysemous verbs *give* and *take* where two definitions of prtotypicality have been compared. They are prototypicality as salience and prototypicality as frequency. It further discloses that in contradiction with the common belief, the most frequent sense in language does not necessarily coincide with that which comes first in mind. In support of this, the preposition *of* explicates a variety of meanings as it occurs in various contexts. Downing and Locke discover ten of such meanings while the Cambridge Advanced Learner's Dictionary discloses nineteen ranges of the meanings of the preposition *of*.

Groom (2007) observes the variety of meanings expounded by the preposition *of* in one hundred concordance lines from HistArt corpus, a 3.2 million-word corpus of journal articles representing the academic disciplinary discourse of History. Leech et al. (2001: 181) report that the preposition *of* is the second highest-frequency word not only in the HistArt corpus but also in written English more generally. The preposition *of* constitutes an

excellent test-bed for the claim that the closed-class keywords are tractable to qualitative semantic analysis. This conveys that the preposition *of* has a variety of meanings that it refers to as it co-occurs in various contextual situations. Sinclair (1991) supports this through his claim that meaning naturally exists in structures of words and not in single word forms that contain such structures. The choice of the preposition *of* in this context coincides with the modest tribute to the pioneering study of Sinclair, whose corpus driven analysis of the preposition *of* (Sinclair, 1991) provides both the inspirational and methodological template for empirical research on the preposition *of*.

A template has been presented in the Cambridge Advanced Learner's dictionary. The template consists of semantic relationship such as; Possession, Amount, Containing, Position, Typical, Days, Made of, With adjectives/verbs, Judgment, Relating to, That is/are, Done to, Felt by, Through, Comparing, Time, Separate from, Loss, and During. From the 100 concordance lines that Groom analyzed, he classified his findings based on process, content, quantity, domain (locative) relationships and others. Other categorizations observed include Downing and Locke's, Collins Cobuild, and Miriam Webster dictionary.

2.7 Downing and Locke's Categorization

Downing and Locke (1992: 595) claim that "it is clear that, relationships depend greatly on the semantic references of one or both of the constituents which are linked by the prepositions".

From this assertion, the researchers indicate that, their categorization may not be enough to analyze all forms of data in corpus researches. It is in line with this observation that, this research aims to complete the categorization by using some categories from the Cambridge Advanced Learner's Dictionary. Through comparison some categories seem to

be required to fill in the gap where the Downing and Locke's have not provided for. The Downing and Locke's categorization will be supported by the Cambridge Advanced Learner's Dictionary categorization to give a comprehensive list that may cover the entire relationships expounded by the preposition *of* in the texts corpora (ICE-Nig. and ICE-GB). To date, no literature on studies employing Downing and Locke's categorization is available.

2.8 Cambridge Advanced Learner's Dictionary Categorization (2008)

To ensure that the Cambridge Advances Learner's Dictionary is the relevant provider of the complementary efforts of the Downing & Locke's Categories, it makes some certain claims about the sources of its data. The Dictionary holds that, Cambridge International Corpus which contains a collection of words consisting of spoken and written (transcribed) language of beyond one billion words has gathered its data from multidimensional sources. The Dictionary claims that the important tool (texts) it uses tracks both the samples of British and American English correspondingly. The Dictionary claims that everything the Dictionary says is underpinned by the corpus as substantial evidence.

Language has been collected in its actual form as used by the speakers. This includes mistakes committed by learners of English. More than ten million mistakes have been coded in the original forms that the learners committed. About five hundred forms comprising of new and revised common mistakes have been observed. The researchers intended to support the users in order to correct them. Part of such mistakes may be noticed by teachers while others may seem to be strange to them. However, such mistakes have higher occurrences in the corpus.

Special frequency information has been provided by the corpus as it shows the importance of the information associated to meanings and every single phrase besides every single word occurrences. Data from the Cambridge International Corpus has been fully utilized by the researchers in creating this system. They extract all the words with high frequencies; code their relevant examples so as to compute their frequencies in relation to their multiplicity of meanings.

2.9 ICE-Nig.

The creation of ICE-Nig. was initiated in October 2007 at the University of Ausburg, Germany. The authors of the corpus were Eva Maria Wunder, University of Ausburg; Holger Voomann, Agilantis Holger Voomann; and Ulrike Gut, University of Ausberg. The authors' overall goal for the creation of the corpus was to produce a rich and accurate annotated open corpus with maximum efficiency in such a way that users could find it very resourceful and simple to explore. In Nigerian English, it is considered an open corpus in the sense that all the respondents have declared their consent allowing the data to be available to the research community. The XML-based formats enable users to easily explore the corpus in terms of extensibility and reusability to its users who want to enhance annotations or raw data. The corpus was molded on the agile (active) corpus theory (Voomann and Gut, 2008). To suit the agile corpus creation theory, Biber (1993: 243-57) agreed that, "compilation should proceed as cyclic process, in which repeated searches of an initially small corpus provide guidelines for further corpus annotation". Corpus annotation has been fundamentally error-prone and has to be spanned to some sorts of modification as well as improvement at each step.

The annotation was carried out with pacx (www.pacx.sf.net) platform for annotated corpora in XML that is being developed for ICE-Nig. project. The pacx application

expands the Eclipse platform (www.eclipse.org) through a number of tools which includes the XML editor vet, the image viewer Quick Image and subversive (an element that corrects errors). The software ELAN (www.lat.mpi.eu/tools/elan) has been used in annotating audio and video files.

2.9.1 Annotation of the Written Component

The automatically created template annotates the raw data in the written part of the corpus. Once the transcriber keys in the metadata i.e. location and duration of writing the script, the transcriber's name, age, gender, and author/s ethnic group, the raw data file can be automatically copied. In the transcription process, words and phrases are marked in preparation of the annotation process as well as choosing a tag which is considered most relevant (e.g. "italics") from the pre-defined list. Nelson et al. (2002) states that, the annotation is carried out using pacx in which no transcribers' efforts have been made to key in the SGML tags used in the markup manual for written text. This is much simpler than the earlier traditional approach. The annotated XML editor with Vex markup proceeds by choosing the appropriate text and the annotated text label. Pacx keeps these annotations and the xml documents in the corpus.

What makes the ICE-Nig. so special is that its annotation is the richest among the ICE Corpora family with time-aligned transcription of the spoken data (see ICAME journal No. 34 p 86-87). The ICE-Nig. is a beginner at offering this and it intends to provide a more detailed investigation of the phonologies of the Nigerian Variety of English.

2.10 Studies on ICE-Nig.

The International Corpus of English intends to provide researchers in linguistics with opportunities for describing features of a given variety and of comparing varieties across

the existing world Englishes. This study describes whether a particular feature occurs in relation to the frequencies and contextual co-occurrences or not previous researches have been conducted fetching data from ICE-Nig. The studies could either be ultimately retrieving data from the Nigerian variety of English alone or comparing the output to those from other corpora of its related nature. A few of such studies are described in this section.

Adegbite and Gut (2010) study errors of English usage across two generations (older and younger) of educated Nigerians. The study particularly uses data retrieved from the ICE-Nig. The study pays attention solely to the written component of the educated users which contains various text categories (academic writing, formal letters, informal letters, and novels). The study analyzes the syntactic features termed as typical errors of Nigerian English within the research such as plural marking of nouns, reciprocal uses of third person reflexive pronouns *themselves*, use of articles, subject-verb concord agreement, and non-stative use of stative verbs modal auxiliary verbs. They also analyze the occurrence of British vs American English spellings that have been used with different amounts of occurrences in the findings. They suggest that the low frequencies of the errors indicate that educated Nigerians English has minimal characteristics of errors and also that the frequencies of occurrence are directly affected by age and level of educational attainment of the users of English in the country.

Gut and Coronel (2011) investigate the use of relative clauses within the range of new Englishes. The study aims to relate the use of relative clauses and the choices of relative markers across four varieties of English. They investigate the use of the phenomenon from ICE-Jamaica, ICE-Philippines, ICE-Singapore, and ICE-Nig. respectively. The work also explored the syntactic variations within the four varieties. The

data (relative clauses) are explored through manual retrieval process from the various text categories of the corpora.

In a recent corpus-based study on Nigerian English, Gut and Futchs (2013) explore the progressive aspects in Nigerian English. The study gives an elaborate justification for the use of progressives in the variety English. The corpus analysis shows that the structures seem to be mostly used in present tense verb forms. The progressives show higher occurrences in informal text types, media talks, but with relatively least occurrences in more formal and informational text types. Nigerian English can be seen to have more or less similarity to Br.E in the case of frequency supply and stylistic variations.

The progressive style of usage in Nigerian English tends to be fairly similar to that of British English. Despite this, significant variations are found to be in places such as the highest frequencies of progressive structured sentences (5515 per million words) are greater in Nig.E compared to (5028 per million words) in Br.E. This indicates higher occurrences in broadcast interviews and discussions, commentaries, and classroom lessons. These files are of course more or less opinion expression-oriented in nature. It is observed also that the raise in progressive constructions found in Br.E and Am.E in the past five decades (Mair, and Hundt 1995: 113), especially in newspaper language (Mair and Leech 2006: 323) is similar in Nig.E. The excessive use of progressive could be associated with opinion expression or persuasive text. In contrast, Nigerian speakers use lesser progressives than British speakers in more objective and information oriented contexts like administrative writing styles (Nig.E 900, Br.E 2800), broadcast news (Nig.E 2800, Br.E 7200) which are edited and written under restricted guidelines than the free speech opinion expression contexts.

Again, in the case of past progressive forms, 225 Nigerian speakers use fewer progressive compared to 320 British speakers. To sum it up, the choice of past and present progressives is found to be less in spoken than written English of Nigerian speakers compared to those of British. Conversely, there are no restrictions in the passive progressive constructions as regard to the objective texts as in the case of British English, but it has been spread across all text types.

Also, those habitual activities are usually expressed using durative verbs as progressives in Nig.E; mental states are denoted by stative verbs, and so on. The frequency here is the only point of interest but not the nature of usage that appears the same as the native variety. The extension in the use of progressive in Nig.E occurs more usually with present tense forms of verbs as well with media talk. In general, the extended use of progressives is 16 percent in Nig.E. Quantitatively, the percentage leads to the observations such as the extended use of progressives in Nig.E is at the early stage being generally classified as a feature of new Englishes (Kortmann & Szmrecsanyi, 2004; Masthrie, 2008) if the extended uses are most frequently in the new varieties than in the native varieties.

More interestingly, it has been observed that the use of progressives in Nig.E might be due to L1 influence. The first language influence is usually found in almost every aspect of Nigerian English as observed by Ajani (2001) and traced in Indian English by Sharma (2009) and in Setswana English by Van Rooy (2006).

2.11 Studies on the ICE-GB

Studies on ICE-GB are higher in number than the studies on other corpora of one million words intended to be created for the same purposes. This is because it has been in existence

much earlier than the existing one million word ICE corpora. Many studies have been conducted which look at inter varietal comparison between ICE GB and its comparable corpora.

Disney (2010) presents cross genre study of patterns of use of definite article in two corpora i.e. ICE-GB and ICE-HK. The research focuses on data from the timed student essay (TSE) components of the corpora. The study records a kind of distinction between types of use of the article "the" in ICE-HK/TSE found in ICE-GB/TSE. The research investigates the pattern of the usage of the article "the" in the two corpora with special consideration on how the speakers show to their listeners the location of referents within their discourse field. In the ICE-GB, the definite article is found to have been the most populous lexical item as against the indefinite article "a" appearing among the top most occurring words in the corpus. The reason for the popularity of the determiners in various texts is due to the fact that single common countable nouns (NP heads) are found to be highly frequent in modern English. This fact is supported by Hudson (1992: 219) as he observes this phenomenon "a singular count noun cannot be used without a determiner". The research reveals that the use of the definite article "the" in both the corpora is below the criteria used by Quirk. The article "the" appears 5.48% of instances of all the words in ICE-GB. In comparison, it accounts for 5.08% of all the words in the ICE-HK. The underuse has not been found to be higher in the L2 compared to the L1.

Another corpus-based study by Qi (2012) compares the uses of alternating di-transitive verb TELL between L1 and L2 English. The research investigates the written components of ICE-GB to the CLEC with low-and high expertise L2 learners writing. The data in this research are searched from ICE-GB through the instances followed by the

prepositional phrase with "to". As such, the research is solely concerned with prepositional phrases having semantic function conforming to the recipient direct object. The findings of the research has shown that the alternative di-transitive verb TELL surprisingly features in double object structures (DOC) 94% in ICE GB and 92% in CLEC and 2% of ICE-GB and 4% of CLEC respectively for prepositional dative construction (DAT). This proves that the verb TELL features more frequent in DOC than in DAT constructions. Similarly to L1 speakers, the Chinese learners also display awareness about such verbs-specific structures.

In a similar study, Gries and Stefanowitsch (2005) carry their investigation through a corpus-based study of the ICE-GB the lists of structures that have semantic relationships. The structures comprise the English dative construction. A variety of alternating di-transitive verbs has been investigated, with the arrangement ranked based on "distinctiveness" to the dual object structure or the to-dative structure. "Distinctiveness" refers to the extent at which certain constructions attract the lexemes. Co-lexeme distinguishes between the di-transitive and the to-dative. The study indicates that *give* differentiates between the two constructions by most considerably choosing the dual object structure to the to-dative, as *bring* favors the dative structure of preposition. The study is of enormous importance to the extent that it offers a suitable record of the association between verbs and constructions by offering corpus data of empirical nature.

Manzanares and López (2008) present evidence on the roles of item-based learning in second language learning. The study consists of 3 sub-studies a sentence sorting experiment, a corpus-based research and an acceptability score exercise. The corpus-based investigation compares the uses of twelve most frequent di-transitive verbs in the (BNC) from Spanish part of the International Corpus of Learner English (ICLE). The findings

show that data from Spanish language and certain verbs categories are connected with the di-transitive constructions; on the other hand, some of the categories are related with the dative construction of the preposition. The outcomes tallied well with previous researches. For instance, in Gries and Stefanowitch's (2005) study of ICE-GB, most significantly, it is found that from the Spanish learner data, the recipient thematic role has been most commonly realized by a pronoun. Structures like; give + Pronoun + Theme were most frequently found than give + Proper Noun + Theme or give + Full Noun + Theme.

Inter varietal corpus-based comparison may also be suitably exemplified though the work of Bolton et al. (2003) which presents the usage of connectors in the writing practices of university students of Hong Kong and those in Great Britain. The study compares data from the ICE-HK and ICE-GB. It collects data from 10 untimed essays and 10 timed examination scripts written by undergraduate students of the Hong Kong University. The data reveals that the overuse of connectors is not specially limited to non-native speakers but is a salient feature of student writing in general. The non-native Hong Kong university students overuse some connectives much higher than the native Great British university students. From the writing of the Hong Kong students items such as; *so* (31.6%), *and* (24.0%), *also* (15.4%), *thus* (10.4%) and *but* (8.4%) these are found to be highly overused. On the other hand, in the British data, the overuse is mostly associated with items like *however* (20.5%), *so* (12.2%), *therefore* (8.4%), *thus* (6.8%), and *furthermore* (5.6%). In summary, the connectors are relatively highly overused compared to their usage in the writings of their counterparts from the academic discipline.

2.12 ICE Varieties

The creation of the International Corpus of English (ICE) had first been conceptualized by Sidney Greenbaum in the late 1980s. Twenty three research teams all over the world

organized electronic corpora of their own national or regional varieties of English. These teams were assigned the responsibilities to come up with the about one hundred corpora of different varieties of English all over the world. The team on Nigerian English was one of such teams. Each ICE team had compiled a one million word corpus of both spoken and written English (600,000 as well as 400,000 words respectively). For most of the participating countries, the ICE project was motivating a systematic linguistic inquiry of the national variety. To guarantee compatibility amongst the component corpora, every team complied with a common corpus design and particular scheme for grammatical annotation (Nelson, 1996). Each ICE Corpus sampled English of adults (aged 18 and above) who were educated through English to at least the end of secondary school level.

Greenbaum (1988) mapped out national teams of researchers who were expected to collect and conceptualize similar kind of spoken and written English predetermined to represent national varieties of English existing around the world. These included British English, American English, and Indian English. Greenbaum (1988) foresaw that after creating the computer corpora of the varieties, the next step would be to tag and parse them. The resulting corpora would allow for the linguistic analysis of one of the broadest and most excessively analyzed corpora of spoken and written English, besides the comparison of the various national varieties that had emerged around the world. Greenbaum (1988) further justified that,

> We should now be thinking of extending the scope for computerized comparative studies in three ways: (1) to sample standard varieties from other countries where English is the first language, for example Canada and Australia; (2) to sample national varieties from countries where English is an official additional language, for example India and Nigeria, and (3) to include spoken and manuscript English as well as printed English. (p.2)

Though, Sidney Greenbaum did not survive to witness the accomplishment of his mission, the mission had been covered by the ICE teams in countries and regions which

included: Australia, Cameroun, Canada, Fiji, Ghana, Great Britain, Hong Kong, India, Ireland, Jamaica, Kenya, New Zealand, Nigeria, Philippines, Sierra Leone, Singapore, South Africa, Sri Lanka, and USA (Nelson *et al*. 2002).

2.12.1 Description of ICE-Nig.

The ICE-Nig. is a useful source of data for research in Nigerian English studies. It provides the data for research on English usage by educated Nigerian speakers. In October 2007, the compilation of ICE-Nig. started. The project was coordinated by Professor Ulrike Gut of the University of Augsburg, Germany. The principal aim of the project was to compile a one-million word corpus of both spoken and written English used in Nigeria at the beginning of the 21st century. The written component of the corpus was over 400,000 tokens. This was compiled earlier than the 600,000 tokens of the spoken component of the corpus. The corpus was accessible in an XML-format. It was annotated with a platform of annotated corpora (pacx) (the pacx software is accessed at: www.pacx.sf.net) and the spoken data was transcribed with ELAN (Wunder et al. 2010).

The corpus creation process was quarry-driven based on the cyclic processing model (open to revision and improvement) and observing the least effort principle (see Voormann and Gut, 2008). It consisted of raw data from the Nigerian English which was built at the University of Munster, Germany (see Wunder, Voomann & Gut 2010). The corpus was searched and accessed via the web link URL: http://sourceforge.net/projects/ice-nigeria/. The corpus included: xml, txt, raw and post-tagged file folders. The size of the ICE-Nig. was 872,721 words from 1,191 users (722 male /469 female aged 18-76). The speakers adopted such refined variety observed by Udofot (2003). In other words, it is what Bonjo (1997) referred to as Variety III. The

variety was closely connected to university education groups. A majority of the users in the corpus are Yoruba and Igbo Native speakers.

2.12.1.1 The Written Component of the ICE-Nig.

The written component of the ICE-Nig. was found in the twenty one text files as xml files or a POS tagged version. The written component of the corpus was over 400,000 tokens. This was compiled earlier than the 600,000 tokens of the spoken component of for instance building the corpus data of the corpus. Also, the corpus compilation team made the entire raw files accessible. The standard ICE conventions of arranging the corpus was not strictly followed with the ICE-Nig. The written texts were collected from different genres and sub-genres (see Table 2.1). Manual searches of items and their respective frequencies from the texts could be done through available software and tools such as AntConc for the written text only. Furthermore, the annotations of data about ethnic group, age, and sex of the speakers and writers were intended to guide the users in the selection of text categories in line with different variables.

Table 2.1 ICE-Nig. Text categories and Word Count

Text-categories	**Word-Count**
Academic writing	80,043
Administrative writing	19,983
Broadcast news	40,916
Broadcast discussions	40,292
Broadcast interviews	20,357
Broadcast talks	40,138
Business letters	30,066
Commentaries	51,562
Conversations (private)	135,754
Editorials	20,014
Essays	20,014
Exams	19,762
Instructional writings/skills and hobbies	20,008
Non-broadcast talks	20,156
Novels	40,031

Parliamentary debates	20,375
Phone calls	15,680
Popular writing	80,144
Press text/reportage	40,085
Social letters	28,780
Unscripted speeches	62,168
Total	**872, 721**
Source: ICE Nig. (2013)	

2.12.2 Description of the International Corpus of English Great Britain (ICE-GB)

The International Corpus of English Great Britain (ICE-GB) is a component of the International Corpus of English. The ICE-GB is one of the corpora termed as the reminiscent of corpora 30-40 years ago when million words corpora were the model. The ICE-GB project was coordinated by SEU (Survey of English Usage). It has been built with the ICECUP 3.1 exploration software designed with parse corpora. The corpus has been predetermined to compile over twenty components from English speaking countries around the world. Each component contains a one million word corpus of 60,000 spoken and 400,000 written components of the corpus considerably. In line with this, the ICE-GB contains one million word of written and spoken British English from the 1990s. The composition of ICE-GB comprises two hundred (200) written and three hundred (300) spoken texts which made up the million word corpus. Every text allows for the complexity and detail search has grammatical annotation through the entire corpus. Due to the above fact, the corpus claims to be the most advanced component of all its counterparts in terms of its annotation and interface.

In addition to the corpus data, the users are supplied with ICECUP interface which enables them to work with the corpus data in distinct ways. Users can limit their search to a

given “node”, and texts are identified by a given speaker or text variable in the corpus. They can search via the “lexicon”, “grammaticon” of associate word or syntactic tag. The key word in context (KWIC) presents various options for customizing the display (i.e. increasing/ decreasing context). Users are able to form a chart-like map of the quarry by adding nodes and indicating part of speech, lexical form, wildcards. The users can also search for more than fifty features such as “floating NP post-modifiers”, “cleft operators”, and “notion direct objects”.

What makes the corpus special includes, its content of 83,394 parse trees, including 59,640 parse in the spoken component of the corpus. This is considered the biggest collection of the parsed spoken materials anywhere with the exception of DCPSE (which contains spoken materials from the ICE-GB itself and the BNC). The corpus has been fully checked by linguists at several stages in its compilation, using both a traditional ‘post-checking’ strategy and also by cross-selection error based searches. Despite all the special features, the authors to the corpus do not believe the analysis in the corpus to be perfect, rather systematically imperfect unlike its paper best output (a garbage-in-garbage-out process). In addition, release 2 as against release 1 of the corpus includes an optional paid-for extra in which the digitized speech recordings of the corpus are aligned with the text. This allows the users to play back the original source that they can see on the screen.

2.12.2.1 The Written Component of ICE-GB

The written component of the corpus contains a large body of writing such as fiction, press reportage and editorials, learned and popular writing. Specially, other three types of writing not usually found in most corpora have been included in ICE-GB. These include: business correspondence, personal letters, students essays and examination scripts. What has been

noted as being missing in the corpus is the text from legal English, highly specialized English that has been excluded which represents a highly fossilized kind of English intended primarily for highly specialized listeners.

2.13 Concepts of Collocation

The term collocation is viewed in diverse ways by many linguists. The only conceptual mutuality they share is that collocation is customarily viewed as a concept denoting a syntagmatic relationship associated to words. Cruise (1991) observes that collocation is considered as a sequence of lexical items in a situation where those items appear in an environment that has a certain degree of mutual predictability. This implies that some sequences of lexemes may co-occur as a result of the choice of words preferred by an individual speaker. However, others may tend to appear in a predictable way. Therefore, when words collocate, they naturally appear together semantically, psychologically, syntactically, contextually, and so on. It is one of the features of dictionary making and a branch of lexicography. It is at a later stage with the invention of corpora that the term has been exported to serve an important function in wider areas such as lexico-grammar and semantics.

2.13.1 Definitions of Collocation

Despite the multiplicity of researches conducted on various aspects of collocation, there is no unanimous definition of the term "collocation". Attempts have been made by various scholars to describe the term collocation. Sinclair (1991: 170) describes collocation as "the co-occurrence of two or more words within a short space of each-other in a text. In this case, a short space or "span" is viewed as a space of around four words from the left and four words from the right around are under consideration (i.e. the node)". A similar

example to illustrate this is highlighted by Sinclair (1994:21f) from a given text with the word *money* in the sentence *It goes against my principle to give money to people who waste it* the words; *my principle to give__to people who waste*, are all assumed to be collocates of the word "money". The italicized words are therefore termed as collocates of *money*. A similar view to Sinclair's is Nesselhauf (2004) who sees collocation as the co-existence of words at a particular distance and a distinction is made between frequency of co-occurrence that are (or more specifically high frequency that could be anticipated in words if combined randomly in a language). This view is therefore called the frequency-based approach (Nesselhauf, 2004).

Considering the close relevance of collocation to keywords contextual appearances of the preposition *of*, this study would like to further explore how many other linguists define the term from different point of views. Some linguists refer to the term as follows:

Collocation is "a type of word combination (an abstract) with instantiations in actual texts" (Cowie et al. 1993).

Collocation is "a phrase consisting of two elements, one of which is freely chosen on the basis of its meaning, while the selection of the other depends on this freely chosen element" (Mel'chuk, 1988).

Collocation is a "phrase that cannot be translated using the default translations offered for its components" Teubert and Cermakova (2007).

Collocation as "relationship between lexemes" (Sinclair, 1991:54 &173)

Collocations are "fixed expressions" (Moon, 1994).

Collocation is "a type of word combinations most commonly as one that is fixed to some degree but not completely" (Nesselhauf, 2004).

Collocation is “a group of two or more words that occur frequently together” (Shin and Nation, 2007).

The common (overall) view on collocation can be summed up to give us an insight that collocation is a couple of words that frequently co-occur together not just in rare occasions which once separated the words sound odd and incomplete to the listeners/readers in a given context. Closer association of words usually gives rise to a different sequential sense other than that of the individual components of the combined words in such a company.

2.14 Summary of the Chapter

The chapter most importantly reviews relevant literatures in the fields of corpus linguistics and prepositions. The brief description of Nigeria provides a solid background to the study as the study looks at the variety of English in Nigerian society. The chapter describes how the term collocation was employed to support the semantics of the terms used in the study. Polysemy of meanings a word could expound in a context of usage has been described in the chapter. Downing and Locke’s categorization and the Cambridge Advanced learner’s as well as studies on ICE-Nig. and ICE-GB have been compared.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter describes the corpus-driven methodology used in this research. It describes the ICE varieties used (ICE-Nig. and ICE-GB) and the analytical tools (AntConc and the ICECUP) used for the exploration of the corpora. The procedures for data collection and the criteria for the selection of the concordance lines are also presented in the chapter.

3.1 Corpus Methodology

This research is an exploratory study as it explores the use of the preposition *of* which has not been examined by any study of its kind from the ICE-Nig. We need to take into account what methodology refers to with regards to corpus linguistics. Corpus linguistics is not a linguistic theory to some linguists rather a methodology that can be applied to wider range of linguistic enquiries (Tognini-Bonnelli 2001). Therefore, corpus linguistics is beyond just the use of corpora. Some scholars consider corpus linguistics to be a paradigm in its own right. Tognini-Bonnelli and Laviosa (2002) see it on the basis that conducting research using corpora generally involves some basic expectations that the object of study as an independent entity needs to be verified using corpus linguistics as a special tool for research (methodology). Corpus linguistics uses authentic data or naturally occurring texts as opposed to intuitive, introspective, and invented sentences (Laviosa 2002).

The study adopts a corpus-driven methodology which is in line with Tognini Bonnelli's concepts (2001). Tognini-Bonelli (ibid: 651) differentiates between corpus-based and corpus-driven studies. The main distinction being that the corpus-based approach

starts with a pre-existing theory which is validated using corpus data. On the other hand, corpus-driven methodology constructs the theory step-by-step in the presence of the evidence, the discovery of emerging patterns pave ways for the formulation of hypothesis. This as a result, brings about the generalization in line with rules of usage and conclusively discovers unification in a theoretical statement.

3.2 Quantitative/Qualitative Technique in Corpus Research

Classification and counting of linguistic data are essential steps associated with the way linguistic researchers approach the use of corpora. These steps are considered as essential parts of quantitative analysis using corpora. Quantitative analysis starts with simple frequency counts from the beginning. Quantitative technique is sometimes beyond simple frequency running in corpus linguistics research. Mathematical calculations are sometimes involved where researchers employ statistical procedures. Test of significance are deemed necessary depending on the nature of the research findings and how the interpretation needs to be done as well. Relevance of reliability and tests of significance are viewed from different angles in the area of corpus linguistics.

Moreover, Danielson (2003) points out that statistical test in many cases do not express something that cannot be revealed by simply comparing frequencies. Danielson disputes that if something is recurring in a particular text, it does so for a reason. It can hardly be anticipated that the purpose may be revealed in a simple calculation, because "the distribution of words in texts is far more complex than a mathematical formula can perceive" (ibid: 114).

Despite the above argument, the use of corpora and qualitative analysis is to some extent inseparable. In many cases, a combination of both the methods is deemed necessary

to provide a wider description of the concept under observation with clearer explanations. McEnery and Wilson (1996: 62-63) assert that "Quantitative analysis enables one to separate the wheat from the chaff while qualitative analysis, which does not require the data to fit into a finite number of categories, enables very fine distinctions to be drawn".

Quantitative and qualitative techniques can be pulled in many ways in corpus linguistic studies. Detailed qualitative study can construct the basis for theories that are subsequently verified through quantitative techniques. For the huge amount of data (frequency) this research has for instance, the data collected from 699 concordance lines, distributed across 13 categories will also be analyzed using chi-square statistical technique.

