Language Use and Code-switching among Educated English-Nigerian Pidgin Bilinguals in Nigeria

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Chapter 1

Introduction

As a structured system, one central characteristics of language is its ability to vary. It is a common saying that "variability is inherent in human language". Apparently, there are differences in the way language is used, which allows for differentiation or identification of people, groups or communities. Language variation reveals ways and manner in which language varies, and the elements, both internal and external that motivate variation. This variation is apparent at different linguistic levels, e.g., phonology, morphology, syntax etc. and has been approached from both the linguistic perspective, where motivation for variation emanates within the linguistic context of discourse, and the sociolinguistic perspective, where externally motivated social factors are responsible for variation. As language is a social construct, the concept of language variation has been prominently investigated from a sociolinguistic perspective by connecting linguistic variation to the social characteristics of the speakers (e.g., age, education status, gender etc.), the circumstances of language use (formal or informal settings), the structuring of language in a community (monolingualism or multilingualism) etc., thereby echoing some linguists' premise that linguistic structures are constructed to adapt to the sociocultural environment of language use (Eckert 2000, Ladd et al. 2015).

One of the sociolinguistic situations that give rise to language variation is language contact. Language contact involves the interaction of two or more languages, either between people speaking different languages, or within an individual, whose linguistic repertoire consists of more than one language or language variety. Studies have shown that as languages stay in prolonged contact and interaction, mutual influence becomes highly inevitable (Thomason 2001, Sankoff 2001, Epps et al. 2013 etc.). Contacts between languages can result in a wide variety of linguistic behaviors, like mixing of different languages during interactions, or borrowing of words from another language to fill a linguistic gap. Over time, these borrowed words sometimes become part of the lexicon of the language that borrowed them. Some contact cases result in the formation of new languages, e.g., pidgins and creoles. These linguistic behaviours result in different sociolinguistic phenomena like diglossia, convergence, code-switching etc. in a community or within an individual. One or more of these sociolinguistic phenomena can be found to exist in a community, depending on the existing language situation.

The language situation in Nigeria is a complex one that could allow the existence of different sociolinguistic phenomena. Nigeria is a multilingual nation, with over 400 languages in existence (Simons & Fennig 2018). Apart from the numerous indigenous local languages, three other languages (English, Nigerian Pidgin and Arabic), which are not local to Nigeria exist alongside the local ones. These three languages perform different functions, and are accorded different status in Nigeria. English is accorded a prestigious status as it is formally recognized as the official language in Nigeria. Nigerian Pidgin is a contact language that exists in Nigeria as a result of contact between English or some other European languages and the indigenous Nigerian languages. Nigerian Pidgin, unlike English is not officially recognized in Nigeria, but it performs the function of a lingua franca. Arabic is also a contact language, but the contact is only between the northerners in Nigeria and the Arabs, mostly through trade transactions. Arabic is only spoken in the northern part of Nigeria, while English and Nigerian Pidgin are spoken in every part of Nigeria. English and Nigerian Pidgin perform a common function as lingual franca by helping to bridge the linguistic gap between people whose languages are unintelligible. Because of this common function, both languages are used in every region in Nigeria, but in different capacities.

Although English and Nigerian Pidgin share a common function, their status and the degree at which each of them performs the function differ. Whereas English represents a standard language in Nigeria, Nigerian Pidgin is a non-standard language variety. Even with their different status as standard and non-standard languages, both languages are the only two languages that can breach a linguistic gap in every part of Nigeria. They have co-existed for a long time in their different capacities as lingual franca in Nigeria, but the nature of their co-existence has remained uncharted. The areas that have mostly drawn the attention of linguists as regards both languages are in their status and speakers' attitudes towards them (e.g., Akande and Salami 2010, Balogun 2013, Osoba 2014, Amakiri and Igani 2015, Solomon 2015). Little or no empirical work has been done, however, on their mutual influence. The only empirical study in literature on their mutual influence is Deuber (2006), who approached their relationship from the perspective of a dialect continuum. Apart from Deuber's work, no thorough empirical research exists on the mutual influence of English and Nigerian Pidgin in Nigeria. The reality, though, is that both languages are still in close contact in Nigeria. They have co-existed for a long time in Nigeria to the extent that they have expanded into performing functions in areas that are formerly reserved for the local languages. Their expansion in such areas has also contributed in the increasing number of speakers of these languages over the years.

Given the prolonged relationship and the function that English and Nigerian Pidgin perform in Nigeria, mutual influence between them is inevitable. The very kind of influence that could exist between these languages, especially in a multilingual language situation as Nigeria has still not been established. Among the different kinds of bilingual language behavior that arise as a result of long-term co-existence of two languages, the most likely kind to exist between these languages is such that will enable the functioning of both languages in discourse, and the main aim of this study is to investigate how both languages function in discourse in Nigeria. The functioning of more than one language in discourse is embedded in such sociolinguistic situations as diglossia, style-shifting, post-creole continua and code-switching. These sociolinguistic situations describe the use of more than one language variety in a community or within the speech of individuals. Apart from Deuber's study (2006) along the line of dialect continuum, these sociolinguistic phenomena have not been investigated in relation to the co-existence of English and Nigerian Pidgin in Nigeria.

1.1 Research Objectives

This study empirically investigates the relationship between English and Nigerian Pidgin in actual language use in Nigeria. The use of both languages is investigated within a social group, the educated speakers in Nigeria, who have dual knowledge of these languages in their linguistic repertoire. The main focus is to investigate variation that arises as a result of mutual influence from both languages, and the sociolinguistic phenomenon that best describes the variation. This study looks at the amount of variation, the pattern of variation, and the factors that motivate variation between both languages. Copula constructions serve as a test bed for the investigation of variation in this study. Deuber (2006) also investigated copula use between English and Nigerian Pidgin, which serves as bases for evaluating the findings of the present study. Both quantitative and qualitative analyses are employed to investigate the amount of variation and variation patterns. The variation patterns, in turn, reveal the sociolinguistic phenomenon prevalent in Nigeria as a result of the co-existence of both languages.

Apart from looking at the amount of variation and variation patterns, language preference is also one of the main areas of investigation in this study. As Dewaele (2010) suggests that multilingual society show language preference when expressing emotion and sentiment, this study also investigates whether speakers show language preference in informal interactions. Given the different status of both languages as lingua franca in Nigeria, this study

investigates whether speakers prefer Nigerian Pidgin in informal communication, as this language is mostly used in informal settings in Nigeria, or if their preference is English, since English is a prestigious language and research has shown that bilingual speakers prefer languages with high social status, irrespective of context (Greene, Peña, and Bedore 2012, Ribot and Hoff 2014, Huang and Zhang 2018 etc.).

This study makes use of two different corpus data . One is taken from the spoken section of the International Corpus of English (ICE), Nigeria. ICE-Nigeria is one of the world-wide varieties of English compiled for the analysis of linguistic structures. It represents both written and spoken genre by educated speakers, but this study makes use of only the spoken conversations. The second data is a naturally occurring informal conversation corpus from educated bilingual speakers in Nigeria, collected and compiled by the author in 2019. The corpus features both English and Nigerian Pidgin conversations and is named Corpus of English-Nigerian Pidgin Code-switching (CENCOS). It was collected from different cities and locations where educated speakers of English and Nigerian Pidgin are able to communicate in casual conversations. The two corpora are used differently in this work, but they are both geared towards addressing the following main research questions:

1. What is the nature of the variation in the use of English and Nigerian Pidgin by the educated speakers in Nigeria?
2. What sociolinguistic phenomenon best describes the pattern of variation between both languages?
3. Is there asymmetry in the pattern of influence between both languages?
4. What social factors motivate the pattern of variation between both languages?
5. What structural factors constraints code-switching?

1.2 Structure of the Work

The following section gives the structure of the work. The general introduction is contained in chapter one. The second chapter presents the language situation in Nigeria, exposing the nature of the existence of English and Nigerian Pidgin amidst other languages. It gives the status of both languages and the scope of their functions in Nigeria. Chapter 3 is a review of related literature and the theoretical context of the work. In this chapter, dimension of language contact as it relates to the language situation in Nigeria is presented. Forms of sociolinguistic variation are also presented here, especially those that have the potential to exist in Nigeria as a result of the language situation in Nigeria. Chapter 4 gives the description of the data and general

research methodology. Since the two sets of data are used differently, their annotations are also done differently based on the different research questions for the different chapters. The data annotation and specific methodology for the different chapters are described in the respective chapters accordingly.

Chapter 5 investigates copula constructions along a dialect continuum. This chapter provides a quantitative and qualitative analysis of copula constructions in the use of both languages. Using implicational scaling, this chapter checks whether the variation leads to an English-to-Nigerian Pidgin continuum in Nigeria. Some other statistical analysis like network and cluster analysis are carried out to investigate the pattern of variation. Chapter 6 presents a detailed description of the CENCOS data, the annotation of the data and the methods applied in analyzing the data. This CENCOS data is used in this chapter to investigate sociolinguistic code-switching between English and Nigerian Pidgin. A quantitative analysis of language preference, switching location and direction, and the social factors that correlate with code-switching pattern are presented in this chapter. Chapter 7 gives the structural analysis of code-switching. It employs the Matrix Language Framework and the Functional Head Constraint models to investigate the structural constraints of code-switching between both languages. Chapter 8 gives the summary and conclusion of this work.

Chapter 2

Language Situation in Nigeria

Nigeria is a multilingual African nation, with diverse languages existing at the same time. Simons et al. (2018) estimate that over 500 languages are spoken in Nigeria. These languages have different functions and status in Nigeria. Apart from three languages, English, Nigerian Pidgin and Arabic, which are not native to any ethnic group in Nigeria, the others are locally used in different regions as mother tongues to different ethnic groups. Among these native languages, only three (Igbo, Hausa and Yoruba), which are also mutually unintelligibility, are officially recognized as the major languages based mostly on their numerical strength (Liman et al 2017). The other three that are not native to any ethnic group serve as lingua franca, bridging linguistic gap between speakers whose languages are mutually unintelligible. Arabic, unlike English and Nigerian Pidgin lacks broad coverage in Nigeria, as it is limited in function and speaker awareness, by being spoken only in some parts of the northern region. English and Nigerian Pidgin are widely used in almost every part of Nigeria. Because of their function as lingua franca, English and Nigerian Pidgin have much wider speaker awareness than any other language in Nigeria. In that case, the rivalry in language use in Nigeria is mostly between English and Nigerian Pidgin. These two have languages have co-existed for a long time in their roles as lingua franca, but with different status and degree of function, which makes their investigation a fascinating one.

2.1 English in Nigeria

English was officially introduced in Nigeria by the British colonial administrators. As Nigeria is multi-cultural with different languages representing different cultural groups, English belonged to no ethnic group. It was mainly used in government administration and in educating parts of Nigerian population by the missionaries (see, for example, Adetugbo 1979, Bamgbose 1991etc.). At the end of the colonial era, it would have been a dilemma to pick one of the native languages to serve as a national or official language, as doing so might have given rise to national instability and animosity towards the chosen language and people. To avoid such national prejudice, English was retained as the official language because of its lack of bias in the face of “extreme linguistic diversity” in Nigeria (Elugbe 1994). This has helped to foster peace and unity in diversity.

English is acquired through formal education in Nigeria. Most proficient English speakers are educated, at least up to the secondary school level. Other proficient English speakers or near-proficient English speakers are children who learnt English as their first language. These are mostly the children of elites, who attended high quality nursery and primary schools or those who are fortunate to have lived in highly cosmopolitan urban cities like Lagos, Port-Harcourt, Abuja etc. Kperogi (2015: 27) refers to such English speakers in Nigeria as speakers of "English as a native second language". Apart from the proficient speakers, a good number of Nigerians speak English, but to varying degrees of proficiency. Given that most Nigerians speak English, it is really difficult to estimate the number of English speakers in Nigeria as the number has varied over the years (see Jowitt 2019, for a summary). However, research has shown that the number of English speakers has been on the rise over the years and some factors as language prestige, economic/political value, among others have been the contributing factors for this increase (Emenyonu 1992, Ayenbi 2014, Uwen 2020 etc.).

Presently, English remains the official and the most prestigious language in Nigeria. Literacy is measured based on one's proficiency in speaking and writing English, even when one is highly proficient in the other local languages. English is used as the only language of instruction in education in most of the regions from pre-nursery school level to the tertiary level. This even contradicts the National Policy on Education in Nigeria (2004: 11–12, 16), which specifies that the mother tongue, or the language of the immediate community should be the principal medium of instruction in pre-primary education. This mother tongue, or language of the immediate environment should also be used in primary school up to the first three years, and from the fourth year, English shall be gradually introduced as the language of instruction. This language policy is violated by the use of English as the language of instruction from the pre-primary level of education because of the value attached to English in Nigeria. English enjoys a socio-economic value in Nigeria, and the knowledge of English is seen as a gateway to success. Proficient English speakers have the tendency of being in a better socio-economic position compared with people who cannot express themselves in English. Parents therefore make sure that their wards learn the English language at a tender age so as to be able to belong to the presumed socially successful class.

Beside the education sector, English is used in every other government sector (health, science and technology, communications and media, etc.). English is also seen as an international language, without which the country will not be able to function with the outside world. As English is a global language, it has continued to foster communication in the areas of politics, scholarly publications, trade etc. between Nigeria and the international community.

As Osoba and Alebiosu (2016:127) put it, “it is a global language; without it, Nigeria is doomed”.

2.2 Nigerian Pidgin

Nigerian Pidgin is an English-based contact language, with a long history going back to the 17th century. It originated through language contact between Nigerian languages and European languages mostly through trade transactions. Like most Pidgins, Nigerian Pidgin has a superstrate, English, and many substrate languages, i.e., the local Nigerian languages and some European languages. Most of the vocabulary of Nigerian Pidgin is from English, with additional contributions to the word stock from the local languages and also from European languages like Portuguese. It is not officially recognized by the government and has always been primarily a spoken language used mostly in informal language situations and settings (like markets, among friends, office colleagues, etc.).

Unlike English, Nigerian Pidgin is not acquired through formal education and has no standardized orthography. Orthography has been described as referring to the conventional writing system that is used by members of a given society to write a particular language (Wales 1989, Akmajian et al 2001, Chalker et al 1994 etc.). Nigerian Pidgin has no such acceptable writing system, as there are inconsistencies in the writing, depending on the writer’s social and linguistic backgrounds (Elugbe et al. 1991, Egbokhare 2003, Ojarikre, 2013 etc.). Nigerian Pidgin was formerly accorded a low prestige in Nigeria, and relegated to speakers who could not acquire formal education. Its status, however, has changed over the years.

The reality of the status of Nigerian Pidgin presently in Nigeria is that it has graduated from its negative connotation of a bastardized, uncouth, and illiterate language to a language with almost the highest population of speakers and the most used interethnic lingua franca. The rising status of Nigerian Pidgin has also been identified outside its use in Nigeria as the “largest European-lexifier contact language on the globe” (Faraclas 2013: 176, Yakpo 2020). Its population of speakers has been estimated to be more than half of the Nigerian population (Jibril 1995, Faraclas 2008 etc.). Jowitt (2019: 11), however, suggests that the idea that half of the Nigerian population is fluent in Nigerian Pidgin, as asserted by Faraclas and others should be treated with caution. This is because Nigerian Pidgin is not used in the north at the same level it is used in other parts of the country. This is because Hausa is a major lingua franca in the north, and serves the same function that Nigerian Pidgin serves in the south. The reality is that the people in the North might not be fluent speakers of Nigerian Pidgin, but a good number of

Hausas speak Nigerian Pidgin. There have been different avenues like trading, university education, National Youth Service, etc. through which Nigerian Pidgin has been introduced in different parts of the north. The main language in Nigerian military barracks is Nigerian Pidgin and the northerners are well represented in the military. It is not an overstatement to say that almost every English speaker in Nigeria speaks or understands Nigerian Pidgin to some degree.

Nigerian Pidgin has continued to evolve over the years. It has creolized in certain parts of Nigeria, especially in the Niger Delta region, where it is now used as a first language (Igboanusi 2008). The most evolving aspect of Nigerian Pidgin is its use in tertiary institutions in Nigeria. Nigerian Pidgin is used extensively in tertiary institutions in Nigeria, and could be said to be the students' language of identity. In their investigation of students' language preference, Onjewu & Okpe (2015) observe that students' casual talks within university campuses in Nigeria are predominantly done in Nigerian Pidgin. English is used in the classroom, while Nigerian Pidgin and English compete in other interactional settings. Students are not the only literate users of Nigerian Pidgin. Akande & Salami (2010: 70) also noted that it is now increasingly used by and among highly educated people, e.g. professors, lawyers etc.

Nigerian Pidgin is seen as the language with a wide scope. Since it is used by both the literate and the non-literate, it has the advantage of reaching out to more people than English, even to those at the grassroot. In the media, it is used in billboards, advertisements, comics, TV presentations, radio broadcast etc. A radio station in Lagos, wazobia, broadcasts in Nigerian Pidgin. The BBC also launched BBC News Pidgin in 2017, with its base in Lagos. In the entertainment industry, it is used in movies, songs, stand-up comedies. It is used during elections to reach the masses: the rich, poor, educated and uneducated. It is also widely used in the military barracks, as the barracks is a conglomeration of individuals from different regions of Nigeria. Due to this wider coverage, some linguists advocate that Nigerian Pidgin be used as a national language in Nigeria (e.g. Agheyisi 1984, Elugbe & Omamor 1991, Moore 2010 etc.). Some Nigerian writers like Ola Rotimi and Eriatu Oribhabor use Nigerian Pidgin in literary composition. There is also a strong academic and research community awareness on Nigerian Pidgin. Scholarly conferences are being organized on this subject matter in Nigeria, e.g., the *Naija Symposium* and the *Conference of Nigerian Pidgin* held in 2019 in Nigeria. It is obvious that Nigerian Pidgin is competing with English in Nigeria, even in formal domains. This shows the extent Nigerian Pidgin has gradually risen in status over time in Nigeria, even to the level that it is sometimes mistaken to be Nigerian English.

2.3 Nigerian English

English in contact with the other numerous Nigerian languages has given rise to what is known today as Nigerian English. There are a lot of controversies as to the existence and acceptability of Nigerian English. In Jowitt's (2013) words, there are "accepters" and "rejecters" of Nigerian English. Jowitt points out that the issue between the contending groups relates to the prescriptive and descriptive approaches to language. The rejecters are the prescriptivists, who want to adhere to the correct usage of the Standard English, while the accepters are the descriptivists, who are interested in the description of "Nigerianism". At the moment, there is no acceptable descriptive standard Nigerian English available, although scholars agree that there is a "recognizable and highly distinctive variety of English called Nigerian English (Jibril 1986, Jowitt 1991, Gut 2008).

Nigerian English is any nativized variety of English spoken in Nigeria. Its uniqueness lies mostly with its phonology, although every other aspect of it (lexical, syntactic or semantic) shows significant differences when compared to its reference variety, the standard British English. The diverse indigenous languages have been studied to characteristically influence what is known as Nigerian English (see, e.g., Awonusi 2004, Josiah et al 2011, olajide et al 2013 etc.). Nigerian English is thus regarded as English that has been "nativized" and "domesticated" to represent the Nigerian identity (Gut 2008; Jowitt 2019 etc.). In his dynamic model, Schneider (2003) acknowledges the nativization stage as the most vibrant of all the phases in his evolution theory, at which constructions from the indigenous languages are grammatically and structurally assimilated into English by the speakers, leading to the restructuring of English. English in Nigeria has passed through this restructuring phase, resulting not only in the variety known today as Nigerian English, but has also given rise to other social varieties of Nigerian English, for example, the educated Nigerian English, which is the focus of this research. In the subsequent chapters, this work investigates this educated variety of English in Nigeria. Before carrying out this investigation, literature review on some sociolinguistic concepts relating to the co-existence of more than one language in a community is presented in the next chapter.

Chapter 3

Dimension of Language Contact

This chapter features some different notions that relate to the use of more than one language in the society, which in every sense, relates to language contact. Although Nigeria is a multilingual nation, and many people use more than one language, the focus of this work is on only the two languages that function as lingua franca in Nigeria. The focused group (the educated speakers) has a high level of competence in both languages. I therefore regard this group as fluent bilinguals in the two languages. Bilingualism and other notions related to language contact are discussed in this chapter.

3.1 Billingualism

Bilingualism, a term also used to refer to multilingualism (see, e.g., Weinreich 1953, Romaine 1995 etc.) is the existence of more than one language system within an individual or in a society. Valdez & Figueora (1994) call it the ability of knowing two languages. A bilingual has the ability to speak or use two different languages. Bilingualism is a sociolinguistic phenomenon that results from language contact between people of different languages. It can also result from interest in learning a different language other than the mother tongue, or through literature and media, i.e., television, radio etc. Bilingualism is differentiated on two levels: Individual and societal bilingualism (Breitborde 1983, Hoffmann 1991, Baker 2001, Butler 2012.). Individual bilingualism focuses on a bilingual person and some characteristics of the person's bilingual behavior. The examples of individual bilingual behavior are style-shifting and code-switching, where the focus lies with the individuals. Societal bilingualism, on the other hand, involves the existence of more than one language in a community, social group, region or country, leading to such bilingual language situation as diglossia, dialect continuum etc. Such languages in bilingual situation may officially or unofficially be assigned different roles in the community.