In describing the process of deciding on the amount of samples for a study in a manner that the sample represents the entire population, the researcher considers the number of concordance lines to be analyzed in this study following a cut-off point stated by Jacob (2013) that,

> To gather data about the population in order to make an inference that can be generalized to the population the larger the population size, the smaller the percentage of the population required to get a representative sample. For smaller samples (N ‹ 100), there is little point in sampling to survey the entire population. The size of the sample influences both the representativeness of the sample and the statistical analysis of the data. If the population size is around 500 (give or take 100), 50% should be sampled. If the population size is around 1500, 20% should be sampled. Beyond a certain point (N = 5000), the population size is almost irrelevant and a sample size of 400 may be adequate. Larger samples are more likely to detect a difference between different groups. However, smaller samples are more likely not to be representative. (pp 14-16)

The upgrading of the sample size is in congruence with Jacob's last statement that larger samples are more likely to detect a difference between different groups. Therefore, in view of the above characterizations, the population size of the data (ie. concordance lines) in this research falls between 1,500 and 5,000 which also require the sample size of 20%. The population size of the total concordance lines of the preposition *of* (3,495) is less than

5,000 and hence, the population size is sampled at 20% giving a sum of 699 concordance lines analyzed in the corpus.

This research uses both qualitative and quantitative techniques for effective analysis of the data. In the qualitative process, three concordance lines have been collected from each of the thirteen categories to demonstrate the use of the preposition *of* in ICE-Nig. in this analysis chapter while, one concordance line per category has been shown from the instances of the ICE-GB. This has been done only to compare the use of the preposition in the two varieties of English. On the other hand, the SPSS analysis (i.e. the Chi square statistical tool) has been used to analyze the quantitative data. This describes the frequency of occurrence of each of the thirteen categories across the corpora. The chi square shows the level of significance of the difference found from each category across the corpora.

3.3 Justification for Choosing the Written-Edited Academic texts

The written academic texts of the ICE are those files from published materials. Hence, they are already edited. In such texts, any odd misspelling will be tagged as such in the data. On the other hand, the unedited texts are those from the written academic files considered as unpublished materials. In this case, odd misspelling may be due to the unedited nature of the materials. Despite the nature described in written texts above, the unwritten materials tend to be most tricky in terms of dealing with data.

Spoken data is usually associated with a lot of complications that makes data problematic in the process of collection, analysis and interpretation (Hoffmann, 2004). Among other complications is time consumption, the use of some sophisticated gadgets to explore the corpus, un-clarity, sentences with repetitive words, incomplete sentences and, unnecessary use of discourse markers (Hoffmann). Most importantly, the spoken component of ICE-Nig. was not released when this research started. Considering the

multiplicity of such problems, this research focuses on the written component of the ICE-Nig. Considering the multiplicity of such problems for which the researcher could not properly handle this lead to the decision to focus on the written component of the ICE-Nig. The written data contains numerous files which are of edited and un-edited nature. Among other reasons this study has to investigate the edited files is that it tends to be more formal than the un-edited ones. Besides, the language seems to be controlled. These make the data more authentic and reliable. Studies of this nature require such kind of data considering the comparable nature of study across corpora.

The edited files include Academic, Administrative/instructive, Editorials and Press reports. While the un-edited files are Business letters, Exams, Novels, Popular writings, Skills/hobbies/instructive, Social letters, and Essays. The academic file is the largest file with sub-files: Academic humanities (20,014), Academic natural sciences (20,025), Academic social sciences (19,998), and Academic technical (20,006) respectively. The overall Academic file has a total of 80,043 tokens. Other non-academic edited files are Administrative file (20,001), Editorials (20,014), and Press Reports (40,085).

In view of the above facts therefore, this research focuses on the academic file which is the biggest of all the edited files in the corpus. Presumably, larger files may likely produce higher frequencies in a search. Besides, larger sizes of data may likely provide enough data to a research (Groom, 2007). The files also provide different generic backgrounds such as Academic Humanity, Academic Natural Science, Academic Social Science and Academic Technology. It is also in line with Groom (2007) who collected his data from academic files of the HistArts corpus. Groom investigated the semantic usage of the preposition *of* from a historical corpus of newspapers. Also, Halliday and Hassan (1976) examined the overuse of connectors in an academic corpus. The study uses data

from the sub-corpus of the ICE-GB. Hence, the choice of the edited written academic texts of ICE-Nig. for the purpose of this study came into being.

3.4 Procedure for Data Collection

The data used in this research has been collected from two source corpora (ICE-Nig. and ICE-GB). The data have specifically been collected from academic files of the ICE-Nig. and ICE-GB. While collecting the data from various files of the two corpora, the concordance lines were copied and pasted into a Microsoft file. This procedure was used for extracting the data. To determine which of the concordance lines is to be selected as the composition of the data, see Section 3.5 for sampling technique employed in the study.

At the process of selecting the data to be used in this research, retrieving the data from the ICE-Nig. corpus was the first and foremost step. After determining what the data should be, the next stage was to extract them by copying each of the selected concordance lines and then pasting them into a Microsoft word document. Having done this the researcher then had to rearrange them as the concordance lines were not in a word format. This is usual with copy paste exercise that a change in format causes misappropriation to the initial arrangement. The researcher rearranged the data in order to make classification easier than how it looked after the copy paste procedure. After the copy paste process, irrelevant spaces and words segments were found. Deletion of these vague spaces allowed each concordance line to appear clearer and readable.

There was the need to print the data so as to ease the observation processes. On the print, the arranged data made the data observable. Where the preposition *of* appeared more than once within a short distance (within two to three words distance), it appeared a bit confusing in identifying which of them was to be considered. In that case, the researcher

checked back from the concordance lines the right word to be considered. Then the right word was highlighted as the right word.

3.5 The Sampling Technique

Classifying and analyzing a whole population in researches with larger population sizes may be rigorous and time consuming. It is in line with this fact that the research work employs the concept of sampling. The type of sampling used in this research is systematic sampling. The reason for choosing systematic sampling is due to the fact that it gives better room for objectivity as against random sampling which is open to subjectivity. This is in line with the definition by Crossman (2014):

> In a systematic sample, the elements of the population are put into a list and then every *k*th element in the list is chosen (systematically) for inclusion in the sample. For example, if the population of study contained 2,000 students at a high school and the researcher wanted a sample of 100 students, the students would be put into list form and then every 20th student would be selected for inclusion in the sample. To ensure against any possible human bias in this method, the researcher should select the first individual at random. This is technically called a 'systematic sample with a random start'. (p. 7)

It is in search for a similar concept which is found in Crossman (ibid) that the research employs the systematic sampling technique. Subjectivity is commonly associated with many types of sampling such as manual random sampling. Usually in the process of selecting the data (sampling) the researcher hardly turns away his pointer from the kinds of data he presumes to favor his findings. On the other hand, it is nearly impossible for him to choose data which he feels may likely be problematic.

This sampling method has a very easy procedure of random selection of data which can also be done manually. This procedure is more or less related to arithmetic progression. This is simply because a researcher is able to select a given quantity that is fewer than the subjects in his target population. The collected amount has to tally with the first proportion

intended for the sample. After this, the researcher selects his modeling interval which has to be a regular distant between the numbers.

Crossman (2014) exemplifies systematic sampling from a bigger size for instance when a researcher has a population of 100 from which he/she wants to select a systematic random sample of 10 respondents, he/she will assign a number from 1 to 100 to each respondent. First he/she picks a number at random, for instance, 6, then he/she starts his/her count from such a number, picking each tenth respondent for the sample (as his/her class interval = 100/10 = 10). At last, his/her sample will be those respondents whose numbers fall within: 6, 16, 26, 36, 46, 56, 66, 76, 86, 96.

The present study has adapted this approach in the selection of concordance lines for its systematic nature. Thus, the intended sample for this research for instance has been predetermined as twenty percent (20%) of the target population. The target population (academic file) has a token of 3495 instances of the preposition *of* whereas; twenty percent (20%) of these concordance lines is 699 which are used for analysis in this study.

Similarly, in the context of this research, the target population ranges between the concordance lines 1025 from the text (AHum_01 txt) to the concordance line No. 4520 (ATec_11txt). A total of 3495 set of data (concordance lines) made up the total population. Here, in every five concordance lines one stood the chance to be chosen as a sample. In view of this, any number could be given the chance to represent this title. The research consequently chooses any number ending in 5 and 0 to represent this sample. Thereby, the sample selection goes as; 1025, 1030, 1035, 1040, 1045, 1050, 1055, 1060…4515. This gives the exact number of 699 (i.e. 20%).

3.6 Comparison between the two corpora

The two corpora are compared in places where they seem to be different in terms of their period, sizes, number of speakers, accessibility and exploring software. The two written components of the corpora are compared in some areas using Table 3.1.

Table 3.1 Comparison between ICE-Nig. and ICE-GB

Areas	ICE-Nig.	ICE-GB
Compilers	One of the 23 teams of the ICE corpora around the world	Survey of English Usage (SEU)
Period	21st century	3 to 4 decades ago
Size	872,721 word	1,141,721 word
Number of Speakers	1,191	1,750
Accessibility	Through URL, free access on request	On hard disc on a licensing agreement
Software for Exploring the Corpus	Non-specific (as chosen by the user)	Specific (attached to an ICECUP)
No. of releases	1	1& 2

3.7 ANALYTICAL TOOLS

The software tools used for the exploration of the two corpora are AntConc Software tool (which is used to explore ICE-Nig.) and the ICECUP (which is used to explore the ICE-GB). These are discussed in Sections 3.7.1 and 3.7.2 respectively.

3.7.1 AntConc Software Tool

AntConc is the software created by Laurence Anthony of the Faculty of Science and Engineering Waseda University, Japan in October 4, 2011. An Anthony Concordance tool is the relevant software with which the corpus software can be fully utilized. AntConc 3.2.4w (Windows) is the version used among the available tools built by the author. Studies

such as the progressive aspect in Nigerian English by Gut and Futchs (2013) used the same software to explore ICE-Nig. The features used include the concordance plot, concordances, collocates, and Keyword list, File view, Clusters (N-Grams), Wordlist. It also includes some menu options such as, File, Global settings, and Tool Preferences. Any of the above icons has a specific role to play in searching the corpus for given information.

Among other functions the software can do includes generating search results in a keyword in context (KWIC) format. This allows the user to see how words and phrases are commonly used in corpus texts. Concordance plot gathers search results plotted as a "brocade" format. Through this, the user can access the location of a search result in a target text(s). Another tool is the file view which displays the text of an individual file targeted. Through this, investigation is in detail of the result generated in other tools of AntConc (i.e. 3.2.4). The cluster (N-Grams) displays clusters based on search conditions. As a result, it summarizes the result generated in concordance tool or concordance plot tool. The N-Grams tool surveys the entire corpus for "N" (e.g. 1word, 2 words) length clusters. This allows a user to locate common expressions in a corpus. The PNP low-frequency complex prepositions are easily searched in the corpus through the N-Grams which makes the investigation of this research easier at the stage of data collection.

Collocates tool traces the location of the search term. It also allows the researcher to trace non-sequential pattern in language. On the other hand, Wordlist counts all the words that appear in the corpus. It displays the words in ascending order. The arrangements displayed by the Wordlist simplify the researchers' efforts in tracing the word with the highest frequency in the corpus. However, Keyword tool displays the list of words which have the unusual frequency as compared to those in a preference corpus. Characteristics of

words such as genre or ESP can easily be identified in the corpus through the Keyword list. Another tool is the Menu option which contains three main categories such as File, Global settings, and Tool preferences.

3.7.1.1 File

Options within file are associated to reading the files to be loaded into AntConc and written files to the hard disk encompassing information of various kinds. There are options to export all current settings to a given file. Restoring default setting or restarting a program is a good solution when a user setting file becomes corrupt.

3.7.1.2 Global Settings

A number of categories under global settings usually have an effect of various tools in AtnConc. In the file settings, the user may choose to display the complete file or only the name. Also, the user may wish to show or hide the tags in the file as the tags boundaries could be specified. In tag settings, the user may choose to show or hide a given tag that featured in the corpus files. Specifying tag markers is possible so as to hide the tags. To avoid clash in tags entry, users have to edit the default wildcard characters. The user chooses a given character or number with which he wants to describe a ‘word’.

3.7.1.3 Tool preference

Except concordance plot and file view, each tool contains a preference category (an option where settings can be turned). Using the tool preference, users are able to show or hide frames of different types which contain the result displacement. The tools have the options to either treat data as upper or lower case.

3.7.2 The ICECUP

Unlike the open nature of the ICE-Nig. which allows the software to be used for its exploration open, the ICE-GB is attached to the ICECUP. The ICECUP is predetermined to explore the corpus as the two entities are already attached to each other at the time of the corpus production. The users of the corpus are relieved of the worries of finding the relevant software to be used for the exploration of the corpus. This is one of the specialties of the ICE-GB over many corpora of its kinds.

3.8 Possession of the Corpora

3.8.1 Possession of ICE-Nig.

The ICE-Nig. is a free and open corpus. The team of authors of the corpus led by Professor Ulrike Gut has made it clear that the corpus file is free and absolutely costless to users who wish to explore the files. However, only the written component is said to be in circulation when the researcher put a request for the corpus. The written component is the relevant component of the corpus this research work is interested to investigate. It has clarity and easiness of usage over the spoken component. Secondly, it is said to be an open corpus in the sense that the respondents who have contributed various kinds of texts from various genres to the corpus, have declared their intentions to make the corpus accessible to the research communities and open to observations as well.

When the idea to conduct research on Nigerian English came to the mind of the researcher, the ICE-Nig. was yet to be in circulation. This idea predated the release of the ICE-Nig. by at least a month. The introduction to the upcoming corpus shows that the corpus software would be forwarded to its intended users by the team especially on request. This statement motivated the researcher to promptly write to the team and acclaim the

privilege as a potentially intended user. The response received was really encouraging as the software was sent a few hours later. The e-mail correspondence exchanged can be seen in Figures 3.1 and 3.2.

Bagudu Rimi wrote on 2013-06-27:
> Dear Professor Dr. Ulrike Gut,

> Wie geht es Ihnen? Ich hoffe, dass es Ihnen gut geht.

> I am a Nigerian master student at the Faculty of Languages and Linguistics of the University of Malaya, Kuala Lumpur, Malaysia. Last year, I started studying linguistics and intend to utilize a corpus for my master study. Especially, I am interested in the ICE Nig. corpus that you and your colleagues have been developing. I would like to ask you if the ICE Nig. is already available. If yes, I also would like to know whether I can access and use it for my master study without charge or at an accessible cost.
I would be delighted with your answer.
>Respectfully yours,
> Best wishes,
> Rimi Saleh Bagudu
> Master student
> Faculty of Languages and Linguistics
> University of Malaya
> Kuala Lumpur, Malaysia

Figure 3.1. An e-mail (request) from Rimi Saleh Bagudu to Prof. Ulrike Gut

From: Ulrike Gut <gut@uni-muenster.de>
To: Bagudu Rimi <rimibagudu@yahoo.com>
Sent: Thursday, June 27, 2013 3:31 PM
Subject: Re: Question on the ICE Nigeria corpus

Dear Mr Bagudu,

The written part of the ICE Nig. can be downloaded here <http://sourceforge.net/projects/ice-nigeria/>.
The spoken part will be available soon.

Best wishes,
Ulrike Gut

Figure 3.2 An e-mail (reply) from Prof. Ulrike Gur to Rimi Saleh Bagudu

Within a reasonable time after the application to the corpus team, the researcher received the corpus on the web page through which the written part of the corpus is downloadable. The intended users of the spoken component will be kept in view for its release.

As against the other corpora such as the ICE-GB, the ICE-Nig. is not attached to any specific software through which the users can explore the corpus. Therefore, the user selects from the available corpus tools such as AntConc, Wordsmith, ICECUP, with which he/she could explore the corpus.

3.8.2 Possession of ICE-GB and ICECUP

The International Corpus of English Great Britain (ICE-GB) is the international corpus of English utility program. Whole or part of the corpus is affordable through accessible licensing agreement. Request for the accessibility of the license leading to the affordability of the ICE-GB went on through the exchange of e-mails as presented in Figures 3.3 and 3.4.

Request for a proper link Mar19, 2014

Me
To ucleseu@ucl.ac.uk

Mar 20

Good day Prof.
I write to request for the proper link I could send my licencing application forms as the forms do not contain such a link.
Kindly send me the link through which I could send my application documents to claim my licence.
Thank you for listening.
Regards,
Rimi.

Reply, Reply All or Forward | More

Figure 3.3 An e-mail (request) from Rimi Saleh Bagudu to The Survey of English Usage (UK.)

English Usage Mar 20, 2014
To Me

Dear Rimi,

Full instructions can be found on this page:

http://www.ucl.ac.uk/english-usage/projects/ice-gb/iceorder2.htm

The links are at the top of the page. You need to send the form to us by mail.

Regards,

Survey of English Usage
Department of English Language and Literature
University College London
Gower Street
London WC1E 6BT
(00) 44 20 7679 3119/3120
Reply, Reply All or Forward | More

Figure 3.4 An e-mail (reply) from Survey of English Usage to Rrimi Saleh Bagudu

3.8.3 Licensing Terms of ICE-GB

The accessibility to the corpus came under three licensing terms. The individual license is the category to which this research falls under. For individual license (including student license), the licensed user is permitted to produce a single copy of the corpus and software on a single computer only. For one to be eligible for a student license, an official letter covering the claimer as a full time student from a head of department has to be provided on a headed paper with official school/college stamp.

The final stage is the payment of the stipulated amount to acquire the license. The prices for release 1 of the ICE-GB are in pound sterling (GBP). Student's license is at GP50 flat price. It was categorically mentioned that the corpus and software would be posted to the student after receiving the completed order form and proof of payment for the corpus

and the software. The payment was made and this entitled the researcher to acquire a copy of the corpus and software.

3.9 Relevance of SPSS analysis and chi-square statistical tool

SPSS refers to the Statistical Package for Social Sciences. Pillant (2010:1) defines SPSS as software designed for students towards the completion of their research exercises which involves statistical analysis and those involved in conducting their academic and other related researches. The software is designed with the aim of providing a step-by step guide to the process of data analysis. Other objectives of the program include the application of appropriate test to the set of data, by testing hypothesis in order to draw statistical/valid conclusions. All these aimed at simplifying statistical analysis using the software Pillant (2010).

In order to test the relationship between the uses of the preposition *of* across the 13 categories: *Partitive, Content, Quantitative, Extent, Source, Attribution, Temporal, Cause, Possession, Position/Location, Process, Separate-From and Loss Relationship Categories* a statistical analysis is required. SPSS tool is capable for analysis of this kind. This is why the SPSS is used for statistical analysis in this study. SPSS uses many tools such as T-test, Anova, Chi-square, Pearson, Spearman, and Regression analyses. The tool to be used relies on the size of data and purpose of the analysis.

The choice of Chi-square for analyzing the data in this study is determined by the size of data used as supported by the some authors. George and Mallery (2003:6) see Chi-square test or variance test as "the relevant test preferred for larger samples". In a broader sense Pillant (2010) observes that,

> Chi-square is a non-parametric statistical technique used primarily without nominal or categorical data. It measures the overall fit of a model as goodness of fit measures supports the adequacy of a model in a set of examples. A finding of non-significance corresponds to an adequate model-one whose model implied covariance matrix does not differ from observed variance matrix. Results are usually accepted when $\alpha<.05$ as the relationship/difference is considered significant. But where $\alpha>.05$ the relationship/ difference is rejected as it is considered insignificant. (p. 1).

Chi-square tests the goodness of fit for one variable having the categories two and beyond. The goodness of fit test is run for each variable with two or more categories such as the 13 categories in this study (George and Mallery, 2003). The semantic uses of the preposition *of* across the 13 categories are in line with the claim of George and Mallery (2013). So, the goodness of fit of each category is tested. Goodness of fit is run to test assumptions "if the proportion of frequency in each Relationship Categories of the preposition *of* across ICE-Nig. and ICE-GB is equal or not" (George and Mallery, 2013:7).

3.10. Categorizations in this Research

Categorizations in this research include an adaption of the 10 categories of Downing and Locke (1992) and the 19 categories of Cambridge Advanced Learner's Dictionary (2008). Groom (2007) uses some of the categorizations from the COBUILD dictionary to disclose the relationships established by the preposition *of* in the HistArt corpus. The categories he used include process, content, domain/locative, quantitative relationships. It is in line with the above claim that this research considers the Cambridge Advanced Learner's Dictionary (2008) for comparative study. The Dictionary offers nineteen (19) categories for the relationship expounded by the preposition *of* see Table 3.2.

The categorization of the Cambridge Advanced Learner's Dictionary (2008) which covers nineteen (19) relational meanings of the preposition *of* is listed in Table 3.2.

Table 3.2 Cambridge Advanced Learner's dictionary's categorization (2008)

No	Categories	No	Categories	No	Categories	No	Categories
1	Possession	6	Days	11	That is or are	16	Time
2	Amount	7	Made of	12	Done to	17	Separate from
3	Containing	8	With adjectives and verbs	13	Felt by	18	Loss
4	Position	9	Judgment	14	Through	19	During
5	Typical	10	Relating to	15	Comparing		

The definitions of and examples of the Cambridge Advanced Learner's Dictionary (2008) categorizations which have been used in this study have been shown in Table 3.3

Table 3.3 Definitions and examples in categorizations of Cambridge Advanced Learner's Dictionary (2008)

N0	Categories	Definition	Examples
1	Possession	Used to show possession, belonging or origin	-a friend of mine -the president of the United states
2	Amount	Used after words or phrases expressing amount, number or a particular unit	-a kilo of apples -hundreds of them -a drop of rain
3	Containing	Containing	-a bag of sweets A class of idiots
4	Position	Used in expressions showing positions	-the back of your dress -on the corner of the street
5	Typical	Typical or characteristics of	-she has the face of an angel -that man's got the brain on a donkey
6	Days	Used to refer to a particular date of a month	-the eleventh of March -the first of the month
7	Made of	Made or consisting of; having	-dress of lace and silk -land of ice and snow
8	With adjectives/ verbs	Used to connect particular adjectives and verbs with noun	-fond of swimming -sick of his excuses
9	Judgment	Used after an adjective when judging someone's behavior	-it was a bit unkind of you to mention her weight
10	Relating to	About; relating to	-speaking of Elizabeth, here she is -one of the advantages of travelling by train is being able to read
11	That is/are	That is/are	-the problem of homelessness -the difficulty of bringing up twins
12	Done to	Done to	-the massacre of hundreds of

			innocent people -the oppression of a nation
13	Felt by	Felt or experienced by	-the suffering of millions -the anguish of the murdered child's parent
14	Through	Through; having as a cause	-he died of cancer -I did it of my own free will
15	Comparing	Used when comparing related things	-best of all I liked the green one -he's the best looking of the three brothers
16	Time	Used in saying what the time is	-its ten minutes of five
17	Separate from	Used in expressions showing distance from something in place or time	-we lived within a mile of the city centre -she came within two seconds of beating the world record
18	Loss	Used in expressions showing loss	-they were robbed of all their savings -I feel I have been of your company
19	During	During	-I like to relax with a pipe of an evening

The categorization of Downing and Locke (1992) which covers ten (10) relational meanings of the preposition *of* are listed in Table 3.4.

Table 3.4 Downing and Locke's categorization (1992)

No	Categories	No	Categories	No	Categories
1	Subjective	5	Quantitative	9	Temporal
2	Objective	6	Extent	10	Cause
3	Partitive	7	Source		
4	Content	8	Attributive		

The definitions and examples of the Downing and Locke's categorizations which have been used in this study have been shown in Table 3.5

Table 3.5 Definitions and examples of categorizations in Downing and Locke's (1992)

No	Categories	Definition	Example
1	Subjective	Where the object linked by *of* falls in a subject position	One of the boys is ill.
2	Objective	Where the object linked by *of* falls in an object position	She talked to none of them.
3	Partitive	When a person or thing is viewed as related to a bigger frame as its part through the preposition *of*.	-lid of the bottle -engine of the car
4	Content	All things serving as quantity which is confined or enclosed in another thing else serving as its container.	the water of the dam -a picture of her
5	Quantitative	A quantity or figures of a particular thing which is subject to measurement or counting.	-twenty bags of rice -a population of 10m
6	Extent	A space, distance or volume, the range a thing measured, how corrupt a particular thing is, how much somebody knows of a thing, the size of a thing etc. express through the a link by *of*. Extent is a bigger context of the quantitative in comparison.	land of ten sqkm -a road of nine k/m -bags of rice -backbone of corruption -from the book of five hundred pages -She is the dictionary of English.
7	Source	An area from which a thing comes or begins, caused or provider of information (somebody, electricity, water, or internet, etc.), a place from which money comes, etc.	-rays of the sun -milk of the cow -water of the Nile -a product of Google
8	Attributive	A characteristics of a person, or thing, expression of typicality, what a person or a thing as relating to or done by, etc. as related by *of.*	-product of great beauty -an act of stupidity -a native of Rome
9	Temporal	When two entities related by *of* conveys an idea of lapsing, perishing, or an unpreserved thing or idea or phenomenon which is related to time or have time consciousness	-as of last week -the height of the season
10	Cause	A cause of a thing, usually a thing evil happens. *Because* is mostly chosen to announce causal effect of such a happening. But where *of* relates the two parts to expound such a relationship	-die of cancer -tired of study -rid of the responsibility

The two categorizations (Downing & Locke's (1992) and the Cambridge Advanced Learner's dictionary (2008) are compared in Table 3.6

Table 3.6 Comparison between the Downing & Locke's (1992) and the Cambridge Advanced Learner's dictionary's Categorizations (2008).

No	Downing & Locke's	Cambridge Advanced Learner's
1	Subjective	X
2	Objective	X
3	Partitive	Comparing/*amount* √
4	Content	Containing √
5	Quantitative	*Amount* √
6	Extent	*Amount*/Comparing √
7	Source	Made of √
8	Attributive	With adjective or verb, Typical, Relating to, Done by, That is/are √
9	Temporal	Days, During, Time √
10	Cause	Judgment √
11	X	Possession
12	X	Position/location
13	X	Process
14	X	Separate From
15	X	Loss

In Table 3.6, categories 11-15 have been observed to be absent in the Downing and Locke's categorization. It therefore, has to be added to the eight refined and chosen list (category 3-10) to form a thirteen (13) categories. The categorization is pre-supposed to provide for the 14,488 distribution of the preposition *of* as used in ICE-Nig. This is not a limitation of the newly formed categorization as is also presumed to fit into all contexts of preposition distribution in corpus analysis.

3.11 The Adapted Categorization for this Study

Considering the complication of the data in this study which is explained in Section 3.10, the Downing and Locke (1992) was not comprehensive enough to accommodate it. This led to the hybridization of the two categories. It is in view of the above that this categorization is believed to have been first used by this study. See Table 3.7

Table 3.7 The adapted Categorization for this Study

No	Categories	No	Categories
1	Partitive	8	Cause.
2	Content	9	Possession
3	Quantitative	10	position/location
4	Extent	11	Process (material/mental)
5	Source	12	Separate from
6	Attribution	13	Loss
7	Temporal		

3.12 Definitions of the 13 Adapted Categories

The thirteen (13) categories collected to be used in the context of this research are defined in Table 3.8 which provides the definitions and examples of the categories. The definitions are suitable for this research as they were defined by the original authors. The improvement given by this research is in terms of insufficient examples of the criteria in defining the categories as provided by the authors of the two categories. This is especially in the Downing & Locke's categorization (1992), where only few criteria of defining *Extent relationship category* were provided with examples. Examples were not provided for criteria such as; *space, the range of things measured, how corrupt a particular thing is, and how much somebody knows of a thing*. Other areas could be in paraphrasing some ideas without altering the meanings given by the authors.

Table 3.8 Definitions of the 13 adapted categories

No.	Categories	Definition	Examples
1	Partitive	When a person or a thing is viewed as related to a bigger frame as its part through the preposition *of*.	-lid of the bottle -engine of the car
2	Content	All things serving as quantity which is confined or enclosed in another thing else serving as its container.	-the water of the dam -a picture of her
3	Quantitative	A quantity or figures of a particular thing which is subject to measurement or counting.	-twenty bags of rice -a population of 10m
4	Extent	A space, distance or volume, the range a thing measured, how corrupt a particular thing is, how much somebody knows of a thing, the size of a thing etc. express through the a link by *of*. Extent is a bigger context of the quantitative in comparison.	-land of ten sqkm -a road of nine k/m -bags of rice -backbone of corruption -from the book of five hundred pages -She is the dictionary of English.
5	Source	An area from which a thing comes or begins, caused or provider of information (somebody, electricity, water, or internet, etc.), a place from which money comes, etc.	-rays of the sun -milk of the cow -water of the Nile -a product of Google
6	Attribution	A characteristics of a person, or thing, expression of typicality, what a person or a thing as relating to or done by, etc. as related by *of*.	-product of great beauty -an act of stupidity -a native of Rome
7	Temporal	When two entities related by *of* conveys an idea of lapsing, perishing, or an unpreserved thing or idea or phenomenon which is related to time or have time consciousness	-as of last week -the height of the season
8	Cause	A cause of a thing, usually a thing evil happens. *Because* is mostly chosen to announce causal effect of such a happening. But where *of* relates the two parts to expound such a relationship	-die of cancer -tired of study -rid of the responsibility
9	Possession	Where origin, ownership, belonging or possession of something or someone is expressed by the relational preposition *of*	-the prime minister of Malaysia -the love of a noble wife
10	Position/ Location	An association indicating a fixed position or a location at which someone or something is situated through the use of the preposition *of*	-the front of your dress -at the end of the highway
11	Process	Where a nominalized verb is used to express an action that undergo stages and that which cannot be reproached in a snapshot	-commercial production of oil in Nigeria -acquisition of knowledge and skills
12	Separate From	A relationship expressing a distance between something distinctive or a location of time through the use of the preposition *of*	-they live within two miles of the city Centre -within ten seconds of beating the world record
13	Loss	In a situation where an expression shows a sense of loss, damage or the absence of something necessary in a particular context through the use of the preposition *of*	-they were robbed of all their wealth -he feels he's been deprived of your company

3.13 Justification for dropping Subjective and Objective Categories

Two sub-categories from the categorizations of Downing & Luke (1992) (i.e. Subjective and Objective) are more of grammatical than semantic relationship. All other categories fall into either of the two. For instance, Partitive must fall into either subjective or objective position as well. The same applied to all other categories i.e. Content, Quantitative, Extent, Source, and Attribution. On the other hand, Sinclair (1991) claims that the functions of the preposition *of* should be looked up from their grammatical relationship they established other than the so called dictionary and single semantic relevance found to be most relevant. Therefore, these categories have been put off for the purpose of this research. As a result, eight of the categories (Partitive, Content, Quantitative, Extent, Source, Attribution, Temporal and Cause) will be used.

Some categories seem to be similar in function. Therefore, they are merged into categories that suit them. Besides, a category with multiple functions (which can fit into many classes depending on how it is used in a context) is *italicized* to indicate its multiple occurrences in the classes it appears.

3.14 Justification for Adapting the Two Categorizations

In the beginning, the researcher attempted to analyze the data to this research using the Downing and Locke's categorization. This was found to be impossible as some of the occurrences of *of* in the corpus were not suitable in the Downing and Locke's categories. The necessity led to the search for categorizations that could help the situation. This search falls on categorizations such as the Cambridge Advanced Learners Dictionary's, the Merriam-Webster online English Dictionaries, and the Collins Cobuild Dictionary's.

The researcher chose the Cambridge Advanced Learners Dictionary's (2008) due to the existence of categories needed to bridge the gap in this research. Categories such as possession, process and Loss which have not been provided by the other categorizations were present in the Cambridge Advanced Learners Dictionary's. This was the reason for choosing the Cambridge Advanced Learners Dictionary's categorization (2008) to fill-in the gap of the Downing and Locke's Categorization (1992). The two categorizations were compared. Most of the categories were similar as few others were absent. These were the categories needed to bridge the gap as indicated by Table 3.6.

The authors did not claim perfection in the suitability of their categorization. Downing and Locke's (1992: 595) state "one of the polysemous prepositions *of* which can cover the following and other functions" the phrase "and other functions" here infers that their categorization is presumed to suit some specific functions and not all contexts.

This is one of the reasons the categorization may demand refinement to make it cover all the set of data in this research work. It is in line with this fact that the five categories are collected from the Cambridge Advanced Learner's dictionary's (2008) to form a comprehensive categorization that can be used to analyze the data in this research.

3.15 Resolution on the Preposition *of*

The preposition *of* has been found to be the highest occurring preposition in the ICE-Nig. Considering the fact that frequency significance is the major concern of every successful corpus investigation, this study decided to shift from the former concept of the least frequency construction (Preposition-Noun-Preposition PNP constructions) to the most occurring preposition in the same corpus. This is for no other reason than that of statistical backup to the data from the corpus under study.

The preposition *of* appeared 14,488 times in the ICE-Nig. as shown by the concordance search. Frequency from the reference corpus is not the primary concern of this work. Though, the preposition is likely to be the populous in all kinds of texts. Research work on the preposition *of* from ICE-Nig. has not been found yet even if it exists, then it has not been traced to date by the researcher.

This does not mean at all that no attempt has been made to classify the multi-relational preposition based on inferential meanings. Categorizations such as the ten (10) categories of the Downing and Locke, nineteen (19) categories of the Cambridge Advanced Learner's Dictionary, eleven (11) categories of the Merriam-Webster online English dictionary, and the twelve (12) categories of the Collins Cobuild Dictionary have made a significant attempt in making the relational concept of the preposition *of* clear to the readers. But, this hybridized categorization (the 13 categories) seems to be a virgin one as the data drove the findings which called for the adaption of these categories.

3.16 Data Classification Judgments

Classification judgments were conducted by language students two of whom were PhD candidates and two Masters Students of University of Malaya and University of Putra Malaysia respectively. This was done in the form of inter-rater reliability. The judgments were done after analyzing data collected from each of the two corpora. The judges sat with the researcher who had earlier analyzed the data based on his own perception of the data in relation to the categories. The judgments were usually preceded by defining the categories as in Table 3.8. Clarifications were made to any of the members who seemed to misunderstand any of the categories.

The judgment started as soon as all the members were clear with the entire concepts. Each of the instances (contextual co-occurrence of the preposition *of*) was read to the hearing of the members. Suitability of a category into which each occurrence of the preposition in a particular concordance line falls, has to be discussed. Sometimes argument broke. Here, the recordings could not hold until consensus was reached. Once any three of the four judges (i.e. 75%) agreed to a given category, the view is considered stronger than that of the other judge (i.e. 25%). This strengthened the classification of the data. Besides, the reliability of the classification increased.

Argument broke in classifying some instances such as in the following concordance lines:

1. 1165 in portraying the moral cum *physical decay of Nigeria*. The books are morbidly sick and the… Ahum_02 txt (ICE-Nig.).

   In this context, the judges argued whether the preposition *of* in *physical decay of Nigeria* establishes *a loss relationship* as it indicates loss of some values in the country or *a process relationship* as the action of the verb undergoes certain processes. Finally, the sense of *loss relationship* was unanimously agreed upon as the phrase *physical decay* seems to be more of a noun than a verb.

2. 1535 the only difference noticed in the *language of Urhobo people* is the one between the elderly… AHum_07 txt (ICE-Nig.).

   In this context, the judges argued whether the preposition *of* in *language of Urhobo* establishes *an attributive relationship* as it indicates that *language* seems to be more of an attribute of a people than of possession. It also seems to be something they possessed as establishing *possessive relationship*. At the end, the sense of *attributive relationship* was unanimously agreed upon as people could be identified by their language.

3. 1560. …reveal the roles it plays in *the existence of dialects in the Urhobo language*… AHum_07 (ICE-Nig.).

   In this context, the judges argued whether the preposition *of* in *the existence of dialects in the Urhobo language* establishes *a process relationship* as it indicates that *existence* seems to be a *process relationship*. It also seems to expound a *temporal relationship* as existence relates to time. At the end, the sense of *process relationship* was unanimously agreed as the phrase refers to their living than the time they lived.

4. W2A_001 016. It was only *the rejection of this demand* that led them to rise in revolt in 90 B.C. and in… (ICE-GB)

   In this context, the judges argued whether the preposition *of* in *the rejection of this demand* establishes *a loss relationship* as it indicates that *the rejection* seems to be a loss relationship as the acceptance of the demand was required instead. It also seems to have expounded a process relationship as *rejection* undergoes certain processes. At the end, the sense of *loss relationship* was unanimously agreed upon as the term refers to loss of acceptance.

5. W2A_010 044. …good seved to challenge and threaten *the Capetian monarchy of France.* (ICE-GB)

   In this context, the judges argued whether the preposition *of* in *the Capetian monarchy of France* establishes *a possessive relationship* as it indicates that *the capetian monarchy* denotes a *possessive relationship* with *France*. It also seems to have expounded an *attributive relationship* as *the captian Monarchy* distinguishes *France* from other systems of governments. At the end, the sense of *possessive relationship* was unanimously agreed upon as there are many countries worldwide with the same system of government.

6. W2A_012 046. The first type, ‘exemplarism’ is a *Christian form of humanism*; (ICE-GB). In this context, the judges argued whether the preposition *of* in *the Christian form of humanism* establishes *an attributive relationship* as it indicates that *Christian form* seems to indicate *attributive relationship* as the *humanism* shows a feature if the *Christian* attribute. It also seems to have expounded a *partitive relationship* as *form of humanism* shows a part of *humanism* among other parts. This is when the word *form* is viewed independently of the word *Christian*. At the end, the sense of *attributive relationship* was unanimously agreed upon as the term refers to a feature of *Christian* people.

3.17 Analytical Framework

The framework used for this research is on one hand what the researcher conceptualizes and on the other hand, what is obtained from the hybridization of two categorizations. The part adapted by the researcher is that which describes the two corpora used (ICE-Nig. at one hand and the ICE-GB at the other). The preposition *of* follows to indicate that, the two corpora are compared in terms the use of the preposition. Next are *Frequencies, Collocations*, and *Semantics*. This indicates that frequency of occurrences will be observed across the two corpora to indicate the patters of use, Collocations will be observed to help study preposition as it is meaningless studying the preposition in isolation. Semantics refers to the distinctive meanings the preposition gives for each instance on occurrence which complements the corpus analysis. Categorizations mean the variety of meanings the preposition is observed to have had as observed by linguists.

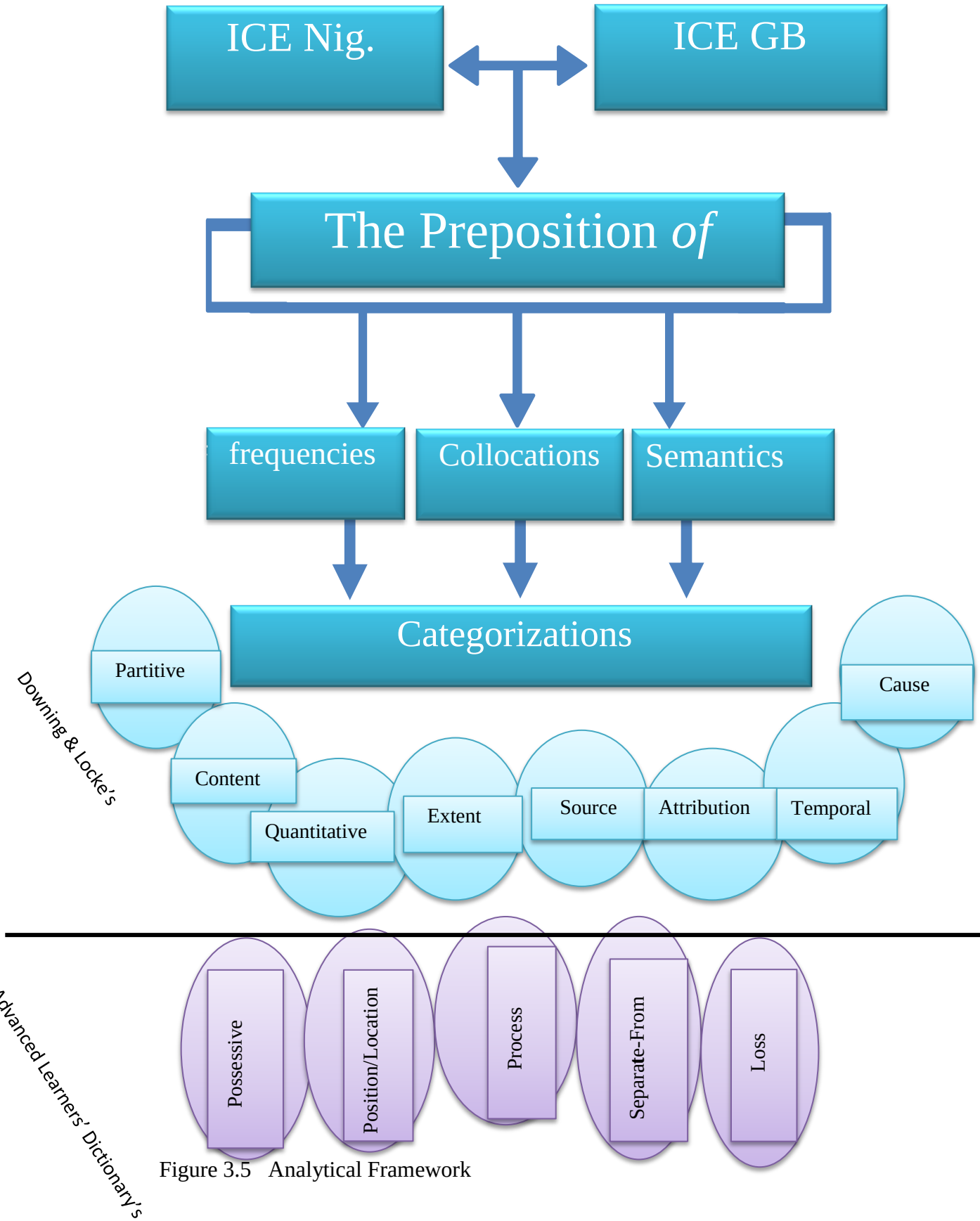


Figure 3.5 Analytical Framework

3.18 Summary of the Chapter

This chapter presents the methodology used in this study. The chapter describes the two corpora used as sources of data to the study. Data sizes and sampling technique, data collection procedure, and so on have all been reported in the chapter. Corpus tools used through which the data have been retrieved are also been defined. The thirteen categorizations (adapted from Downing & Locke', and the Cambridge Advanced Learners') which the study used and the justifications for such choices have been substantially drawn.

CHAPTER FOUR:

DATA ANALYSIS AND FINDINGS

4.0 Introduction

This chapter presents the analysis of the preposition *of* in ICE-Nig. in comparison to ICE-GB. It presents the corpus analysis as well as the SPSS analysis of both the corpora in relation to the categories of the preposition *of*. Finally, the chapter summarizes the findings from the corpus and SPSS analysis.

4.1 Corpus Analysis

This section attempts to answer RQ1: "What are the patterns of use of the preposition *of* in ICE-Nig.?" In an attempt to answer this question, every individual instance of *of* from ICE-Nig. has been classified according to its suitability in one of the 13 categories (see chapter 3.16) for each of these categories, three examples of concordance lines from ICE-Nig. and one of example from ICE-GB are selected to demonstrate. This is done to demonstrate how each category works in actual language context. One example is collected from the ICE-GB because the section is mainly on ICE-Nig. on which the research question is based. In an attempt to compare the patterns of the usage (qualitative aspect) as required by RQ2: "How does the use of the preposition *of* in ICE-Nig. compare to those in ICE-GB?" Three examples are collected from ICE-Nig. while one example from each category from the ICE-GB has been shown to illustrate the similarity that exists between the two varieties in terms of the usage of the preposition *of* across the semantic categories.

4.2 Findings from the ICE-Nig.

The preposition *of* occurs 3495 times in the Academic files of the ICE-Nig. The 20% sample used to analyze the semantic uses of the preposition is 699 concordance lines.

Figure 4.1 and Table 4.1 show the percentage of the 13 categories of the occurrences of *of* in the context of ICE-Nig. The procedure of data collection has been explained in Section 3.4 respectively.

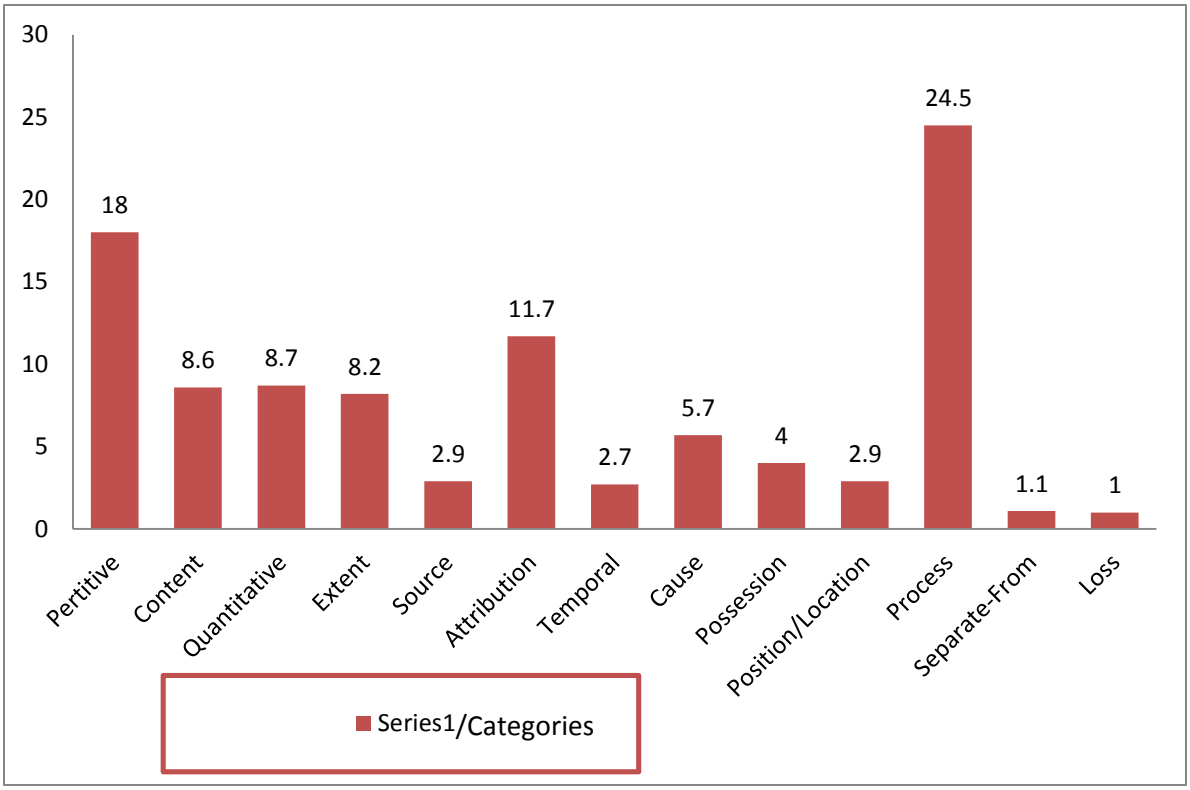


Figure 4.1 Frequencies of preposition categories in ICE-Nig.

Figure 4.1 shows that the most frequent category in the corpus is the *Process Relationship Category*. The category presents 24.5% of the total number of concordance lines in the samples. The second most frequent semantic category is the class establishing *Partitive Relationship Category* which occupies 18% of the sampled population. Next appears to be *Attributive Relationship Category* with 11.7%, followed by *Quantitative Relationship Category* (8.7%), *Content Relationship Category* (8.6%) and *Extent Relationship Category* (8.2%). The other categories which have lesser occurrences include

Cause Relationship Category (5.7%), *Possessive Relationship Category* (4.0%), *Source relationships Category* and *position/location Relationship Category* (2.9%) respectively. Closer to this is the *Temporal Relationship Category* having 2.7%. The least frequent categories appear to be the *Separate-From Relationship Category* (1.1%) and *Loss Relationship Category* (1.0%) of the total appearance of the preposition *of* in the concordance lines. It is apparent that the preposition *of* has a better chance to occur in an environment that expresses an attributive and process relationship above other semantic categories in the ICE-Nig.

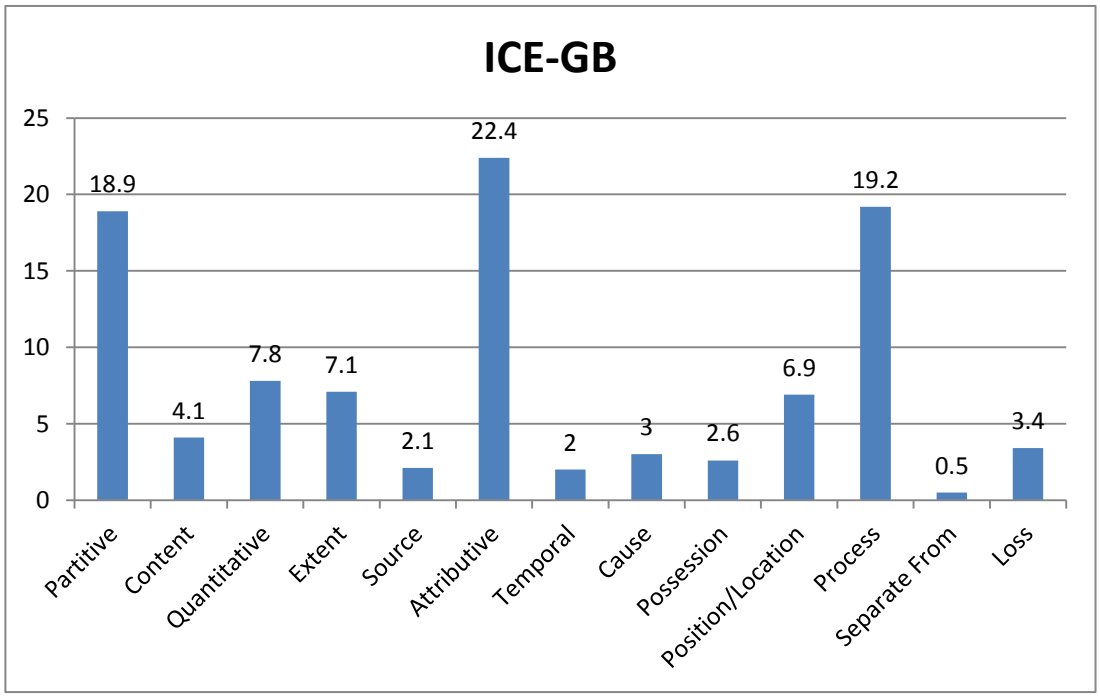


Figure 4.2 Frequencies of preposition categories in ICE-GB.

4.3 Findings from ICE-GB

Table 4.2 contains the data from the International Corpus of English Great Britain (ICE-GB). The information discloses that *Attributive Relationship Category* appears to have the largest frequency with 22.4%, followed by *Process Relationship Category* with 19.2%, and

Partitive Relationship Category with 18.9%. This is followed by *Quantitative Relationship Category* (7.8%), *Extent relationship category* (7.1%). *Position/Location Relationship Category* (6.9%) and *Content Relationship Category* (4.1%). The other categories occur less than 3% and these are *Loss relationship category* (3.4%), *Cause Relationship Category* (3.0%), *Possession Relationship Category* (2.6%), *Source Relationship Category* (2.1%), *Temporal Relationship Category* (2.0%) and *Separate-From Relationship Category* (0.5%).

The numbers to be more suitably compared are the percentages. This is simply because the sizes of the two corpora are not the same. While the ICE-Nig. is 872,721 in size, the ICE-GB is 1,141,761. Gut and Futch (2013) reported that the number (of progressives traced) for ICE-GB was relatively low. They attributed the cause to differences in corpus size. Therefore, this research considers the percentage proportion to compare the frequency of occurrence of each category from the two corpora.

Table 4.1 Frequency of occurrence and percentage of preposition categories in ICE-Nig. and ICE-GB

		ICE-Nig		**ICE-GB**		
No	**Category**	**Freq**	**%**	**Freq**	**%**	**Diff. %**
1.	Partitive	126	18.0	162	18.9	+0.9
2.	Content	60	8.6	35	4.1	-4.5
3.	Quantitative	61	8.7	67	7.8	-0.9
4.	Extent	57	8.2	61	7.1	-1.1
5.	Source	20	2.9	18	2.1	-0.8
6.	Attribution	82	11.7	192	22.4	+10.7
7.	Temporal	19	2.7	17	2.0	-0.7
8.	Cause	40	5.7	26	3.0	-2.7
9.	Possession	28	4.0	22	2.6	-1.4
10.	Position/Location	20	2.9	57	6.9	+4.0
11.	Process	171	24.5	164	19.2	-5.3
12.	Separate-From	8	1.1	4	0.5	-0.6
13.	Loss	7	1.0	29	3.4	+2.4
	Total	**699**	**100**	**856**	**100**	**===**

The highest category in ICE Nig. is the process (24.5%) and ICE-GB attribution category (22.4%). This is followed by Partitive (18.0%) in ICE-Nig. and process (19.2%) in ICE-GB. It is followed by attributive category (11.7%) in ICE-Nig. and partitive (18.9%). This is followed by Quantitative (8.7%) in ICE-Nig. and Quantitative (7.8%) in ICE-GB. The fifth most frequent categories are content (8.6) in ICE-Nig. and extent (7.1%) in ICE-GB. This is followed by extent (8.2%) in ICE-Nig. and position/location (6.9%) in ICE-GB. It is followed by cause (5.7%) in ICE-Nig. and content (4.1%) in ICE-GB.

The eight most frequent categories from the corpora are possession (4.0%) in ICE-Nig. and loss (3.4%) in ICE-GB. This is followed by source (2.9%) in ICE-Nig. and cause (3.0%)in ICE-GB. It is followed by position/location (2.9%) in ICE-Nig. and possession (2.6%) in ICE-GB. The eleventh populous categories are temporal (2.7%) in ICE-Nig. and source (2.1%) in ICE-GB. This is followed by separate-from (1.1%) in ICE-Nig. and temporal (2.0%) in ICE-GB. The least frequent categories in the corpora are loss (1.0%) in ICE-Nig. and separate-from (0.5%) in ICE-GB.

This section explains the semantic usage of all the relationship categories. It first describes each category in terms of its meaning especially as it is used in this study and then displays the instances of each category as it appears in the concordance lines from ICE-Nig. Then each of the concordance lines is discussed, explaining how the preposition *of* has been used to establish relationship in the context within which it occurs. One instance is presented from the concordance lines of the ICE-GB as it is used only for the purpose of comparison in terms of usage between the two corpora.

4.4 Corpus Analysis of the 13 Categories

4.4.1 Partitive Relationship Category

Partitive Relationship is where a person or thing is viewed in relation to a bigger frame acting as its part through the use of the preposition *of* to establish such a relationship. The relationship can be seen in the examples provided from the concordance lines as follows:

(1)…into the African artistic canvas. *The title of Achebe's second novel*, No Longer At Ease, is (AHum_02.) [ICE-Nig.]

(2)…the subject NP is a pronoun, *the first part of the vowel* bears a low tone while the lengthen (AHum_06) [ICE-Nig.]

(3)...subsequent repair bills. Unfortunately, *many of the explanations* given for these poor practice… (ATec_10.) [ICE-Nig.]

(4) W2A-006 In an aesthetic ‘adoration perpetuelle *the initial title of Proust’s book* but rather in a purgatorial structure… [ICE-GB]

In (1) above, the noun phrase *the title of Achebe’s second novel,* contains the preposition *of* which establishes a relationship between the two separate entities *the title* and *Achebe’s second novel.* The relationship established is partitive in nature. The relationship is not driven only from the individual word of but it is made by the whole sequences i.e. partitive relationship collected from the *partitive form (the title) + of + noun or noun phrase (Achebe’s second novel).* This implies that the novel is a bigger frame within which the title exists. Among other things the frame may include preface, acknowledgements, several chapters, reference section and appendices. From sentence two we have the phrase *the first part* and *the vowel*. Without the relationship established by the preposition *of*, the two segments would have zero association. But, in this case, the

preposition inter relates the two short phrases to form a larger concept which mean that, the first is directly associated to the second *the vowel*.

The relationship is not only driven from the individual word of but, it is made by the whole sequences i.e. the partitive relationship collected from the *partitive form (the first part) + of + noun or noun phrase (the novel).* This also infers that, the vowel has more than just a part. For instance, a diphthong has two parts, and thripthong has three parts.

The third sentence contains the phrase *many of the explanations*. The phrase contains two independent parts; *many* and *the explanations*. The two parts are possibly related to the use of the relative preposition *of*. The relationship established is partitive. The relationship is not only driven from the individual word of but it is made by the whole sequences i.e. the partitive relationship collected from the *partitive form (many) + of + noun or noun phrase (the explanations).* This shows that, the concept of *many* is closely affiliated to *the explanations* by the use of the preposition. One can simply infer that, *the explanations* constitute a big frame from which *many* are considered.

From example (4), *the initial title of Proust's book* is similar in term of Partitive relationship with *The title of Achebe's second novel,* in (1). *The initial title* refers to a part of which other parts are composed in the Proust's book, as *the title* is to *Achebe's second novel.*

4.4.2 Content Relationship Category

Content Relationship is an association where things that denotes quantity which are enclosed in another thing serve as its container and where the relationship is realized

through the use of the preposition *of* to establish the relationship. This can be seen in the examples provided from the concordance lines as follows:

(5)…tions and definitions earlier stated. *A list of required media characteristic* should encompass (AHum_03.) [ICE-Nig.]

(6)…Kaduna, for Oro-facial malignancies. *Records of 211 of them* were traced and have been retros (ANsc_02.) [ICE-Nig.]

(7). appropriate mobile phase such as *a mixture of equal portions* of benzene and chloroform wit (ATec_07.) [ICE-Nig.]