The main focus of the study of bilingualism is on language choice, i.e., the conscious or unconscious selection or use of one language form rather than the other. The different languages that exist in a community or within a bilingual speaker do not have the same value or status. The use of one language rather than another is mostly based on discourse context and social factors. De Houwer (2018) points out that language choice is never neutral, but is always

embedded in a particular context and creates a social meaning within that context. Le Page & Tabouret-Keller (1985) see the choice of one language over another as an 'act of identity' for the speakers. This signals that bilingual speakers use language choices to construct relevant identity dimensions at different points in discourse. Works by for example, Gumperz (1982), Heller (1988), and Coupland (2007) present language as having a central role in the creation of social reality, and bilingual language choices demonstrate not just the social reality of an individual or a group, but the different social meanings and identities these speakers assume in the cause of interaction. The issue of language choice is subsumed in such bilingual behaviors as code-switching, transference, borrowing, etc and bilingual situations as diglossia, dialect continuum etc. The next section will look at some of these sociolinguistic situations e.g., code-switching, dialect continuum, style-shifting and diglossia that could exist in Nigeria as a result of contact between English and Nigerian pidgin in Nigeria.

3.2 Sociolinguistic Situations

The alternation of languages is encompassed in different sociolinguistic situations. These sociolinguistic situations are distinct in some ways, although they describe the use of more than one language in a community or within an individual. These language situations can also exist simultaneously in a community depending on the language situation in the community. Whereas some involve distinct languages, others involve same language varieties. The sociolinguistic situations that are relevant to this work, and which will be discussed here are style shifting, code-switching, dialect continuum and diglossia.

3.2.1 Style Shifting

Style-shifting is a language behavior that has the potential to exist in Nigeria, as different language varieties or dialects of a language exist together in Nigeria. Style shifting is the stylistic variation of alternating one speech style with another in the context of the same communicative event, towards the same or another addressee (e.g. Selting, 1985), usually in order to signify some social meaning. Style shifting gives rise to stylistic variation. Meyerhoff (2006: 28) defines stylistic variation as "variation in an individual's speech correlating with differences in addressee, social context, personal goals or externally imposed tasks". It involves individual speakers' variation, i.e., intra-speaker variation rather than across groups of speakers, i.e., inter-speaker variation (Schilling-Estes 2006).

The languages involve in style shifting are varieties or dialects of a language, instead of two totally unintelligible languages. The varieties could be regional varieties (associated with a particular geographical location) or social varieties (associated with particular social groups). Speakers shift their speech style, either from formal style (careful) to informal style (careless) or vice versa as a result of the social context of the speech (Trudgill 2000: 8). Style shifting usually refers to degrees of formality in specific speech situations, which also relates to the notion of register (i.e., the appropriate use of varieties of a language in a given context). Some linguists use 'style' and 'register' interchangeably (see Bell 2001, Biber & Finegan, 1994). Speakers shift their speech style to suit the register for a particular interaction, to accommodate a particular individual or social group, or to diverge from them (Bucholtz 1999, Cutler 1999). Schilling-Estes (2006) outlines three major approaches to understanding stylistic variation: Attention to speech, Audience design and Speaker design.

3.2.1.1 Attention to Speech

This factor was proposed by Labov (1966), who contrasted 'casual' with 'careful' speech in language use. Labov (1972a:208) proposes that 'Styles' can be ranged along a single dimension by measuring the amount of attention paid to speech. Variation is analyzed in this approach as being motivated by speakers' awareness to their language use. The degree of formality of the context is the main tenet of this model**.** The more attention speakers pay to speech, the more formal or standard their speech becomes. The less attention they pay to their speech, the more casual it becomes. Based on Labov's work, different speech contexts have been proposed to trigger either careful or careless speech. Such contexts as extended discussions, narratives of high emotional topics like childhood customs and dangerous situations etc. give less attention to speech. Less emotional topics and direct response to interviews, on the other hand, promote more careful attention to speech (Schilling-Estes 2006). Schilling-Estes also noted that speakers pay more attention when using standard language features than when using vernacular features.

Attention to speech has been criticized for a number of shortcomings. One is the practical difficulty in separating casual from careful speech in conversational interviews. Another short-coming has to do with the difficulty in quantifying attention to speech, as interactional contexts may differ as a result of factors other than attention to speech. There is also the criticism that the approach is too one dimensional in focusing only on the continuum of casual-careful or standard-nonstandard etc. The most interesting criticism is that attention to speech views speakers as passive respondents to external situation, rather than seeing them as

resourceful language stylists (Wolfram 1969, Bell 1984, Romaine 1980, Schilling-Estes 2006 etc).

3.2.1.2 Audience Design

Audience design is the second factor that accounts for variation in style shifting. It focuses on the role of the listeners in motivating variation. Bell (1984) introduced audience design based on the notion of 'speech accommodation' by Street and Giles (1982). Speakers shift styles primarily in response to their audience, by adjusting their speech to either converge or diverge from their audience. Audience design considers not only the main individuals directly addressed, but other audience around the interaction. In other words, audience design postulates speakers' degree of adjustment of their speech based on who is involved or listening to the interaction. By responding to the audience, variation relates style shifting to its situational factors. Bell's Audience Design is formulated according to his "style axiom", which postulates that "Variation on the style dimension within the speech of a single speaker derives from and echoes the variation which exists between speakers on the social dimension". In other words, style shifting is a response to social variation, which takes place between speakers. Audience design therefore attributes shifts in style to response to differences in audience.

3.2.1.3 Speaker Design

Speaker design is another approach to style shifting, and this approach views style shifting as influenced by the speakers' identities and their relationships with their interlocutors (e.g., Coupland 2007; Schilling-Estes, 2004). The cause of the shifting is not attributed to external influence, but on the internal motivations of speakers to shape and re-shape situations, identities, beliefs etc. in an immediate situation. With speaker design approach, stylistic variation is a "resource in the active creation, presentation, and recreation of speaker identity" (e.g. Arnold et al. 1993, Campbell-Kibleret al. 2000, Schilling-Estes 2006, etc.). Patterns of stylistic variation under this approach are not just reflections of one's positions in an existing social order. They are rather resources speakers use to shape and re-shape their identities and social structures with respect to one another in an immediate situation.

Some questions have been raised concerning the interpretation of internal motivations of style shifting in speaker design and their correlation with external factors. Schilling-Estes (2006) and other linguists, e.g. Eckert (2000) have pointed out that the micro-level studies of

stylistic variation are always complemented by macro-level ethnographic and sociolinguistic analyses as meaning cannot be interpreted without a thorough ethnographic understanding of individual and group meanings in the community under study. Secondly, individual stylistic choices are never made in a social vacuum but are always being measured against group styles at the same time that groups styles are being shaped by individual language use.

3.2.2 Diglossia

Diglossia is a bilingual language situation that has the capability of characterizing the language situation between English and Nigerian Pidgin in Nigeria. Pioneered by Ferguson (1959), diglossia refers to the co-existence of two distinct varieties of a language within a speech community. In some diglossic situations, one variety is the literary language and the other is used for speech. Variation pattern in a diglossic situation is characterized by complementary distribution of the languages. The languages are discretely separated as a result of discourse situations, with the more prestigious (high variety) forms used in formal situations, while the low variety is used informally. Some characteristic features like function, prestige, literary heritage, acquisition, standardization, stability and grammar have been used to separate languages as belonging to high or low variety in diglossic situations (Ferguson 1959, Khubchandani 1985).

3.2.3 Dialect Continuum

Another bilingual language situation capable of existing between English and Nigerian Pidgin in Nigeria is dialect continuum. A continuum is a continuous sequence of elements that vary by such little difference that the elements close to each other are not perceptibly different from each other, while those at the extremes are quite distinct. A dialect continuum is a range of language varieties that are spoken in a geographical region, such that the further apart the regions are, the more the languages differ and the closer the regions, the more mutually intelligible the languages will be. The mainstay of this language situation is that two languages in a continued contact will develop a range of intermediate varieties between them, and speakers are in command of a greater or lesser range of this continuum. DeCamp (1971) pioneered the concept of post-creole continuum, with his discovery of the implicational model that conceptualize the relation between speakers and linguistic variants as being rule-governed. He

proposed two conditions that make for the existence of a post-creole continuum. One is that the standard or official language corresponding to the creole must be the dominant language in the community. The second is that there must be social mobility or other acculturation activities that motivate creole speakers to modify their speech towards the standard language (DeCamp 1971: 351).

DeCamp implemented his post-creole continuum to capture the sociolinguistic reality of language use in the Caribbean, specifically in Jamaica. He sees the extreme linguistic variability in Jamaica as a post-creole continuum reflecting the social freedom and increasing access to education after liberation. The quest to acquire Standard English in post-emancipation period gave rise to a dialect continuum, as the assimilation of Standard English impacted differently on different speakers. DeCamp (1971:350) pointed out that "there is no sharp cleavage between creole and standard English in Jamaica, but a continuous spectrum of speech varieties, ranging from the bush talk or broken language…to the educated standard variety". His argument is that there is a single dimension of variation with the two languages in contact at the opposite poles (standard and creole/pidgin). The languages are no longer considered two discrete languages, but a range of grammars linking one end to the other. The Post-Creole continuum establishes that in a contact situation of social flexibility, where efforts are made to learn the standard language, the effects of learning are not uniform across the learners. The outcome is "varying degrees of effectiveness, drawing some of them more than others towards the standard". This creates a unidimensional variation pattern with the creole (basilect) and the standard (acrolect) varieties at the two extremes, linked by a number of intermediate (mesolects) varieties.

DeCamp implemented the implicational scaling to account for the variable behaviour of speakers. It is based on co-occurrence of features within individual speakers (p.356). Implicational analysis shows a binary relation between linguistic features and language varieties by testing the competence of the idealized speaker. According to Sebba (1997:214), implicational scaling shows "implicational hierarchy". This means that the use of a particular form by a speaker indicates that the speaker will also use some other related forms as well. It is like a schemata of conditional statement, if A1, then A2, if A2, then A3 etc. The speaker is likely to use forms that are closely related than the ones that are far different. For instance, a speaker that uses the invariant copula *be* will likely use the invariant 3rd person singular subject *im* in the sentence *Im be my friend* instead of *She be my friend*. Speakers are ranked in a table using "+ or –" sign according to the features they use. The "+" sign represents the presence of a standard form while the "-" sign represents the absence of a standard form. If the features are

arranged in such a way that the most standard speaker is placed on top accordingly, and the most used variant is placed at the extreme right accordingly, the pattern will show if a continuum is formed or not, by showing the implicational hierarchy. The tables below show unordered and ordered implicational patterning of DeCamp's seven speakers in the use of six linguistic variables of English and Creole forms from sebba (1997:214-216).

Table 3.1: Linguistic features of English and Creole by DeCamp´s speakers

	Standard variant	Creole variant
A	Child	pikni
B	Eat	nyam
C	Θik	tik
D	Đen	den
E	Granny	nana
F	didn't	no ben

Table 3.2: Unordered use of features by speakers

Speakers	**Linguistic features**					
1	+A	+B	+C	-D	+E	+F
2	-A	+B	-C	-D	+E	+F
3	-A	+B	-C	-D	-E	-F
4	-A	-B	-C	-D	-E	-F
5	+A	+B	+C	+D	+E	+F
6	+A	+B	-C	-D	+E	+F
7	-A	+B	-C	-D	+E	-F

Table 3.3: Ordered use of features by speakers

Speakers	**B**	**E**	**F**	**A**	**C**	**D**
5	+	+	+	+	+	+
1	+	+	+	+	+	-
6	+	+	+	+	-	-
2	+	+	+	-	-	-
7	+	+	-	-	-	-
3	+	-	-	-	-	-
4	-	-	-	-	-	-

The debate on dialect continuum dates as far back as 1960s and 70s, but the approach is still significant in the contemporary study of linguistic variation. A lot of research has been carried out recently along this line of dialect continumm. Forrester (2014), for example, applied this approach in the investigation of tense conversion techniques and some problems encountered as judges in Jamaican courtrooms move from one pole of the ladder (basilectal) to the other (acrolectal).

3.2.4 Code-switching

Code switching refers to a type of bilingual behaviour where speakers alternate between two languages or language varieties in the same conversation. The alternation can occur in a single speech utterance of an individual (within an utterance) or between speech utterances of individuals (between utterances). Auer (1998) refers to code-switching between utterances as `discourse related´ code-switching as it occurs in a sociolinguistic situation where speakers prefer to use one language at a time, instead of mixing them together in one single speech. Code-switching is a bilingual behavior that occurs as a result of language contact among language users, whose linguistic repertoires consist of forms from more than one language. Code-switching is regarded as the central and most dominant phenomenon in bilingual language behavior (Milroy & Muysken 1995, Redouane 2005). It occurs both within speakers (intra-speaker) and between speakers (inter-speaker), and involves entirely distinct languages. Code-switching and code-mixing have been used interchangeably to represent such bilingual behavior, depending on whether the switch is within a sentence or between sentences. Whereas some linguists refer to code-mixing as the alternate use of languages within a sentence, code-switching refers to those between sentences (Gumperz 1971, Gringras 1974, Kachru 1983 etc.). Some linguists however, do not differentiate between code-switching and code-mixing. (Hudson 1980, Fasold 1984, Wardhaugh 2010 etc). The investigation of code-switching has been mostly directed towards two approaches: structural and sociolinguistics approaches.

3.2.4.1 Structural Approach to Code-switching

The structural approach to code-switching investigates the linguistic constraints of code-switching. It analyses code-switching not as a random mixture of words from two or more languages, but a structured linguistic behavior. The structural approach of code-switching upholds that switches are grammatically structured and focuses on identifying the grammatical rules that affect the structuring of code-switching. The interest in the structural approach is at the sentence level, i.e., investigating internal constraints on switches within sentences. Several linguists have directed their investigation in this perspective, proffering theories and models on grammatical constraints. This is shown in the numerous grammatical approaches that have been proposed for the analysis of code-switching. Among these proposals are constraints specific to bilingual grammar. These are constraints from linguists who believe that monolingual and bilingual grammars are guided by different rules, e.g., the equivalence constraint and free

morpheme constraint (Poplack 1980, 1981), closed-class constraint (Joshi 1985), matrix language frame (Azuma 1991, 1993; Myers-Scotton 1993[1997]) etc. There are also linguists, who claim that code-switching is structurally constrained, but the structuring does not involve a constraint specific to code-switching. Their argument is rather that a universal grammatical system responsible for monolingual utterances can also account for bilingual code-switching utterances (Belazi, Rubin and Toribio 1994; Santorini and Mahootian 1995; MacSwan 1997, 2000 etc ; Chan, 2003, 2008 etc.).

The proponents of constraints specific to code-switching established the fact that bilingual grammar is different from monolingual grammar, and these constraints are only applicable to bilingual code-switching. Some of the most widely implemented and most influential grammatical models under this approach are proposed by Poplack 1980, Sankoff and Poplack 1981, Myer-Scotton 1993[1997], 2000, Muysken 1997 etc. Poplack (1980), for example proposes two syntactic models: the Equivalence Constraint and the Free Morpheme Constraint. The equivalence constraint proposes that code-switching occurs at points where juxtaposition of elements from the participating languages does not violate a syntactic rule of either language. The free morpheme constraint states that codes may be switched after any constituent in discourse provided that constituent is not a bound morpheme (Poplack 1980: 585-586). Myer-Scotton on the other hand proposes the matrix language framework, which assumes asymmetry in the functions of the participating languages, i.e., one of the languages functions as the matrix language that defines the surface structure positions for content and system morphemes in bilingual utterances. There are many other studies on code-switching specific constraints not mentioned here, which have also either empirically or theoretically accounted for different language pairs in code-switching.

Another group of structural linguists sees code-switching as structurally constrained, but opposes the code-switching specific constraints by claiming that code-switching and monolingual utterances are governed by the same principles that govern the universal grammar (Mahootian 1993, Belazi, Rubin and Toribio 1994, MacSwan 2009, Chan 2003, etc.). This standpoint has been referred to as “Null Theory” as it avoids proposing a third grammar for code-switching. The Null Theory opposes formulating a constraint specific to code-switching, but relies on general syntactic notions of heads and complements in explaining the structure of code-switching. The proponents of this approach have different syntactic models of universal grammar to account for both code-switching and monolingual structures.

Belazi, Rubin and Toribio (1994) for example, proposed the functional head constraint (FHC), which accounts for language structuring based on heads and their complements. They

propose that no code switching is allowed between a functional head and its complements because of the strong relationship that exists between them as a result of functional feature checking processes, e.g., f-selection. Because of this strong relationship, code switching is restricted between functional heads and their complements, while lexical heads and their complements allow code-switching (p.228). Santorini and Mahootian (1995) also formulated a model which claims that "the language of a head determines the phrase structure position of its complements in code-switching just as in monolingual contexts (p.9)." Under this model, switches are controlled by specific parametric features of lexical items from the participating languages. Chan's model (2003, 2008) proposes that "the language of a lexical head may or may not determine the order of its complement, but the language of a functional category always determines the position of its complement (p.778)". MacSwan (2009) assumes a minimalist perspective in proposing that "nothing constrains code-switching apart from the requirements of the mixed grammars (p.325)." Although these models approached code-switching differently, their tenets generally rely on heads and complement selection, which is a natural linguistic process in universal grammar. Although this distinction between structural theories that are peculiar to bilingual grammar and those that follow natural processes of language use exists, the function of these theories remain the same, which is to investigate the linguistic rules governing the use of code switching. Some linguists, however, believe that social factors are responsible for the engagemet in code-switching or that structural factors alone cannot account for the motivation of code-switching. This idea also resulted in the different sociolinguistic approaches to code-switching.

3.2.4.2 Sociolinguistic Approach to Code-switching

Gumperz & Cook-Gumperz (2008:532) define sociolinguistics as "the descriptive study of the effect of any and all aspects of society, including cultural norms, expectations, and context, on the way language is used, and society's effect on language". This perspective studies the effects of social factors on code-switching, i.e., whether specific context motivates switches and the meanings behind code switching patterns. The social factors are studied at two levels: macro and micro levels. Macro-social level is concerned with the sociolinguistics of the wider society. It covers shared social factors, for example, societal norms like power relations between the languages, domains of language use, social networks, language status, language policy and standardization etc. This level is regarded as the community level, and is independent of the speakers and context of the immediate conversations. With the influence of macro social

factors, speakers' code choices are determined by the linguistic norms operational in the society at large (see, e.g., Fishman, 1972; Wei, 1994; Gardner-Chloros, 1995 etc.). The micro-social level, on the other hand, is speaker-and context-dependent. It is operational at the personal level. The social circumstances surrounding the immediate interaction, for example, speakers' age, gender, status, formality of the discussion, settings etc. are at the micro level.

Several theories on both macro and micro sociolinguistic approach to code-switching abound, but only some theories at the micro level are exemplified here, as this work is restricted to the micro-level. Blom and Gumperz's (1972) theory of situational and metaphorical code-switching distinction is regarded as one of the influential models of micro sociolinguistic code switching. Situational code-switching is seen as a result of change in situational factors, i.e., topic, audience, setting etc. during conversation, and distinct varieties are used in certain settings or spoken with certain kinds of speakers (Gumperz 1982:60). Metaphorical code-switching results in making a marked choice, by using a language meant for a particular conversational domain in another domain. There is Auer's (1998) conversational theory, which is concerned with the "sequential implicativeness of language choice in conversation". Myers-Scotton (1993) also developed the Markedness model with the distinction on marked and unmarked code choices, which accounts for the social indexical motivation for code-switching. Many more models on the micro sociolinguistic perspective on code-switching exist, but the tenets of them all is in relating social factors to code-switching variation, as language is by nature a social activity.

This work, however, looks at both structural and social factors motivating code-switching between English and Nigerian Pidgin in Nigeria. Myer-Scotton (1993) proposes that the social forces affecting the performance of codeswitching may be distinguished from those factors controlling its basic structure. In other words, the two play distinctive roles: one motivates the engagement in code-switching while one controls the syntactic structuring of code-switching. Myers-Scotton also opines that social factors in terms of community/group specific values, micro-sociolinguistic factors etc affect the structural patterns of code-switching. Secondly, while the grammatical processes designate permissible forms of code-switching, the social processes regulate selection among the range of permissible forms. Two structural theories- the matrix language framework and the functional head constraint- are employed here to investigate the role of structural constraints in code-switching while community use of language and some micro-social factors and employed to investigate the role of social factors in code-switching.

Chapter 4

Research Methodology

The main research focus in this work is to investigate bilingual language use and patterns among educated English-Nigerian Pidgin speakers. To investigate this, both quantitative and qualitative research methods are employed. The quantitative analysis is employed to reveal patterns of language use. This enables the author make generalizations using a larger population, and also measures the statistical relationship of variables by looking at patterns of language use. Both univariate and multivariate statistical analysis like frequency distribution, implicational scaling, network analysis, cluster analysis, and correlation analysis are carried out using different statistical tools form Rstudio. The AntConc software is also used in viewing usage patterns. Qualitative analysis is carried out to enable a better understanding of the sociolinguistic variation pattern by investigating conversation transcripts in relation to some social factors like settings, age, region, setting etc.