(8) W2A-005 060 *The alternative picture of the square mile* which 'Big Bang' encouraged is of … [ICE-GB]

Example (5) contains the phrase *A list of required media characteristic*. The two shorter phrases *A list* and *required media characteristic* are conjoined by the preposition *of* to express the correlation between them. The association is content in nature. This signifies that the *required media characteristic* is contained in the structure of *a list.* The relationship is not only driven from the individual word of but it is made by the whole sequence i.e. the *content relationship* collected from the *content (a list) + of + noun or noun phrase (required media characteristic).* In such a context, the list contains media characteristics which should encompass a complete specification of what is required of a learning situation. This context matches with content behavior.

In example (6), the phrase *Records of 211 of them* exists. As in the examples above, *records* stands as a content within which the quantity *211 of them* can be found though there is a concept of quantity and content in this phrase. The actual concept being conveyed by the phrase is that of the content rather than the quantity. The relationship is not only

driven from the individual word of but it is made by the whole sequences i.e. the *content relationship* collected from the *content (records) + of + noun or noun phrase (211 of them).* From the seventh sentence lies the phase, *a mixture of equal proportion.* This indicates that the mixture is a quantity that can be traced within a given content. Since some quantities now exist within it, then it becomes content itself.

The relationship established between the parts *a mixture* and *equal proportion* by the preposition *of* is entirely that of content as it refers to a content mixture within which a quantity of equal proportion as lies in example 7. The relationship is not only driven from the individual word of but it is made by the whole sequences i.e. the content relationship collected from the *content (a mixture) + of + noun or noun phrase (equal portion).* In the context, the mixture contains equal portions of benzene and chloroform with silica gel as the stationary phase. The instances provided are suggested to convey message of content relationship established by the relative preposition.

From example (8), the alternative *picture of the square mile* is similar in terms of *content relationship* established by the preposition *of* in *A list of required media characteristic* in (5). As the *alternative picture* refers to a frame in which *the square mile* of the land can be found, as *a list* is to *the content of media characteristic*.

4.4.3 Quantitative Relationship Category

Quantitative Relationship refers to a quantity of (amount of something), or a figure which is subject to measurement or that which can be counted and which is realized through the use of the preposition *of* to establish such a relationship. The relationship can be seen in the examples provided from the concordance lines as follows:

(9). patients received *intravenous infusions of 10mg/kg ciprofloxacin* every 12 hours in two (ANsc_01.) [ICE-Nig.]

(10). l (RI) is determined thus: Where: *N = number of events in the series*; M = rank of individual (ANsc_10.) [ICE-Nig.]

(11). these frequencies, because *the size of the raindrop* is comparable to the wavelength (ATec_06.) [ICE-Nig.]

(12) W2A-027 096 during electrical simulation, *two groups of workers*, one in Cambridge the other in Stockholm… [ICE-GB]

Example (9) has the phrase, *intravenous infusions of 10mg/kg ciprofloxacin*. The two fragments *intravenous infusions* and *10mg/kg ciprofloxacin* are fused together as a matter of relationship by the preposition *of* which shows the *intravenous infusions* as a matter of quantity. The phrase expresses the conceptual quantity of the *intravenous infusions*. The relationship is not only driven from the individual word *of*, it is made by the whole sequences i.e. the quantitative relationship collected from the *quantity (intravenous infusions) + of + noun or noun phrase (value of the quantity [10mg/kg ciprofloxacin]).* In the context, the 10mg/kg of ciprofloxacin was given to sick children as a dose within time intervals. So, it clearly stands for a quantity of medicine.

Sentence (10) includes the phrase *N = number of events in the series*. From the concordance line *N=number* and *events in the series* are different independent entities without the intervention of the relational function of the preposition *of*. Here, the *N=number* represents a hidden number which can be substituted by any given number of events or any given number. The relationship is not only driven from the individual word of but it is made by the whole sequence i.e. the quantitative relationship collected from the

quantity (N=number) + of + noun or noun phrase (value of the quantity [events in the series). Therefore, in the context, it appears thus; Where: N = number of events in the series; M = rank of individual event; and RI is return period expressed in years. The concept conveys a quantity of the events as N, M, and RI, all stands for an undisclosed quantity. The phrase, *size of the raindrop* in sentence (11), is related by the preposition *of*. This suggests that, the size is that of the raindrop. Size is generally associated with a quantity (big or small).

The relationship is not only driven from the individual word *of*, it is made by the whole sequences i.e. the quantitative relationship collected from the *quantity (size) + of + noun or noun phrase (value of the quantity [the rain drop]).* In the context, the raindrop is quantitatively comparable to the wavelength of the signal. This signifies that, the raindrop is a given size of the rain and in fact a quantity. The above instances are presupposed to have conveyed the concept of quantity relationship posed by the relational preposition *of.*

From example (12), *two groups of workers*, is similar in terms of the quantitative relationship established by the preposition *of* in the phrases: *N = number of events in the series* in (10) refers to some amount of numbers (though not exactly mentioned). Also, the *two groups of workers* refer to some amount of workers in the groups.

4.4.4 Extent Relationship Category

Extent Relationship refers to a space, distance or volume, the range a thing is measured, how corrupt a particular thing is, how much somebody knows of something, the size of a thing. Extent is a bigger concept of the quantitative relationship in comparison. This is realized where the relationship is expounded through the use of the preposition *of* to

establish such a relationship: The relationship can be seen in the examples provided from the concordance lines as follows:

(13). o the abuse of tobacco and alcohol. *Over 80% of all males in this study* use alcohol and tobacco (ANsc_02) [ICE-Nig.]

(14). hen compared to previous study where *the peak age of occurrence* was seen at 4th and 5th (ANsc_02.) [ICE-Nig.]

(15). means of understanding how to control *the degree of complexity* of software design and dev (ATec_09) [ICE-Nig.]

(16) W2A-030 073 Seven days during which time *they can be blown thousands of kms by wind system* and the materials washed out after… [ICE-GB]

Over 80% of all males in this study from sentence (13) express an extent to which something is. If we consider the integration of the first part with the second, *over 80%* and *males in this study* by the use of the preposition *of*, the composition denote an extent. It tells us to what extent men use tobacco. The relationship is not only driven from the individual word of but it is made by the whole sequences i.e. the quantitative relationship collected from the *extent (over 80%) + of + noun or noun phrase (object of comparison [of all males in this study]).* In the context, over 80% of all males in this study use alcohol and tobacco. The percentage itself signifies the extent while the use of the special preposition over emphasizes it. The group of words *the peak age of occurrence* is driven from example fourteen.

The phrase states as a matter of an established relationship using the relational preposition *of* the extent relationship between *the peak age* and *occurrence.* For instance *the peak age* can answer the question *to what extent does it occur?* The relationship is not

only driven from the individual word of but it is made by the whole sequences i.e. the quantitative relationship collected from the *extent (the peak age) + of + noun (object of comparison [occurrence]).* From example 12, we can infer from the phrase *the degree of complexity* that degree is obviously a word that denotes an extent to which something happens or exists. The preposition *of* links the two sub-parts of the phrase *degree* [with] *complexity* in the context of the sentence. The preposition indicates that the degree is measured in relation to the software. The linkage was possible through the relational function of the preposition. This means that the complexity has reached a certain peak that attracts the interest of the researchers. The above set examples are thought to have maximally conveyed the sense of extent association established by the preposition *of.*

From example (16) *they can be blown thousands of kms by wind system* is similar in terms of extent relationship established by the preposition *of* in *over 80% of all males in this study* in (13) as they both refer to extent relationship. As *thousands* refers to the measurement in *km* at which the things *can be blown by the wind system, over 80%* shows the extent at which the *men use alcohol*.

4.4.5 Source Relationship Category

Source Relationship refers to an area from which a thing comes or begins, caused, or provider of information (about somebody, electricity, water, internet, etc.), a place from which money comes. It is applicable where this relationship is realized through the use of the preposition *of* in establishing such a relationship. This can be seen from the examples provided in the concordance lines as follows:

(17)…translation is actually *an interpretation of the song*. Thus, the poet-persona, probably a… (AHum_10) [ICE-Nig.]

(18)…90% by weight anacardic acid, *a derivative of o-carboxyphenol* that readily decarboxylates… (ATec_07.) [ICE-Nig.]

(19)…not using them at all. *Main source of knowledge* about agrochemicals Table 3 contains da (ASsc_03.) [ICE-Nig.]

(20) W2A-030 091 The acid rain controversy is very much *a product of the 1980s*.

[ICE-GB]

Source relationship can be traced in the relationship suggested by the preposition *of* in the phrase *an interpretation of the song* in example (17). The phrase *an interpretation* comes from *the song*. Without the song, there will be no interpretation or, a different song may give a different interpretation than this. So, this particular interpretation comes only from this song as its source. The relationship is not only driven from the individual word of but it is made by the whole sequences i.e. the quantitative relationship collected from the *source (an interpretation) + of + noun or noun phrase (source i.e. interpretation).* Compare this to *a derivative of o-carboxyphenol* in example 18 for instance. The sub-group of the phrase *a derivative* means something driven from something else. Connecting it to the later part of the phrase *o-carboxyphenol* is the linking function of the preposition *of*. This means that the *derivative* (anacardic acid) comes from the source *o-carboxyphenol*.

The relationship is not only driven from the individual word of but it is made by the whole sequences i.e. the source relationship collected from the *source (a derivative) + of + noun or noun phrase (source [o-carboxiphenol]).* Similarly, in example 19, *Main source of knowledge* can be divided into two sub-groups: main source and knowledge. Here, it is obviously clear that the *knowledge* comes from the *main source.* Looking into the contextual relations between the two sub-groups, the main sources have been Agricultural

Extension Officers, Sales men of Agrochemicals, the rice merchants, and the Television stations. The relationship is not only driven from the individual word of but it is made by the whole sequences i.e. the source relationship collected from the *source (main source) + of + noun or noun phrase (sourced [knowledge]).*

From example (20) *a product of the 1980s* is similar in terms of source relationship established by the preposition *of* to *a derivative of o-carboxyphenol* in (20) as they both refer to source relationship. *A product* comes from 1980s the time when the product was obtained as *a derivative* was obtained from *carboxyphenol*.

4.4.6 Attributive Relationship Category

Attribution Relationship refers to the characteristics of a person or a thing, expression of typicality, what a person or a thing is as relating to or done by and where this relationship is realized through the use of the preposition *of* in establishing it. The relationship can be seen in the examples provided from the concordance lines as follows:

(21)…sis of recent changes in *the characteristics of extreme rainfall* and their implication for f (ANsc_10.) [ICE-Nig.]

(22)…include symbols of *other major languages of West Africa* and was as a result renamed PanK (AHum_01.) [ICE-Nig.]

(23)…pool of human resource. *The true quality of a university* is determined by the calibre of (ASsc_11.) [ICE-Nig.]

(24) W2A-034 026 *The problem of extrapolation* from high to low temperature testing is… [ICE-GB]

Attributive relationship established in example 21 can be traced in the phrase *the characteristics of extreme rainfall*. The sub-parts of the phrase *the characteristics* and *extreme rainfall* are integrated to link the attributive meaning of the phrase characteristics to its following phrase. This shows that some special features are observable to have been the sign of extreme rainfall. For instance, cloud, wind, icefalls, lightening, etc. may be such indicators. The relationship is not only driven from the individual word of but it is made by the whole sequences i.e. the attributive relationship collected from the *attribute (the characteristics) + of + noun or noun phrase (attributor [knowledge]).* Similarly, in example 22, *other major languages of West Africa* are a phrase consisting of *other major languages* and *West Africa* as its sub phrases. The use of the preposition *of* established the attributive relationship in such a way that the major languages are part and parcel of West Africa. The languages could be part of the West African identity.

The relationship is not only driven from the individual word of but it is made by the whole sequences i.e. the attributive relationship collected from the *attribute (other languages) + of + noun or noun phrase (attributor [West Africa]).* In contrast, *the true quality of a university* has the two segments of the phrase *The true quality* and *a university* both as independent entities. The two tiers are rubbed up by the preposition *of* to establish the attributive relationship signified by the semantics of the true quality. The meaning of the former is linked to the later using the relative preposition. The relationship is not only driven from the individual word of but it is made by the whole sequences i.e. the attributive relationship collected from the *attribute (the true quality) + of + noun or noun phrase (attributor [a University]).*

From example (24) *the problem of extrapolation* is similar in terms of attributive relationship established by the preposition *of* to *The true quality of a university* in (23) as they both refer to attributive relationship. *The problem* refers to something attributed to *extrapolation* as the true quality is to *a University*.

4.4.7 Temporal Relationship Category

Temporal Relationship is when two segments of a phrase are related to in a situation where it conveys the idea of lapsing (of time) perishing or impermanent nature in things, idea, or phenomenon which is related to time especially where this relationship is realized through the use of the preposition *of* in establishing such a relationship. The relationship can be seen from the examples provided in the concordance lines as follows:

(25) e commanding height of the world at *the dawn of the twentieth century*. The twentieth century… (AHum_02) [ICE-Nig.]

(26) The period 1840 to 1899 is considered *the period of early European interest* in Hausa studies. Du… (AHum_11.) [ICE-Nig.]

(27)…and semi-urban dwellers in Nigeria. *As of 1999*, the national grid has eight generating stat (ATec_04.) [ICE-Nig.]

(28) W2A-031 076 To proceed simultaneously and require *almost ten weeks of the schedule…* [ICE-GB]

Temporal relationship is a relationship conveying the senses in time. This relationship can be traced in example 25 from the phrase *the dawn of the twentieth century*. Though the phrase sounds idiomatic, *the dawn* denotes time of the day and the other part i.e. *the twentieth century* refers to the duration or period of time. The preposition *of* links the two parts of the phrase as it demonstrates a temporal relationship. This conveys the

sense that the time has a lapsing attitude at which Modernism, as a concept was the commanding height. This phenomenon had only happened within a specific time frame. The relationship is not only driven from the individual word of but it is made by the whole sequences i.e. the temporal relationship collected from the *time or duration (the down) + of + noun or noun phrase (time frame [twentieth century]).* Consider example 26 where the phenomenon, *early European interest* held has been interconnected by the relative preposition *of* to *the period* in the phrase *the period of early European interest.*_The compound phrase indicates that the duration refers to (1840-1899) in Hausa studies, has the same lapsing nature as of the pattern above.

The relationship is not only driven from the individual word of but it is made by the whole sequences i.e. The temporal relationship collected from the *time or duration (the period) + of + noun or noun phrase (time frame [early European interest])* is shown in example 26. Correspondingly, *As of 1999* in instance 27 bears a similar sense of time frame which obviously seemed to have passed, when the national grid has eight generating stations. But now the stations may seem to have either, increased, decreased, or seized to exist. This is due to the temporal nature of time which is demonstrated by the three instances. The relationship is not only driven from the individual word of but it is made by the whole sequences i.e. the temporal relationship collected from the *time or duration (as) + of + noun or noun phrase (year [1999]).*

From example (28) *almost ten weeks of the schedule* is similar in terms of temporal relationship established by the preposition *of* to *the period of early European interest* in (26) as they both refer to temporal relationship. *Almost ten weeks* refers to time of the *schedule, the period* refers to time of *European interest*.

4.4.8 Cause Relationship Category

Cause Relationship explains the causes of a thing, usually an evil thing that has happened. The word *because* is usually chosen to announce the causal effect of such a happening. This happens when the preposition *of* is used in establishing such a relationship. The relationship can be seen in the examples provided from the concordance lines as follows:

(29) …n Nigeria, the educated are not merely *proud of their mastery* of English, they celebrate the (AHum_01.) [ICE-Nig.]

(30) Methods of dealing with *problems of software complexity* iv. Review of existing method (ATec_09.) [ICE-Nig.]

(31)…cidence of disease and infection *as a result of what people consume* is on the increasing (Ok (ASsc_01.) [ICE-Nig.]

(32) W2A-002 071 one curious *result of this* is that what is repressed appears to be no more than… [ICE-GB]

The expression *proud of their mastery* in illustration 29 inter-relates the two key concepts *proud* and *their mastery*. The action of *proud* is directly a consequence of their mastery, as it caused it. As the sentence carries, in Nigeria, the educated are not merely proud of their mastery of English. This means, their mastery of English causes their proud attitudes. The relationship is not only driven from the individual word of but it is made by the whole sequences i.e. the cause relationship collected from the *caused (proud) + of + noun or noun phrase (cause [their mastery]).* Comparably, *problems of software complexity* as the relative preposition *of* inter linked the two concepts in instance (23); *problems* and the next item of the phrase *software complexity* disclosed that the semantics of problems is directly related to the complexity of the software. This also means that simple software may not have problems or problems of related nature.

Therefore, the problem is caused by that peculiar software. The relationship is not only driven from the individual word of but it is made by the whole sequences i.e. the cause relationship collected from the *caused (problem) + of + noun or noun phrase (cause [software complexity]).* In related term, the phrase *as a result of what people consume* in example 31 as the two key concepts *as a result* and *what people consumed* have been glued by the preposition *of* to mean that what people eat has been the cause of what happened as a result.

From the concordance line, *incidence of disease and infection as a result of what people consume* simply means what people eat causes the infection disease and infection they have suffered from. Cause relationship can be clearly seen in the above examples. The relationship is not only driven from the individual word of but it is made by the whole sequences i.e. the cause relationship collected from the *caused (something as a result) + of + noun or noun phrase (cause [what people consume]).*

From example (31) *a result of what people consume* is similar in terms of temporal relationship established by the preposition *of* to *result of this* in (32) as they both refer to temporal relationship. *The result* is caused by *what people consume, as result* is to *this.*

4.4.9 Possessive Relationship Category

Possessive Relationship refers to a situation where origin, ownership, belonging, or possession of something or someone is expressed. This happens when the preposition *of* establishes such a relationship. The relationship can be seen in the examples provided from the concordance lines as follows:

(33)…invites the learner to create *their own model of a system*, defined mathematically and then ru (AHum_03.) [ICE-Nig.]

(34) Commonwealth as a whole, *the Federal Government of Nigeria* needs to consider the follow (ASsc_05.) [ICE-Nig.]

(35) Prophesies would be revealed about *the life of an individual* or the fortunes of the group. (ASsc_09.) [ICE-Nig.]

(36) W2A-010 073 Edward's feelings with *the crown of Aragon* in its war with the house of Anjou for the kingdom… [ICE-GB]

Possession is usually conveyed by many words such as "*s*" form, own, possessive pronouns. The relative preposition *of* is another word that establishes a particular relationship that conveys a sense of possession. Example 32 above links the two segments of the phrases *their own model* and *a system* with the linking preposition *of in* the phrase *their own model of a system.* The sense of possession has been established by the preposition to mean that their model belongs to the system as the two are inseparable entities. The relationship is not only driven from the individual word of but it is made by the whole sequences i.e. the possessive relationship collected from the *possessed (their own model) + of + noun or noun phrase (possession [a system]).*

Example 33 conveys the same possessive thought alike. *The Federal Government of Nigeria* consists of two sub-phrases *the federal government* and *Nigeria* which are bound by the connecting preposition *of.* The semantic implication of such a combination in the above set phrase means that the federal government belongs to the country Nigeria. For instance, the federal government decides what the country should do as well as represents the entire country in all international summits and gathering. So, this signifies the strong sense of possession.

The relationship is not only driven from the individual word of but it is made by the whole sequences i.e. the possessive relationship collected from the *possession (federal government) + of + noun or noun phrase (possessor [Nigeria]).* Also, in example 34, the expression *the life of an individual* includes the two segmental parts of the phrase *the life* and *an individual* by linking them using the preposition *of* to mark the wisdom of possession between the two sets. This indicates that the life privately belongs to the individual. We can prove this to an extent that losing the life of such an individual may be concomitant to losing the entire individual at large. With the aid of these three instances, the concept of possession is to some extent explained. The relationship is not only driven from the individual word of but made by the whole sequences i.e. the possessive relationship collected from the *possession (the life) + of + noun or noun phrase (possessor [an individual]).*

From example (36) *the crown of Aragon* is similar in terms of possessive relationship established by the preposition *of* to *the life of an individual* in (35) as they both refer to possessive relationship. *The crown* refers to possession of *Aragon* as *the life* is to *an individual.*

4.4.10 Position/Location Relationship Category

Position/Location Relationship is an association indicating a fixed position or a location at which someone or something is situated. This is where the situation is realized by the use of the preposition *of* in establishing such a relationship. The relationship can be seen in the examples provided from the concordance lines as follows:

(37)…dialect is determined by *the geographic location of the group of people* who speak the dialect. A… (AHum_07.) [ICE-Nig.]

(38)…average solar heat flux intercepted by *area of the collector*. It is calculated as indicated (ATec_01.) [ICE-Nig.]

(39) In such central places in *Urhoboland, halls of worship* (called ogwa) are constructed (ASsc_09.) [ICE-Nig.]

(40) W2A-012 072 with radio universal and television blanketing *all major centres of population in the region* the majority of Latin Americans now… [ICE-GB]

The term position or location denotes a sense of situating, spot or place where a person, thing (concrete or idea) resides. The concept can be illustrated in sentences 35, 36, and 37. From sentence 35, in the phrase *the geographic location of the group of people* here, *the geographic location* clearly refers to a spot. As linked to *the people* by the preposition *of*, the relationship is then established to indicate that the spot in question belongs to the people. In this context, the concept of dialect is built through the nature of settlement and language shared by such a group.

The relationship is not only driven from the individual word of but it is made by the whole sequences i.e. the locative relationship collected from the *location (the geographic location) + of + noun or noun phrase (resident [the group]).* In concordance line 36, the word *area* in *area of the collector*, conveys the same meaning as that of the geographic location. Without the use of a connecting word or phrase with a semantic relevance such as the preposition *of* which links the former concept to the latter i.e. *the collector,* the two segments could not be said to have been bound together. The bound concept here conveys the sense of a space where the collector can be located. From the concordance line, *the area of the collector* is a place where *the interception* is caused to the *solar heat influx*.

The relationship is not only driven from the individual word of but it is made by the whole sequence i.e. the locative relationship collected from the *location (area) + of + noun or noun phrase (resident [the collector]).* Likewise, *Urhoboland, halls of worship* in pattern (37) *Urhoboland, halls* is of course a clear indication of an area or spot. Using the preposition *of* links this place to a purpose for the erection of the hall, i.e. *worship*. The evidence that the phrase contains a sense of location could be traced from the concordance line. Also the later part of the sentence; *and decorated with white cloth, native chalk (orhe), carvings, hand skin fans…* indicates that the place is a room and a closure. The relationship is not only driven from the individual word of but it is made by the whole sequences i.e. the locative relationship collected from the *location (Urhboland, hall) + of + noun or noun phrase (purpose which is worship).*

From example (40) *all major centres of population in the region* is similar in terms of position/Location relationship established by the preposition *the geographic location of the group of people* in (37) as they both refer to position/Location relationship. *All major cetres* refers to position/Location of *population in the region* as *the geographic location* is to the group of people.

4.4.11 Process Relationship Category

Process Relationship is where a nominalized verb is used to express an action that is indicated follows stages and that which cannot be met in a snapshot approach. This is where the situation is realized by the use of the preposition *of* in establishing such a relationship. The relationship can be seen in the examples provided from the concordance lines as follows:

(41)…for instruction in education and *acquisition of general knowledge and skills*. For these language…(AHum_01. [ICE-Nig.]

(42)…economical for *commercial production of oil in Nigeria*. That of mango seed (13.511%) (ANsc_07.) [ICE-Nig.]

(43)…hinder designerâ□™s *full understanding of the problem* and hence lead to inappropriate (ATec_09.) [ICE-Nig.]

(44) W2A-014 082 problems by the clinicians and the early *formation of research terms* meant that research results were coming out… [ICE-GB]

Process relationship is such a relationship established by the preposition *of* to show that the idea being conveyed by the two inter-locking parts of the phrase takes place in a stage wise order. Instance 38 includes the phrase *acquisition of general knowledge and skills* signify that knowledge and skills undergo processes of acquisition. This means that their acquisition cannot be achieved over night, rather a step by step achievement. For instance, as shown in the concordance line *instruction in Education and acquisition of knowledge and skills* has almost been a life-long span.

The relationship is not only driven from the individual word of but it is made by the whole sequences i.e. the process relationship collected from the *process (acquisition) + of + noun or noun phrase (processed [general knowledge and skills]).* Another instance is the concept of process relationship in example 39 in the phrase *commercial production of oil in Nigeria*. Production for instance, denotes an instance of step by step activities. Qualifying this with the word *commercial* poses an idea of occupation. But only with the presence of the word *of* the concept is linked to the other part *oil in Nigeria*. In this case, oil production has to pass several stages. The crude oil has to be dug, refined (which undergoes different processes. The process of production is incomplete until it reaches the final consumers.

The relationship is not only driven from the individual word of but it is made by the whole sequences i.e. the process relationship collected from the *process (commercial production) + of + noun or noun phrase (processed [oil in Nigeria]).* In similar concept, *full understanding of the problem* in illustration (40) entails that, *understanding* which is a process and abstract noun of the verb *understand* in linked up to the nominal group *the problem* by the relative liker *of* to indicate that the abstract and process idea of the word *understanding* is attached to *the problem*. This means that the phrase *understanding the problem* undergoes a certain process and not a snap shot activity. The relationship is not only driven from the individual word of but it is made by the whole sequences i.e. the process relationship collected from the *process (full understanding) + of + noun or noun phrase (processed i.e. the problem).*

From example (44) *formation of research terms* is similar in terms of process relationship established by the preposition *acquisition of general knowledge and skills* in (41) as they both refer to process relationship. *Formation* refers to a process of construction of *research terms* as *acquisition* is to the *general knowledge and skills.*

4.4.12 Separate-From Relationship Category

Separate-From Relationship is a relationship that expresses a distance between something distinctive and location of time. This is where the situation is realized by the use of the preposition *of* in establishing such a relationship. The relationship can be seen in the examples provided from the concordance lines below:

(45)…ning, as the couple approached *the outskirts of the village* ululations were heard. Most… (AHum_10) [ICE-Nig.]

(46)…significant and exist *independently of segmental strings*. They are quite distinct (AHum_06.) [ICE-Nig.]

(47)…away from them and giving them to *members of another group*. It declares genocide, consp…(ASsc_02.) [ICE-Nig.]

(48) W2A-007 118 determined whether audience judgments varied *independently of the truth status* of the irony by comparing audience guesses… [ICE-GB]

Separate from in this study is a concept that signifies detachment between one person, thing, or concept. Consider the instance in line 41 from the group of words *the outskirts of the village*, the phrase *the outskirts* means a place physically detached from yet another. It is mostly associated with town, city or village. But, it is associated to *the village* here by the meaning of the preposition *of*. This is used to convey to readers that the place where the couples reached is actually separated physically from the village. The ululations heard were from the outskirts area but not from the village nearby.

The relationship is not only driven from the individual word of but it is made by the whole sequences i.e. the separation relationship collected from the *detached (the outskirts) + of + noun or noun phrase (the village]).* Similarly, in line 42, the expression *independently of segmental strings* has the word *independently* which infers that something is freely on its own and detached to another in a particular way. In the context, *These tomorphs may be single tone units or tonal smelodies that is fixed tonal patterns, which are grammatically significant and exist independently of segmental strings. They are quite distinct from lexical tones.* We can infer that the tomorphs or the tonal melodies are detached from the segmental strings or lexical tones. The relationship is not only driven from the individual word of but it is made by the whole sequences i.e. the separation

relationship collected from the *detached (segmental string) + of + noun or noun phrase (tonal patterns]).*

In instance 43 the phrase *members of another group* in such a particular context refers to distancing the members of a particular group from their children. This is done due to their harmful activities to their people that lead to their banning decision from such a group. So, in the context, their children are distanced from them (kept separate from them). The relationship is not only driven from the individual word of but it is made by the whole sequences i.e. the separation relationship collected from the *detached (members [of this group]) + of + noun or noun phrase (another group]).*

From example (48) *independently of the truth status* is similar in terms of separate-from relationship established by the preposition *of* in *independently of segmental strings* in (46) as they both refer to separate-from relationship. *Independently* refers to zero connection with *truth status as it* is to *segmental strings.*

4.4.13 Loss Relationship Category

Loss Relationship is a situation where an expression shows a sense of loss, damage, or the absence of something considered necessary in a particular context. This is where the situation is realized by the use of the preposition *of* in establishing such a relationship. The relationship can be seen in the examples provided from the concordance lines as follows:

(49)…y in portraying the moral cum *physical decay of Nigeria*. The books are morbidly sick and the (AHum_02.) [ICE-Nig.]

(50)…inders on threshing effectiveness and *damage of wheat* revealed that the cylinder speed (ATec_02.) [ICE-Nig.]

(51)…ation was further exacerbated by *the failure of the Government* formed in post-colonial Africa (ASsc_02.) [ICE-Nig.]

(52) W2A-066 033 England were predominantly *deprived of their livings* during the civil and under the republic… [ICE-GB]

Loss Relationship especially in the case of this investigation, refers to a situation where a person, animal, thing, or abstract quality such as; value, dignity, achievement, image, is reported to have been lost. This report may not be necessarily through the word *loss* or its synonyms. But, it could be, an instance of relationship between the two segments of the phrase established by the preposition *of.* The relationship is not only driven from the individual word of but the Loss Relationship is shown in line 44, where the phrase *physical decay of Nigeria* has two parts *physical decay* and *Nigeria.* The former is glued with the later part *Nigeria* by the preposition *of* to give rise to the moral cum physical decay of Nigeria in the scatological imagery of Thomas.

The relationship is not only driven from the individual word of but it is made by the whole sequences i.e. the loss relationship collected from the *lost (physical decay) + of + noun or noun phrase (the looser [Nigeria]).* In support of these illustrations, the concordance line instantiated at line 45 carries the expression *damage of wheat* the two words; *damage* which means mutilation, destruction, loss. If associated by the relational preposition *of* with the word, *wheat* is obviously conveying the sense of loss in relation to *the wheat*. From the context that was due to the speed of the cylinder etc. this changed the productivity of the wheat to such that cannot be useful in the process. Therefore, the affected wheat is counted as damage and lost.

The relationship is not only driven from the individual word of but it is made by the whole sequences i.e. the loss relationship collected from the *lost (damage) + of + noun or noun phrase (the lost [wheat]).* More so, another example in line 46 with the expression *the failure of the Government* can be observed as the first part which is *the failure* is similar in semantic ground with the former damage. In that case, failure is a drastic loss in ability to deliver a particular task. If accompanied by *the Government* with the established relationship by the preposition *of,* it therefore, refers to the governmental delivery as a failure. In the context for instance: To the U.S the failure of the government in post-colonial Africa and Arab are in cynicism and despair. Cynicism and despair are related terms to convey the senses of loss. With the examples in lines 44-46, the concept of loss is conveyed. The relationship is not only driven from the individual word *of* rather, it is made by the whole sequences i.e. the loss relationship collected from the *lost (the failure) + of + noun or noun phrase (the looser i.e. the* government**).**

From example (52) *deprived of their livings* is similar in terms of loss relationship established by the preposition *of* in *the failure of the Government* in (51) as they both refer to loss relationship. *Deprived* refers to loss of *their living* as *failure* is to *function of the government.*

4.5 Summary of the Qualitative (Corpus) Analysis

RQ2 demands for the difference in terms of patterns. These differences seem to be minor in the two varieties as discovered in the context of this research. This could be seen in the lines of comparison between the data from ICE-Nig. and those from ICE-GB in the thirteen categories presented. Reasons for the similarities in terms of patterns of usage between Nigerian English and British English may be due to the adoption of RP as a model of

Nigerian English. The proximity or distance between Nigerian variety of English and the Received Pronunciation (RP) is in accordance with Cruttenden (2008:75) who observed that, "Educated Nigerian variety of English differs only in the major points of evidence. These divergent features are to be considered as the regional variants of the standard British English and not deviant forms." The proximity in this sense is what makes most aspects of Nigerian variety of English similar to the RP in most cases.

4.6 SPSS Analysis of the Quantitative Data

The study employs the use of SPSS analysis so as to describe the significance and insignificance of each category. Statistical analysis makes it possible to describe this. The analysis has been approached manually before the invention of the statistical software tools. Now that the software is available, it saves time as well as eases the analytical procedures with accuracy and clarity.

This section attempts to quantitatively answer research question two (RQ2) "How do the patterns of use of the preposition *of* in ICE-Nig. compare to those in ICE-GB?"

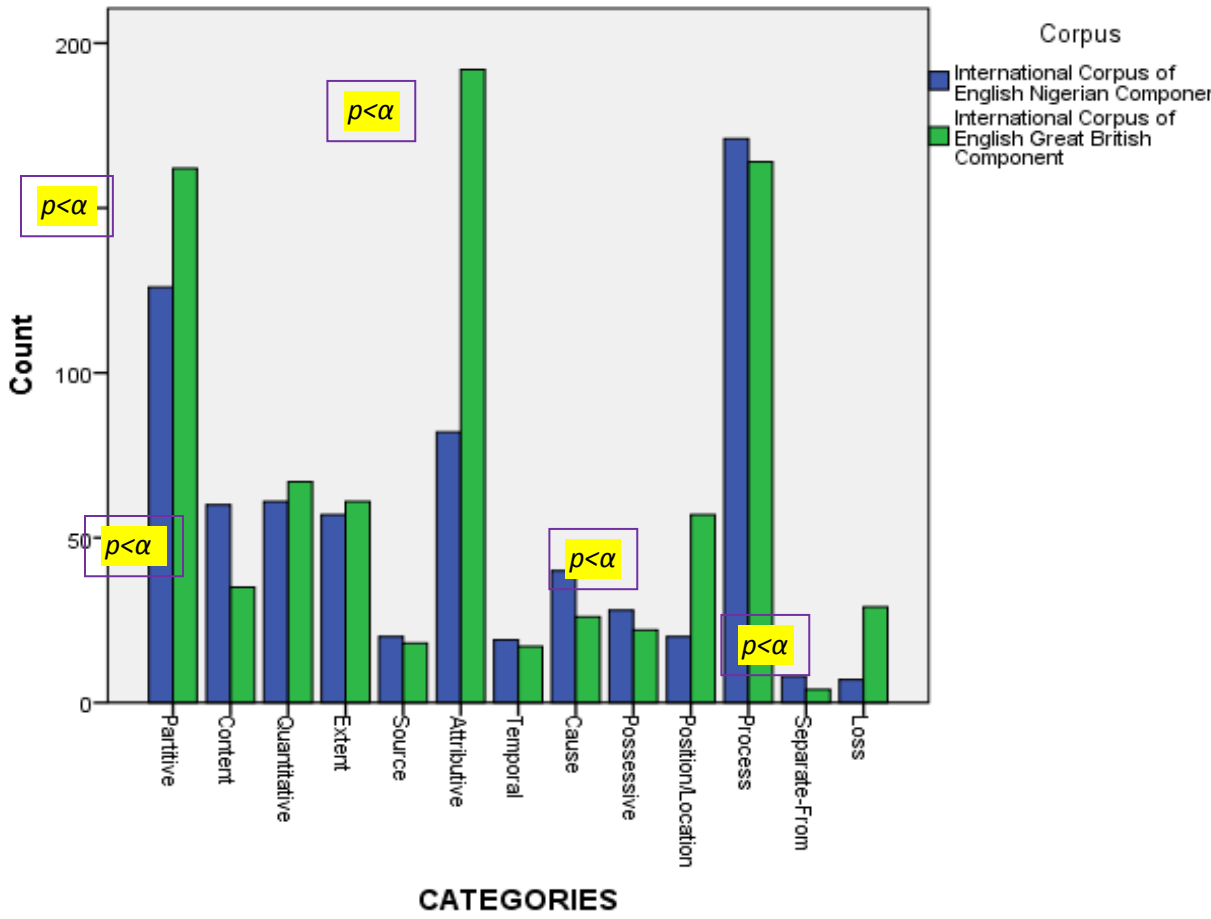


Figure 4.3 Categories and the percentages shared across the two corpora

The uneven distribution of the preposition appears to be clear across the categorization paradigm in both of the corpora with Process Relationship Category emerging as the highest in ICE-Nig. and Attributive Relationship category being the topmost in the ICE-GB. Differences have been described in respect of each category. The level of significance of the differences of the use of the preposition *of* in each category is stated. As in the tradition of the statistical analysis, this leads to the acceptance or rejection of the null hypotheses, the heading of each category.

``4.6.1 Null Hypothesis 1: There is equal proportion of frequency in *Partitive Relationship Category* of the preposition *of* across ICE-Nig. and ICE-GB.

Table 4.2a Descriptive statistics results for Partitive Relationship frequencies

Parameters	Percent	Observed N	Expected N	Residual
ICE-Nig.	44	126	144.0	-18.0
ICE-GB	56	162	144.0	18.0
Total	100	288	288	

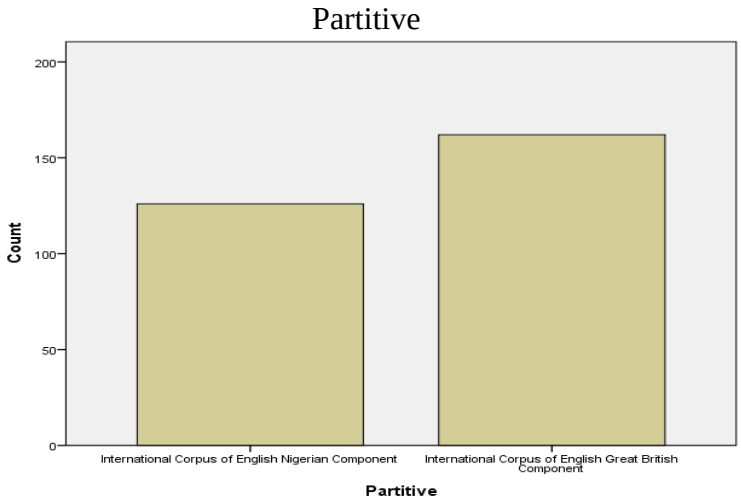


Figure 4.4 Distributions of Partitive Relationship Frequencies across ICE-Nig. and ICE-GB

As Table 4.2a and Figure 4.4 indicate, the percentage of occurrence of the proposition *of* is lower in ICE-Nig. (44%) as compared with that of ICE-GB (56%).

Table 4.2b Chi-square Results for Partitive Relationship

Parameters	**Partitive**
Chi-Square	4.500[a]
Df	1
Asymp. Sig.	.034

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 144.0.

Based on the results of Goodness of fit Chi Square, X^2 (1, *N*=287) = 4.50, *p* = .034, (Table 4.2a) this difference was statistically significant. That is, the *partitive relationship category* has been disproportionately distributed across the two corpora with a higher number of occurences in ICE-GB. This leads to the rejection of the nul hypothesis and it proves that there is a sinificant difference in the use of the preposition in the Partitive category across the two corpora as alpha is <.05

4.6.2 Null Hypothesis 2: There is equal proportion of frequency in *Content Relationship Category* of the preposition *of* across ICE-Nig. and ICE-GB.

Table 4.3a Descriptive Statistics Results for Content Relationship Frequencies

Parameters	Percent	Observed N	Expected N	Residual
ICE-Nig.	63	60	47.5	12.5
ICE-GB	37	35	47.5	-12.5
Total	100	95	95	

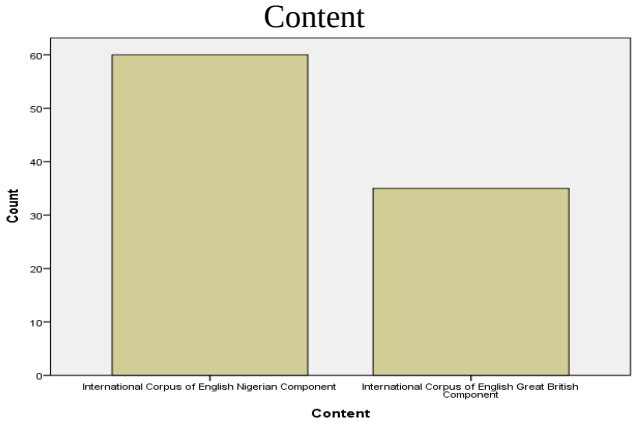


Figure 4.5 Distributions of Content Relationship Frequencies across ICE-Nig. and ICE-GB

As Table 4.3a and Figure 4.5 indicate, the overall percentage of occurrence of the proposition is higher in ICE-Nig. (63%) as compared with that of ICE-GB (37%).

Table 4.3b Chi-square Results for Content Relationship

Parameters	Content
Chi-Square	6.579[a]
df	1
Asymp. Sig.	.010

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 47.5.

Based on the results of Goodness of fit Chi Square, X^2 (1, N=95) = 6, p = .010 (Table 4.3a) this difference was statistically significant. That is, the content relationship category has been disproportionately distributed across the two corpora with a higher number of occurences in ICE-Nig. This leads to the rejection of the nul hypothesis and it proves that there is a sinificant difference in the use of the preposition in the Content category across the two corpora as alpha is <.05

4.6.3 Null Hypothesis 3: There is equal proportion of frequency in *Quantitative Relationship Categories* of the preposition *of* across ICE-Nig. and ICE-GB.

Table 4.4a Descriptive Statistics Results for Quantitative Relationship Frequencies

	Percent	Observed N	Expected N	Residual
ICE-Nig.	48	61	64.0	-3.0
ICE-GB	52	67	64.0	3.0
Total	100	128	128	

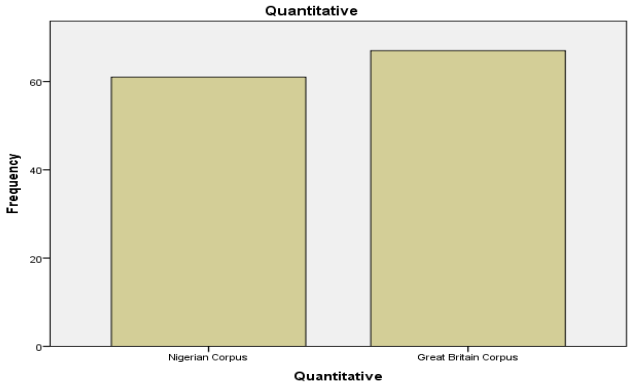


Figure 4.6 Distributions of Quantitative Relationship Frequencies across ICE-Nig. and ICE-GB

As Table 4.4a and Figure 4.6 indicate, the overall percentage of occurrence of the proposition is lower in ICE-Nig. (48%) as compared with that of ICE-GB Corpus (52%).

Table 4.4b Chi-square Results for Quantitative Relationship

Parameters	Quantitative
Chi-Square	.281[a]
Df	1
Asymp. Sig.	.596

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 64.0.

Based on the results of Goodness of fit Chi Square, X^2 (1, N=128) = .281, p = .596, (Table 4.4a) this difference was statistically insignificant. That is, the quantitative relationship category has been closely distributed across the two corpora with slightly higher number of occurences in ICE-GB. This leads to the acceptance of the nul hypothesis and it proves that there is an insinificant difference in the use of the preposition in the Quantitative category across the two corpora as alpha is >.05

4.6.4 Null Hypothesis 4: There is equal proportion of frequency in *Extent Relationship Categories* of the preposition *of* across ICE-Nig. and ICE-GB.

Table 4.5a Descriptive Statistics Results for Extent Relationship Frequencies

Parameters	Percent	Observed N	Expected N	Residual
ICE-Nig.	48	57	59.0	-2.0
ICE-GB	52	61	59.0	2.0
Total	100	118	118	

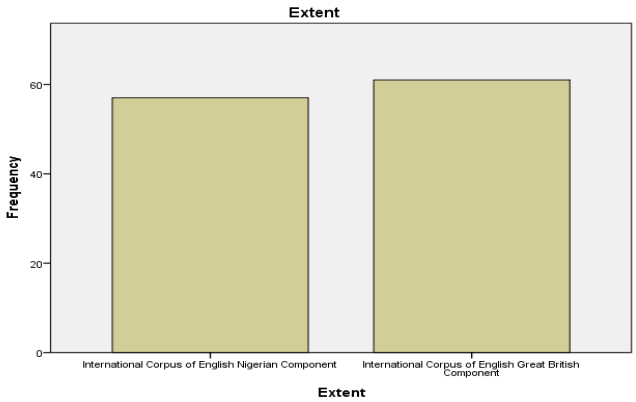


Figure 4.7 Distributions of Extent Relationship Frequencies across ICE-Nig. and ICE-GB

As Table 4.5a and Figure 4.7 indicate, the overall percentage of occurrence of the proposition is lower in ICE-Nig. (48%) as compared with that of ICE-GB (52%).

Table 4.5b Chi-square results for Extent Relationship

Parameters	**Extent**
Chi-Square	.136[a]
df	1
Asymp Sig	.713

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 59.0.

Based on the results of Goodness of fit Chi Square, X^2 (1, *N*=118) = .136, *p* = .713, (Table 5a) this difference was statistically insignificant. Extent relationship category has been closely distributed across the two corpora with slightly higher number of occurences in ICE-GB. This leads to the acceptance of the nul hypothesis and it proves that there is an

insignificant difference in the use of the preposition in the Extent category across the two corpora as alpha is >.05

4.6.5 Null Hypothesis 5: There is equal proportion of frequency in *Source Relationship Categories* of the preposition *of* across ICE-Nig. and ICE-GB.

Table 4.6a Descriptive Statistics Results for Source Relationship Frequencies

Parameters	Percent	Observed N	Expected N	Residual
ICE-Nig.	53	20	19.0	1.0
ICE-GB	47	18	19.0	-1.0
Total	100	38	38	

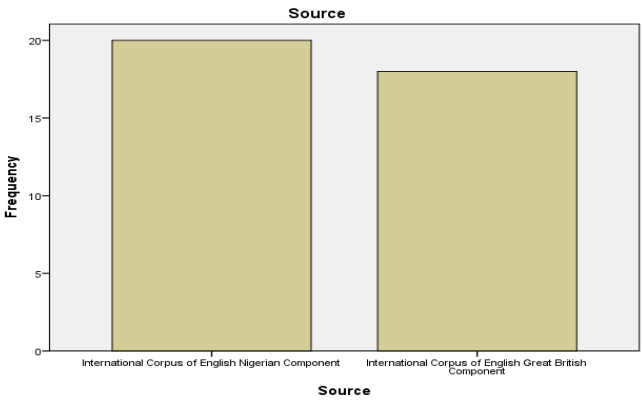


Figure 4.8 Distribution of Source Relationship Frequency across ICE-Nig. and ICE-GB

As Table 4.6a and Figure 4.8 indicate, the overall percentage of occurrence of the proposition is higher in ICE-Nig. (53%) as compared with that of ICE-GB (47%).

Table 4.6b Chi-square Results for Source Relationship

Parameters	**Source**
Chi-Square	.105[a]
Df	1
Asymp. Sig.	.746

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 19.0.

Based on the results of Goodness of fit Chi Square, X^2 (1, *N*=38) = 105, *p* = .746, (Table 4.6a) this difference was statistically insignificant. That is, the source relationship category has been disproportionately distributed across the two corpora with a higher number of occurences in ICE-Nig. This leads to the acceptance of the nul hypothesis and it proves that there is an insinificant difference in the use of the preposition in the Source category across the two corpora as alpha is >.05

4.6.6 Null Hypothesis 6: There is equal proportion of frequency in *Attributive Relationship Categories* of the preposition *of* across ICE-Nig. and ICE-GB.

Table 4.7a Descriptive Statistics Results for Attributive Relationship Frequencies

Parameters	Percent	Observed N	Expected N	Residual
ICE-Nig.	30	82	137.0	-55.0
ICE-GB	70	192	137.0	55.0
Total	100	274	274	

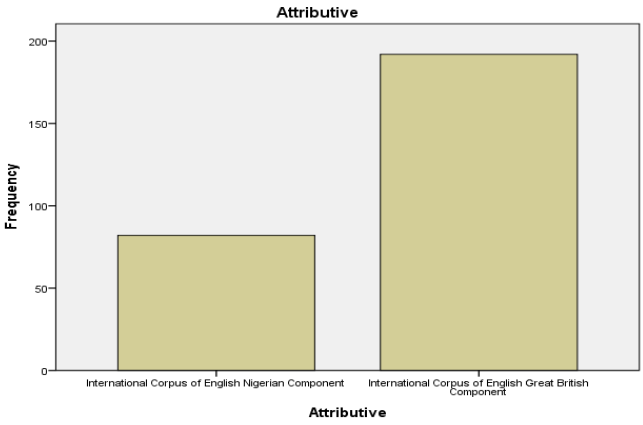


Figure 4.9 Distributions of Attributive Relationship Frequencies across ICE-Nig. and ICE-GB

As Table 4.7a and Figure 4.9 indicate, the overall percentage of occurrence of the proposition is lower in ICE-Nig. (30%) as compared with that of ICE-GB (70%).

Table 4.7b Chi-Square Results for Attributive Relationship

Parameters	Attributive
Chi-Square	44.161[a]
Df	1
Asymp. Sig.	.000

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 137.0.

Based on the results of Goodness of fit Chi Square, X^2 (1, N=274) = 44.161, p = .000, (Table 4.7a) this difference was statistically significant. That is, the attributive relationship category has been disproportionately distributed across the two corpora with a higher number of occurences in ICE-GB. This leads to the rejection of the nul hypothesis and it proves that there is a sinificant difference in the use of the preposition in the Attribution category as alpha is < .05

4.6.7 Null Hypothesis 7: There is equal proportion of frequency in *Temporal Relationship Categories* of the preposition *of* across ICE-Nig. and ICE-GB.

Table 4.8a Descriptive Statistics Results for Temporal Relationship Frequencies

Parameters	Percent	Observed N	Expected N	Residual
ICE-Nig.	53	19	18.0	1.0
ICE-GB	47	17	18.0	-1.0
Total	100	36	36	

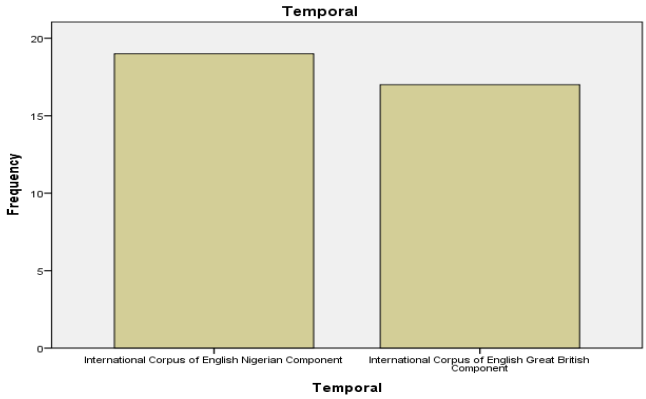


Figure 4.10 Distributions of Temporal Relationship Frequencies across ICE-Nig. and ICE-GB

As Table 4.8 and Figure 4.10 indicate, the overall percentage of occurrence of the proposition is higher in ICE-Nig. (53%) as compared with that of ICE-GB (47%).

Table 4.8b Chi-square Results for Temporal Relationship

Parameters	Temporal
Chi-Square	.111[a]
Df	1
Asymp. Sig.	.739

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 18.0.

Based on the results of Goodness of fit Chi Square, X^2 (1, N=36) = .111, p =.739, (Table 4.8a) this difference was statistically significant. That is, the Temoral relationship category has been disproportionately distributed across the two corpora with a higher number of occurences in ICE-Nig. This leads to the acceptance of the nul hypothesis and it proves that there is an insinificant difference in the use of the preposition in the Temporal category across the two corpora as alpha is >.05.

4.6.8 Null Hypothesis 8: There is equal proportion of frequency in *Cause Relationship Categories* of the preposition *of* across ICE-Nig. and ICE-GB.

Table 4.9a Descriptive Statistics Results for Cause Relationship Frequencies

Parameters	Percent	Observed N	Expected N	Residual
ICE-Nig.	61	40	33.0	7.0
ICE-GB	39	26	33.0	-7.0
Total	100	66	66	

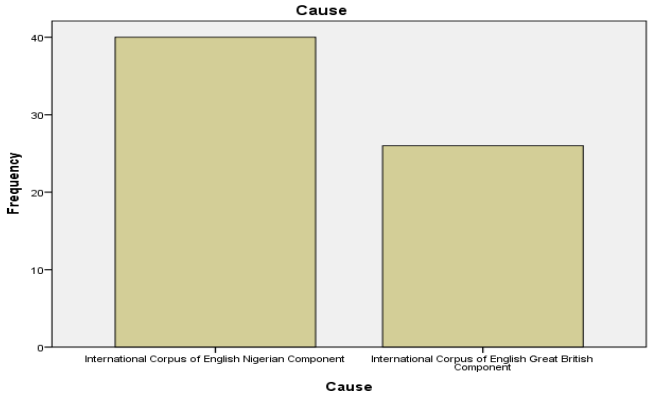


Figure 4.11 Distributions of Cause Relationship Frequencies across ICE-Nig. and ICE-GB

As Table 4.9a and Figure 4.11 indicate, the overall percentage of occurrence of the proposition is higher in ICE-Nig. (61%) as compared with that of ICE-GB (39%).

Table 4.9b Chi-square Results for Cause Relationship

Parameters	**Cause**
Chi-Square	2.970[a]
df	1
Asymp. Sig.	.085

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 33.0.

Based on the results of Goodness of fit Chi Square, X^2 (1, *N*=66) = 2.970, *p*=.085, (Table 4.9a) this difference was statistically insignificant. That is, the cause relationship category has been disproportionately distributed across the two corpora with a higher number of occurences in ICE-Nig. This leads to the acceptance of the nul hypothesis and it

proves that there is an insinificant difference in the use of the preposition in the Cause category across the two corpora as alpha is >.05.

4.6.9 Null Hypothesis 9: There is equal proportion of frequency in *Possessive Relationship Categories* of the preposition *of* across ICE-Nig. and ICE-GB.

Table 4.10a Descriptive Statistics Results for Possessive Relationship Frequencies

Parameters	Percent	Observed N	Expected N	Residual
ICE-Nig.	56	28	25.0	3.0
ICE-GB	44	22	25.0	-3.0
Total	100	50	50	

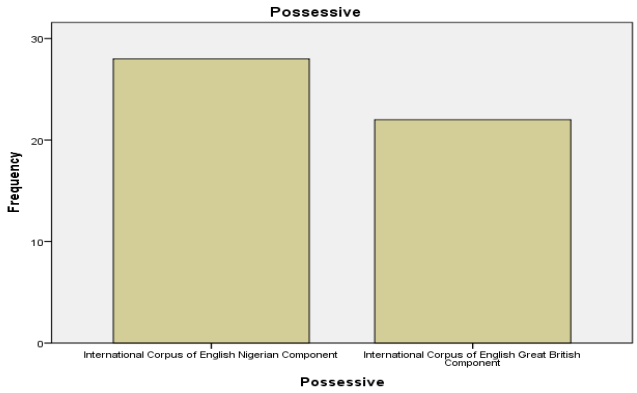


Figure 4.12 Distributions of Possessive Relationship Frequencies across ICE-Nig. and ICE-GB

As Table 4.10a and Figure 4.12 indicate, the overall percentage of occurrence of the preposition is higher in ICE-Nig. (56%) as compared with that of ICE-GB (44%).

Table 4.10b Chi-square Results for Possessive Relationship

Parameters	**Possessive**
Chi-Square	.720[a]
df	1
Asymp. Sig.	.396

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 25.0.

Based on the results of Goodness of fit Chi Square, X^2 (1, *N*=50) = .720, *p* =.396, (Table 4.10a) this difference was statistically significant. That is, the possessive relationship category has been disproportionately distributed across the two corpora with a higher number of occurences in ICE-Nig. This leads to the acceptance of the nul hypothesis and it proves that there is an insinificant difference in the use of the preposition in the Possession category across the two corpora as alpha is >.05.

4.6.10 Null Hypothesis 10: There is equal proportion of frequency in *Position/Location Relation-ship Categories* of the preposition *of* across ICE-Nig. and ICE-GB.

Table 4.11a Descriptive Statistics Results for Position/Location Relationship Frequencies

Parameters	Percent	Observed N	Expected N	Residual
ICE-Nig.	26	20	38.5	-18.5
ICE-GB	74	57	38.5	18.5
Total	100	77	77	

Figure 4.13 Distributions of Position/Location Relationship Frequencies across ICE-Nig. and ICE-GB

As Table 4.11a and Figure 4.13 indicate, the overall percentage of occurrence of the proposition is lower in ICE-Nig. (26%) as compared with that of ICE-GB (74%).

Table 4.11b Chi-square Results for Position/Location Relationship

Parameters	Position/Location
Chi-Square	17.779[a]
df	1
Asymp. Sig.	.000

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 38.5.

Based on the results of Goodness of fit Chi Square, X^2 (1, *N*=77) = 17.779, *p* =.000, (Table 4.11a) this difference was statistically significant. That is, the Position/Location relationship category has been disproportionately distributed across the two corpora with a higher number of occurences in ICE-GB. This leads to the rejection of the nul hypothesis and it proves that there is an insinificant difference in the use of the preposition in the Position/Location category across the two corpora as alpha is >.05.

4.6.11 Null Hypothesis 11: There is equal proportion of frequency in *Process Relationship Categories* of the preposition *of* across ICE-Nig. and ICE-GB.

Table 4.12a Descriptive Statistics Results for Process Relationship Frequencies

Parameters	Percent	Observed N	Expected N	Residual
ICE-Nig.	51	171	167.5	3.5
ICE-GB	49	164	167.5	-3.5
Total	100	335	335	

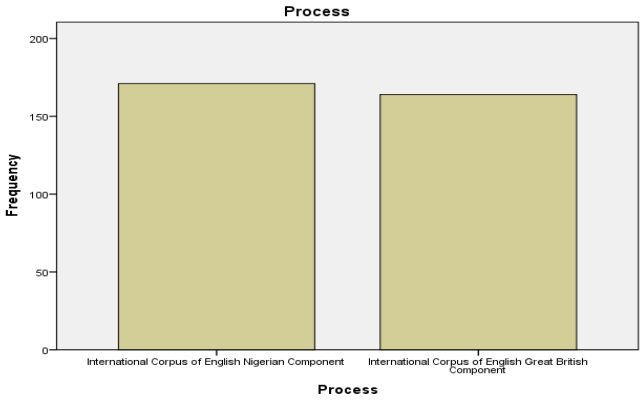


Figure 4.14 Distributions of Process Relationship Frequencies across ICE-Nig. and ICE-GB

As Table 4.12a and Figure 4.14 indicate, the overall percentage of occurrence of the proposition is higher in ICE-Nig. (51.0%) as compared with that of ICE-GB (49.0%)

Table 4.12b Chi-square Results for Process Relationship

Parameters	Process
Chi-Square	.146[a]
Df	1
Asymp. Sig.	.702

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 167.5.