4.1 Data: International Corpus of English, Nigeria (ICE-Nigeria)

This work makes use of two different data sets. One is from the conversation section of the International Corpus of English, Nigeria (ICE-Nigeria, https://sourceforge.net/projects/ice-nigeria/). The International Corpus of English is a collection of corpora of world-wide varieties of English that were compiled for the analysis of linguistic structures. The ICE varieties represent speech of educated speakers (Greenbaum 1996:6) and the corpora have been used in many studies, including studies related to Nigeria (see, e.g., Deuber 2009, 2010, Bolton et al 2002, Oenbring 2010, Gut and Fuchs 2013). Like the corpora of other varieties, ICE-Nigeria represents both the written text category (e.g. academic writing, business letters, administrative writings etc) and the spoken category (e.g. conversations, broadcast news, parliamentary debates etc). It comprises a total number of 1,010,382 words.

The conversation part of ICE Nigeria represents spontaneous speech of speakers from different geographical zones in Nigeria. For this work, all the conversations in the corpus, with a total of 67 text files (tagged Con 01 through Con 67) are used. The conversations feature 140 speakers, with each text file having two or more speakers. For some of the speakers, some demographic information, like gender, age, ethnic group and occupation are given. The nature of the conversations differs, depending on the interlocutors. There are group discussions among

workers, friends, family, and university classmates featuring three to six speakers. Some feature two speakers, e.g. between husband and wife, two friends, or an interviewer and the interviewee. Some conversations are structured like informal interviews, especially those featuring university lecturers and professors. The settings of the conversations are mostly in the university, offices, leisure time settings, eatery, home, shops etc. The topics of discussion are familiar ones that have to do with marriage, studies, food, work, fashion, vacation etc.

4.2 Data: Corpus of English and Nigerian Pidgin Code-switching (CENCOS)

The second data is Corpus of English and Nigerian Pidgin Code-switching (CENCOS-https://doi.org/10.5281/zenodo.7314016). It is a corpus of natural conversations collected and compiled by the author in various locations in Nigeria. The speakers in these conversations are mostly educated bilinguals, who speak English and Nigerian Pidgin. The data consists of only conversation data that represents spontaneous, spoken and informal use of the two languages by the target population (i.e. educated speakers). It was collected in seven cities from different geographical zones. Data was collected from different geographical zones to enable a compilation of data that is representative of the target population. The six geographical zones in Nigeria are divided according to states with similar ethnic groups and history, so collecting data from at least one state in each zone will give a good representation of the Nigerian population. Unfortunately, it was impossible to freely collect data from two zones in the northern region (North West and North East) because of the general insecurity there. In general, data was collected from seven cities highlighted in red dots in the map below from the other four geographical zones in Nigeria (see, e.g., figure 4.1).

Figure 4. 1: Map of Nigeria with states and their capitals (https://gisgeography.com/nigeria-map/). The cities from where the data was collected are indicated with the red dots in the map.

In order to increase the chances of collecting a representative data sample, I used the following criteria to select the locations: Metropolitan area, Nigerian Pidgin region and educated speakers.

Metropolitan areas in Nigeria are ethnically heterogeneous. Such areas are densely populated and have the tendency of representing people from various cultural backgrounds. Most of the cities used in the data collection are cities that are highly populated with people from different regions and ethnic groups in Nigeria. The second criterion has to do with region. Data was collected from areas where Nigerian Pidgin is dominant or well spoken. Nigerian Pidgin is more widely spoken in some regions than the others. It is predominant in the Niger Delta regions, where most of the population speaks it as their first language. Since the focus of this work is on the interaction of English and Nigerian Pidgin, I opted for those regions where Nigerian Pidgin is spoken on a daily basis. The last focus was on the educated speakers. Data was collected from such settings as the universities, offices, homes and any other possible settings where educated people like university students, lecturers, administrative workers etc. are likely to engage in informal interactions.

All the conversations are informal in nature, mostly between speakers that share personal relationship, although there are some that feature speakers of different social status, e.g. lecturers and students. The settings are also informal places, e.g., outside university classrooms, in canteens and homes, where speakers are able to relax and freely engage in

informal interactions. The topics of discussion are familiar topics about studies, leadership, politics, marriage, etc. These topics and the speakers are not predetermined. Different spontaneous situations determined the speakers and the topics discussed. The conversations were collected through recordings of speakers' interactions and later transcribed into text, amounting to a data size of 79 text files with 125,067 word tokens. The conversations feature over 230 speakers, with each conversation text featuring two or more speakers. The length of the conversations differs, depending on how much time speakers were willing to engage in the interaction. The data sample is shown in table 4.1.

The two data sets are used differently in this work. As this work is divided into 3 main studies, the ICE corpus is used for the first study. Because of the limitations of the ICE corpus in accounting for code-switching between English and Nigerian Pidgin, the self-generated corpus is used for the other two studies. The annotations and coding are done differently for each study to help answer the different research questions. The methods employed in analyzing the data also differ, depending on the research questions and the need for suitable approach to the questions. So the different annotations, coding and research methods for the three studies are explained in the chapters for each study.

Table 4.1: Data sample showing the geographical locations of the cities in Nigeria where the speech samples were collected. The number of speakers and word tokens were obtained from the conversations

Geographical location	**Cities**	**No of conversations**	**No of speakers**	**Word tokens**
South West	Lagos	21	50	13119
	Ibadan	9	29	11521
South South	Warri	10	32	16017
	Benin	7	24	20914
	Port Harcourt	4	16	12845
South East	Enugu	20	53	34903
North Central	Abuja	8	30	15748

4.3 Method of Data Collection (CENCOS)

Due to the nature of the data needed (spontaneous speech), naturally occurring spoken conversations were collected by recording participants as they speak. This was done in three kinds of speech situations: researcher as the interviewer, researcher as a participant observer and researcher as absent. With the researcher as interviewer, the author interviewed people without having planned the settings or questions. The participants were asked open ended questions based on situational awareness and their freedom of engagement in the conversations. Topics were maintained or changed according to participants' response. The discussions were flexible as speakers were free to change topics and use words freely. The interview was either a one-on-one discussion or with a group of speakers. One limitation of this method was that although speakers were free, they were still conscious of the fact that their discussions were being recorded. This prompted their use of mostly the English language, as English happens to be the official and the unmarked language for the situation, since the interviewer is not a close relation.

With the researcher as participant observer, the author recorded some conversations while taking part in the conversation, instead of being an interviewer. As a participant observer, the author was mostly undisguised, although there were cases when situations arose that made it impossible to inform the participants before the recordings. For example, when new speakers joined an ongoing discussion, it was difficult to inform them about the recordings, until the discussion was over. There were also cases where only one speaker was aware of the recordings. The speaker happens to be a member of the group and also the author's assistant. Whenever the participants were unaware of the recordings, they were later informed at the end of the conversations. Most participants gave their consent to use the recordings for whatever research purpose. For a few participants that didn't give their consent, the recordings were deleted immediately.

Another speech situation that helped in getting naturally occurring conversations was a situation where the researcher is absent. This was achieved by using a fellow group member. In this case, the researcher was not a participant observer or an interviewer. The recordings were done by the research assistants while talking with friends and colleagues. The participants were informed of the recordings, but they still expressed themselves freely by using whatever language that pleases them, as they were all people that share a form of relationship.

4.4 Device for Data Collection (CENCOS)

Recording naturally occurring data requires a type of device that is fast and easy to use. The researcher used Android mobile phones, which are easy to handle. With the smart phones, it was possible to collect spontaneous, everyday conversations. It was also possible to collect data from different settings and with larger participants, instead of doing it in a particular setting or laboratory with fewer participants. The recording duration for each conversation differ as a result of participants' willingness to engage in the discussion and the duration ranges from 3 to 20 minutes. The annotation, selection and coding of the CENCOS data is fully explained in the chapters where the CENCOS data is used.

Chapter 5.

Variation in Copula Use: Evidence from ICE-Nigeria[1]

This chapter initiates the investigation into the relationship between English and Nigerian Pidgin as used by the educated speakers in Nigeria. It is approached along the line of dialect continuum by Deuber (2006), which happens to be the only empirical study that has investigated the influence of both languages as used in Nigeria. This work draws two assumptions from Deuber's work, as to what propels Deuber's investigation of linguistic continuum between these languages in Nigeria. The first is what she calls a "sweeping generalization" (2006:245) by Todd (1974) that a Creole continuum can be found in every part of the world where English based Creole co-exists with English. Another issue is Bickerton's (1975a) assertion that a linguistic continuum has emerged in Nigeria as far back as 1960, after Nigerian's independence. Bickerton attributed this to social mobility, which he believes is the vehicle for the development of a continuum. According to Bickerton, social mobility favors the development of a continuum in a multilingual society as Nigeria, as people move from one part of the country to another, learning other languages, but being impacted in different degrees. Secondly, due to emancipation, there was free movement of people across the country and there were opportunities for the uneducated to learn English. Because learning did not impart equally on every learner, intermediate varieties came into being, and speakers can be located along a continuum from the least standard variant (with influence from other local languages) to the more standard variant. Deuber (2006) pointed out, however, that there is no detailed empirical evidence to support the generalizations by Todd and Bickerton. Agheyisi (1984) contradicted Bickerton by saying that the relationship that exists between English and Nigeria Pidgin in Nigeria cannot be described as a continuum in the sense of the Caribbean varieties.

To empirically investigate the possible existence of a continuum in Nigeria, Deuber investigated Nigerian Pidgin spoken by educated Nigerian speakers in Lagos, the southwestern part of Nigeria. She investigated variation in copula constructions, tense-aspect marking and verbal negation. Comparing her results with those of the Caribbean, whose sociolinguistic situation has been characterized to reflect dialect continuum, Deuber concluded against the existence of a continuum in Nigeria. As a general result, she finds the two languages as two separate varieties with no evidence for intermediate varieties as found in the Anglophone

[1] Earlier version of this chapter has been previously published by Agbo and Plag (2020) in *Journal of Language Contact 13(2020): 351-388*. It is only slightly altered in this dissertation.

Caribbean. Going back to Bickerton's assertion that social mobility enhances the development of a continuum, Deuber wondered why after more than 40 years of Nigerian's independence, no such intermediate varieties have come into existence in Nigeria. One of her explanations is that the two situations differ with regard to the continuing presence of the substrates in Nigeria. The presence of the substrates (i.e., the Nigerian local languages) in Nigeria may have been detrimental to the development of a continuum. Deuber's result is based on the investigation of only Nigerian Pidgin data, with focus on the influence of English on Nigerian Pidgin. To validate Deuber's result, another investigation that takes English as a focus of analysis is absolutely necessary. This chapter, thereby, investigates Nigerian English data, looking at the mutual influence of both languages.

Using copula constructions as a test bed, this chapter investigates a conversation corpus of educated English-Nigerian Pidgin bilinguals in Nigeria to determine whether there is variation in the use of both languages. The establishment of the existence of variation in the use of these languages leads to further investigation to determine whether the variation leads to a linguistic continuum in Nigeria. This present chapter is particularly interested in answering the following questions:

1. Which copula forms from the two languages do educated speakers of English and Nigerian Pidgin use in their conversations?

2. Does the variation in the use of different forms lead to an English-to-Nigerian-Pidgin Continuum in Nigeria?

3. What factors are responsible for the pattern of variation observed in the use of these languages?

The remaining part of this chapter is organized as follows. The next section describes the variable investigated, i.e., the copula in English and Nigerian Pidgin. Section 3 describes the methodology, and sections 4 and 5 present the empirical results. Section 6 looks at the sociolinguistic variation and 7 concludes this chapter.

5.1 The Copula

The copula is a type of verb whose main function is to relate the subject to its predicate. It is traditionally known as a linking verb. Constructions with copula are called copula constructions or clauses. Mikkelsen (2011) sees copula constructions as "a minor sentence type in which the

contentful predicate is not a verb, but some other category like AP, NP or PP". The copula verbs on their own lack content meaning, but are structurally meaningful in relating the subjects to their complements. Copula clauses have been categorized into different types, which are embedded into what is known as the taxonomy of copular clauses introduced by Higgins (1979: 204–293). Higgins differentiates copula clauses into four different types: predicational clauses, e.g., *Paul is tall*, specificational clauses, e.g., *The director of finance is Paul*, identificational clauses, e.g., *That man is Paul* and equatives, e.g., *Paul is batman*. This categorization is dependent on the syntactic and semantic differences observed in the individual types. I will not dwell much on the taxonomy of copula clauses as the focus of this chapter is not on the syntactic environments of copula occurrences.

Copulas are found in many languages and their inventory and usage vary across languages. (see, e.g., Curnow 1999, Pustet 2003, etc for cross linguistic study of copulas). Spanish, for example has two copulas, *estar* and *ser*, whose usage varies, depending on several grammatical factors as perfectivity, predicate type, animacy etc. (Luján1981, Leonetti 1994, Fernández Leborans, 1999 etc.). In Nigeria, for example, two major indigenous languages, Igbo and Hausa have a number of different copulas in their inventories and their usage is based on different notions. The use of copulas in Igbo is dependent on the semantic type of its complement (e.g., identification, locatives, animacy etc), whereas that of Hausa is dependent on gender (Uchechukwu 2015, Abubakar 2016). Although copulas vary across languages, they are generally assumed to cover predication, existence/location and identity semantic values.

5.2 The Copula in English

In English, copula constructions are overtly marked by a form of Be (*be, am, are, is, was, were*). These copulas follow the same structural rules of English word order except in cases of inversion e.g., in questions like *Are you sure*? The complement following the copula may be a noun phrase, an adjective phrase, or a prepositional phrase, as shown in (1).

(1)	*a.*	*She is a girl.*	noun phrase
	b.	*They are very beautiful.*	adjective phrase
	c.	*The man is outside.*	adverb phrase
	d.	*The house is on a hill.*	Prepositional phrase

There are other verbs that have been analyzed as copulas (e.g. *seem, become, appear, sound, feel* etc.), but the scope of this work is restricted to the English copula *be* and its functional equivalents in Nigerian Pidgin.

5.3 The Copula in Nigerian Pidgin

Nigerian Pidgin has a copula system different from that of English. Faraclas (1996:46) writes that the "space normally covered by copulas is divided roughly into two parts, each of which is coded by one of two basic copula verbs: the copula identity verb *bi* and the copula locative/existence verb *de*." There is also a third copula verb in Nigerian Pidgin, which also functions as a focal marker: *na*. Just like English, Nigerian Pidgin also has some other verbs that may have copulative functions, but the scope of this work is restricted to the three main Nigerian Pidgin copulas discussed in Faraclas' grammar (1996): *bi, de*, and *na.* The first two copulas are also sometimes written as *be* and *dey*, respectively. These copulas are also the equivalent of the English copula *to be*.

5.3.1 Copula *bi/be*

The copula *bi* is used as an equative copula. It is mostly followed by a nominal complement, as in (2a) and (2b) (Faraclas 1996:48/51). *Bi* also takes clause complements as in (2c).

(2) a. *Im bi man.*
he COP man
'He is a man.'

b. *Ma pikin bi dat.*
My children COP that
'My children are those (ones).'

c. *Di wahala bi [se a no get moni]*
the problem Cop [COMP I NEG have money]
'The problem is that I don't have money.'

5.3.2 Copula *de/dey*

De is used as an existential or locative copula and can be followed by adverbial phrases or clauses, prepositional phrases, nominal phrases or may stand alone as in the sentences in (3).

(3) a. *A* *de.*
I COP
'I am (fine).'

b. *A* *de* *haws*
I COP house
'I am at home.'

c. *Di* *gari* *de* *layk* *sansan.*
the garri COP like sand
'The garri is like sand.'

d. *A* *dè* *kari* *nyam.*
I ASP carry yam
'I am carrying yam.'

There is a distinction here between the copula *de* illustrated in (3a-c) and the low tone marker *dè*/*dèy*, illustrated in (3d). Low tone *dè* occurs in preverbal position, where it marks imperfective aspect. Faraclas (1996: 186) labels this form as 'auxiliary'.

5.3.3 Copula *Na*

Na sometimes functions as a focus marker and as copula. Examples in (4a) and (4b) show its use. It introduces any focused constituent and is always followed by a nominal complement. It does not take auxiliaries, negators or non-emphatic pronouns.

(4) a. *Na* *nyam* *[we a chop]*.
(It is) yam [REL I eat]
It's yam that I ate.

b. *Di* *wuman* *na* *sista*
The woma COP sista
'The woman is a sister' (Reverend sister)

The functions of *na* and *bi* can overlap sometimes when preceded and followed by a nominal element (p. 50). Example (4b) can take either *na* or *bi*. One important distinction between *na* and the other copulas in Nigerian Pidgin is that *na* is always followed by a nominal element and can never take auxiliaries, negators or non-emphatic pronouns (p.50). The other two forms can take auxiliaries and negators.

Some other structural issues about Nigerian Pidgin copulas that are worth mentioning have to do with adjectives and null copula. Adjectives do not serve as complements to Nigerian Pidgin copulas because there are no predicative adjectives in Nigerian Pidgin. What is regarded as predicative adjectives in English can be analyzed as stative verbs in Nigerian Pidgin. Consider example (5), where the adjective, *afraid* serves as a stative verb.

(5) *Di* *man* *fyar*
The man fear
'The man is afraid'

However, this study finds variation in the use of stative verbs, such that stative verbs may also be accompanied by the copula *de.* Observe the contrast between (6a) and (6b).

(6) a. *Ma* *pikin* *de* *smol*
My child COP small
'My child is small'

b. *Di* *sup* *swit*
The soup sweet
'The soup is sweet'

This work remains agnostic as to the kind of syntactic analysis that would be assigned to examples such as (6a) and (6b), but it refers descriptively to those constructions that are without overt copula as 'zero copula' or 'zero' constructions.

To summarize, there are important differences, but also similarities, in the use of the copula between Nigerian Pidgin and English, which opens up a space for variation across both languages. Subsequent sections will show how speakers vary the use of these copulas within the same conversation.

5.4 Methodology

5.4.1 Data Selection and Coding

As written earlier in the general methodology for this work, the data used for this particular chapter comes from the International Corpus of English, Nigeria (ICE-Nigeria, https://sourceforge.net/projects/ice-nigeria/). (See chapter 4 for detailed explanation of the ICE corpus). The conversation part of the ICE-Nigeria is used in this chapter. The selection of copula constructions, the coding of the variables, and the different methods employed in the analysis are given below.

Utterances with copula constructions were extracted from the ICE-Nigeria conversations. The extraction was done both systematically and manually as to include constructions with copula omission. The selection was restricted to declarative copula constructions because they are structurally and pragmatically simpler and thus allow for a more straightforward comparison across languages. The English constructions are further restricted to 3rd person forms and infinitival *be*. Other English inflected forms of *be* would have been included in the analyses in this chapter, as it would increase the amount of work enormously, but it would have also increased the proportion of the standard forms in the data set without providing important insights into the variation between standard forms, i.e. English, forms and non-standard forms. The resulting data set consists of 1292 tokens of copula constructions with nine variant forms. Among the nine variant forms are two variants that do not belong to either language, i.e., they are not mentioned or attested in sources of Nigerian English nor of Nigerian Pidgin. These variants involve the use of the copula form *is* without a subject, and the use of a construction without an overt copula. Examples of both variants attested are given in (7) (see also (6b) above).

(7) a. *Is naturally good in music*. (Con 05)

b. *Lunch Ø around one.* (Con 46)

The copula constructions are coded into a spreadsheet according to their forms and the forms are classified according to their functions or construction types. English copula forms are classified as standard forms while the Nigerian Pidgin forms together with the other attested forms were classified as non-standard forms. The standard forms are further classified as inflected (e.g.*is*) or contracted (*'s*). Sentences with the copula *is*, but without overt subject are coded as *NoSubject.* Constructions without overt copula are classified as *Zero.* The invariant use of *be* is coded as *Invariant,* classified as Nigerian Pidgin. The Nigerian Pidgin copula form *na* is classified as focus marker (*FocusNa*) or copula (*CopNa*), depending on its function in the respective construction. *De* is coded as auxiliary (*AuxDEY)* or copula (*CopDEY*). In total, 9 variant attestations of copula forms from both languages are identified and coded. In addition, variables like the conversation files, the speakers etc are also coded. The sample below shows the coding format.