Based on the results of Goodness of fit Chi Square, X^2 (1, *N*=335) = .146, *p* =.702, (Table 4.12a) this difference was statistically significant. That is, the process relationship category has been disproportionately distributed across the two corpora with a higher number of occurences in ICE-Nig. This leads to the acceptance of the nul hypothesis and it proves that there is an insinificant difference in the use of the preposition in the Process category across the two corpora as alpha is >.05.

4.6.12 Null Hypothesis 12: There is equal proportion of frequency in *Separate-From Relationship Categories* of the preposition *of* across ICE-Nig. and ICE-GB.

Table 4.13a Descriptive Statistics Results for Separate-From Relationship Frequencies

Parameters	Percent	Observed N	Expected N	Residual
ICE-Nig.	67	8	6.0	2.0
ICE-GB	33	4	6.0	-2.0
Total	100	12	12	

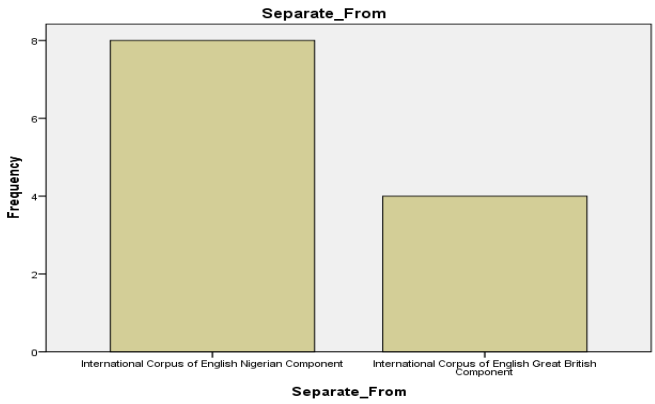


Figure 4.15 Distributions of Separate-From Relationship Frequencies across ICE-Nig. and ICE-GB

As Table 4.13a and Figure 4.15 indicate, the overall percentage of occurrence of the pre-position is higher in ICE-Nig. (67%) as compared with that of ICE-GB (33%).

Table 4.13b Chi-square Results for Separate-From Relationship

Parameters	**Separate-From**
Chi-Square	1.333[a]
Df	1
Asymp. Sig.	.248

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 6.0.

Based on the results of Goodness of fit Chi Square, X^2 (1, N=12) = 1.333, p =.248, (Table 4.13a) this difference was statistically significant. That is, the Separate-From relationship category has been disproportionately distributed across the two corpora with a higher number of occurences in ICE-Nig. This leads to the acceptance of the nul hypothesis

and it proves that there is an insinificant difference in the use of the preposition in the Separate-From category across the two corpora as alpha is >.05.

4.6.13 Null Hypothesis 13: There is equal proportion of frequency in *Loss Relationship Categories* of the preposition *of* across ICE-Nig. and ICE-GB

Table 4.14a Descriptive Statistics Results for Loss Relationship Frequencies

Parameters	Percent	Observed N	Expected N	Residual
ICE-Nig.	19	7	18.0	-11.0
ICE-GB	81	29	18.0	11.0
Total	100	36	36	

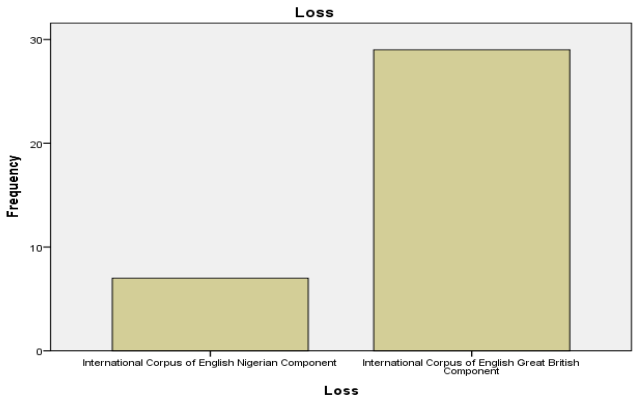


Figure 4.16 Distributions of Loss Relationship Frequencies across ICE-Nig. and ICE-GB

As Table 4.14a and Figure 4.16 indicate, the overall percentage of occurrence of the proposition is lower in ICE-Nig. (19%) as compared with that of ICE-GB (81%)

Table 4.14b Chi-square Results for Loss Relationship

Parameters	Loss
Chi-Square	13.444[a]
Df	1
Asymp. Sig.	.000

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 18.0.

Based on the results of Goodness of fit Chi Square, X^2 (1, *N*=36) =13 .444, *p* =.000, (Table 4.14a) this difference was statistically significant. That is, the Loss relationship category has been disproportionately distributed across the two corpora with a higher number of occurences in ICE-GB. This leads to the rejection of the nul hypothesis and it proves that there is a insinificant difference in the use of the preposition in the Loss category across the two corpora as alpha is >.05.

4.7 Summary of the Quantitative (SPSS) Analysis

Based on the statistical analysis in Section 4.6, the table below shows how each category is distributed in the international corpus of English Nigerian component ICE-Nig. In this, the Process Relationship Category has the highest (n=171) as the Loss Relationship Category has the lowest (n=7) frequency. On the other hand, the table shows how each category is distributed in the International Corpus of English Great British component (ICE-GB). The *Attributive Relationship* Category has the highest (n=192) as the *Separate-From Relationship Category* (n=4) frequency.

Table 4.15 Differences in the categories from the two corpora

No	Category	ICE-Nig.	ICE-GB	Difference
1	Partitive	18. 0	18.9	-0.9
2	Content	8.6	4.1	+4.5
3	Quantitative	8.7	7.8	+0.9
4	Extent	8.2	7.1	+1.1
5	Source	2.9	2.1	+0.8
6	Attribution	11.7	22.4	-10.7
7	Temporal	2.7	2. 0	+0.7
8	Cause	5.7	3. 0	+2.7
9	Possession	4. 0	2.6	+1.4
10	Position/Location	2.9	6.9	-4.0
11	Process	24.5	19.2	+5.3
12	Separate-From	1.1	0.5	+0.6
13	Loss	1. 0	3.4	+2.4

Based on the above result on report of significance in the ICE-Nig., Process Relationship Category had the highest frequency (n=171, 24.5%) while the Partitive Relationship Category (n=126, 18%) and Attributive Relationship Category (n=82, 11.7%) had the second and third highest frequencies. Based on the results of Goodness of fit Chi Square test, X^2 (n=12, N=699) = 529.751, p=.000, the difference between the distribution of the 13 categories was statistically significant. That is, the proportion of each category is not equal at .05 level of significance.

On the other hand from the ICE-GB, the Attributive Relationship Category had the highest frequency and percentage (n=192, 22.5%) while the Process Relationship Category (n=164, 19.2%) and Partitive Relationship Category (n=162, 19%) had the second and third highest frequencies and percentages. Based on the results of Goodness of fit Chi Square test, X^2 (n=12, N=854) = 749.201, p=.000, the difference between the distribution of the 13 categories was statistically significant. That is, the proportion of each category is not equal at .05 level of significance.

4.8 Summary of Findings

This chapter presents the findings which show that Nigerian English uses more of process category in establishing relationship using the preposition *of*. Table 4.1 presents the proportions covered by each category. From the table it has been observed that the process category has 24.5 per cent of the total use of the prepositions in the sampled population. This is against the data retrieved from the ICE-GB which shows that attributive category has the highest proportion of 22.4 percent in the samples collected from the corpus. It has been concluded that the two corpora use the preposition *of* to expound relationships independently of each other in rather different ways.

CHAPTER FIVE

SUMMARY AND CONCLUSIONS

5.0 Introduction

In this chapter, the researcher concludes the thesis on the use of the preposition *of* in ICE-Nig. by using ICE-GB as a reference corpus. This chapter presents the summary of the findings, discussions, and conclusions. The chapter also contains the possible implications of the study and finally concludes with suggestions and recommendations for further studies.

5.1 Summary of Findings

This study aims to analyze the use of the preposition *of* in ICE-Nig. and compares the use to that of ICE-GB. In this thesis, 20% of the instances of the occurrences of the preposition *of* were collected from each of the two corpora (ICE-Nig. and ICE-GB) under consideration. This gave a total of 1555 concordance lines from which 699 concordance lines were collected from ICE-Nig. and 856 from ICE-GB respectively. The data were collected explicitly from the academic files of each of the corpora which constituted four academic sub-files: Academic Humanity, Academic Natural Science, Academic Social Science, and Academic Technology correspondingly. The data were categorized into thirteen (13) categories i.e. *Partitive, Content, Quantity, Extent, Source, Attributive, Temporal, Cause, Possessive, Position/Location, Process, Separate From and Loss* Categories. The categorizations were adapted from two contributing categories, namely, Downing & Locke's (1992) and the Cambridge Advanced Learner's Dictionary (2008). The adoption of the two categorizations has been discussed in 3.10.

The two varieties of English (Nigerian English and the British English) do not use the preposition *of* across the 13 categories in exactly the same way. This is pointed out by the distributions of the preposition *of* as shown in Table 5.2 First in the Attribution Category the ICE-Nig. shows a difference at 10.7% lower than ICE-GB. At this Category the percentage in ICE-Nig. is 11.7% while in ICE-GB is 22.4%. Secondly, in the Process Category ICE-Nig. is 5.3% higher than the ICE-GB. This is where the ICE-Nig. is 24.5% while the ICE-GB is 19.2. Thirdly, in the Content Category ICE-Nig. is 4.5% higher than the ICE-GB. This is where the percentage in ICE-Nig. is 8.6% while in ICE-GB is 4.1% respectively.

Forth is the Position/Location Category where ICE-Nig. is 4.0% lower than ICE-GB. This is where ICE-Nig. is 2.9% while ICE-GB is 6.9%. Fifth is in the Cause Category where ICE-Nig. is 2.7%higher than ICE-GB. In this Category ICE-Nig. is 5.7% while ICE-GB is 3.0%. Sixth is the Loss Category where ICE-Nig. is 2.4% less than ICE-GB. In this Category ICE-Nig. is 1.0% while ICE-GB is 3.4%. This can be seen in Table 5.1

Table 5.1 Differences in Percentages between Categories in ICE-Nig. and ICE-GB

No.	Category	ICE-Nig. %	ICE-GB %	Differences %
1	Attribution	11.7	22.4	-10.7
2	Process	24.5	19.2	+5.3
3	Content	8.6	4.1	+4.5
4	Position/Location	2.9	6.9	-4.0
5	Cause	5.7	3.0	+2.7
6	Loss	1.0	3.4	-2.4

Table 5.1 shows that the corpus analysis discloses the amount of differences in the Attribution Category. This is followed by Process Category, Content Category,

Position/Location Category, Cause Category and then Loss Category respectively. In this case, ICE-Nig. is lower than ICE-GB in Attribution Category which shows that ICE-Nig. uses the category relatively lower than ICE-GB. This is attributable to the status of English as a second language in Nigeria. The situation in which the language operates is inseparable from the mother tongue influence. The interference of the major Nigeria languages (i.e. Hausa, Yoruba and Igbo) in the use of English in Nigeria brought about the greater amounts of difference in Nigerian English from British English.

Beside the larger amount of differences in the Categories presented in Table 5.1, the remaining categories have relatively lower amount of differences between the two corpora. The least difference is in Separate-From Relationship where ICE-Nig. is 0.6% higher than ICE-GB. In the Category ICE-Nig. is 1.1% while ICE-GB is 0.5%. Temporal Category is slightly higher at which the ICE-Nig. is 0.7% higher than ICE-GB. In this Category, ICE-Nig. is 2.7% while ICE-GB is 2.0%. This is followed by Source Category in which ICE-Nig. is 0.8% higher than ICE-GB. In this Category, ICE-Nig. is 2.9% while ICE-GB is 2.1%. Next is Quantitative Category in which ICE-Nig. is 0.9 higher than ICE-GB. In this Category ICE-Nig. is 8.7% while ICE-GB is 7.8%.

In Partitive Category ICE-Nig. is 0.9% lower than ICE-GB. In this Category, ICE-Nig. is 18.0% while ICE-GB is 18.9%. In Extent Category, ICE-Nig. is 1.1% higher than ICE-GB. This is where ICE-Nig. is 8.2% while ICE-GB is 7.1%. Lastly, in Possession Category ICE-Nig. is 1.4% higher than ICE-GB. In this Category, ICE-Nig. is 4.0% while ICE-GB is 2.6% respectively. Table 5.2 presents the lower relationship categories.

Table 5.2 Differences in Percentages between Categories in ICE-Nig. and ICE-GB

No.	Category	ICE-Nig. %	ICE-GB %	Diff. %
1	Separate-From	1.1	0.5	+0.6
2	Temporal	2.7	2.0	+0.7
3	Source	2.9	2.1	+0.8
4	Quantitative	8.7	7.8	+0.9
5	Partitive	18.0	18.9	-0.9
6	Extent	8.2	7.1	+1.1
7	Possession	4.0	2.6	+1.4

From Table 5.2, it is observed that the differences are relatively lower than in the Categories presented in Table 5.1. This indicates that Nigerian English uses the Preposition *of* in establishing the relationships in a close contact with the British English in these categories. This also means that the influence of the mother tongue (i.e. Hausa, Yoruba, and Igbo) do not bring about much difference to the native variety. However, the difference from the raw frequencies may not indicate that the two varieties of English have wide gap in such categories. In support of the above fact, Garba (1979) contains that, no language in any society has come into contact with any other society/societies could maintain its absolute purity. Such languages usually adopt some loan words from their contact language. For instance, in Yoruba morphology, no syllable ends with consonant.

As such, English words which end with consonants follow the process of vowel insertion when pronouncing them. Example of such words include; “ofisi” for office, “soosi” for church, “feremu” for frame. Other areas are lack of inflectional morphemes of English types in Yoruba language, and differences in part of speech of Yoruba compared to English. Parts of speech such as nouns, verbs and adjectives operate at different positions than that of English. For instance, adjectives in Yoruba language come from the nouns it

qualifies. They are post-positive in the language unlike their proposed nature in English. These forms of differences and many others could be traces in many branches of a language tend to be the indicators of language varieties or dialectal differences.

The report for the higher and lower amount of differences given in Table 5.1 and 5.2 is independent of the report of significance from the SPSS analysis. What is considered a high amount of differences may be insignificant as reported by the SPSS analysis. For instance, Categories such as *Process* and *Cause* have a high difference in Table 5.1 but still, Table 5.4 reports them as part of the insignificant categories. On the other hand, Content category has a difference which looks low but SPSS shows its significance. Table 5.3 and 5.4 show the report of the SPSS analysis.

5.1.1 Report of Significance of Relationship from SPSS Analysis

When P value is less than alpha ($P<\alpha$) the relationship is considered to be significant and therefore, the null hypothesis will be rejected. This can be observed in Relationship Categories as reported in Table 5.3.

Table 5.3 Categories with Significant Relationship from SPSS Analysis

No.	Categories	$P<\alpha$
1	Partitive	.039
2	Content	.014
3	Attribution	.000
4	Position/Location	.000
5	Loss	.000

Table 5.3 indicates that categories such as Partitive, Content, Attributive, Position/ Location, and Loss have P value which is less than alpha ($P<\alpha$). This happens when the P value is less than .05 which is the alpha (α). This indicates that the relationship is considered to be significant and therefore, the null hypothesis has to be rejected.

5.1.2 Report of Insignificance of Relationship from SPSS Analysis

When P value is greater than alpha (P>α) the relationship is considered insignificant and therefore, the null hypothesis will be accepted. This can be observed in Relationship Categories as reported in Table 5.2

Table 5.4 Categories with Insignificant Relationship from SPSS Analysis

No.	Categories	P>α
1	Quantitative	.596
2	Extent	.584
3	Source	.505
4	Temporal	.612
5	Cause	.085
6	Possession	.484
7	Position/Location	.702
8	Separate-From	.248

Table 5.4 indicates that categories such as Quantitative, Extent, Source, Temporal, Cause, Possessive, Position/Location, and Separate-From have P value which is greater than alpha (P>α). This happens when the P value is greater than .05 which is the alpha (α). This indicates that the relationship is considered to be insignificant and therefore, the null hypotheses have to be accepted.

5.2 Findings and Discussions

The findings of the study have been driven by the textual nature of the data. In other words, it supports the Sinclair's concept of trusting the texts. The notion offers that text indicates the kind of treatment it deserves. This is against a situation where a researcher prescribes what categorization has to be used to analyze a particular text under treatment. This provided the clue for the essential interplay the two categorizations have to do in a research of this kind. Composing a category considered standard for the research offered such an

opportunity to possibly analyze the data which gave rise to the findings as described in Rankin and Schiftner (2011) finding in this section.

Correspondingly, the ICE-GB surpasses the ICE-Nig. at frequencies of occurrence in some categories. For instance, in *Attributive Relationship Category* where the ICE-GB has 22.4% as its counterpart ICE-Nig. has 11.7%, still in contrast the ICE-GB presents 6.9% in *Position/Location Relationship Category* as the ICE-Nig. contains 4.0%, finally, at *Loss Relationship Category* the ICE-GB shows 3.4% as the ICE-Nig. fetches 1.0% in comparison.

It is clearly observed that in Nigerian English the highest frequency goes to the Process Relationship Category expounded by the preposition *of* with 24.5% as against the category having the highest frequency in British English which is found to be Attributive Relationship Category having 22.4%. On the other hand, the preposition is used to expound the least relationship in ICE-Nig. in Loss Relational Category showing 1.0% as against the ICE-GB which has the least frequency distribution in Separate from category containing 0.5%.

The study also found that the closed class keywords are worthy of investigation. This is in line with Groom (2007) that the closed-grammatical-class keywords (such as determiners, conjunctions, prepositions, and pronouns) are useful indicators of characteristic of styles of a particular text or corpus rather than the way conventional researchers perceive them as being classes of less interests attraction or having less quality in terms of containing semantic properties.

As described in the Section 5.2 the two varieties of English do not use the preposition *of* across the categories in exactly the same way. This agrees with the inter-language study of Rankin and Schiftner (2011) which hold the view that variations in the distributions of the marginal and complex prepositions were as a result of L1 transfer across the five learner corpora studied. The study also revealed the over-underuse of the prepositions through the use of statistical measures as well as a qualitative approach. This shows that variations in prepositional distributions are mostly due to L1 transfer.

5.3 Conclusion

The first Research Question of this study is to provide a comprehensive account of the semantic uses of the preposition *of* in Nigerian English as the Research Question 2 has been treated in Section 4.3. The corpus analysis shows that the preposition *of* establishes relationships mainly in process relationship than any other category in the variety of English. In relation to the use of the preposition *of* at establishing semantic relationship based on the categorization used in this study, we can infer that Nigerian English is characterized by excessive use of the preposition at revealing process relationships. Also that, the process relationship is established mainly within Academic Technology text type. This suggests that in terms of frequency, distribution, and stylistic variability hence, the genre establishes more of processing relations in their styles of expressions than any other genre in the variety of English.

5.4 Implications

1. A study of this nature seemed to be highly demanding of a researcher. In the first place, the study requires reasonable frequency(ies) of a given data which it claims to have existed in a particular variety of English to support such a claim. Without this no

claim on any amount of linguistic difference between two varieties of English could be shown to be substantial.

2. Future researches may have enough frequency of occurrence of a given data; it could make no significance without semantic, pragmatic, text analysis, content analysis, and other related analytical patterns that give meanings to such frequencies of occurrence. So, new researchers in the field of corpus linguistics need to bear in mind that linguistic analysis has to do with such kinds of analytical concepts in order to make their findings meaningful.

3. In the process of data categorization/classification, for instance the element of cognitive linguistics comes in. This is in the process of relating the data to fit in to a given category. Consider a phrase (meaning of words AHum_06) which can be accepted in such a way that a meaning is an amount of quantity inside the word. On the other hand, it can be accepted that the meaning is an attribute of the word. Forcing a data (ambiguous) to fit into a most suitable category is an aspect of cognitive linguistics. This is what a researcher may not think of coming into his research at the very beginning.

4. Future observations need to be given especially in classifying data that turn to be ambiguous as in the case discussed above. In view of the above therefore, researchers should collaborate with their colleagues for sharing of ideas, arguing on their views, and reassessment of their individual scores.

5. Choosing suitable categorizations within which ones data can best fit into is quite exhausting. When a researcher finds categories that cannot comprehend the whole

size of his data, he finds the work almost daunting. Searching for complementing categories from other sources to bridge such a gap is quite challenging.

6. In the process of data classification, the researcher also needs to broaden his mind with the concepts of collocation such as the concept of Sinclair, (1991:170) who defines collocation as "the co-occurrence of two or more words within a short space of each-other in a text. In this case, a short space or "span" is viewed as a space of around four words from the left and four words from the right around are under consideration (i.e. the node)". This is not possible in some of the contexts. For instance (time-consuming arduous *analysis of large* volumes of data W2A-027 057) can be best understood when the scope is broadened beyond the highlighted scope. *Analysis of large*, for instance, can be better understood if the concept is broadened to *time-consuming arduous analysis.* This is simpler compared to the following word which is an adjective *large*. The need to fetch the noun phrase to the large *volumes of data* together will really help.

7. The need to combine the concepts of keywords, multiword units as an interplay etc. should be incorporated in the meaning making process.

8. The differences found in terms of the use of the preposition of from the two corpora are indication of inter-varietal differences. It could not be seen as a point of condemnation to any of the varieties for the overuse or underuse of the preposition. The linguistic differences that can be found across varieties of English form one of the points of interests of modern linguists.

9. Previous researches such as Gut and Fuchs (2013) progressives in Nigerian English suggest that L_1 transfer hypothesis and second language status as reasons for the differences in the choice of linguistic items in the process of communication. The choice of the preposition *of* can be said to have affected either.

10. Representativeness of the corpora may not be at the same level. For instance, Nigerian corpus collects most of its data from one of the two regions of the country. Samples from informal settings are considerably low, These factors and many more may bring about differences in frequencies at most of the categories.

5.5 Suggestion for Further Studies

The following suggestions are offered for further studies:

1. Studies on the preposition *of* can be conducted from the same corpora (ICE-Nig. and the ICE-GB) observing data from other sub-edited files such as Administrative or instructive, Editorials and Press reports of the two corpora.
2. Studies could be carried out on the same preposition *of,* covering the whole of the edited files (Academic, Administrative/instructive, Editorials and Press reports) including the academic file on which this study paid its sole attention.
3. At the same time, a study can be conducted on prepositions from the spoken components of the two corpora. Observing the spoken aspect of the two varieties will give comparative facts on both the written and spoken notion of English usage in the two corpora.
4. On the other hand, studies will also attract interest by observing the same preposition from different corpora within the sixteen varieties the ICE-Project first intended to

cover and even beyond. This will give enough bases for comparison across corpora as objects of studies as well as add to the existing literature.

5. The Use of other prepositions such as *in, on, at, out, above, under, beside, behind, between, for*, as well as compound and even complex prepositions can also be observed from the same corpora.
6. The same preposition can be investigated using a different sample size. For instance, this study collected 20 per cent sample. Other studies may wish to collect more or less sample size to observe the validity of the result provided by this study.
7. This study observes Categorizations from various authors. It criticizes two (Downing & Locke's and Cambridge Advanced Learner's Dictionary) and consequently, it reconstructs a new (combining a combination of both categories) which it believes could best fit the context of the study. For example other researchers may wish to use other categories to conduct a research on the preposition within or outside the context.

REFERENCES

Adebileji, A., & Araba, O. (2012). Nigerian English Usage: Its Lexico-Semantic Features in the Joys of Motherhood by Buchi Emecheta. *Journal of Languages in India, 12*(7), 1-27.

Adegbija, E. (1989). Lexico-semanticVariation in Nigerian English. *World Englishes, 8*(2), 165-177.

Adegbite, W. & Gut, U. (2010). The ICE-Nigeria Corpus as a Data Base for Nigerian English Studies *ISEL, 10*(1), 1-10.

Adeniyi, K. (2006). *Attitudes to Nigerian English among Lagos State Teachers: A Sociolinguistic Survey*. Un published PhD Dissertation. University of Ilorin.

Ajani, T. (2001). *Aspect in Yoruba and Nigerian English*. Grainesvile. University of Florida.

Akare, F. (Ed.). (1998). *English across Displines*. Abekuta, Nigeria: Pumarak.

Anthony, L. (2011). AntConc Computer Program. Retrieved from. Version 3.2.2 Access through: http://www.antlabwaseda.ac.jp/

Awonusi, V. (1986). Regional Accent and Internal Variability in Nigerian English: A Historical Analysis. *Journal of English Studies, 6*(6), 555-560.

Bamgbose, A. (1996). English in the Nigerian Environment. In A. Bamgbose, A. Banjo & A. Thompson (Eds.), *New Englishes: A West African Perspective* (pp. 9-12). Trenton N. J: African World Press.

Bamiro, E. O. (1991). Nigerian Englishes in Nigerian English literature. *World Englishes, 10*(1), 7-17.

Banjo, A. (1971). Towards a Definition of Standard Nigerian Spoken English *Actesdu 8e Congress de la Societe Linguiste de l' Afrique Accidentale* (pp. 165-175). Abidjan: University of Abidjan.

Biber, D. (1993). Representativeness in Corpus Design. *Journal of Literary and Linguistic Computing, 8*(1), 243-257.

Bolton, K., Nelson, G., Hung, J. (2003). Corpus-based Study of Connectors in Students Writing. *International Journal of Corpus Linguistics, 7*(3), 165-182 (118).

Bolton, K. (2006). *Varieties of world Englishes*: Wiley Online Library.

Bolton, K. (2009). Varieties of World Englishes In Kachru ,B. B., Kachru, Y., & L. Nelson Cicil (Eds.), *The Hand Book of World Englishes* (pp. 289-312). UK.: Wiley-Blackwell.

Bondi, M., Scott, M. (2010). Perspective on Keywords and Keyness. In M. Bondi, Scott, Mike (Ed.), *Keyness in Texts* (pp. 1-20). Amsterdam Philadelphia: John Benjamins.

Bowker, L. and Pearson J. (2002). *Working with Specialized Language*: *A practical Guide to Using Corpora*, London and New York: Routledge.

Cambridge Advanced Leaner's Dictionary (2008) (4th ed.) Late, Woodford, Malissa Good, Ann, Fiddes. Singapore: Green Giant Press.

Carter, R., & McCarthy, M. (2006). Visible Patterns of Interaction. *Explorations in Corpus Linguistics*, 7.

Crossman, A. (2014). Types of Sampling Designs. Retrieved 3/5/2014, 2014, from: Sociology.about.com/od/types-of-samples/a/systematic-samples.htm

Cruise, D. A. (1991). *Lexical semantics*. Cambridge: Cambridge University Press.

Cruttenden, A. (2008). *Gimsons Pronunciation of English*. London: Hodder Education.

Cowie, A. P., & Howart. (1993). Phraseology: A Selected Bibliography. *International Journal of Lexicography, 9*(1), 38-51.

Danielson, P. (2003). Automatic Extraction of Meaningful Units from Corpora: A Corpus-driven Approach Using the Word Stroke. *International Journal of Corpus Linguistics, 8*(1), 102-127.

De Felice, R., & Pulman, S. G. (2008). *A Classifier-based Approach to Preposition and Determiner Error Correction in L2 English.* Paper Presented at the Proceedings of the 22nd International Conference on Computational Linguistics-Volume 1.

Disney, S. (2010). *The World English Model Revised: Definite Article Used in ICE-GB and ICE-HK*. Proceeding of the Lancaster University Postgraduate Conference. University College Plymouth Marjon.

Downing, A., & Locke, P. (1992). *A University Course in English Grammar*. London (UK): Prentice Hall International.

Emecheta, B. (2011). *The Joys of Motherhood*: WW Norton & Company.

Francis, G. (1993). A Corpus-driven Approach to Grammar: Principles, Methods, and Examples. In M. B. et al. (Ed.), *Text and Tecnology* (pp. 137-156). Amsterdam: Benjamins.

Garba C. Y. (1979). Application of Language. Theory: Selected Papers. *Kano Mimesograh*.

George, D. & Mallery, P. (2003). *SPSS for Windows step by step: A Simple Guide and reference 11.0 Update (4th ed.)*. Boston: Allyn & Bacon.

Greenbaum, S. (1988). A Proposal for an Internaional Corpus of English. *World Englishes, 7*, 315.

Gilquin, G. (Ed.). (2008). *What You Think Ain't What You Get: Highly Polysemous verbs in mind and language* (Vol. 2). Presses Universitaires de Bordeaux: Pessac.

Gries, S. T., & Stefanowitsch, A. (2005). Co-varying Collexemes: *Corpus Linguistics and Linguistic Theory, 1*(1), 1-43.

Grims, B. (2000). *Ethnolog. Languages of the World* (Vol. 1). Dallas: Sill International.

Groom, N. (2007). Closed-class Keywords and Corpus-driven Discourse Analysis. In M. Bondi, Scott, Mike (Ed.), *Keyness in Texts* (pp. 59-78). Amsterdam Philadelphia: John Benjamins.

Gut, U. (2002). Prosodic Aspect of Nigerian English. *Journal of English Linguistics, 1*(2), 87-94.

Gut, U., & Coronel, L. (2011). Relatives World-wide. In H. Marine (Ed.), *Mapping Unity and Diversity World-wide: Corpus-based Studies of New Englishes* (pp. 215-241). Amsterdam, New zealands: John Benjamins.

Gut, U., & Coronel, L. (2012). Relatives worldwide. *Mapping unity and diversity world-wide. Corpus-based studies of New Englishes*, 215-241.

Gut, U., & Fuchs, R. (2013). Progressive Aspects in Nigerian English: *Journal of English Linguistics, 41*(3), 243-267.

Halliday, M., & Hassan. (1976). *Cohesion in English*. London: Longman.

Heaton, J. B. (1965). *Using Prepositions and Particles* (Vol.2): Longman Publishing Group.

Hoffmann, S. (2001). In (hot) Pursuit of Data: Complex Prepositions in Late Modern English. *LANGUAGE AND COMPUTERS, 36*(1), 127-146.

Hoffmann, S. (2004). Are the Low-frequency Complex Prepositions Grammaticallized? In L. Hans & M. Christian (Eds.), *Corpus Approaches to Grammaticalization in English* (pp. 171-211). Amsterdam/Philadelphia: John Benjamins.

Huddleston, R., & Pullum, G. K. (2002). *The Cambridge Grammar of English Language*. Cambridge: Cambridge University Press.

Hudson, R. (1992). *Teaching Grammar*. Oxford: Blackwell.

Hunston, S., & Francis, G. (2002). *Corpora in Applied Linguistics*. Cambridge: Cambridge University

Jacob, R. M. (2013). Educational Research: Quantittative Research. *Descriptive ppt.* Retrieved on 2/4/2014, from http://www83.homepage.villanova.edu/richard.jacobs/EDU%208603/lessons/sampling.ppt

Jibril M. (1986) Sociolinguistic Variation in Nigerian English. *English World-wide* 7(1)47-74.

Jowitt, D. (1991) *Nigerian English Usage*. Lagos. Longman

Jowitt, D. (1997). Nigerian National Language Question: Choice and Constraints. In A. Bamgbose, A. Banjo & A. Thompson (Eds.), *New Englishes: A West African Perspective* (pp. 34-56). Trento N.J.: African World Press.

Jowitt, D. (2012). *Nigerian English Usage: An Introduction*. Lagos, Nigeria: Learn Africa Plc.

Kachru, B. B. (1981). The Pragmatics of Non-native Varieties of English. In E. Smith (Ed.), *English for Cross-Cultural Communication* (pp. 30-35). Hong Kong: Macmillan Press.

Kennedy, G. (1991). "Between" and "Through":The Company they Keep and the Function they Serve. In K. Aijmer and B. Altenberg (eds). *English Corpus Linguistics:* Study in Honour of Jan Startvik. Longman. 95-110.

Kennedy, G. (1998). An Introduction to Corpus Linguistics. London: Longman.

Kilgarriff, A. and Grefenstette G. (2003). "Web as Corpus", Journal of *Computational Linguistics* 29(3): 333-347.

Kperogi, F. A. (2012). Prepositional and Collocational Abuse in Nigerian English. Access Through: *http:www.farooqkperogi.com/2012/07/prepositional-and-collocational-abuse.html*

Kujore, O. (1985). *English Usage: Some Notable Nigerian Variations*. Ibadan, Nigeria: Evans Brothers.

Kortmann, B. & Benedikt, S. (2004) Global Synopsis-morphological and Syntactic variation in English. In Bernd Kortman, Kate Burridge, Rajend Edger W. Schnieder & Clive Upton (eds), *A Handbook of Varieties of EnglishVol.2: Morphology and Syntax, 1142*-1202. Berlin: Mounton de Gruyter

Laviosa, S. (2002). *Corpu-based Translation Studies: Theory, Findings, Applications.* Amsterdam and New York: Rodopi.

Leech, G. (1992). Corpora and Theories of Linguistic Performance. In J. S. (ed) (Ed.),

Directions in Corpus Linguistics (pp. 105-122). Berlin: Mouton de Gruyter.

Leech, G., P. Rayson., & A. Wilson. (2001). *Word Frequencies in Written and Spoken English*. London: Longman.

Leech G., Marianne, H., & Mair, C. (2009). *Change in Contemporary English: A Grammatical Study.* Cambridge: Cambridge University Press.

Lehnmann, C. (1991). Grammaticalization and Related Changes in Contemporary German. In E. C. a. H. Traugott, B. (Ed.), *Approaches to Grammaticalization* (Vol. 2, pp. 493-535). Amsterdam: Benjamins.

McEnery, T. and Wilson A. (1996). *Corpus Linguistics,* Edinburgh: Edinburgh University Press.

Mair, C., & Hunt, M. (1995). Why is the Progressive Becoming More Frequent in English? *A corpus-based Investigation of Language Change in Progress Zeitschrift fur Anglistik and Americanistic, 43(2),* 111-122.

Mair, C., & Leech, G. (2006). 14 Current Changes in English Syntax A handbook of English linguisics *In A. Bas & M. April (Eds.), A handbook of English Linguistics* Mainstreet, Malden, U.S.A.: Blackwell Publishing.

Manzanares, J. V., & López, A. M. R. (2008). What Can Language Learners Tell us about Constructions? *Applications of Cognitive Linguistics, 9,* 197.

Mastherie, R. (2008). Indian South African English: Morphology and Syntax. In Rejerend Mastherie (ed), *Varieties of English. Africa South and South East Asia*, 501-520. Berlin: Mouton de Gruyter.

Mel'chuk, I. A. (1988). Semantic Description of Lexical Units in an Explanatory Combinatorial Dictionary: Basic Principle and Heuristic Criteria. *Journal of Lexicography, 1*(1), 165-188.

Mindt, D., & Weber, C. (1989). Prepositions in American and British English. *World Englishes, 8*(2), 229-238.

Moon, R. (1994). The Analysis of Fixed Expression. In M. Coulthard (Ed.), *Advances in Written Text Analysis* (pp. 117-135). London, Longman Inc.

Nelson, G. (1996). The Design of Corpus. In S. Greenbaum (Ed.), *Comparing Engllish Worldwide: The International Corpus of English* (pp. 27-35). Oxford: Derendon Press.

Nelson, G., Sean, W., Bas, A. (2002). *Exploring Natural Language*. Amsterdam: John Benjamins Publishing.

Nelson, G., Wallis, S., & Aarts, B. (2002). *Exploring Natural Language: working with the British component of the International Corpus of English* (Vol. 29). Amsterdam: John Benjamins Publishing.

Nesselhauf, N. (2004). *Collocation in a Learner Corpus*. Amsterdam: John Benjamins.

Ofuya, A. (1996). Perfecting your Listening and Speaking Skills in English as MESTA Students. In Adegbija, E. and A. O fuja (Eds.) *English Language and Communication Skills.* Ilorin: The English Language Outer Circle, University of Ilorin.

Pallant, J. (2010). *SPSS Survival Manual: A Step by Step Guide to Data Analysis using SPSS*: McGraw-Hill International.

Qi, X. (2012). A Corpus-based Study of the Alternating Di-transitive Verbs "TELL" in Native and Chinese Learner English Corpora. *ICAME, 37*, 185-205.

Quirk, R., & Greenbaum, S. (1973). *Concise Grammar of Contemporary English*. New York: Harcout Brace Jaovanavich.

Quirk, R., Greenbaum S., Leech, G., & Svartvik J. (1985) *A comprehensive Grammar of the English Language*. London, England: Longman Inc.

Rankin, T., & Schiftner, B. (2011). Marginal Prepositions in Learner English: Applying Local Corpus Data. *International Journal of Corpus Linguistics, 16*(3), 412-434.

Schmied, J. (1990). Corpus Linguistics and Non-native Varieties of English. *World Englishes, 9*(3), 255-268.

Schmied, J. (1995). National Standard and International Standard of English. In A. B. A. B. a. A. Thomas (Ed.), *New Englishes: A West African Perspective* (pp. 337-348). Ibadan: Mosuro.

Scott, M., & Tribble, C. (2006). *Textual Patterns: Keywords and Corpus Analysis in Language Education* (Vol. 22): John Benjamins Publishing.

Sharma, D. (2009). Typological Diversity in New Englishes. *English World-Wide*. 30(2)170-195

Shin, D., Nation, P. (2007). Beyond Single Words: The Most Frequent Collocation in Spoken English. *ELT Journal, 62*(4), 339-348.

Sinclair, J. M. (1991). *Corpus, Concordance and Collocation*. Walton Street, Oxford New York Toronto Oxford University Press.

Sinclair. J. M. (1994). Trust the Text: In Advances (ed) In M. Conrad (Ed.), *Written Text Analysis* (pp. 225-237). London: Routledge.

Stubbs, M. (1996). *Text and Corpus Analysis: Computer-assisted Studies of Language and Culture*: Blackwell Oxford.

Stubbs, M. (2001). *Words and Phrases: Corpus Studies of Lexical Semantics*: Blackwell Publishers

Teubert, W. (2005). My version of Corpus Linguistics. *International Journal of Corpus Linguistics, 10*(1), 1-13.

Teubert, W., & Cermakova, A. (2007). *Corpus Linguistics: A Short Introduction*. Athenaeum press. London, UK Gateshead, Thyne & Weber.

Tognini-Bonnelli, E. (2001). *Corpus Linguistics at Work,* Amsterdam and Philadelphia: John Benjamins.

Tonye, M. O. (2000). A Contrastive Analysis of English and Yoruba Morphology. *Cebiotimo publication*.

Udofot, I. (2003). Stress and Rhythm in Nigerian Accent of English. *English Worldwide, 24*(2), 201-220.

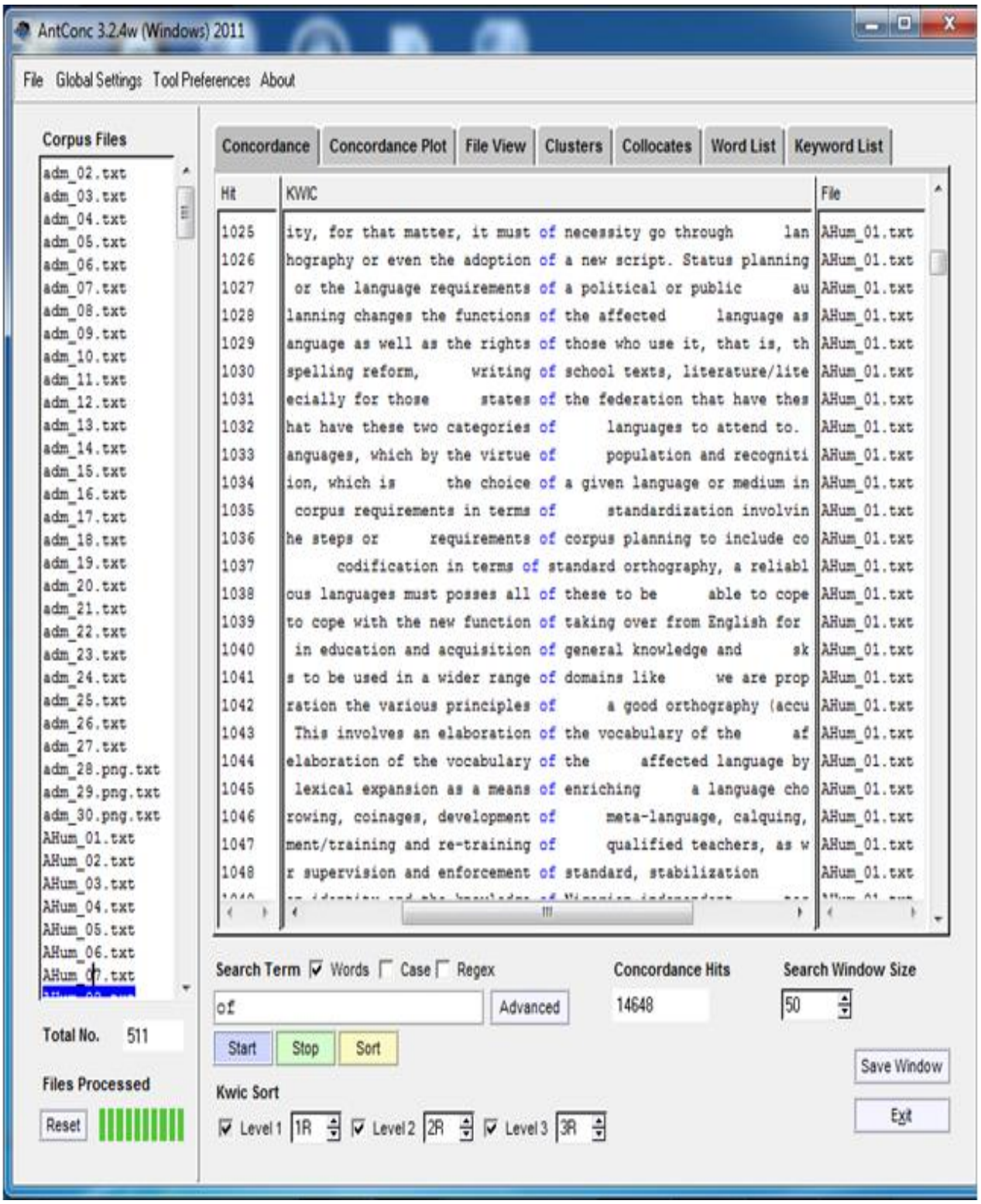
Van Rooy, R. (2006). The Extension of Progressive in Black South African English. *World Englishes* 25(1). 37-64

Voormann, H., & Gut U. (2008). Agile Corpus Creation. *Corpus Linguistics and Linguistic Theory, 4*(2), 235-251.

Williams, R. (1976). *Keywords* (2nd ed.). London: Fontana.

Wunder, E. M., Voomann, H., & Gutt, U. (2010). The ICE Nigeria Corpus Project: Creating an Open, Rich and Accurate Corpus. *ICAME Journal 34*, 78-88.

Appendix I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1027 or the language requirements of a political or public au AHum_01.txt
1028 lanning changes the functions of the affected language as AHum_01.txt
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1031 ecially for those states of the federation that have thes AHum_01.txt
1032 hat have these two categories of languages to attend to. AHum_01.txt
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1038 ous languages must posses all of these to be able to cope AHum_01.txt
1039 to cope with the new function of taking over from English for AHum_01.txt
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1041 s to be used in a wider range of domains like we are prop AHum_01.txt
1042 ration the various principles of a good orthography (accu AHum_01.txt
1043 This involves an elaboration of the vocabulary of the af AHum_01.txt
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1047 ment/training and re-training of qualified teachers, as w AHum_01.txt
1048 r supervision and enforcement of standard, stabilization AHum_01.txt
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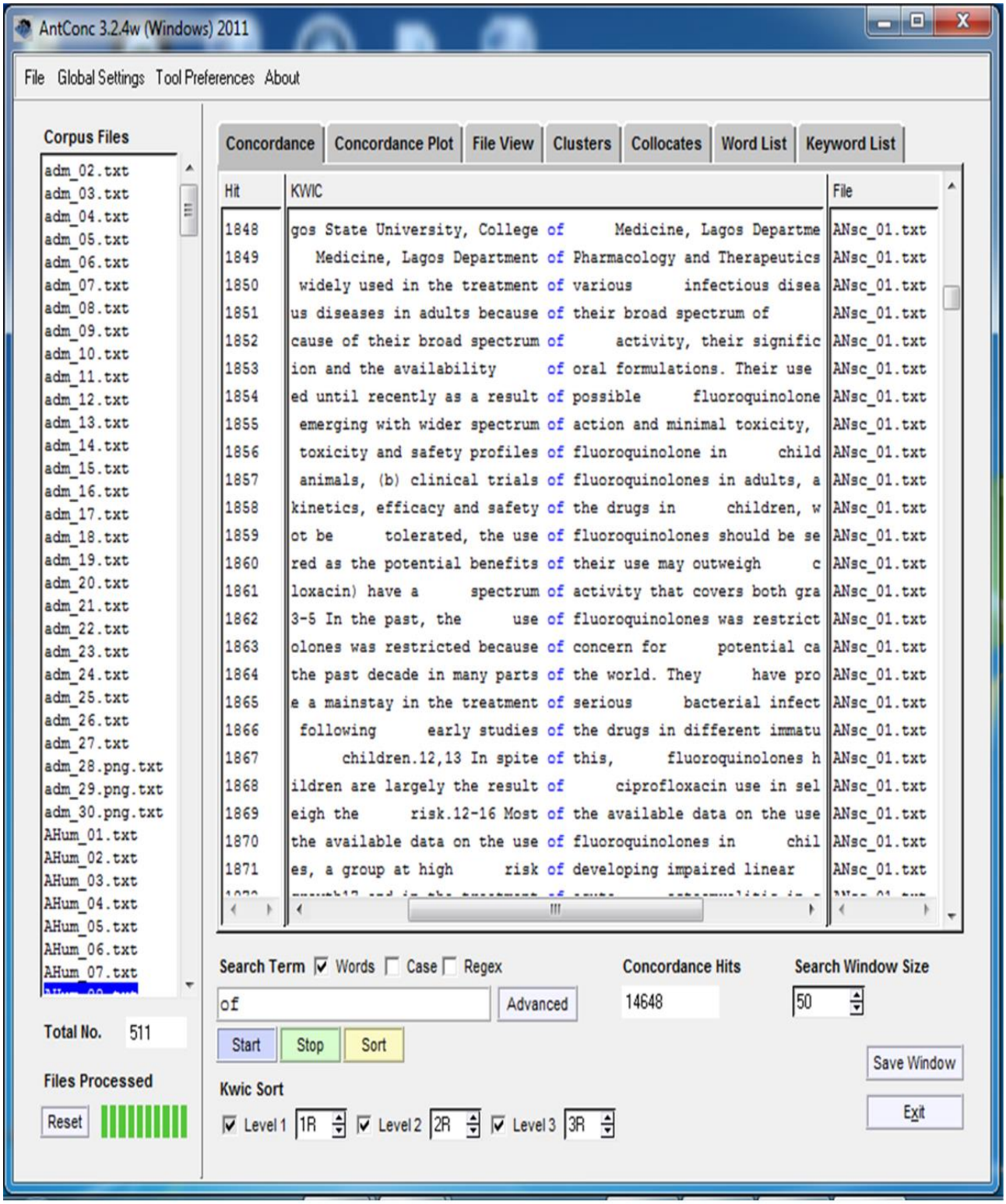
Appendix II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Corpus Files
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Concordance
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1849 Medicine, Lagos Department of Pharmacology and Therapeutics ANsc_01.txt
1850 widely used in the treatment of various infectious disea ANsc_01.txt
1851 us diseases in adults because of their broad spectrum of ANsc_01.txt
1852 cause of their broad spectrum of activity, their signific ANsc_01.txt
1853 ion and the availability of oral formulations. Their use ANsc_01.txt
1854 ed until recently as a result of possible fluoroquinolone ANsc_01.txt
1855 emerging with wider spectrum of action and minimal toxicity, ANsc_01.txt
1856 toxicity and safety profiles of fluoroquinolone in child ANsc_01.txt
1857 animals, (b) clinical trials of fluoroquinolones in adults, a ANsc_01.txt
1858 kinetics, efficacy and safety of the drugs in children, w ANsc_01.txt
1859 ot be tolerated, the use of fluoroquinolones should be se ANsc_01.txt
1860 red as the potential benefits of their use may outweigh c ANsc_01.txt
1861 loxacin) have a spectrum of activity that covers both gra ANsc_01.txt
1862 3-5 In the past, the use of fluoroquinolones was restrict ANsc_01.txt
1863 olones was restricted because of concern for potential ca ANsc_01.txt
1864 the past decade in many parts of the world. They have pro ANsc_01.txt
1865 e a mainstay in the treatment of serious bacterial infect ANsc_01.txt
1866 following early studies of the drugs in different immatu ANsc_01.txt
1867 children.12,13 In spite of this, fluoroquinolones h ANsc_01.txt
1868 ildren are largely the result of ciprofloxacin use in sel ANsc_01.txt
1869 eigh the risk.12-16 Most of the available data on the use ANsc_01.txt
1870 the available data on the use of fluoroquinolones in chil ANsc_01.txt
1871 es, a group at high risk of developing impaired linear ANsc_01.txt
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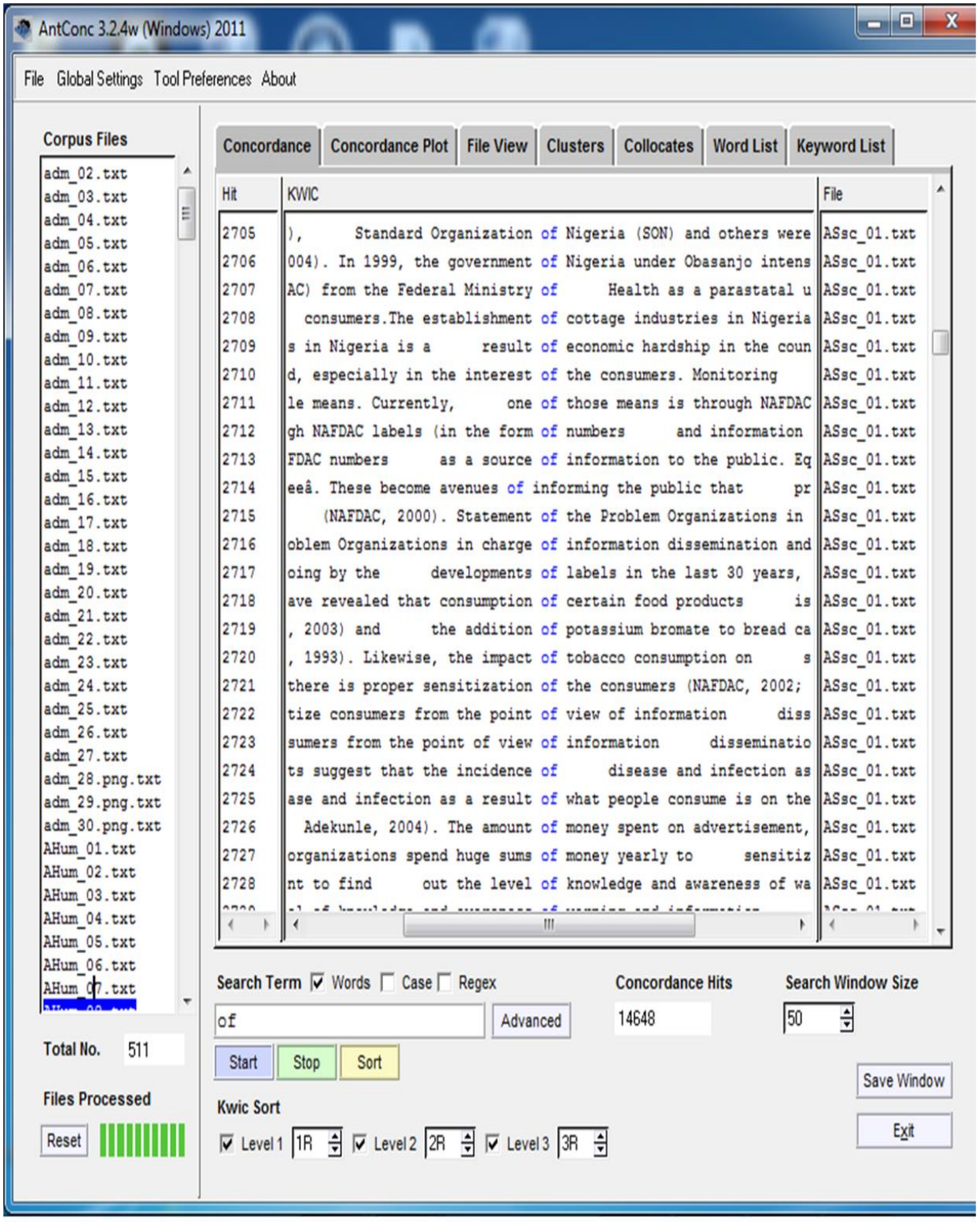
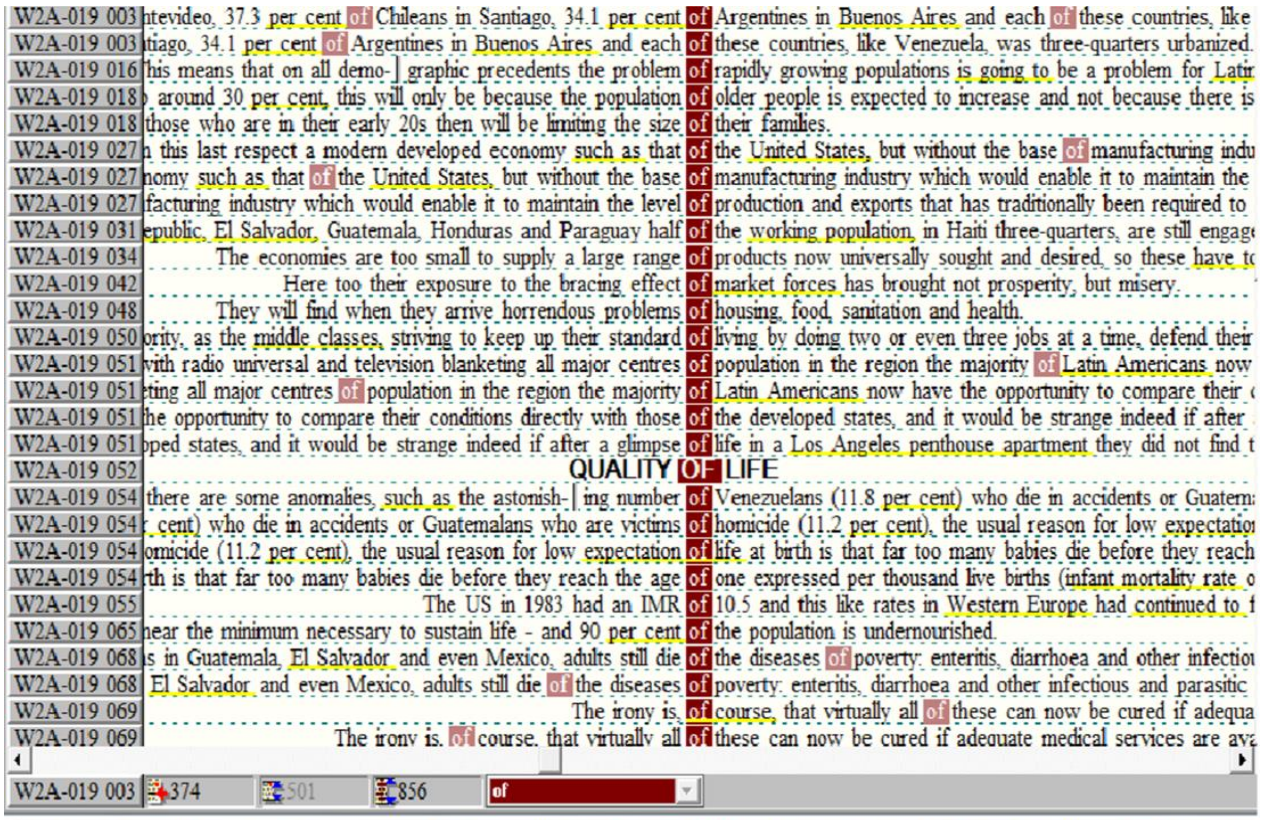
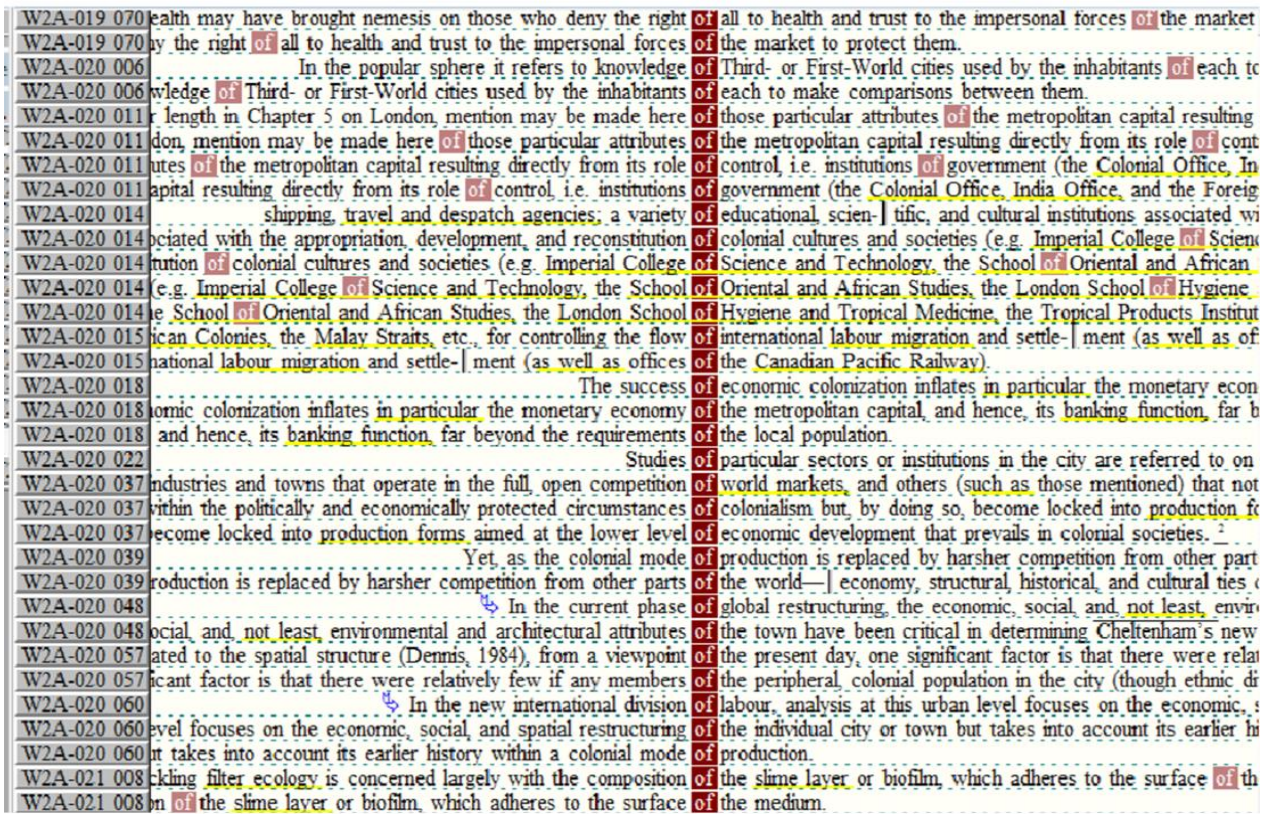
Appendix III