Table 5.1: Sample of coding

ITEM ID	SENTENCES	FILE	FORM	SPEAKER	CONSTRUCTION	GENDER	AGE	TRIBE	STATUS
1	It's no longer the trend	Con 01	is	4	contracted	male	NA	yoruba	Standard
2	Is not the same	Con 02	_is	2	NoSubject	female	NA	Igbo	Non standard
3	That's right	Con 02	is	1	Contracted	male	49	Echie	Standard
4	Na the same thing	Con 04	na	2	FocNA	male	31	yoruba	Non standard
5	Him dey work with bosch	Con 04	dey	1	Aux.DEY	male	32	Igbo	Non standard
6	Them dey pay am sha	Con 04	dey	1	Aux.DEY	male	32	Igbo	Non standard
7	Other rooms dey okay abi	Con 04	dey	1	Cop.DEY	male	32	Igbo	Non standard
8	My club na Man U	Con 54	na	1	CopNA	male	NA	Hausa	Non standard
9	The man na Muslim so	Con 58	na	1	CopNA	male	NA	NA	Non standard
10	Na bomb you dey drink	Con 59	na	2	FocNA	male	NA	NA	Non standard
11	I dey fine	Con 49	dey	2	Cop.DEY	male	NA	Hausa	Non standard
12	He is a better candidate	Con 47	is	1	Inflected	male	NA	Igbo	Standard
13	It is a professional body	Con 51	is	2	Inflected	male	NA	Hausa	Standard
14	is a very hygienic place	Con 45	_is	2	NoSubject	male	NA	yoruba	Non standard
15	This - how it is	Con 43	0	3	Zero	male	NA	NA	Non standard
16	How _ school	Con 52	0	2	Zero	Male	NA	Hausa	Non standard
17	Na fifty something be that	Con 04	be	1	Invariant	male	32	Igbo	Non standard
18	No, no be that type of ice fish	Con 04	be	1	Invariant	male	32	Igbo	Non standard

5.4.2 Analytical Methods

In this chapter, both quantitative and qualitative analyses are carried out. For the quantitative analysis, this chapter employed Rstudio to investigate the distribution of the variant copula forms in the conversation corpus. To get a better understanding of the patterning of the variant forms, other statistical analyses are carried out. First, Implicational scaling is used to model the use of the variant copula forms by a particular speaker in order to establish the existence of a continuum of lects as regards both languages. Second, Network analysis is carried out using package network (Butts 2008) in R to enable a better understanding of the clustering of speakers and variants. Cluster analysis is also employed to detect usage patterning among speakers and constructions.

A qualitative analysis was also carried out to enable a better understanding of the sociolinguistic variation between both languages. Some conversation transcripts are analyzed in relation to some social factors, e.g., formality, setting, participants and interpersonal relationships surrounding the conversations.

5.5 Results

5.5.1 Distribution of Variants

Let us first look at the distribution of standard and non-standard constructions in the data. This is given in figure 5.1 (the numbers on top of the bars give the number of observations for each category). It can be seen that about one third of the constructions are non-standard constructions, which shows that Nigerian Pidgin and other non-standard forms are part of the repertoire of the speakers in ICE-Nigeria.

Figure 5.2 gives the distribution of the different constructions. The inflected and contracted forms are predominant with 601 and 244 occurrences, respectively. Nigerian Pidgin forms and zero forms are also used in non-negligible proportions. There is also attestation of a sizable number of *NoSubject* forms.

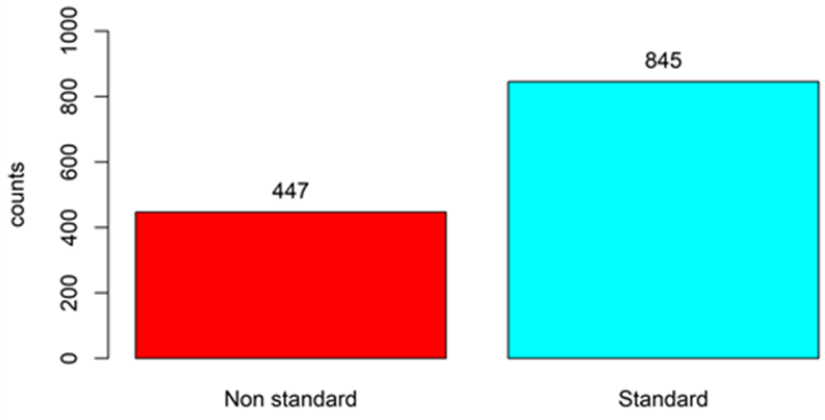

Figure 5.1: Distribution of the Standard and Non-Standard English forms

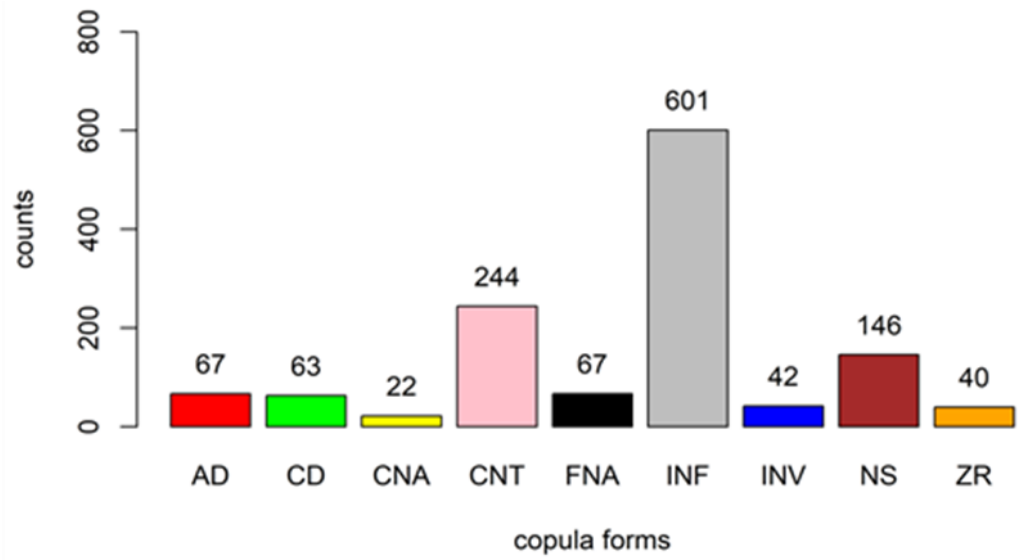

Figure 5.2: Distribution of variant copula forms in ICE-Nigeria. AD=*AuxDEY*, CD=*CopDEY*, CNA=*CopNa*, CNT=*Contracted*, FNA=*FocalNa*, INF=*Inflected*, INV=*Invariant*, NS=*NoSubject*, ZR=*Zero.*

5.5.2 Statistical Analysis

In order to get a better understanding of this variation, a traditional implicational analysis is first implemented. Implicational scaling was introduced in linguistics by De Camp (1971) to analyze dialectal variation resulting from the co-existence of the standard language and a creole or Pidgin base of that language in a country. It should be noted that mathematically, implicational scaling is a methodology that implements concepts of graph theory. In graph theory, a graph is a mathematical structure that models the relationship between two objects. In the case of dialects, such a relationship would be the use of a particular linguistic feature by a particular speaker. In linguistic implicational scaling, such relationships are represented in an ordered adjacency matrix. In graph theory such adjacency matrices may be represented also as a network of nodes and edges. Such networks have numerous advantages over two-dimensional

adjacency matrice and they have been used in many disciplines to model various kinds of relationships in physics, biology and the social sciences.

Apart from being a viable tool in the study of dialect continua (see, e.g., Bailey 1971, Winford 1988, Patrick 1998, Deuber 2009, Hinskens 1992 etc.), Implicational analysis has also been used for purposes other than dialect-standard studies, for example in second-language learning, (Pienemann 1998a, Pienemann and Keßler 2011), universal and typological studies (e.g. Greenberg 1978), language change (Weinreich et al. 1968 and Labov 1980), acceptability judgements (Elliot et al. 1969) and word-formation (Plag & Baayen 2009, Zirkel 2010). In what follows, implicational scaling is modeled first, followed by network and cluster analysis to get an even better understanding of the nature of the variation in the sample data.

5.5.2.1 Implicational Scaling

For the implicational scaling, only those speakers for which there are more than 10 utterances with copulas are selected. The first thing was to devise a table which lists for each speaker which constructions each speaker used. The table was then rearranged in such a way that the speakers with the largest range of constructions occupy the topmost rows. The different constructions are grouped such that the variant used by most speakers is on the left, and the variant used by the smallest number of speakers on the right. This procedure resulted in table 5.2 (in Appendix), which shows an ordered scale of the pertinent 34 speakers and 9 variables, given the number of tokens for each variant. Table 5.3 (in Appendix) abstracts away from the number of attestations by using a plus sign if a form is attested and a minus sign if a form is not attested.

The permutation of columns and rows in this manner leads to an adjacency matrix in which the plus signs cluster at the left and top of the scale while the minus signs cluster at the right and bottom of the scale. There is a scalability measure of 96.7 percent with only ten of the 306 cells (i.e. 3.3 percent) going against full scalability, i.e. against a distribution where all pluses are above the thick line, and all minuses are below that line. This shows that the variation is highly systematic and predictable.

What does the adjacency matrix tell us, beyond the fact that the variation is systematic? For the patterning of the constructions, we find that the forms from the two languages are located at opposite ends of the columns. The Standard English forms occupy the left side of the table while Nigerian Pidgin forms occupy the right side. The two forms that do not belong to either of the languages, the *NoSubject* and the *Zero* copula are sandwiched between the English

and Nigerian Pidgin copula forms attested. As for the speakers, the result shows sets of speakers that show similar patterns of usage.

The adjacency matrix is to some extent underdetermined, i.e. slightly different orderings are possible without altering the scalability. To overcome this problem, and to get a better idea of the clustering of speakers and variants, network analysis and cluster analysis are useful tools.

5.5.2.2 Network Analysis

The result of the network analysis is shown in Figure 5.3. There are two kinds of nodes. Circles (in red) represent speakers and are labelled with the speaker identifier. Diamonds (in blue) represent copula constructions, with their respective labels. The labels of the diamonds in the center are a bit hard to read, they represent the three constructions: *contracted, inflected* and *NoSubject*. An edge connecting a speaker node with a construction node represents the fact that this speaker uses this particular construction.

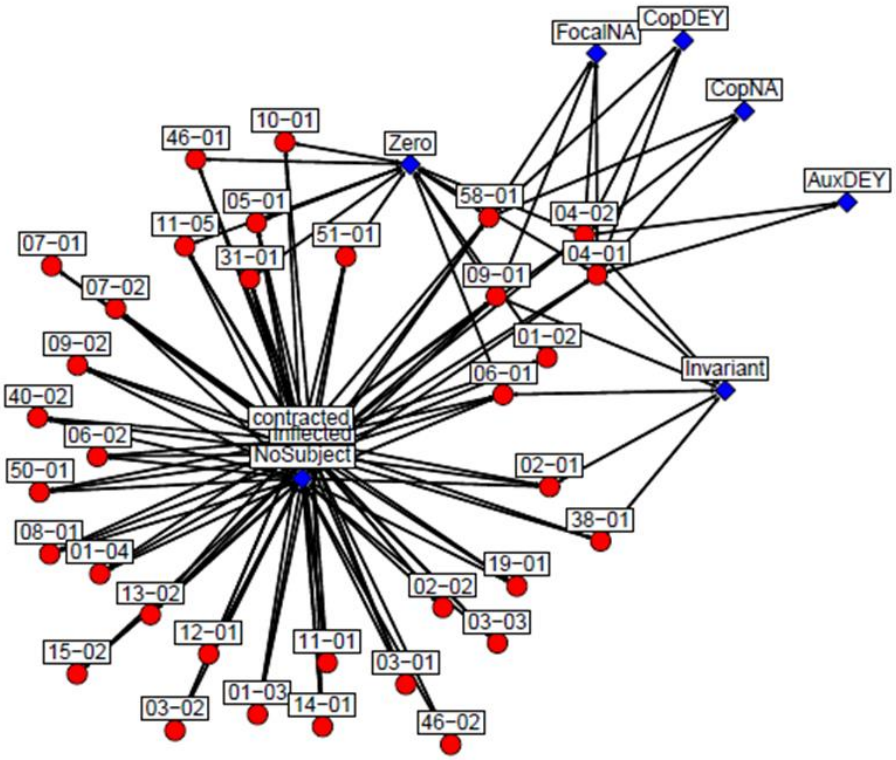

Figure 5.3: Network of speakers and constructions. Color coding: Red= Speaker, Blue = copula forms, Black lines= edges connecting speakers to the forms.

The graph allows for a closer inspection of the pattering of speakers and constructions. As for the constructions, we can see that three constructions (*contracted, Inflected, NoSubject*) cluster in the center of the graph, while the other constructions are placed in the upper right region. This distribution of constructions is a reflection of their usage by the speakers. The three constructions in the center are used by almost all speakers (see also table 5.3). The other constructions are used more restrictively by various subsets of speakers. For instance, the speakers that use *Zero* fall into two sets. One set (on the left) consists of speakers that do not use Pidgin constructions, the other set (on the right) are speakers that also use Pidgin constructions.

5.5.2.3 Cluster analysis

To gain further insights into usage similarities among speakers and constructions, cluster analysis is used (e.g. Baayen 2008: chapter 5, R package 'cluster', Maechler et al. 2018). Cluster analysis is a multivariate statistical tool that helps detect meaningful structures and relationships between features. A clustering algorithm conducts a pair wise comparison of all data points and calculates their distance. Based on these distances and their similarities, groups of data points, i.e. 'clusters', are identified and can be plotted in a dendrogram. In the dendrogram, the members of the same cluster are more similar to each other than to members of other clusters. The degree of similarity is reflected in the nested branch structure of the dendrogram, and the distance measure is given on the y-axis.

Figure 5.4 shows how the different constructions cluster according to their usage. The first split from the top gives us two main clusters, in the left of which we find the two standard constructions and one of the intermediate constructions (i.e. *NoSubject*). In the right main cluster we find the Nigerian Pidgin constructions and the other intermediate construction (i.e. *Zero*). If we go down to the next level of splits we can discern four clusters (indicated by the boxes). At this level we can see that the two standard constructions form a cluster and that the Pidgin constructions form a cluster. The *Zero* construction, which forms a cluster of its own, is more similar in its usage to the Pidgin variants, while the *NoSubject* construction is more similar in usage to the English variants.

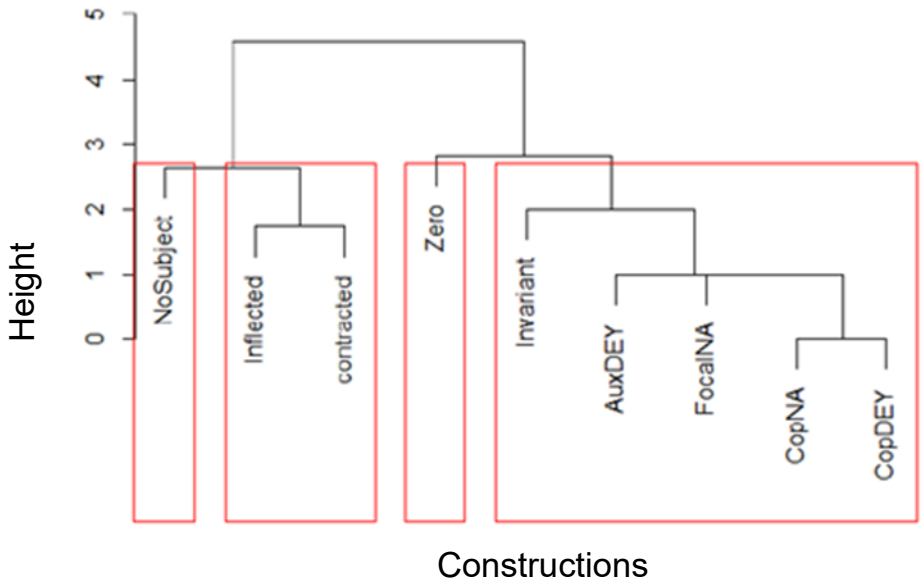

Figure 5.4: Dendrogram for constructions

In the dendrogram for the similarity between speakers, given in Figure 5.5, we can also discern four main clusters, indicated by the four boxes.

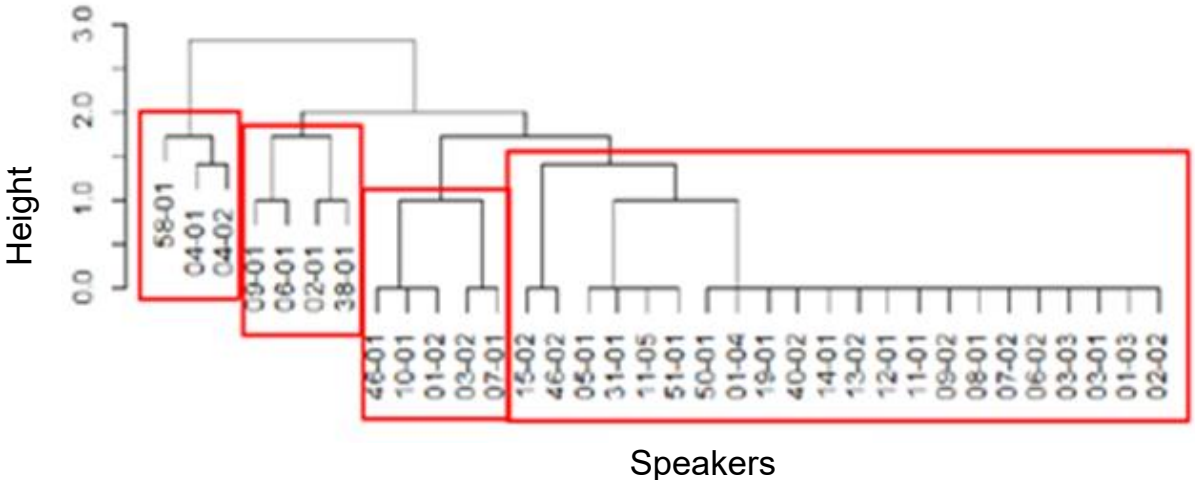

Figure 5.5: Dendrogram for speakers

The interpretation of the four clusters can be informed by comparing the clusters to the nodes in figure 5.3. The leftmost cluster contains the three speakers that are most prone to use Pidgin constructions. Speaker 58-01 does not use *Invariant*, which differentiates him from the other two speakers in the cluster. The next cluster from the left contains four speakers that are similar to each other in that, among other things, they make use of *invariant*. For the third cluster the

most prominent characteristics is the use of *Zero.* The rightmost cluster comprises the speakers that produce the most standard copula constructions.

Let us now discuss whether the result of the statistical analyses can be interpreted as evidence for a continuum. Returning to table 5.3, one might want to say that, much in the spirit of analyses of creole continua, the standard forms are on the left, and the more we go to the right, the more basilectal the forms become. Inflected forms would be the most acrolectal while Nigerian Pidgin *Aux.DEY* would be the most basilectal form. If we interpret the scale in table 5.3 in the same way as comparable scales in the Caribbean have been interpreted, however, we should find different speakers belonging to a particular lect. These putative lects would feature adjacent subsets of variants, ranging from the near standard English variety at one end to Nigerian Pidgin at the other end. In between these two lects we would find other, i.e. intermediate lects. The speakers at the two ends, representing the acrolectal and basilectal speakers would not be able to understand each other because their lects are too far apart. They will rather understand only those intermediate speakers closer to their own respective pole. In such a scenario, speakers would tend not to have very good command of both languages.

What was found in the data is, however, quite different. We have two distinct languages with their own constructions, plus two intermediate constructions. In the data, the speakers have good knowledge of the two languages in their repertoire, and are all able to use the standard constructions. In addition, they use, to varying degrees, constructions that are non-standard. There was no case of any speaker that used only the Nigerian Pidgin forms, nor a speaker that used the Nigerian Pidgin forms together with the other non-standard English forms without using the standard English forms. Therefore, the implicationally ordered constructions are not to be interpreted as evidence for a continuum of lects.

The network and cluster analyses strongly suggest that, instead of a one-dimensional continuum, we are faced with a complex sociolinguistic situation in which different speakers, or groups of speakers, may choose between variants that relate to each other in a non-random fashion. Having ruled out a continuum of lects, other possible patterns of variability need to be taken into consideration: diglossia, code-switching and style shifting.

5.6 Other Sociolinguistic Variation

5.6.1 Diglossia

The variation pattern in a diglossic situation is characterized by complementary distribution (see chapter 3 for overview). The languages are discretely separated as a result of discourse situations, with the more prestigious ('high variety') forms used in formal situations while the low variety is used informally. In general it seems that the standard criteria for diglossic situations are not fulfilled when it comes to the ICE-Nigerian data. The two languages are expected to function separately at a particular situation, depending on the formality of the situation in a diglossic situation. What is seen, rather, is that in a number of conversations, both Nigerian Pidgin and standard English are used together in a single conversation. Every speaker that used Nigerian Pidgin also used standard English. In terms of separating the languages based on discourse situations, English should function only in formal situations, while Nigerian Pidgin should function only in informal situation. This is not the case in the ICE-Nigerian data as both languages are used mostly in informal discourse situations and that makes it difficult to interpret the variation pattern in the data as a case of diglossia.

5.6.2 Code-Switching

Variation analyzed under the name of code-switching involves a shift between distinct languages in the same discourse (see chapter 3 for an overview). The relationship of English and Nigerian Pidgin in our data could be interpreted as a rather straightforward case of code switching. In those conversations where both English and Pidgin are used, the definitional criteria for code-switching are fulfilled. There are both inter-sentential and intra-sentential switches between the two languages in the data. In addition to such switches, there are also some apparently intermediate forms that are neither standard English nor Nigerian Pidgin (i.e. *NoSubject* and *Zero copula*). These additional forms enlarge the linguistic repertoire of the bilingual speaker. Why such an enlarged repertoire may be useful for these speakers can be understood by looking at style-shifting.

5.6.3 Style-Shifting

Style shifting just as code-switching involves the alternation of one speech style with another, but usually refers to degrees of formality in specific speech situations (see chapter 3 for an overview). The general assumption is that style-shifting occurs within a single language of a monolingual speaker, while 'code-switching' foregrounds the use of two very distinct language

varieties. Wolfram and Schilling-Estes (2015: 388) and Ervin-Tripp (1972) have come to the conclusion that "there is no clear dividing line between style shifting and code-switching" as in both cases, speakers draw on their linguistic capabilities to communicate shared social meaning. They are also shaped by the same situational factors and speaker motivations, e.g., context (both linguistic and social context), speakers' social status, setting, mood etc. There are also participants (the audience participating in the conversation by whom speakers either converge or diverge from, and topic (the theme of the conversation). Interpersonal relationship (i.e., the level of intimacy existing between speakers and interlocutors) is also one of the situational factors.

With the presence of the intermediate varieties, the criterion of shift between language varieties or dialects of the same language for style-shifting is fulfilled. The intermediate *Zero* construction is more similar in its usage to the Pidgin variants, while the *NoSubject* construction is more similar to the English variants. The intermediate varieties can therefore be seen as variants of either language. The variation therefore involves both code-switching between two distinct languages and style-shifting between variants of the same language all in the bid to enact a particular social meaning. Speakers here shift from either language, or a variant of either language as motivated by some situational factors highlighted above. This variation is regarded in this study as a continuum of style, instead of lects. This phenomenon will be referred to in this study as 'stylistic code-switching', as code-switching is used in the same way as style-shifting in monolingual communities. The next section will give a qualitative illustration of stylistic code-switching in the data.

5.7 Stylistic Code-switching in ICE-Nigeria

The analysis so far shows that the speakers in the data code-switch as a matter of stylistic choices in order to enact different social meaning. This section demonstrates this type of code-switching by looking at some transcripts of conversations to show how code switching is motivated by the same factors that motivate style shifting: formality, setting, interpersonal relations and audience.

For the speakers in the data set, the main motivating factor for code switching is the formality of the conversations in relation to the social status of the two languages in Nigeria. English can be used in both formal and informal interactions, depending on who is using it, but Nigerian Pidgin is largely restricted to informal situations in Nigeria. The speakers in the data

set pay attention to the formality status of the two languages in Nigeria, and the nature of the conversations determines the level of their formality. For example, conversations 01 and 02 in the data set are discussions with a panel of speakers sharing their different perspectives on a specific topic. The panelists are given turns by the moderator. Accordingly, this type of interaction requires the use of more formal styles of speaking. It is therefore no surprise that there is no code switching in these conversations. The data also features interviews with an interviewer and an interviewee. Here, the language is not as formal as in the panel discussions just mentioned, but also not as informal as discussions among people that have a close relationship and interact in a familiar setting. Generally, for the interview form of conversations in the data, participants use mostly English, and rarely code-switched from English to Nigerian Pidgin.

There are also discussions among groups of friends, colleagues, family members, or among people that have a close relationship. Speakers here discuss whatever topic comes to their minds, usually without waiting for turns. They can also change topics as they please. These speakers use more informal forms of language, shift from one form of the same language, and comfortably switch between the two languages.

All the code-switching in the conversation data happen in informal settings. Although the settings of the conversations are not explicitly given in the ICE corpus, one can infer the settings of each conversation through the content of the conversations. We will start the discussion of code-switching with an example beyond the copula to illustrate the generality of the phenomenon. Example (8a) is from conversation 11 and one can infer that the setting of the discussion is the home of one of the speakers. Speaker 5 refers to his home as "our humble place of abode". In the comfort of a home, the speakers mix the English structures with Nigerian Pidgin structures, as shown in (8b) and (8c), with the use of the Nigerian Pidgin phrase- *come better* and the omission of the indefinite article *a* before the common noun, *boy*. The Nigerian Pidgin parts are given in bold print. Translations for the Nigerian Pidgin parts are provided.

(8) From Conversation 11

a. S 5 *This is our humble place of abode.*
Just trying to manage ourselves here.
Sorry about our bad road.

b. *S 5* *Is it rice you cooked for them?*

S1 ***Come better for it to bring the rice now o***

‘ It’s better to serve the rice now’

S 3 *Okay, should I bring it now?*

c. *S 5* *How can you say ah ah.*

S 2 *Change it.*

S 5 *They said they* ***want boy*** *you are saying…*

‘want a boy’

S 3 *Okay, God give them* ***boy*** *first.*

‘a boy’

Let us now zoom in on the copula constructions. Conversation 59 can be inferred to take place in a shop. Shopping in Nigeria is an informal activity characterized by the lack of price tags on items. This gives customers room to ask questions and negotiate a bargain. Example (9) illustrates the code-switching in such a setting. This type of setting gives room for the use of the intermediate varieties too.

(9) From conversation 59

a. S 1 *how much is this?*

S 2 *sixty*

S 1 *eh?*

S 2 *sixty thousand*

S 1 *this one?*

S 2 *mhm*

S1 ***this one wey be say…***

‘this one that is ...’

S 3 ***this one na Okada money naw***

‘This one is little money’

S 1 *eh?*

S 3 ***money wey them use buy machine na im you take buy this kind thing***

‘Does one use huge amount of money to buy this type of thing?’

S 2 ***erm no- na****Anonymous…*

‘… no-it’s …’

S 3 ***Jesus, no be small small pump o***

'Jesus! They are not cheap pumps'

b. S 1 *well,* ***you never try it ni****.*

'Well, you have not tried it'

We use this one ***plenty****.*

'We use this one 'a lot'

S 2 ***if na surface****, I will go and buy one…*

'If it is Surface (a brand), I will buy one'

Another example is in conversation 09. The speakers are students conversing outside the classroom. The setting gives them the comfort of using language freely by code switching between English and Nigerian Pidgin. The extract in 10 is from a very long discussion, and does not represent the sequence of the conversation, but different places the three speakers code-switched in the course of their interaction.

(10) From Conversation 09

S1 *But if there's no three G network, I don't know* ***sha. Na wa o.***

'anyway. It's incredible!'

something happened to some of the pictures on my phone ***sha.***

'anyway'

I like him ***sha.***

'anyway'

Na bulala be that one o. *Cane* ***abi?***

'that one is bulala. Cane, isn't it? '

Na you lost mark already.

'You are the one that has already lost a mark'

S 2 ***Okay your O S abi***

'Okay, you're O S, Isn't it?'

Talking about your size ***abi?***

'isn't it?'

You wrote sense relations in ANON's course ***abi?***

'isn't it?'

So I just pray ***make I get good mark there.***

‘So I pray that I will get a good grade on that’

Her dress ***abi?***

‘isn’t it?’

Hope that it's not Lebanese she's following ***sha***

‘anyway’

Don't spoil her runs o

‘Don’t ruin her business!’

S3 *You’ve written the stuff you submitted*

abi? Awuf!

‘isn’t it? Free item!’

As expected, the kinds of participants in a conversation also play a vital role in switching between languages. In the data set, the speakers that codeswitch are mostly students, friends, classmates or members of the same family. Conversation 04 in the data set is a crucial example. This conversation features more code switching in the data than any other conversation. From the content of the conversation, one can infer that the speakers are two Nigerians in diaspora. The speakers are both students in a university in Germany. They are in a foreign setting, away from their home country. This creates a sense of solidarity which is the basis for the code switching. Example (11) is a sample from the beginning of their conversation, where they discuss the university election.

(11) From Conversation 04

S1 So *who did you vote for today?*

S 2 *what is the election even all about?*

S 1 *oh boy I don't know o!*

wetin I know be say *erm* ***people they them dey vote*** *for something, but I don't know* ***wetin the thing be all about.***

‘What I know is that people were voting for something, but I don't know what it was all about’

S2 ***Them dey vote****…*

‘They were voting…’

The first speaker started with what could be called a question in standard English. The first speaker’s shift of style to “oh boy” and “o” indicates familiarity. The speaker seems to suddenly realize that he is speaking to a familiar person, and consequently switched to Nigerian Pidgin.

The conversation continues with code-switching in both directions. The second speaker's immediate response in Nigerian Pidgin shows solidarity to their shared identity as Nigerian students in a foreign setting.

Another motivation for code-switching in the data is interpersonal relationships. Speakers switch from one language to the other in order to manage situations and negotiate interpersonal relationships. This is illustrated in examples (12) and (13). In (12) from conversation 09, the speaker shifts to Nigerian Pidgin to express surprise: *nawa o!* This speaker used this expression in the midst of an English conversation to show disapproval of the situation at hand and to elaborate the fact that she is not receiving the friends' attention. The shift in the style of speaking is done purposefully to draw the attention of the other participants to accompany her for lunch.

(12) *From Conversation 09*

S1 *ANON I'm really hungry o, let's go and eat now*

S2 *maybe I will go out I wou- I*

S1 *you're waiting for ANON!* ***nawa o!***

'It's unbelieveable!'

S 3 *I thought about it I went to ANON's house*

S 1 *I've never really had a lunch date in this erm*

I am ah ah ! nobody ever wants to follow me for lunch!

In example 13 from conversation 27, the speaker uses code switching to lighten a situation that would have ordinarily been unpleasant.

(13) From Conversation 27

S2 *when did he call*

S1 *erm*

S2 *you lied to me*

S1 *erm erm I didn't lie to you*

S2 *when did he call*

S1 *erm* ***omoyawa, I dey hungry o, abeg wan go chop?***

'troublesome person! I'm hungry, please do you want to go andeat?'

S2 ***abi!****erm*

'true!'

S1 *okay, so what's going to happen now?*

S2 *erm I think, what're your plans for today?*

Here, the code-switching (accompanied by a change of topic) by Speaker 1 releases the tension that was building up in the discourse due to Speaker 2 accusing Speaker 1 of lying to her. As a reaction to Speaker 1's switch, Speaker 2 also switches to Nigerian Pidgin, and, after another turn by Speaker 1 accepts the change of topic. The switch thus ends the controversial and face-threatening topic and a new topic is introduced and accepted. The excerpt nicely illustrates how speakers proactively use code-switching to manage their interpersonal relationships during a conversation.

In summary, the ICE data demonstrates that linguistic variation, here the use of two languages in one conversation, is all about constructing styles, and understanding these styles as an integral part of constructing social meaning (cf. Eckert 2004).

5.8 Summary and Conclusion

This chapter has used copula variability in ICE-Nigerian conversation to investigate the relationship between English and Nigerian Pidgin. The data reveal an unexpected amount of variation among the different copula forms. Apart from the use of the standard English copula variants, this study also finds different Nigerian Pidgin copulas in the data and two forms that are neither found in English nor in Nigerian Pidgin. The variation lends itself to implicational scaling, showing a clear implicational pattern of usage. This pattern, however, is not interpreted as a continuum of individual lects as is the case with some Caribbean varieties of English like Jamaican English. The pattern rather demonstrates linguistic variation in the use of both languages in conversation as stylistic code-switching.

Further statistical analysis (network and cluster) were carried out to get a better understanding of the nature of the variation. These analyses show that speakers form groups that systematically prefer specific constellations of variants. The variants pattern according to the specific ways speakers select them. This complex situation is revealed as a continuum of style, with code-switching as the main stylistic device. A qualitative analysis of the individual conversations provides evidence that code-switching in the data is motivated by the same social

factors as formality, setting, participants and interpersonal relationships that also motivate style-shifting.

Comparing the results in this chapter to those of Deuber (2006), it can be affirmed that the findings corroborate her conclusion that the type of continuum that is typical of the Caribbean does not exist in Nigeria. However, in contrast to Deuber, there is a significant and structured amount of variation in the use of copula from both languages. The pattern of mixing represents that of competent bilinguals with fluent knowledge of the structures of both languages. This repertoire helps them to do what this study has termed 'stylistic code-switching'.

The next chapter looks at code-switching thoroughly, as this has been established in this chapter to be the dominating bilingual behavior existing between both languages as used by the educated speakers in Nigeria. A different data set featuring more code-switching is needed for proper investigation of code-switching, as code-switching in ICE data is limited. The next chapter features a self- generated data set, with a lot of code-switching.

Chapter 6

Code-Switching Patterns (CENCOS)[2]

Code-switching is a linguistic phenomenon that occurs as a result of language contact among language users whose linguistic repertoires consist of forms from more than one language. Although code-switching between English and Nigerian Pidgin is a very common phenomenon, it has not been investigated in detail. Existing researches between the two languages in Nigeria use mostly questionnaire data, with little or no attention to language in actual use (e.g., Onjewu and Okpe 2015; Solomon 2015 etc). In the last section of the previous chapter, a qualitative analysis of code-switching was carried out with data gleaned from ICE-Nigeria, but the data featured limited code-switching. This chapter, therefore, presents both quantitative and qualitative analyses of code-switching from a large number of informal conversations among educated speakers, collected during fieldwork in Nigeria in 2019 and compiled into a corpus tagged *Corpus of English and Nigerian Pidgin Code-switching* (CENCOS). In contrast to the more formal conversations in ICE-Nigeria, CENCOS features a large amount of code-switching. This data is used in this chapter to investigate language preference, code-switching pattern and the social factors that influence code-switching patterns.

This chapter is structured as follows: section 6.1 explores code-switching in Nigeria. The methodology is given in section 6.2, and section 6.3 presents the quantitative analyses and results. Section 6.4 presents qualitative analysis and summary.

6.1 Code-Switching in Nigeria

Code switching refers to the alternate use of two languages in a single conversation, often within a single utterance. Code-switching also refer to a speech situation where a speaker uses a different language in response to a speech in another language by another speaker. Code-switching therefore involves the alternation of languages within a single speech of an

[2] Earlier version of this chapter has been published in Agbo, Ogechi F. & Plag, Ingo 2022. Code-switching pattern of educated English-Nigerian Pidgin Bilinguals in Nigeria. In Alyosius Ngefac, Hans-Georg Wolf & Thomas Hoffman (Eds), *World Englishes and Creole Languages Today: the Bobdian Thinking and Beyound 2: 162*–183.
It is only slightly altered in this dissertation.

individual, between speeches of an individual, and between speeches of different speakers in a single conversation. For the analysis in this chapter, I will refer to the use of a different language from the one used by a former speaker as code-switching between turns.

As a universal phenomenon among bilinguals, codeswitching is prevalent in Nigeria, given that practically every Nigerian uses at least two languages. Code-switching in Nigeria has been observed to occur between different languages in Nigeria, mostly between English and the local Nigeria languages. It has also been observed to occur through different linguistic channels, e.g., in conversations, literary works, musical lyrics, computer-mediated communications etc. (Taiwo 2010, Ibhawaegbele and Edokpayi 2012, Ennin and Afful 2015, Agbo and Plag 2020 etc.). Given the robust functions of English and Nigerian Pidgin in Nigeria, It would be expected that a lot of research on code-switching between these languages as used in Nigeria exist. The opposite is however, the case as limited or no linguistic analyses exist on code-switching between English and Nigerian Pidgin.

The very few studies that exist between both languages in Nigeria focus on different aspects to the one taken in this study. Some investigated attitudes towards the two languages, and use mostly questionnaire data, with little or no attention to language in actual use (see Akande 2016, Onjewu and Okpe 2015, Solomon 2015, Osoba and Alebiosu 2016 etc.). Some others looked at comparative analyses of the grammatical structures of both languages (e.g., Obiamalu and Mbagwu 2010, Balogun 2013, Mowarin 2013, Osoba and Alebiosu2016). Others investigate code-switching in Nigeria, without any restriction to any social group, e.g. the educated, children, etc. The present chapter, therefore, is motivated by the need to explore the nature of both languages in actual language use involving code-switching within the educated group. This group of speakers in Nigeria has proficient knowledge of both languages, so it is vital to investigate how they manage both languages in code-switching. This chapter also investigates code-switching in line with social factors, which is also an aspect that has not been properly investigated between both languages in Nigeria. The present chapter therefore analyzes a corpus of natural conversations, featuring a lot of code-switching between English and Nigerian Pidgin with a view to investigating code-switching variation and patterning, and expanding insight into the language behavior of educated English-Nigerian Pidgin bilinguals in Nigeria.

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6.2 This Present Chapter

The first analysis in this chapter involves language preference. Language preference is not used here in the psychological sense to mean speakers' motives or the measure of their communicative abilities in the languages. It is rather the choice of using one language over the other, which makes it one of the characteristics of code-switching. In some studies, language preference has been found to correlate with factors like language proficiency or dominance (Greene, Peña, and Bedore 2012, Parafita Couto and Gullberg 2017, Bosma and Bloom 2019 etc.). This correlation is misleading; however, as some bilingual speakers may be highly proficient in a language, but still prefer to frequently use another language they are not highly proficient in. A language may also be a dominant language in a community or within speakers, but the speakers may show preference for a non-dominant language in a particular conversation. Studies have shown that preference for one language over the other is determined by a variety of factors, including micro- and macro-sociolinguistic factors (Gee & Takeuchi 2010, Hebblethwaite 2010, Torres and Travis 2015). The investigation of language preference here is based on two opposing predictions motivated by macro-sociolinguistic factors. One prediction is based on formality of context. Speakers will prefer Nigerian Pidgin, given that the data come from informal conversations, and Nigerian Pidgin is mostly used in informal settings. Another prediction is based on the prestige associated to the languages. Speakers will have a preference for English, since research has shown that bilingual speakers will naturally prefer languages with high social status, irrespective of context (Greene, Peña, and Bedore 2012, Ribot and Hoff 2014, Huang and Zhang 2018 etc.), and English is the most prestigious language in Nigeria.

The next analysis investigates code-switching patterns by looking at switch locations and the direction of switches. The switch location is investigated from two perspectives. The first is between-turns, i.e., switches from one speaker's turn to another speaker's turn. Between-turn switch patterns have been categorized to correlate with audience, either converging, when the same language is used by the next speaker, or diverging, when a switch to another language is made (Cheshire and Gardner-Chloros 1998: 20, Valdès-Fallis 1978). The second is within turns, i.e., switches inside a speaker's turn. The within-turn switches may occur in two positions: intra-sentential or inter-sentential. The investigation of within-turn switch location is informed by the generalization that code-switching patterns are constrained by bilingual ability, so highly fluent bilinguals will switch more at intra-sentential boundaries because of their

strong ability to manage the grammatical rules of the languages, while less fluent bilinguals will favour inter-sentential boundaries and tags, which are freely movable constituents that are more easily manipulated (Poplack 1980, Beatty-Martínez et al. 2020).

As for the direction of the switches, the investigation is whether speakers tend to move from English to Nigerian Pidgin, or from Nigerian Pidgin to English, or whether they have no real preference. Most studies on code-switching directionality investigate children, whose switches tend to show asymmetry in switching directionality. Directional asymmetry has been correlated with a number of factors: Speakers code-switch more into their proficient language when using their less proficient language, or switch more into their dominant language when using their non-dominant language. Balanced bilinguals are shown to display symmetry in switch direction (Gutiérrez-Clellen et al 2009, Genesee & Paradis 1995, Greene et al 2012). In this chapter, competent adult bilinguals are used to investigate whether their switching patterns along the stereotyped symmetry by balanced bilinguals, and if preference correlates with directionality.

In addition to the univariate analyses of language preference and code-switching patterns, multivariate analyses are carried out also to investigate the influence of social variables of the speakers (age, gender, education status, and region) on the observed patterns. The research questions answered in this chapter can be summarized as follows:

1. Which language do speakers prefer in the conversations?
2. Where in the conversation does code-switching take place?
3. How often do speakers code-switch?
4. What is the direction of the switches?
5. What social factors correlate with the switching patterns?

6.3 Data Annotation and Coding

As stated earlier, this chapter makes use of the Corpus of English and Nigeria Pidgin Code-switching (CENCOS). Detailed explanation of the collection of this data is given in chapter 4. After the compilation, the text files were annotated, and further coded in a spreadsheet for the analysis in this chapter. This section gives the explanation of its annotation and coding based on the research questions for this chapter. The first annotation differentiates monolingual and bilingual speech turns. These forms are tagged ‘monolingual turns’ (ML), for those speech turns where only one language is used, and ‘bilingual turns’ (BL) for those involving a mixture of

both languages. The next annotation identifies the language which the speakers used to start and end their turns. These forms are tagged 'English start' and 'English end' (ES and EE) for those turns that start in English and those that end in English, while 'Pidgin start' and 'pidgin end' (PS and PE) are used for those that start in Pidgin and those that end in Pidgin.

Differentiating between the two languages is not always straightforward. Given that Nigerian Pidgin is an English-lexifier Pidgin, it shares similar words and also basic word order (SVO) with English. Although they share these similarities, there are still some criteria that distinguish their structure, which were applied in differentiating the two languages, e.g., the presence of preverbal markers, absence of articles, lack of inflection etc. The use of the verb form, *be* and the absence of an article in *She **be** nice girl* 'She is a nice girl', for example, are a sure sign that this is a Nigerian Pidgin utterance featuring Nigerian Pidgin copula, *be*. This example also illustrates the problem of overlap of the two languages. It is hardly possible to differentiate between English *she* and Nigerian Pidgin *she,* which raises the problem of deciding whether we are dealing here with an intra-sentential switch from English *she* to Nigerian Pidgin *be nice girl*, or with a monolingual utterance in Nigerian Pidgin. A conservative strategy is adopted here, by coding a switch only if there was uncontroversial evidence for it. If an ambiguous form fitted the language surrounding it, this form was not assumed to come from the other language. This strategy is likely to have resulted in fewer cases of code-switching in the analyses than are actually there from a speaker's perspective, but the strategy has the more important advantage that the instances of code-switching analyzed are solid.