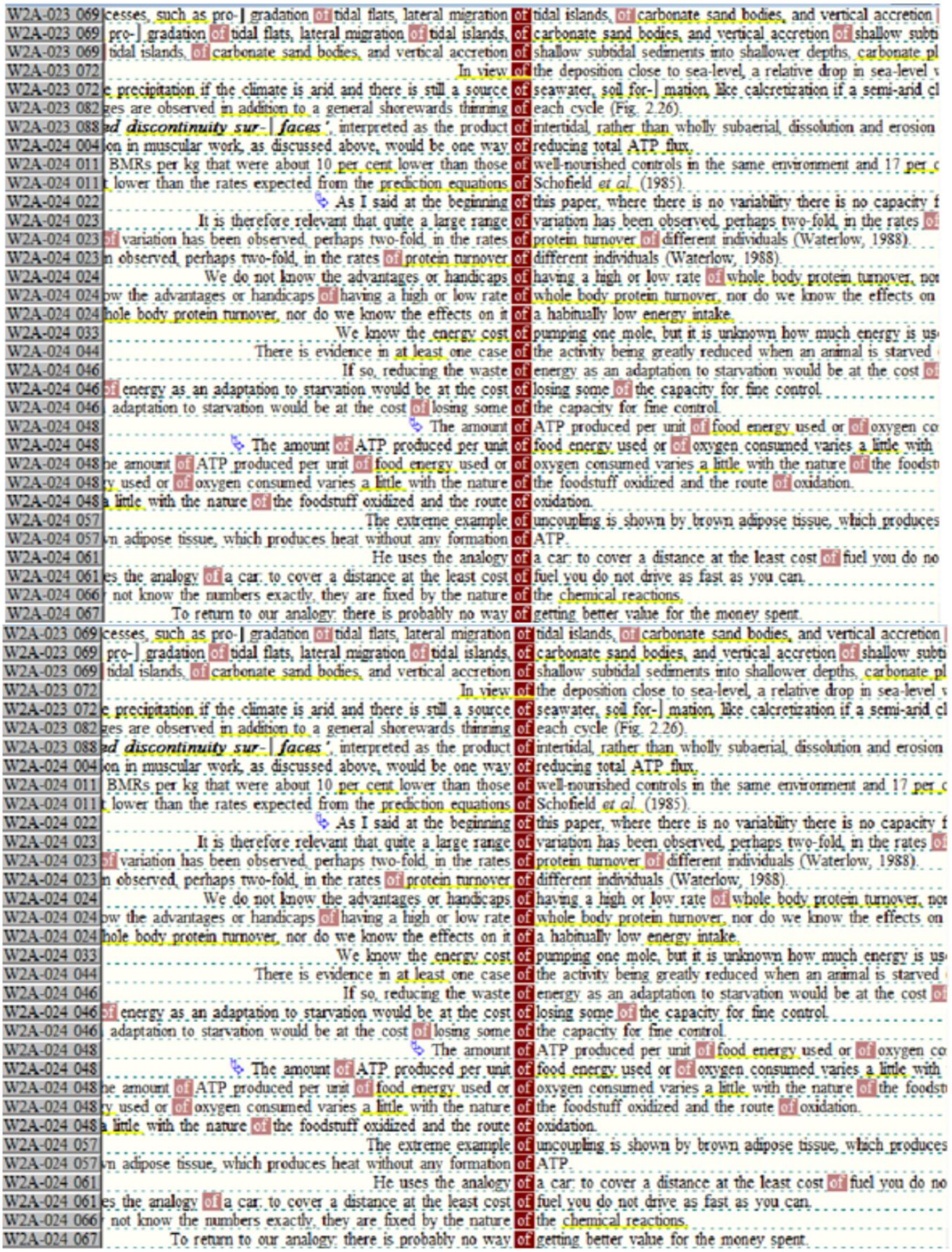


Appendix IV

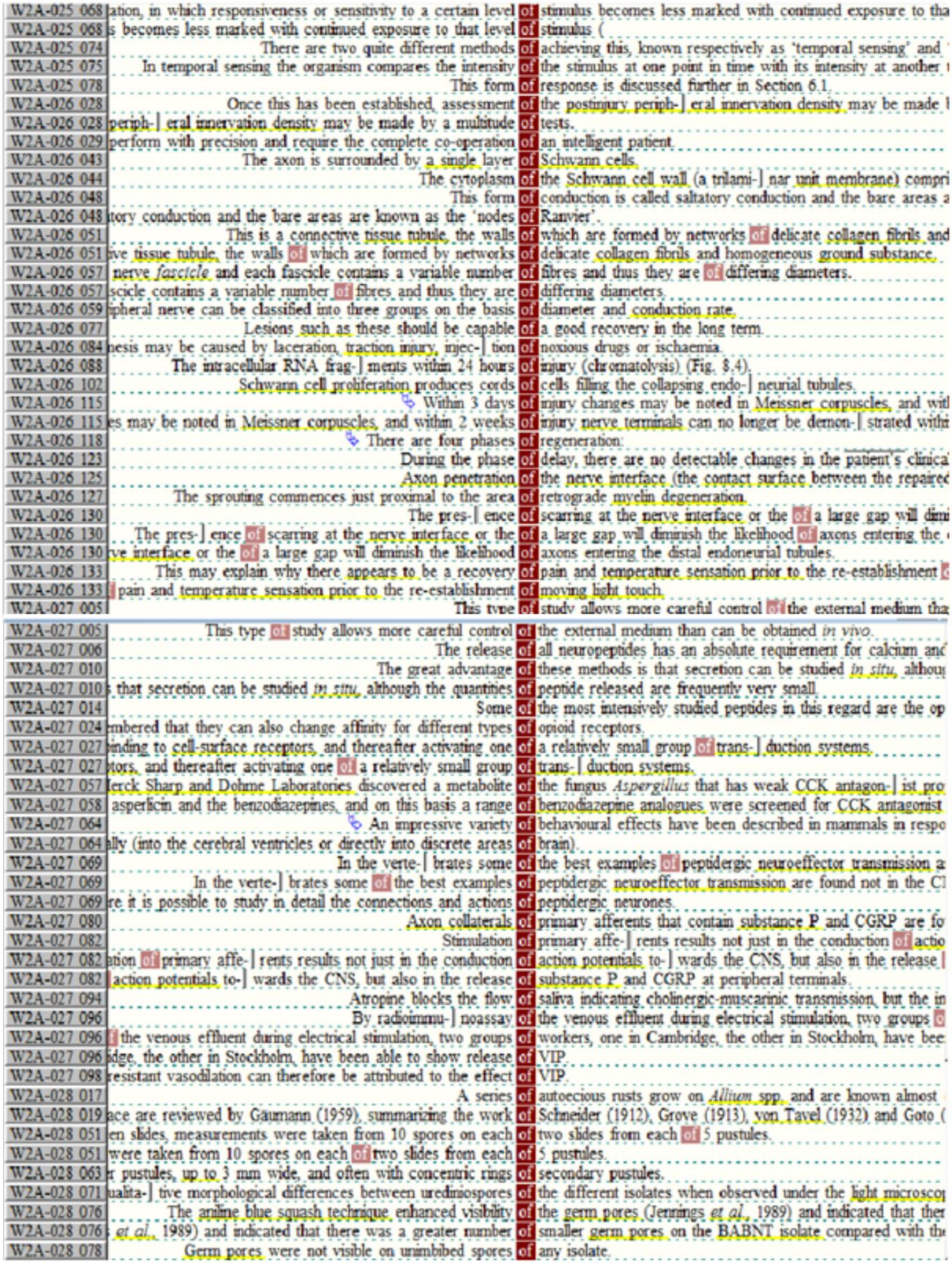

W2A-019 003 ntevideo, 37.3 per cent of Chileans in Santiago, 34.1 per cent of Argentines in Buenos Aires and each of these countries, like
W2A-019 003 tiago, 34.1 per cent of Argentines in Buenos Aires and each of these countries, like Venezuela, was three-quarters urbanized.
W2A-019 016 his means that on all demo-graphic precedents the problem of rapidly growing populations is going to be a problem for Latir
W2A-019 018 around 30 per cent, this will only be because the population of older people is expected to increase and not because there is
W2A-019 018 those who are in their early 20s then will be limiting the size of their families.
W2A-019 027 n this last respect a modern developed economy such as that of the United States, but without the base of manufacturing indu
W2A-019 027 nomy such as that of the United States, but without the base of manufacturing industry which would enable it to maintain the
W2A-019 027 facturing industry which would enable it to maintain the level of production and exports that has traditionally been required to
W2A-019 031 epublic, El Salvador, Guatemala, Honduras and Paraguay half of the working population in Haiti three-quarters are still engage
W2A-019 034 The economies are too small to supply a large range of products now universally sought and desired, so these have to
W2A-019 042 Here too their exposure to the bracing effect of market forces has brought not prosperity, but misery.
W2A-019 048 They will find when they arrive horrendous problems of housing, food, sanitation and health.
W2A-019 050 ority, as the middle classes, striving to keep up their standard of living by doing two or even three jobs at a time, defend their
W2A-019 051 with radio universal and television blanketing all major centres of population in the region the majority of Latin Americans now
W2A-019 051 ting all major centres of population in the region the majority of Latin Americans now have the opportunity to compare their
W2A-019 051 he opportunity to compare their conditions directly with those of the developed states, and it would be strange indeed if after
W2A-019 051 pped states, and it would be strange indeed if after a glimpse of life in a Los Angeles penthouse apartment they did not find t
W2A-019 052 QUALITY OF LIFE
W2A-019 054 there are some anomalies, such as the astonish-ing number of Venezuelans (11.8 per cent) who die in accidents or Guatem
W2A-019 054 cent) who die in accidents or Guatemalans who are victims of homicide (11.2 per cent), the usual reason for low expectatio
W2A-019 054 omicide (11.2 per cent), the usual reason for low expectation of life at birth is that far too many babies die before they reach
W2A-019 054 rth is that far too many babies die before they reach the age of one expressed per thousand live births (infant mortality rate o
W2A-019 055 The US in 1983 had an IMR of 10.5 and this like rates in Western Europe had continued to f
W2A-019 065 near the minimum necessary to sustain life - and 90 per cent of the population is undernourished.
W2A-019 068 s in Guatemala, El Salvador and even Mexico, adults still die of the diseases of poverty: enteritis, diarrhoea and other infectio
W2A-019 068 El Salvador and even Mexico, adults still die of the diseases of poverty: enteritis, diarrhoea and other infectious and parasitic
W2A-019 069 The irony is, of course, that virtually all of these can now be cured if adequa
W2A-019 069 The irony is, of course, that virtually all of these can now be cured if adequate medical services are av
W2A-019 003 374 501 856 of


W2A-019 070 ealth may have brought nemesis on those who deny the right of all to health and trust to the impersonal forces of the market
W2A-019 070 y the right of all to health and trust to the impersonal forces of the market to protect them.
W2A-020 006 In the popular sphere it refers to knowledge of Third- or First-World cities used by the inhabitants of each to
W2A-020 006 wledge of Third- or First-World cities used by the inhabitants of each to make comparisons between them.
W2A-020 011 r length in Chapter 5 on London, mention may be made here of those particular attributes of the metropolitan capital resulting
W2A-020 011 don, mention may be made here of those particular attributes of the metropolitan capital resulting directly from its role of cont
W2A-020 011 utes of the metropolitan capital resulting directly from its role of control, i.e. institutions of government (the Colonial Office, In
W2A-020 011 apital resulting directly from its role of control, i.e. institutions of government (the Colonial Office, India Office, and the Foreig
W2A-020 014 shipping, travel and despatch agencies, a variety of educational, scien-tific, and cultural institutions associated wi
W2A-020 014 ociated with the appropriation, development, and reconstitution of colonial cultures and societies (e.g. Imperial College of Scien
W2A-020 014 tution of colonial cultures and societies (e.g. Imperial College of Science and Technology, the School of Oriental and African
W2A-020 014 (e.g. Imperial College of Science and Technology, the School of Oriental and African Studies, the London School of Hygiene
W2A-020 014 e School of Oriental and African Studies, the London School of Hygiene and Tropical Medicine, the Tropical Products Institut
W2A-020 015 ican Colonies, the Malay Straits, etc., for controlling the flow of international labour migration and settle-ment (as well as of
W2A-020 015 national labour migration and settle-ment (as well as offices of the Canadian Pacific Railway).
W2A-020 018 The success of economic colonization inflates in particular the monetary econ
W2A-020 018 omic colonization inflates in particular the monetary economy of the metropolitan capital, and hence, its banking function, far b
W2A-020 018 and hence, its banking function, far beyond the requirements of the local population.
W2A-020 022 Studies of particular sectors or institutions in the city are referred to on
W2A-020 037 ndustries and towns that operate in the full, open competition of world markets, and others (such as those mentioned) that not
W2A-020 037 within the politically and economically protected circumstances of colonialism but, by doing so, become locked into production fo
W2A-020 037 ecome locked into production forms aimed at the lower level of economic development that prevails in colonial societies.
W2A-020 039 Yet, as the colonial mode of production is replaced by harsher competition from other part
W2A-020 039 roduction is replaced by harsher competition from other parts of the world—economy, structural, historical, and cultural ties
W2A-020 048 In the current phase of global restructuring, the economic, social, and not least, envir
W2A-020 048 ocial, and, not least, environmental and architectural attributes of the town have been critical in determining Cheltenham's new
W2A-020 057 ated to the spatial structure (Dennis, 1984), from a viewpoint of the present day, one significant factor is that there were rela
W2A-020 057 icant factor is that there were relatively few if any members of the peripheral, colonial population in the city (though ethnic di
W2A-020 060 In the new international division of labour, analysis at this urban level focuses on the economic,
W2A-020 060 evel focuses on the economic, social, and spatial restructuring of the individual city or town but takes into account its earlier hi
W2A-020 060 t takes into account its earlier history within a colonial mode of production.
W2A-021 008 ckling filter ecology is concerned largely with the composition of the slime layer or biofilm, which adheres to the surface of th
W2A-021 008 n of the slime layer or biofilm, which adheres to the surface of the medium.

Appendix V


W2A-023 069 cesses, such as pro-| gradation of tidal flats, lateral migration of tidal islands, of carbonate sand bodies, and vertical accretion
W2A-023 069 pro-| gradation of tidal flats, lateral migration of tidal islands, of carbonate sand bodies, and vertical accretion of shallow subti
W2A-023 069 tidal islands, of carbonate sand bodies, and vertical accretion of shallow subtidal sediments into shallower depths, carbonate pl
W2A-023 072 In view of the deposition close to sea-level, a relative drop in sea-level
W2A-023 072 e precipitation if the climate is arid and there is still a source of seawater, soil for-| mation, like calcretization if a semi-arid cl
W2A-023 082 ges are observed in addition to a general shorewards thinning of each cycle (Fig. 2.26).
W2A-023 088 ad discontinuity sur-| faces', interpreted as the product of intertidal, rather than wholly subaerial, dissolution and erosion
W2A-024 004 on in muscular work, as discussed above, would be one way of reducing total ATP flux.
W2A-024 011 BMRs per kg that were about 10 per cent lower than those of well-nourished controls in the same environment and 17 per c
W2A-024 011 t lower than the rates expected from the prediction equations of Schofield et al. (1985).
W2A-024 022 As I said at the beginning of this paper, where there is no variability there is no capacity f
W2A-024 023 It is therefore relevant that quite a large range of variation has been observed, perhaps two-fold, in the rates of
W2A-024 023 of variation has been observed, perhaps two-fold, in the rates of protein turnover of different individuals (Waterlow, 1988).
W2A-024 023 n observed, perhaps two-fold, in the rates of protein turnover of different individuals (Waterlow, 1988).
W2A-024 024 We do not know the advantages or handicaps of having a high or low rate of whole body protein turnover, nor
W2A-024 024 ow the advantages or handicaps of having a high or low rate of whole body protein turnover, nor do we know the effects on
W2A-024 024 hole body protein turnover, nor do we know the effects on it of a habitually low energy intake.
W2A-024 033 We know the energy cost of pumping one mole, but it is unknown how much energy is us
W2A-024 044 There is evidence in at least one case of the activity being greatly reduced when an animal is starved
W2A-024 046 If so, reducing the waste of energy as an adaptation to starvation would be at the cost of
W2A-024 046 of energy as an adaptation to starvation would be at the cost of losing some of the capacity for fine control.
W2A-024 046 adaptation to starvation would be at the cost of losing some of the capacity for fine control.
W2A-024 048 The amount of ATP produced per unit of food energy used or of oxygen co
W2A-024 048 The amount of ATP produced per unit of food energy used or of oxygen consumed varies a little with
W2A-024 048 e amount of ATP produced per unit of food energy used or of oxygen consumed varies a little with the nature of the foodst
W2A-024 048 y used or of oxygen consumed varies a little with the nature of the foodstuff oxidized and the route of oxidation.
W2A-024 048 a little with the nature of the foodstuff oxidized and the route of oxidation.
W2A-024 057 The extreme example of uncoupling is shown by brown adipose tissue, which produces
W2A-024 057 n adipose tissue, which produces heat without any formation of ATP.
W2A-024 061 He uses the analogy of a car to cover a distance at the least cost of fuel you do no
W2A-024 061 es the analogy of a car to cover a distance at the least cost of fuel you do not drive as fast as you can.
W2A-024 066 not know the numbers exactly, they are fixed by the nature of the chemical reactions.
W2A-024 067 To return to our analogy: there is probably no way of getting better value for the money spent.
W2A-023 069 cesses, such as pro-| gradation of tidal flats, lateral migration of tidal islands, of carbonate sand bodies, and vertical accretion
W2A-023 069 pro-| gradation of tidal flats, lateral migration of tidal islands, of carbonate sand bodies, and vertical accretion of shallow subti
W2A-023 069 tidal islands, of carbonate sand bodies, and vertical accretion of shallow subtidal sediments into shallower depths, carbonate pl
W2A-023 072 In view of the deposition close to sea-level, a relative drop in sea-level
W2A-023 072 e precipitation if the climate is arid and there is still a source of seawater, soil for-| mation, like calcretization if a semi-arid cl
W2A-023 082 ges are observed in addition to a general shorewards thinning of each cycle (Fig. 2.26).
W2A-023 088 ad discontinuity sur-| faces', interpreted as the product of intertidal, rather than wholly subaerial, dissolution and erosion
W2A-024 004 on in muscular work, as discussed above, would be one way of reducing total ATP flux.
W2A-024 011 BMRs per kg that were about 10 per cent lower than those of well-nourished controls in the same environment and 17 per c
W2A-024 011 t lower than the rates expected from the prediction equations of Schofield et al. (1985).
W2A-024 022 As I said at the beginning of this paper, where there is no variability there is no capacity f
W2A-024 023 It is therefore relevant that quite a large range of variation has been observed, perhaps two-fold, in the rates of
W2A-024 023 of variation has been observed, perhaps two-fold, in the rates of protein turnover of different individuals (Waterlow, 1988).
W2A-024 023 n observed, perhaps two-fold, in the rates of protein turnover of different individuals (Waterlow, 1988).
W2A-024 024 We do not know the advantages or handicaps of having a high or low rate of whole body protein turnover, nor
W2A-024 024 ow the advantages or handicaps of having a high or low rate of whole body protein turnover, nor do we know the effects on
W2A-024 024 hole body protein turnover, nor do we know the effects on it of a habitually low energy intake.
W2A-024 033 We know the energy cost of pumping one mole, but it is unknown how much energy is us
W2A-024 044 There is evidence in at least one case of the activity being greatly reduced when an animal is starved
W2A-024 046 If so, reducing the waste of energy as an adaptation to starvation would be at the cost of
W2A-024 046 of energy as an adaptation to starvation would be at the cost of losing some of the capacity for fine control.
W2A-024 046 adaptation to starvation would be at the cost of losing some of the capacity for fine control.
W2A-024 048 The amount of ATP produced per unit of food energy used or of oxygen co
W2A-024 048 The amount of ATP produced per unit of food energy used or of oxygen consumed varies a little with
W2A-024 048 e amount of ATP produced per unit of food energy used or of oxygen consumed varies a little with the nature of the foodst
W2A-024 048 y used or of oxygen consumed varies a little with the nature of the foodstuff oxidized and the route of oxidation.
W2A-024 048 a little with the nature of the foodstuff oxidized and the route of oxidation.
W2A-024 057 The extreme example of uncoupling is shown by brown adipose tissue, which produces
W2A-024 057 n adipose tissue, which produces heat without any formation of ATP.
W2A-024 061 He uses the analogy of a car to cover a distance at the least cost of fuel you do no
W2A-024 061 es the analogy of a car to cover a distance at the least cost of fuel you do not drive as fast as you can.
W2A-024 066 not know the numbers exactly, they are fixed by the nature of the chemical reactions.
W2A-024 067 To return to our analogy: there is probably no way of getting better value for the money spent.

Appendix VI


W2A-025 068 ation, in which responsiveness or sensitivity to a certain level of stimulus becomes less marked with continued exposure to tha
W2A-025 068 s becomes less marked with continued exposure to that level of stimulus (
W2A-025 074 There are two quite different methods of achieving this, known respectively as 'temporal sensing' and
W2A-025 075 In temporal sensing the organism compares the intensity of the stimulus at one point in time with its intensity at another
W2A-025 078 This form of response is discussed further in Section 6.1.
W2A-026 028 Once this has been established, assessment of the postinjury periph-| eral innervation density may be made
W2A-026 028 periph-| eral innervation density may be made by a multitude of tests.
W2A-026 029 perform with precision and require the complete co-operation of an intelligent patient.
W2A-026 043 The axon is surrounded by a single layer of Schwann cells.
W2A-026 044 The cytoplasm of the Schwann cell wall (a trilami-| nar unit membrane) compri
W2A-026 048 This form of conduction is called saltatory conduction and the bare areas a
W2A-026 048 tory conduction and the bare areas are known as the 'nodes of Ranvier'.
W2A-026 051 This is a connective tissue tubule, the walls of which are formed by networks of delicate collagen fibrils and
W2A-026 051 ve tissue tubule, the walls of which are formed by networks of delicate collagen fibrils and homogeneous ground substance.
W2A-026 057 nerve *fascicle* and each fascicle contains a variable number of fibres and thus they are of differing diameters.
W2A-026 057 scicle contains a variable number of fibres and thus they are of differing diameters.
W2A-026 059 pheral nerve can be classified into three groups on the basis of diameter and conduction rate.
W2A-026 077 Lesions such as these should be capable of a good recovery in the long term.
W2A-026 084 nesis may be caused by laceration, traction injury, injec-| tion of noxious drugs or ischaemia.
W2A-026 088 The intracellular RNA frag-| ments within 24 hours of injury (chromatolysis) (Fig. 8.4).
W2A-026 102 Schwann cell proliferation produces cords of cells filling the collapsing endo-| neurial tubules.
W2A-026 115 Within 3 days of injury changes may be noted in Meissner corpuscles, and wit
W2A-026 115 es may be noted in Meissner corpuscles, and within 2 weeks of injury nerve terminals can no longer be demon-| strated withi
W2A-026 118 There are four phases of regeneration:
W2A-026 123 During the phase of delay, there are no detectable changes in the patient's clinica
W2A-026 125 Axon penetration of the nerve interface (the contact surface between the repaire
W2A-026 127 The sprouting commences just proximal to the area of retrograde myelin degeneration.
W2A-026 130 The pres-| ence of scarring at the nerve interface or the of a large gap will dimi
W2A-026 130 The pres-| ence of scarring at the nerve interface or the of a large gap will diminish the likelihood of axons entering the
W2A-026 130 ve interface or the of a large gap will diminish the likelihood of axons entering the distal endoneurial tubules.
W2A-026 133 This may explain why there appears to be a recovery of pain and temperature sensation prior to the re-establishment
W2A-026 133 of pain and temperature sensation prior to the re-establishment of moving light touch.
W2A-027 005 This type of study allows more careful control of the external medium tha
W2A-027 005 This type of study allows more careful control of the external medium than can be obtained *in vivo*.
W2A-027 006 The release of all neuropeptides has an absolute requirement for calcium and
W2A-027 010 The great advantage of these methods is that secretion can be studied *in situ*, althou
W2A-027 010 s that secretion can be studied *in situ*, although the quantities of peptide released are frequently very small.
W2A-027 014 Some of the most intensively studied peptides in this regard are the op
W2A-027 024 mbered that they can also change affinity for different types of opioid receptors.
W2A-027 027 inding to cell-surface receptors, and thereafter activating one of a relatively small group of trans-| duction systems.
W2A-027 027 tors, and thereafter activating one of a relatively small group of trans-| duction systems.
W2A-027 057 erck Sharp and Dohme Laboratories discovered a metabolite of the fungus *Aspergillus* that has weak CCK antagon-| ist pro
W2A-027 058 asperlicin and the benzodiazepines, and on this basis a range of benzodiazepine analogues were screened for CCK antagonist
W2A-027 064 An impressive variety of behavioural effects have been described in mammals in respo
W2A-027 064 ally (into the cerebral ventricles or directly into discrete areas of brain).
W2A-027 069 In the verte-| brates some of the best examples of peptidergic neuroeffector transmission a
W2A-027 069 In the verte-| brates some of the best examples of peptidergic neuroeffector transmission are found not in the C
W2A-027 069 re it is possible to study in detail the connections and actions of peptidergic neurones.
W2A-027 080 Axon collaterals of primary afferents that contain substance P and CGRP are fo
W2A-027 082 Stimulation of primary affe-| rents results not just in the conduction of actio
W2A-027 082 ation of primary affe-| rents results not just in the conduction of action potentials to-| wards the CNS, but also in the release
W2A-027 082 action potentials to-| wards the CNS, but also in the release of substance P and CGRP at peripheral terminals.
W2A-027 094 Atropine blocks the flow of saliva indicating cholinergic-muscarinic transmission, but the in
W2A-027 096 By radioimmu-| noassay of the venous effluent during electrical stimulation, two groups
W2A-027 096 of the venous effluent during electrical stimulation, two groups of workers, one in Cambridge, the other in Stockholm, have bee
W2A-027 096 idge, the other in Stockholm, have been able to show release of VIP.
W2A-027 098 resistant vasodilation can therefore be attributed to the effect of VIP.
W2A-028 017 A series of autoecious rusts grow on *Allium* spp. and are known almost
W2A-028 019 ace are reviewed by Gaumann (1959), summarizing the work of Schneider (1912), Grove (1913), von Tavel (1932) and Goto (
W2A-028 051 en slides, measurements were taken from 10 spores on each of two slides from each of 5 pustules.
W2A-028 051 were taken from 10 spores on each of two slides from each of 5 pustules.
W2A-028 063 r pustules, up to 3 mm wide, and often with concentric rings of secondary pustules.
W2A-028 071 ualita-| tive morphological differences between urediniospores of the different isolates when observed under the light microsco
W2A-028 076 The aniline blue squash technique enhanced visibility of the germ pores (Jennings *et al.*, 1989) and indicated that ther
W2A-028 076 *et al.*, 1989) and indicated that there was a greater number of smaller germ pores on the BABNT isolate compared with th
W2A-028 078 Germ pores were not visible on unimbibed spores of any isolate.