There are also turns that start or end in constituents that could belong to either of the languages, e.g., "yeah", "sure" etc. that appear as only words in a turn. Some others have words that belong to none of the languages, e.g., the use of local languages. These constituents were annotated accordingly, but are not included in the analysis presented here. Also, worth mentioning here is the exclusion of 30 turns which were formally included in the analysis for the journal paper part of this work. The excluded 30 turns involve the focalization of the object pronoun *me* in such construction as 'me I just like his song'. Such constructions were initially tagged bilingual turns, with the explanation that *me* is Nigerian Pidgin inserted into English construction. Unlike in English, *me* can function both as subject or object pronoun in Nigerian Pidgin, but the investigation of some English corpora, e.g., the British National Corpus, Brown Corpus etc shows significant focalization of the object pronoun *me*. In other words, the

focalization of me in the data could belong to either English or Nigerian Pidgin, which led to the exclusion of those constructions in this analysis.

Depending on the different research questions, some turns were excluded in some analysis, while they are present in others. This led to the use of four different data sets for different analyses. For instance, one of the data sets involves only speakers that made up to 10 turns, while another one involves only intra-sentential switches. The data sets will be explained in more detail as we go along. Table 6.1 is an overview of the different data sets used for the analysis.

Table 6.1: Data sets used for the code-switching analysis

Data sets	Analysis	No. of turns
Main data	Language preference/switching pattern	5676
Subset 1	Switch location/direction between turns	5420
Subset 2	Structural location within turns/Mixed Regression for intra-sentential patterns	996
Subset 3	Linear Mixed Effect Regression with social variables	5104

The third annotation concerns the languages used across a turn boundary. This annotation involves the end of a speaker's turn and the beginning of another speaker's turn. This variable has four levels: E/P for speakers ending their speech in English and the next speakers starting in Nigerian Pidgin, P/E for speakers ending in Nigerian Pidgin and the next speaker starting in English, E/E and P/P for those ending and starting in the same language. Example (1) below shows sample of the annotations discussed so far.

(1) **Annotation of mono/bi-lingual turns, language and turn boundary**

Speaker 1: _ML _ES _EE <TB> E/E Just teach me anything you know

Speaker 2: _BL _ES _PE <TB> P/E Anything I know! Eh, you go come meet next week

Speaker 1: _BL _ES _PE <TB> P/P why are you angry naw?

Speaker 2: _ML _PS _PE <TB> P/E I no dey angry joor

Speaker 1: _ML _ES _EE <TB> E/E It's a mutual something …

Speaker 2: _BL _ES _PS <TB> P/P Which one is mutual something? You, you don jack everything, you no wan make I jack.

Speaker 1: _ML _PS _PE <*>Okay, I go come meet you next week.

*(No turn boundary for the last sentence in a text)

Another relevant annotation concerns only the bilingual turns, as shown in example (2) below. These are turns that have a mixture of English and Nigerian Pidgin. These turns are annotated according to their location, i.e., whether the switches are inter-sentential or intra-sentential. Insertions of free moveable tags or discourse markers are also annotated. There is also the annotation of switch direction in the bilingual turns (i.e. from English to Nigerian Pidgin or from Nigerian Pidgin to English). For insertions, the language of the inserted constituent is given. The direction of intra-sentential switches is annotated according to their patterns proposed in Muysken (2000): 'insertion' for cases in which one language contributes the structure into which a unit from another language is inserted, 'alternation' for cases in which the two languages share the structure alternately, and 'congruent lexicalization' for cases in which both languages randomly share the structure with the insertion of words from both languages. Congruent lexicalization turned out to be extremely rare, with only a handful of cases in the data. These cases are not included in the analyses presented below as no meaningful comparisons would have been possible with this variable value. After the annotation, the data was coded into a spreadsheet, together with speakers' demographic and social information (age, gender, education status, ethnicity and region).

(2) Sample annotation of switch location and direction

Speaker 1: _BL <**IRS><ALT><E-P>** That's why *I dey tell you say do your…*

Speaker 2: _BL **<IRS><INS><E>** Na *peoples' pen* im dey use.

Speaker 2: _BL **<ITS><E-P>** I've also been reluctant. *You know say e get as the woman dey do.*

Speaker 2: _BL **<ITS><E-P>**What of Pastor Anonymous? *I hear say Im dey do this thing for here, PGD.*

Speaker 1: _BL **<IRS><P-E><ALT>**Abeg no go kill yourself *because of exams*.

Speaker 1: _BL What's wrong with you **<TS><P>***naw.*

Speaker 1: _BL It won't take long **<TS><P>***sha,* like one Month.

6.4 Results

6.4.1 Language Preference: Distribution of Variants

To investigate language preference, the coding of starts and ends of the speakers' turns are used. Overall, the data have 5676 individual turns that either start or end in English or Nigerian Pidgin. Turn edges are distributed over the two languages as shown in Figure 6.1. No matter whether we look at the ends or at the starts of the turns, we see that about two thirds of the turns end or start in English (70% of the starts, 68% of the ends).

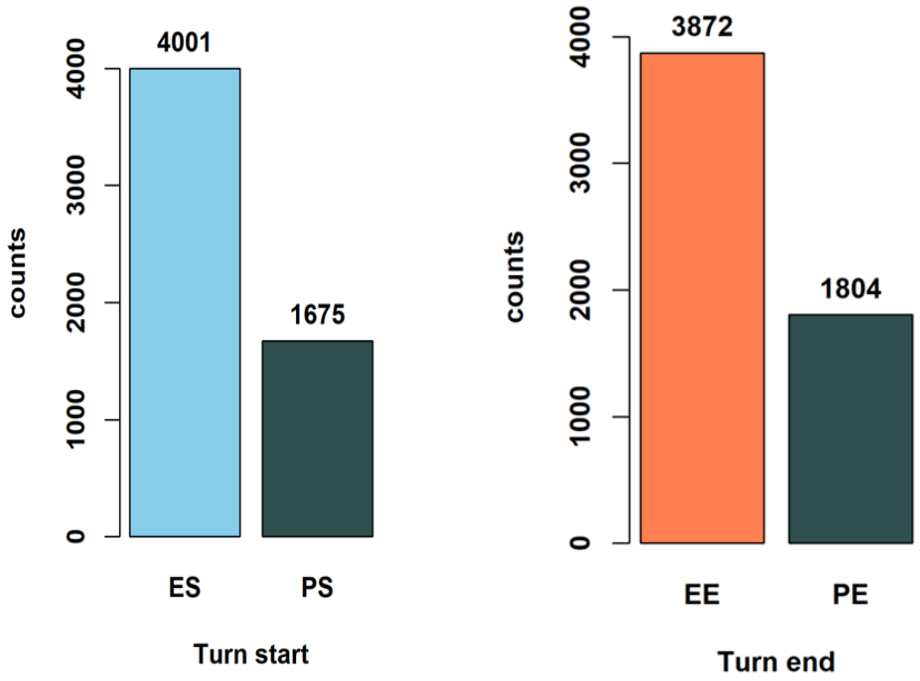


Figure 6.1: Turn starts (left) and ends (right) in the two languages (Abbreviations: ES = English start, PS=Nigerian Pidgin start, EE= English end, PE=Nigerian Pidgin end).

This preference is also borne out when we look at all turns that start and end in the same language, 71 percent are in English. This is shown in Figure 6.2.

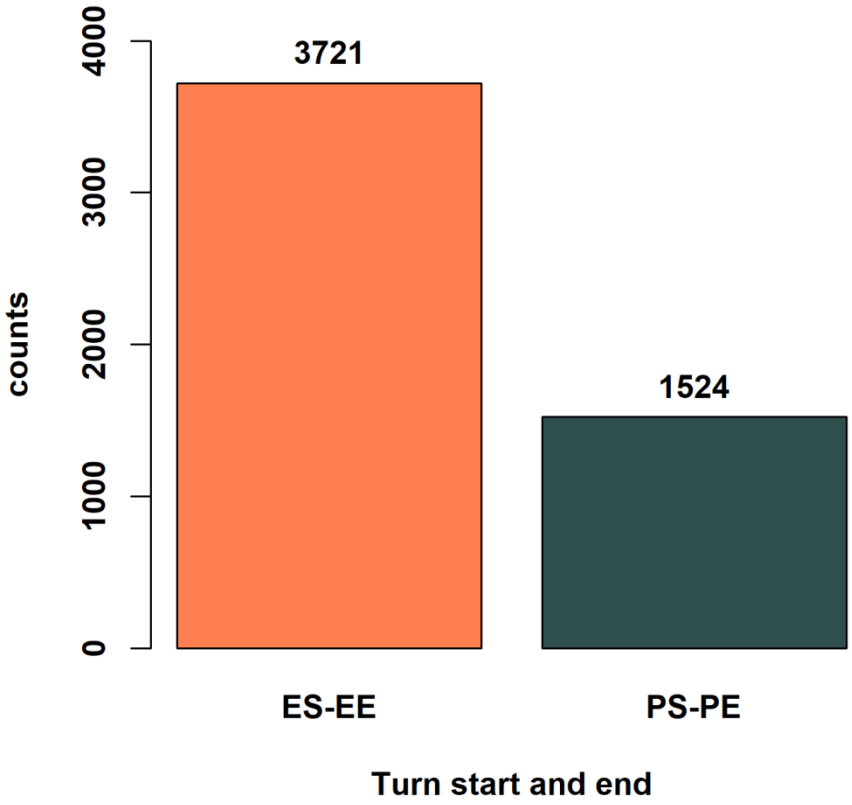


Figure 6.2: Turn starts and ends of turns starting and ending in the same language (Abbreviations: ES= English start, PS=Nigerian Pidgin start, EE= English end, PE=Nigerian Pidgin end).

Both analyses show that English is the preferred language in the conversations under investigation, but Nigerian Pidgin also has a large share. In other words, both languages play an important role for the educated speakers in the data sample. This is a significant finding in itself, as previous studies have not looked at this specific group in detail.

6.4.2 Code-Switching Patterns

In order to learn more about possible code-switching patterns, a number of different analyses are implemented. The first interest is in the location of the switches with regard to the turns. Do speakers switch between turns or within turns? Second, for the switches that occurred within turns, the focus is in their structural location (intra-sentential or inter-sentential). The third

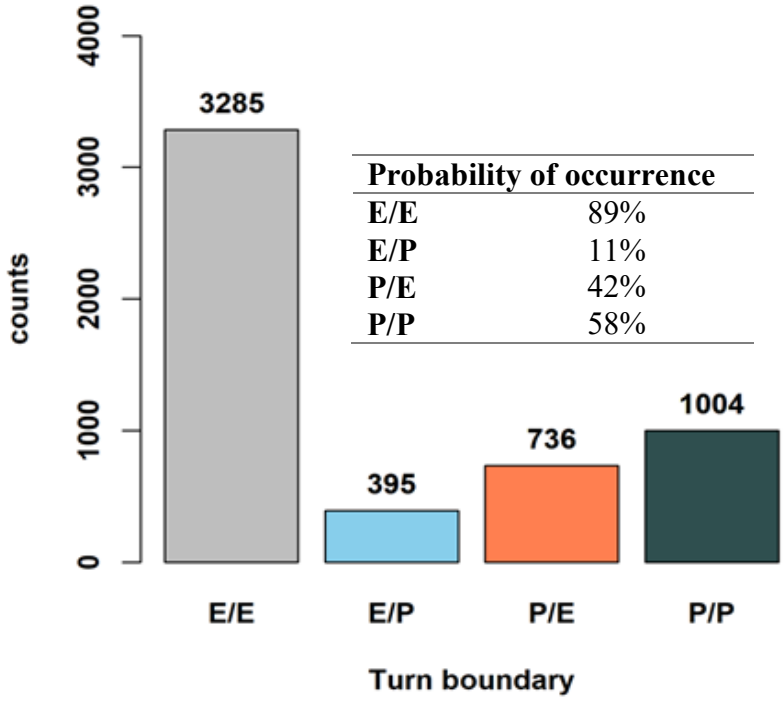
interest is in the direction of the switches. Do speakers switch from English to Nigerian Pidgin or from Nigerian Pidgin to English, or both? The last is on how individual speakers vary in their code-switching behavior.

6.4.2.1 Switch Location: *between* Turns

For the analysis of the location of switches at the turn level, the distribution of the languages by turn was investigated in two ways: the transition from one speaker's turn to the next speaker's turn ('between speakers') and the beginnings and ends of individual turns by a given speaker ('within speaker').

For the analysis of between-speaker turns in figure 6.3, a subset of the main data is used. For this analysis, some turns from the main dataset were excluded. These are turns that end with a different language, other than English or Nigerian Pidgin, or turns whose boundaries are difficult to classify as English or Nigerian Pidgin, because of the similarities of both languages. There is also the omission of 79 turn boundaries in the last sentences of each of the 79 conversation texts, bringing the size of the sub-data to 5420.

The between-speaker analysis reveals that most transitions from one speaker to the next are from English to English (E/E), followed by those from Nigerian Pidgin to Nigerian Pidgin (P/P), Nigerian Pidgin to English (P/E) and English to Nigerian Pidgin (E/P). The distribution is shown in Figure 6.3. The distribution shows that speakers taking a new turn tend to continue in the same language as the previous speaker used. Only a minority of 1131 (21 percent) of all transitions involve a code-switch. If speakers switch, these switches rather occur from Nigerian Pidgin to English than from English to Nigerian Pidgin. Overall, Nigerian Pidgin is involved in 39 percent of the transitions from one speaker to the next.



Probability of occurrence	
E/E	89%
E/P	11%
P/E	42%
P/P	58%

Figure 6.3: Transitions between speakers' turns (Abbreviations: E/E= from English to English. E/P=English to Nigerian Pidgin, P/P=Nigerian Pidgin to Nigerian Pidgin, P/E=Nigerian Pidgin to English)

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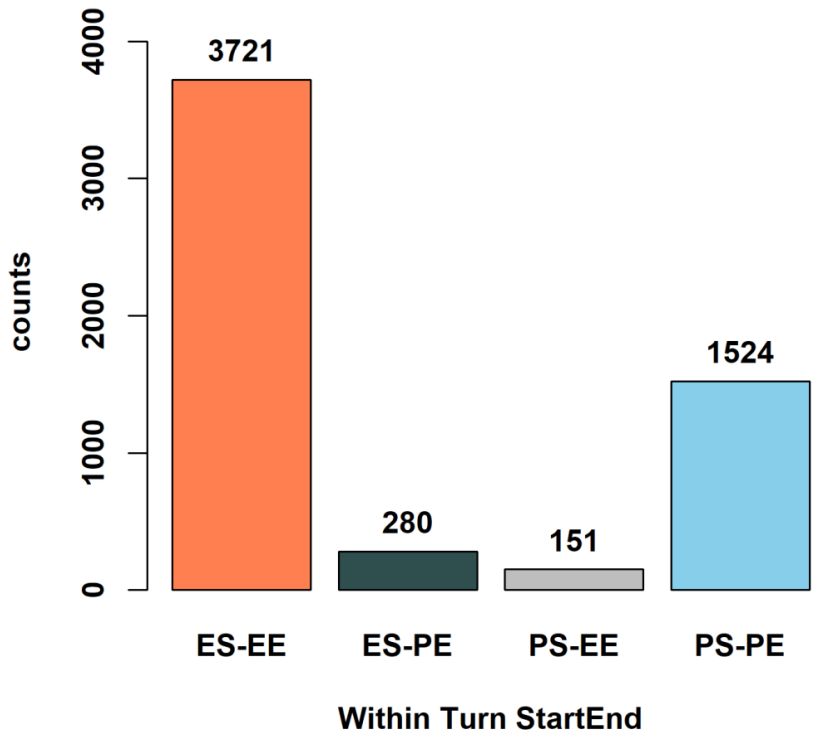

Figure 6.4: Starts and ends of individual turns (Abbreviations: ES= English start, PS=Nigerian Pidgin start, EE= English end, PE=Nigerian Pidgin end).

6.4.2.2 Switch Location: *within* Turns

Looking at the turns of a given speaker, we can see that only a minority of turns end in a different language than the one it started in. Figure 6.4 shows the distribution. 280 turns (i.e. 5 percent of all turns) start in English and end in Nigerian Pidgin, while even less (151, i.e. 3 percent) start in Nigerian Pidgin and end in English. Together with the distribution shown in Figure 6.3, this means that we find many more switches between turns (N=1131) than within turns (N=431). It is important to note that those turns that have been found to show code-switching within turns may actually have more than one switch, for example, when they start in English, switch to Nigerian Pidgin and go back to English. Let us now see the analysis of those turns that contain more than one switch.

Figure 6.5 below shows the switches (or lack thereof) for all turns. The first two patterns in blue show the switches and lack of switches. The first is 'BL', which stands for bilingual turns (i.e., turns that contain switches within) and the second is 'ML' for those turns that do not contain switches within. The figure also shows two patterns of the bilingual turns represented in green and yellow colour. We can see that the majority of turns do not contain switches, as shown by the monolingual turns. The total count for bilingual turns is N=723. These bilingual turns come in two flavours: turns that start in one language and end in another (BL-ES-PE and BL-PS-EE) in yellow, and turns that start and end in the same language (BL-ES-EE and BL-PS-PE) in green. In those turns that start and end in the same language, speakers switch to a different language, and then back to the same language. Up to four times back and forth of such switches in a single turn are seen in the data. Overall, the analyses demonstrate that the educated speakers switch both between turns, involving different speakers and within turns by a single speaker.

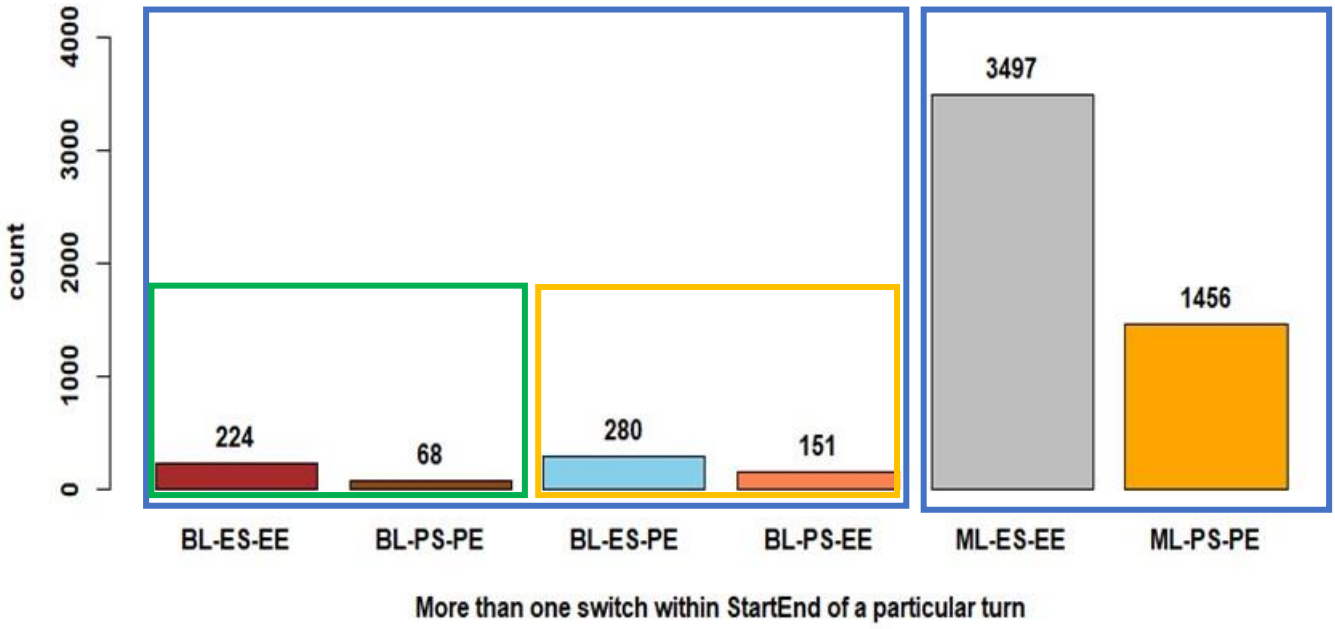

Figure 6.5: Switches within turns (Abbreviations: BL=bilingual, ML=monolingual, ES = English start, PS=Nigerian Pidgin start, EE= English end, PE=Nigerian Pidgin end).

6.4.2.3 Structural Location of Switches *within* Turns

To further investigate the code-switching patterns exhibited by the speakers in the data, this work looks at the specific location of the switches within a speaker's turn, which is referred to here as the 'structural location'. Structural location is concerned with the question of whether a switch is intra-sentential, i.e. within a sentence, or inter-sentential, i.e. between sentences. There is also the switching concerning tags or discourse markers, mostly at the beginning or end of sentences, which is referred to as 'tag-switching'. Examples of each type are shown in example (3). The analysis of the structural location is shown in Figure 6.6. The interesting fact here is that the three structural locations are attested more or less at the same frequency. This shows that the speakers make equal use of all available options.

(3) Samples of inter-sentential, intra-sentential and tag-switching

Inter-sentential

a. Anonymous, how far? ***Is the man still in class?***

b. Let's just try our best; ***God go help us naw***

Intra-sentential

c. Okay dear, but don't wear this ***yeye*** cloth

d. She come dey ginger me say ***her sisters found out*** say she give boy her school fees

Tag-switching

e. That's why they built that federal university ***naw***

f. She's doing her project now ***sef***

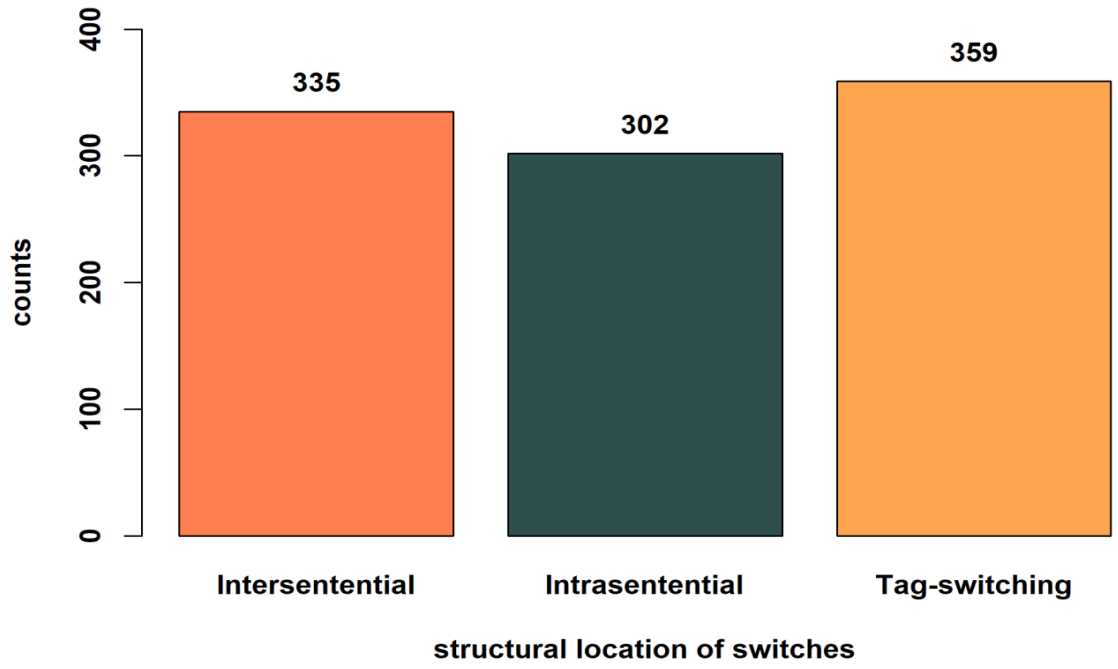

Figure 6.6: Structural location of switches

6.4.2.4 Switch Directions

For the switch direction, the investigation is whether speakers switch more from English to Nigerian Pidgin, more from Nigerian Pidgin to English, or whether the direction is symmetrical. To do this, let us first look at the direction of switches between turns and secondly, the direction

of switches within turns. For switch direction between turns, reference is made to the result shown in Figure 6.3. The interest here is only in the switches, i.e. the levels E/P and P/E. We see 1131 instances of between-turn switches, with more instances of switches from Nigerian Pidgin to English (N=736), than from English to Nigerian Pidgin (N=395).

For the direction within turns, the first investigation is with the inter-sentential structures with 158 occurrences from English to Nigerian Pidgin (coded as E-P) and 177 from Nigerian Pidgin to English (coded as P-E). Although we observe a trend towards English, the difference between the two directions is not significant (X-squared = 1.08, df = 1, p-value = 0.3). This means that the sample represents balanced bilinguals who switch almost equally in both directions between sentences.

For the intra-sentential switches, two patterns are identified: insertions and alternation (as defined above). The direction for alternation is either from English to Nigerian Pidgin or from Nigerian Pidgin to English. As for insertions, the direction is analysed as English-to-Nigerian Pidgin if a Nigerian Pidgin word is inserted into the grammatical structure of English, or vice versa. Figure 6.7 shows the distribution and directions. There are significantly more alternations than insertions.

Unlike the inter-sentential switching that shows little variation in switch direction, the intra-sentential switches show a significant asymmetry in switch direction. For both alternation and insertion, we see more movement from English to Nigerian Pidgin. This does not align with generalization in the literature that balanced bilinguals will show symmetry in switching direction as they will equally code-switch between the two languages. For insertions, hhis switch pattern shows that English functions more frequently as the matrix language. For alternations, eventhough the figure records more direction from English to Pidgin, both languages in most cases share the structure as the matrix language.

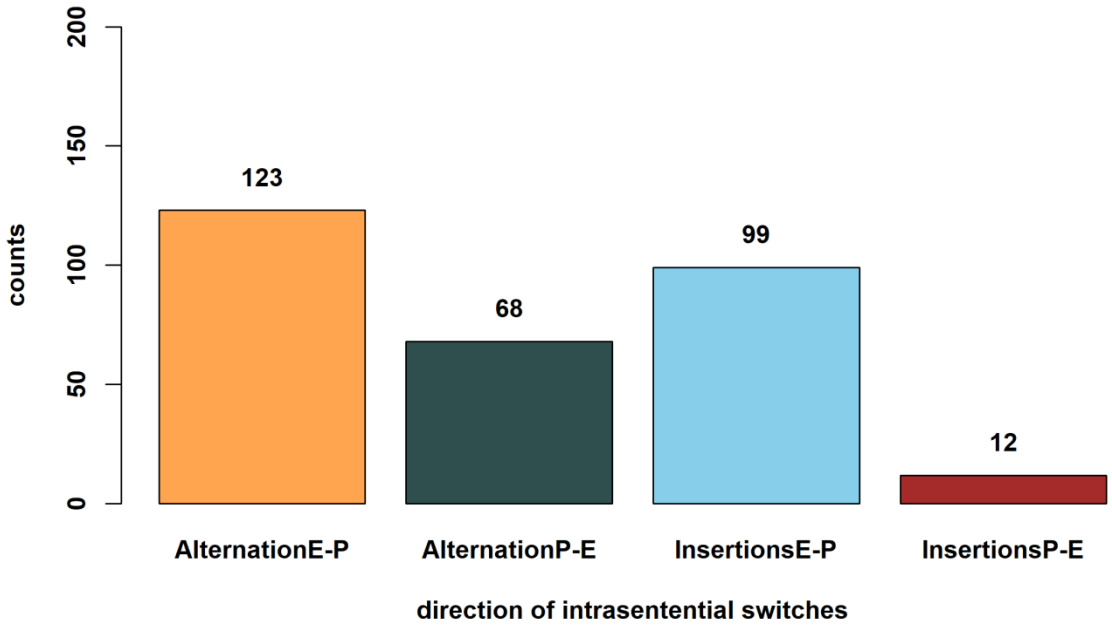

Figure 6.7: Distribution and direction of alternations and insertions in intra-sentential code-switching.

With regard to switch direction, tag-switching patterns similarly to insertions. All tags are Nigerian Pidgin tags added to English structures, thus showing movement from English to Nigerian Pidgin. There is no attestation of English tags in Nigerian Pidgin structures. In Figure 6.6, structural location of switches, tag-switching has a very high number of attestations (i.e. 359), and all of them are Nigerian Pidgin tags into English structures. This reveals that English is often the matrix language in the interaction of both languages. It further reveals that Nigerian Pidgin tags perform significant social functions in conversation between educated speakers in Nigeria as to warrant high frequency occurrence.

6.4.3 Social Factors and Code-Switching Patterns

To investigate the correlation between sociolinguistic factors and code-switching patterns, some analyses are carried out using mixed effects regression with different code-switching variables as dependent variables, and the social variables of the speakers as fixed effects, while speakers are used as random effect. Factors like age, gender, education status, and the region in which the data was collected are considered. The variable, *educationStatus* is coded using three levels: nongraduate (i.e. people with no university training), undergraduate (people still in

tertiary school), graduate (i.e. people holding a university/tertiary degree). Age was discarded from the analyses as it correlated strongly with education status. Education status was kept in the analyses because it is taken to be the more interesting variable. The variable *speaker* is used as random intercept to control for speaker variation.

The first analysis is for language preference. For this analysis, a subset of the data in which only those speakers that have at least 10 turns is used. This amounted to a data set with 5104 turns by 153 speakers. Turn starts and ends are analyzed as the dependent variable. Given that the distribution of turn starts is not very different from that of the turn ends, it did not come as a surprise that these two analyses yielded very similar results. The documentation here shows only the analyses of the turn starts as dependent variable. In addition to the main effects, a two-way interaction between education status and gender, and between region and gender was also tested. Additional interactions, including a three-way interaction of region, education and gender, were impossible or not meaningful to test due to too many empty cells in the cross-tables of these variables.

Following established procedures (e.g. Baayen 2008), the initial model was reduced by step-wise elimination of non-significant predictors. Predictors were eliminated if their presence did not significantly improve the model as shown by way of a log-likelihood test. In the final model for language preference, there is a significant main effect of region, gender and education status, and no significant interactions. The model is documented in Table 6.2. The partial effects of the model are plotted in Figure 6.8.

Table 6.2: Final Linear Mixed Effect Regression model for language preference (***p < 0.001; **p < 0.01; *p < 0.05)

Random effects

Groups	Name	Variance	Std. Dev.
Speaker	(Intercept)	2.78	1.67

Fixed effects	Estimate	Std. Error	p level
(Intercept)	-0.4664	0.9582	0.62643
educationStatusundergraduate	-1.3858	0.8719	0.11197
educationStatusgraduate	-2.2305	0.8755	0.01084 *
gendermale	2.0465	0.3368	1.23e-09 ***
regionB	0.4109	0.7043	0.55962
regionE	-0.6769	0.6932	0.32879
regionI	-2.2460	0.7182	0.00176 **
regionL	-0.2424	0.7317	0.74047
regionP	-0.7127	0.7838	0.36322
regionW	0.9553	0.6764	0.15786

(Baseline levels: Abuja for region, female for gender, non-graduate for educationStatus. Abbreviations: Std. Error – standard error, Region: A-Abuja, B-Benin, E-Enugu, I-Ibadan, P-Port Harcourt, W-Warri, L-Lagos.)

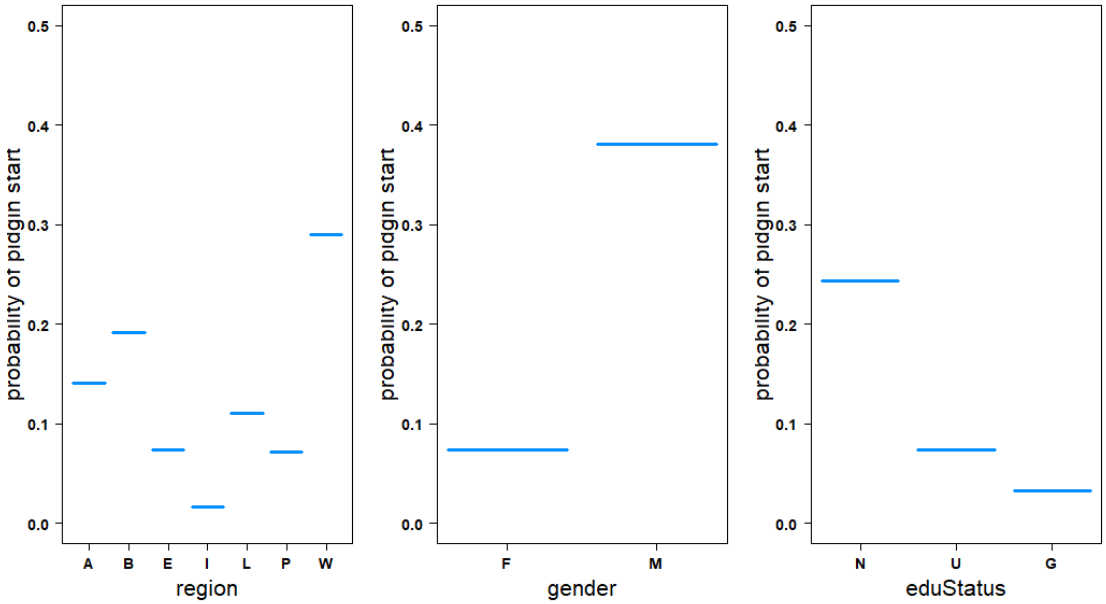

Figure 6.8: Fixed effects of final LMER model for language preference. A, B, E, I, L, P and W refer to the following data collection locations respectively: Abuja, Benin, Enugu, Ibadan, Lagos, Port Harcourt and Warri. The educational status (eduStatus) is classified as shown- N for non-graduate, U for undergraduate and G for graduate.

The rightmost panel of Figure 6.8 shows increasing education levels from left to right. This increase in education level goes together with a decrease in use of the Nigerian Pidgin for the three education levels: non-graduate, undergraduate and graduate. There is a negative correlation between the level of education and the amount of use of Nigerian Pidgin. The middle panel illustrates that males use significantly more Nigerian Pidgin than females. This patterning of gender is as expected, with males generally having the greater tendency towards non-prestigious language use. In the rightmost panel, we can see that regions differ in the amount of Nigerian Pidgin starts. For instance, in I (Ibadan), Nigerian Pidgin is relatively rarely used, while in W (Warri) there are a lot of turns that start in Nigerian Pidgin. This patterning is not surprising, as it reflects the degree of expansion of Nigerian Pidgin in these regions. Nigerian Pidgin is at the creolization stage in Warri, which is in the Niger-Delta, while its expansion is hindered in Ibadan, as a result of the intensive use of the local language of the region, Yoruba.

The next analysis looks at the effects of social factors on code-switching patterns within speakers. For the regression analysis of the intra-sentential code-switching patterns of alternation and insertion, an initial logistic regression model is fitted with the choice between alternation and insertion as the dependent variable, and all three social variables and their two-

way interactions as predictors. The model estimates the probability of insertion. Due to the fact that half of the speakers in this data set (N=996) provided only between one and four observations, mixed effects regression with speaker as random effect was not a viable option. After stepwise elimination of non-significant terms, the final model showed only two main effects, region and gender. The anova of this model is documented in Table 6.3. The two effects are plotted in Figure 6.9.

Table 6.3: Anova of final model for intra-sentential code-switching patterns

	Df	Deviance	Resid. Df	Resid. Dev	P
NULL	301	397.21			
region	6	12.55	295	384.66	<0.05
gender	1	5.82	294	378.83	<0.01

(Abbreviations: Df-Degrees of freedom, Resid. Df-residual degrees of freedom, Resid.Dev-residual deviance)

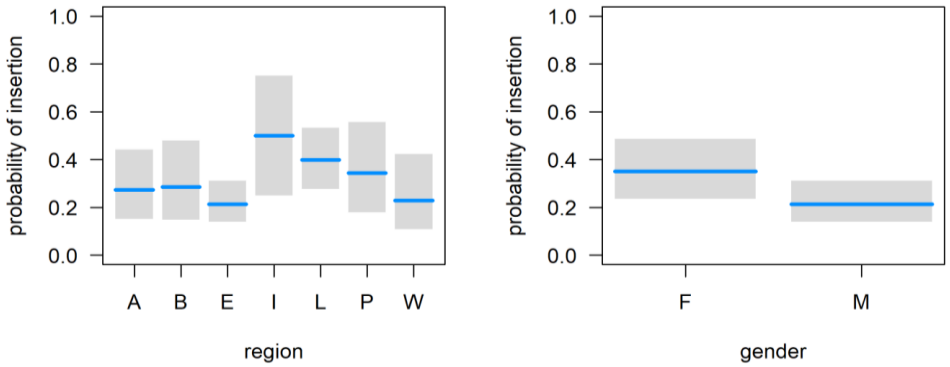

Figure 6.9: Effects of region and gender on intra-sentential code-switching patterns (grey boxes indicate 0.05 confidence intervals).

The left panel of Figure 6.9 shows that there are large differences between the seven regions. The right panel illustrates the fact that females have a slight tendency towards insertions; while men strongly prefer alternations over insertions (tags are not included as insertions).

The final analysis is with the inter-sentential switches. A regression analysis with the three social variables yields only a marginal effect of gender (z=1.70, p=0.089), with males being slightly more inclined towards Nigerian Pidgin-to-English switches within their own turns.

6.5 Summary and Conclusion

The quantitative results in this chapter show that English is the language of preference in informal conversations for the educated bilingual speakers in Nigeria (as represented in the sample). The high proportion of Nigerian Pidgin shows, however, that both languages are part of these speakers' daily linguistic repertoire. English has higher preference, but Nigerian Pidgin is also sometimes preferred over English depending on whether speakers want to conform to, or diverge from the previous speakers. This is mostly evidenced in the between-speaker turns. The social context of the interactions also determines the choice of language. In within-turn switches, we see speakers switch back and forth between the two languages. In order to understand the frequent back-and-forth switches within speaker turns in the analysis, a qualitative analysis was carried out by taking a closer look at individual conversations. The observation reveals that the back-and-forth switches within turns are found in conversations that involve mostly interlocutors who share a personal relationship, while the speakers use mostly one language, especially English in conversations with interlocutors that are not so familiar to them. This concurs with observation from ICE-Nigerian data used in chapter 5, where speakers use mostly English in interview speech situations and only switch to Nigerian Pidgin during informal discussions among people with close relationship. This shows speakers' negotiation of the status of both languages in Nigeria, and merits more investigation in future studies.

The code-switching pattern is also affected by region, gender and education status. There is variation in the use of Nigerian Pidgin across different regions. We see a high occurrence in regions like Warri and Benin. These regions are in the Niger-Delta, where Nigerian Pidgin first started through European and African trade contacts, and has since then creolized to become a first language in this region for subsequent generations. Ibadan (region I in Figure 6. 9), on the other hand, is the place with the smallest amount of Nigerian Pidgin usage. This region is in the south-western part of Nigeria, where speakers are known to use more of their local language (Yoruba) for interpersonal interactions. Secondly, although Ibadan is one of the largest and most populous cities in Nigeria, it is predominantly Yoruba, which hinders the flourishing of Nigerian Pidgin there.

The sociolinguistic analysis also shows a greater inclination of males towards Nigerian Pidgin than females. This conforms to the stereotypical sociolinguistic perspective on gender differentiation in language choice, i.e. that women are linguistically more conservative and

more oriented towards more prestigious variants than men (Labov 1966, Trudgill 1998, Holmes 2008, 2013 etc.). When females use Nigerian Pidgin, they tend more towards insertions than alternations. Insertion is one of the patterns of intra-sentential code-switching that involves mostly single constituents and it is seen as more grammatically difficult, because of the interaction of the morpho-syntactic structures of both languages. This indicates that the lesser use of Nigerian Pidgin by females cannot be attributed to a lower proficiency in Nigerian Pidgin but indeed reflects a socially motivated choice. Education status also plays a significant role. The more educated speakers are, the less they use Nigerian Pidgin. This may receive two interpretations: first, as bilingual speakers get more educated, they are more sensitive to their language choices, and have better judgment as to when to use each code based on social context, unlike the less or non-educated speakers. Second, the non-educated speakers use more Nigerian Pidgin because they have not learnt English properly in formal education.

In conclusion, this sociolinguistic study of code-switching patterns between English and Nigerian Pidgin by educated speakers in Nigeria confirms expectations based on the literature that bilingual speakers prefer the language with higher social status. The still large amount of Nigerian Pidgin use that is observable in the data can be attributed to the informal nature of the conversations. The code-switching between the two languages is a display of the speakers' negotiation of the role both languages play in the everyday life of these speakers in Nigeria. The speakers' language choice is based on what Myer-Scotton (1993) calls the "markedness metric", which is associated to speakers' competence in making the right language choice in conventionalized interaction situations.

Chapter 7

Structural Analysis of Intra-sentential Code-Switching

This chapter is a qualitative study examining the linguistic dimension of code-switching. It investigates the structuring of intra-sentential code-switching patterns by the educated English-Nigerian Pidgin bilinguals in the CENCOS corpus. The study of intra-sentential code-switching focuses on the grammatical aspects of code-switching and the linguistic rules that govern it. Labov (1971), in his investigation of sociolinguistic variation classifies code-switching as "the irregular mixture of two distinct systems", excluding the fact that code-switching is systematically structured. Most code-switching studies after Labov have established otherwise, that code-switching structure is rather regular and rule-governed (Poplack 1980, Joshi 1985, Myer-Scotton 1993, MacSwan 2000 etc.), although there is lack of consensus as to what constitutes the rules and the universality of such rules. The numerous grammatical models proposed for the analysis of intra-sentential code-switching are evidence that code-switching is not just an improper mixture of words from different languages, but rule governed. These many structural approaches to code-switching have been classified to differentiate models that propose constraints specific to code-switching (e.g., Poplack 1980, 1981; Joshi 1985; Azuma 1991, 1993; Myers-Scotton 1993, 2002 etc.), and models that claim that although code-switching is rule governed, the structuring does not involve a constraint specific to code-switching, rather a universal grammatical system responsible for monolingual utterances also accounts for code-switching structure (e.g., Santorini and Mahootian 1995, MacSwan 1997, 2000, 2005, Chan 2003, 2008, Belazi, Rubin and Toribio 1994 etc.).

The proponents of constraints specific to code-switching established that bilingual grammar is different from monolingual grammar, and the constraints are only applicable to bilingual code-switching. Some of the most widely implemented and most influential grammatical models fall under this approach. An example is The free morpheme constraint proposed by Poplack (1980: 585-586), which states that 'codes may be switched after any constituent in discourse provided that constituent is not a bound morpheme'. This was redefined in Sankoff and Poplack (1981: 5), and it states that 'a switch may not occur between a bound morpheme and a lexical item unless the latter has been phonologically integrated into the language of the bound morpheme'. Another influential model is The equivalent model, also by

Poplack (1980: 586), which states that 'code-switches will tend to occur at points in discourse where juxtaposition of L1 and L2 elements does not violate a syntactic rule of either language, i.e. at points around which the surface structures of the two languages map onto each other'. The Matrix Language Framework (MLF) proposed by Myers-Scotton (1993, 2000 etc) is also one of the influential models, and it is based on asymmetry between the languages participating in code-switching. The Matrix Language Framework proposes that one of the languages is more activated in code-switching as the matrix language providing the morpho-syntactic structure of code-switching utterances. There are many other influential structural models not cited here, whose proposed code-switching constraints have also either empirically or theoretically accounted for different language pairs in code-switching.

Another approach mentioned above stands against implementing constraints specific to code-switching. The proponents of this approach claim that code-switching and "pure" languages are governed by the same constraints or principles which form the language faculty or universal grammar (Chan 2008:778). In other words, code-switching is accounted for by principles which also apply to monolingual utterances. In that case, no constraint specific to code-switching is needed. This school of thought is known as the null theory, propagated in the works of such linguists as Mahootian 1993, Santorini and Mahootian 1995, MacSwan 1999, 2000 and Chan 2003. Under the null theory, switching is regulated only by parameters associated with universal grammar. The advocates of this theory proposed different syntactic models under the universal grammar to account for intra-sentential code-switching structure. Santorini and Mahootian's model (1995) for example, claim that "The language of a head determines the phrase structure position of its complements in code-switching just as in monolingual contexts". Chan's model (2003, 2008) is based on the tenet that "the language of a lexical head may or may not determine the order of its complement, but the language of a functional category always determines the position of its complement". MacSwan (1999) also assumes the null theory by using a minimalist approach. The tenet of his model is that "Nothing constrains code-switching apart from the requirements of the mixed grammars."

One thing these null theory models have in common is that they avoid stipulating that code-switching is in any way governed by a "third grammar", which are principles and frameworks formulated to control the interaction of the systems of the participating languages in code-switching. Secondly, the models are interested in the economy of the theory by not postulating a different grammar. Chan (2003), for example questioned the economy of the MLF

in stipulating subsidiary principles (e.g., the double morphology principle, the EL island trigger hypothesis etc.) to account for those data that cannot be explained by the main principles formulated in the matrix language framework.

Apart from the two approaches, i.e., those dealing with constraint specific to code-switching and the Null Theory, some models seem to be at the middle of the two approaches. These are models that rely on the notion of universal grammar, but are perceived to have also proposed some constraints for predicting code-switching. The Government Constraint (Di Sciullo, Muysken & Singh 1986) is one of such models. The Government Constraint holds that a government relation holds between constituents in a sentence. So within a sentence, elements having a certain type of relation to each other must be drawn from the same language. In other words, mixing is possible when a government relation is absent, e.g., between a subject and verb, and constrained when a government relation holds between elements, e.g., between a verb and object noun phrase because the object NP is more closely bonded to the verb than the subject NP. From their perspective, the proponents of this model see it as a form of Null Theory as they claim that the model is not specific to code-switching because it is formulated on the general considerations of lexical integrity, constrained by government condition, which holds for all uses of natural languages, and not just for code-mixing (Di Sciullo et al 1986:4). MacSwan (1999:60), however, categorized The Government Constraint as being specific to code-switching as he claims that the government relation is not necessary in syntactic theory and needs to be justified as a syntactic theory within monolingual utterances to avoid being seen as a specific mechanism for code-switching.

The Functional Head Constraint (FHC) is another model that falls in-between the two approaches. The Functional Head Constraint accounts for the structuring of code-switching based on the grammatical notion of f-selection, of which language is included as a feature that should also be checked. The proponents of FHC believe that the language feature of functional heads must match the language feature of their complements. In order words, no code-switch is allowed between a functional head and its complement, but is allowed between a lexical head and its complement (Belazi, Rubin and Toribio, 1994). The advocates of the FHC opine that the special relation between functional heads and their complements is operative in all speech, but the checking of language feature applies only in code switching, and only between functional heads and their complements, as they are generally required to select the features of their complements.

All the above syntactic models and many more that fall under each of the approaches have been implemented over the years to account for code-switching involving different language pairs with different word order parameters, but there has been lack of consensus as to which of these models best explains the universality of code-switching due to lack of either theoretical or empirical adequacy or even both. No model has been mapped out as the best, but some have proven successful in accounting for a large number of language pairs theoretically and, or empirically. Due to the fact that some of these models have measured up in accounting for different language pairs in code-switching, they have remained relevant up to the present time. The Matrix Language Framework is one of such models that have stood the test of time. Zahra et al (2021) recently employed the Matrix Language Framework in investigating code-switching between Urdu and English in the area of health and science. Wasserscheidt (2020) explores the Matrix Language Framework in investigating Serbian-Hungarian code-switching. Kheir (2019) applied the Matrix Language Framework in investigating the Druze language in Israel.

The Functional Head Constraint is another model that has also persistently appeared in code-switching analysis. Thunaibat et al (2020), for example, carried out a study on Arabic-English code-switching, employing the FHC. Kim (2020) presented a work on Spanish and Korean code-switching, where she employed the FHC as one of the code-switching models tested. The recent application of these models in analyzing code-switching shows their continuing relevance in code-switching.

For the linguistic analysis of the structure of English-Nigerian Pidgin code-switching in this chapter, the Matrix Language Framework and the Functional Head Constraint are employed. I used the Matrix Language Framework because of its popularity in the analysis of different language pairs in code-switching. It has been empirically and successfully employed in the study of code-switching in many multilingual nations, including Africa, where similar language situations as that of Nigeria uphold. Secondly, as one of the aims of this study is to investigate the issue of a matrix language prompted in the previous chapter, it is worthwhile to use a model that bases its tenet on asymmetry between the participating languages. The Functional Head Constraint and its implementation in this work is prompted by the fact that the model is based on the same universal grammar that accounts for monolingual constructions. Like MacSwan (1999:60) pointed out, the model is greatly improved (i.e., no more specific to code-switching) if the language feature that is checked is a collection of formal features that

characterize the languages. So in applying this model in code-switching between English and Nigerian Pidgin, the language feature that is checked is a collection of formal features that describe both languages. Moreover, the other null theory approaches are best suited for two languages whose phrase word orders are totally different.

The aim of this chapter is to test the validity of both the matrix language framework and the functional head constraint in accounting for code-switching patterns between English and Nigerian Pidgin that share similar surface morphemes, but differ in structure in some respect. This is different from the application of these models in previous works where participating languages have totally different surface morphemes and structures. In what follows, the two theoretical approaches will be handled separately to test their validity in accounting for the intra-sentential code-switching in the CENCOS data. The remaining sections of this chapter run as follows: section 7.2 gives areas of contrast between English and Nigerian Pidgin. Section 7.3 presents the MLF. Under this section, a detailed explanation of the MLF model is given, followed by the explanation of the data set. The result of the MLF application is also presented in this section. Section 7.4 presents the FHC, its explanation, application and results. Section 7.5 gives the summary and conclusion of this chapter. The research questions that this chapter intends to answer will be presented in the different sections presenting the different models as both models are set to answer different questions.

7.1 Some Structural Mapping Problems between English and Nigerian Pidgin

Areas of similarities and differences between English and Nigerian Pidgin have been mentioned earlier in this work. As an English-lexifier Pidgin, Nigerian Pidgin shares similar words and also basic sentence structure (SVO) with English. Even with their similarities, they are also different in some respect. The areas where these languages differ are presented in this section to enable effective implementation of the structural models that will be applied later in this section. The areas of contrast have to do with the presence of preverbal markers, absence of articles and lack of inflection in Nigerian Pidgin. I will use some examples from the data to show these areas of contrast in the structure of both languages. Example (1a-e) shows code switching constructions with single embedded morphemes from different grammatical categories. The words in capital are the switched morphemes. All the embedded morphemes

are Nigerian Pidgin morphemes inserted into the structure provided by English. These embedded morphemes show the same syntactic position as their counterparts in the other language would show. The embedded Nigerian Pidgin morphemes can easily be removed and their English equivalents inserted without changing the structure of the constructions. Because the constructions in (1) and (2) feature mostly English words in examples, only the translation of the whole construction is given to avoid a repetition of the words.

(1) a. *But to be honest with you, **FOR** my first year…*
But to be honest with you, **PREP** my first year.
'But to be honest with you, in my first year…'

b. *She **GO** put milk inside sour bitter leaf.*
she ASP put milk inside sour bitter leaf
'she would put milk inside bitter leaf.'

c. *I don't know whether **NA** anonymous*
I don't know whether it is anonymous
'I don't know whether it was anonymous'

d. *Okay dear, but don't wear this **YEYE** clothes*
okay dear, but don't wear this **ADJ** clothe
'Okay dear, but don't wear this useless cloth'

e. *The area **WEY** I wrote my exam….*
the area **REL** I wrote my exam...
'The area that I wrote my exam …'

Example (2a-d), on the other hand, shows contrast in the structure of both languages. The replacement of the embedded morphemes with their counterparts from the other language affects the well-formedness of the constructions. It is slightly complicated to identify the language that solely provides the structure of the constructions in these examples because the insertion of the morpheme equivalents from the other language causes a change in the structure of the constructions.

(2) a. *I **GET** assignment to do.*
I HAVE assignment to do
'I have [an] assignment[s] to do'

b. *You **DEY** class when he gave you the…?*
You COP class when he gave you the …?
'were you [in] class when he gave you the…?

c. *She **NO BE** my kind of person*
she NEG COP my kind of person
'She is not my kind of person'

d *One other type of that slippers still **DEY** here*
One other type of that slippers still COP here
'One other type of that slippers [is still] here'

One area of contrast as we see in the examples is in the use of articles. Placement of articles is realized differently in both languages. In Nigerian Pidgin, the use of articles is optional. Two forms of articles exist in Nigerian Pidgin, *di* (i.e., the article *the* in English) for definiteness, and *won* (i.e., *one* in English) or *some* for indefiniteness (Faraclas 1996:172-173). These articles, especially the indefinite ones also mark number in nouns. Since they are optional, singular common nouns are not obligatorily preceded by articles in Nigerian Pidgin. The English language, on the other hand, requires articles preceding nouns for grammatical correctness (Berk 1999). The noun *assignment* in (2a) in English must be preceded by an article or a determine, but unlike in English, this construction is grammatically correct with or without articles in Nigerian Pidgin.

Another contrast is the lack of inflection in plural marking, which is one of the features of Nigerian Pidgin. This is also seen in example (2a) where the noun, *assignment* is not inflected for plurality with the plural marker *-s*, even in the absence of any singular marker. English attaches the suffix *-s* to nouns to mark plurality, while Nigerian Pidgin uses an independent post nominal marker *dem* to mark plurality. Although both of the markers are post-nominal, one is affixed, while the other is independent as we see in the examples in (3a) and (3b). (3a) is a monolingual Nigerian Pidgin construction, with the plural morpheme highlighted in bold. The code-switching in (3b) is in capital letters

(3) a. *Anonymous **dem** come dey get close talk*
Anonymous PL PST ASP have intimate talk
'They were having intimate conversation'

b. *Red cross suppose know say girl-**S** dey enter*
red cross suppose know REL girl-PL ASP enter

'The Red Cross is supposed to know that girls are entering'

Another type of inflection contrast is in past marking. English uses the past inflected marker -*ed* or internal modification to mark past tense. Nigerian Pidgin, on the other hand, uses the preverbal markers *bin, don,* and *kom* (also written been, done and come in the data) to mark past tense. The verb, *collect* in example (4a) lacks the past marker -*ed,* but it is still marked for past with the past preverbal marker *come*.

(4) a. *I **come** collect the five compulsory courses*
I **PST** collect the five compulsory courses
'1 collected the five compulsory courses'

Nigerian Pidgin does not also mark tense in some constructions. The verb *tell* in the embedded Nigerian Pidgin clause in the example in (4b) is not marked for tense. For such constructions that lack tense/aspect/modality marking in Nigerian Pidgin, default valuesare assigned to them based on whether the verbs are stative or non-stative. (Faraclas 1996:188). Stative verbs are assigned [-past], [-completive], and [+realis]. Non-stative verbs are assigned [+past], [+completive] and [+realis]. So for the construction in (4b), the matrix clause, *im tell me* gets a [+past, +completive, +realis] value, while the embedded clause *say he dey come* with the incomplete aspect marker *dey,* but with no overt tense marking is by default assigned [-incomplete, -past, +realis].

b. *The truth is that im **tell** me say he dey come*
The truth is that 3SG tell me REL he ASP come
'The truth is that he told me that he is coming'

Apart from articles and inflections, negative constructions also contrast between the structure of both languages. The two main negative markers in English, *not* and *no* are both post-posed to auxiliary or modal verbs in declarative constructions. Nigerian Pidgin, on the other hand, has one similar main negative marker *no* which is pre-posed to the verb phrase as in (5a). The negative marker *no* plus the copula *be* also collocate to negate sentences or phrasal constituents

by preceding them as we see in example (5b). Such constructions become focused with *no be* as the focus introducer (Faraclas 1996:91).

(5) a. *You **NO** **DEY** at least try to*
You NEG COP at least try too
'You do not at least try too'

b. ***NO** **BE** because of this current one*
NEG COP because of this current one
'It is not because of this current one'

7.2 Structural Framework: The Matrix Language Frame

The Matrix Language Frame (MLF) model by Myer-Scotton (1993, 2002 etc.) is a structural model proposed to account for a type of intra-sentential code-switching classified as classic code-switching (2002:8). Classic code-switching is distinguished from a composite type to refer to bilingual speech involving only one of the languages participating in code-switching as the determinant of the morpho-syntactic frame of the bilingual clause. The composite type on the other hand, allows more than one language to be the source of the morpho-syntactic structure of the bilingual clause. Two main propositions govern the tenets of the MLF. One is the distinction between a Matrix Language (ML) and an Embedded Language (EL). The model postulates that languages participating in bilingual code-switching do not have the same status. One language is recognized as the Matrix Language, which provides the grammatical frame upon which morphemes from the other language, the Embedded Language are inserted. According to Myers-Scotton and Jake (2000:2), the matrix language is best thought of as the abstract grammatical frame of a bilingual clause, and not as a language itself. The matrix language happens to share the same structure with one of the participating languages in classic code-switching. The Embedded Language, on the other hand, refers to "the other language that participates in code-switching, but with a lesser role (Myers-Scotton 1993: 3).

The second proposition is the distinction between content and system morphemes. This proposition states that the matrix and embedded languages may contribute content morphemes to bilingual code-switching, but both of them can not contribute all the system morphemes (Myers-Scotton, 1993). Some system morphemes are regarded as essential and must be provided by one of the participating languages. These essential system morphemes are those

that have grammatical relations external to their heads, e.g, the 3rd person singular agreement marker-*s*. Myers-Scotton and Jake (2000) expanded the explanation of the different system morphemes in their introduction of the 4M-Model, where they show the activation of different types of morphemes at the mental lexicon, and what differentiates a particular type of system morpheme from the other system morphemes. The 4M-Model is explained in the next section, but we will first look at two testable principles proposed in MLF to identify the Matrix and embedded language in structuring code-switching frame in any classic type of code-switching.

The first principle is the Morpheme Order Principle. This principle states that in any code-switching constituent with a single embedded constituent inserted into the structural frame provided by the Matrix language, the surface structural frame must be that of the matrix language –in ML+EL constituents consisting of singly-occurring EL lexemes and any number of ML morphemes, the surface morpheme order will be that of ML (Myers-Scotton, 1993:83). The Morpheme Order Principle indicates that the word order [referred in this work as constituent structure] of a mixed constituent must not violate that of the Matrix language. The matrix language sets the grammatical frame of the mixed constituents and when the embedded language is inserted, the resulting structure must follow the structural rule of the matrix language. For example, if a noun from an embedded language with pre-posing structure is inserted into a matrix language structure where determiners are post posed, the Morpheme Order Principle requires that the embedded noun takes a post-posed determiner. This is exemplified in the Igbo-English code-switching in example (6) from Ihemere (2016). The highlighted morphemes are the switches. Determiners come after nouns in Igbo, while they precede nouns in English. With the embedded English nouns, *ceremony* and *election*, we see that the structure is that of Igbo, and not English because the determiners, *ahu* and *afo a*, follow the Igbo structure by coming after the nouns.

(6) a. *Ma* ***ceremony*** *ahu fu-ru nnukwu ego*
But ceremony DET cost-IND big money
'But the ceremony cost a lot of money'

b. ***Election*** *afọ a adi-ghị mfe ma ọlị*
Election year DET BE-NEG easy at all
'This year's election is not easy at all'

(Ihemere 2016:97)

The second principle is the System Morpheme Principle. This principle states that all the system morphemes with grammatical relations external to their heads must come from the Matrix Language 'in ML+EL constituents, all system morphemes which have grammatical relations external to their head constituent will come from the ML' (Myers-Scotton, 1993:83). The system morphemes relate differently in structuring the grammatical frame of code-switching utterances. Unlike the content morphemes that assign and receive thematic roles, e.g. nouns, verbs, etc. which can come from both languages, a particular type of system morpheme must always come only from the matrix language. The language that provides this particular system morphemes constitutes the matrix language. If the terms of the Morpheme Order and System Morpheme Principles are satisfied by one and the same language, that language can be identified as the Matrix Language.

Apart from providing the essential system morphemes, and the structural frame for single embedded morphemes, the Matrix Language also controls the insertion of phrases, or what is referred to in Matrix Language Framework as EL islands. EL islands are embedded language phrases that occur as constituents in code-switching. EL islands show structural dependency relations. The well-formedness structure of the embedded language is observed within the EL islands, but the EL islands must follow the matrix language rules within the larger code-switching constituent. Example (7) below from Igbo-English code-switching shows example of EL islands. The embedded English phrase, *ballot box* is well-formed in English, but in the clause, the NP follows Igbo structure by post-posing the quantifier, *dum* [all]

(7) *Ha kụwa-siri* ***ballot box dum***
They break-ENCL-IND ballot box all
'They completely broke all the ballot boxes'
(Ihemere 2016: 165)

7.2.1 The 4-M Model

The 4-M model is an improvement of the Matrix Language Model with regard to system morphemes. The main aim of the 4-M model is to show that morphemes differ in their contribution in bilingual language production as a result of their activation time. The 4-M model is an extension of the psycholinguistic model of language production (e.g., Levelt 1989).

Psycholinguistic model presumes that the production of language begins at the abstract level, so morphemes should be classified at the abstract level, as against their surface distribution. The 4-M model shows morpheme differential distribution at abstract and surface levels (Myers-Scotton& Jake 2000, Myers-Scotton 2002, 2008 etc.) The differentiation is based on morphemes activations at the mental lexicon, and they are classified according to three features [± thematic role assignment], [± conceptually-activated], and [± referring to grammatical information outside of its maximal projection] (Myers-Scotton and Jake 2000:4). These features are applied in the distribution of the morphemes into four types in the 4M-model. Instead of only content and system morphemes as earlier distinguished in the Matrix Language Framework, the 4M model further classifies the system morphemes into early system morphemes and late system morphemes. The late system morphemes are further classified into bridge system morphemes and late outsider system morphemes. So within the 4-M model, morphemes are classified into 4 types: content morphemes, early system morphemes, bridge system morphemes and late outsider system morphemes. based on the three features, content morphemes and early system morphemes are conceptually activated by speakers at the lemma level, while bridge and late outsider system morphemes are structurally activated by the grammar of the matrix language as shown in figure 7.1 (Myers-Scotton and Jake 2002 p. 73). Of the three system morphemes, the 4-M model predicts that late outsider system morphemes only come from the Matrix Language.

Content morphemes are the main meaning conveyors in a discourse, so they are directly elected from the inception of speakers' intention and perform such functions as receiving or assigning theta roles. They have a plus reading for the feature [+ conceptually activated] and this indicates that they are semantically and pragmatically elected directly at the lemma level. Necessary information about content morphemes is also mapped out at the lemma level (Myers-Scotton & Jake 2000). Early system morphemes, e.g, plural markers, determiners, prepositions like *up* and *out* in phrasal verbs like *break up, set out* etc. are indirectly elected, but they also share the feature [+ conceptually activated] with content morphemes because they are conceptually elected together with the content morphemes to convey meaning. Both content and early system morphemes are activated earlier than the other morphemes.

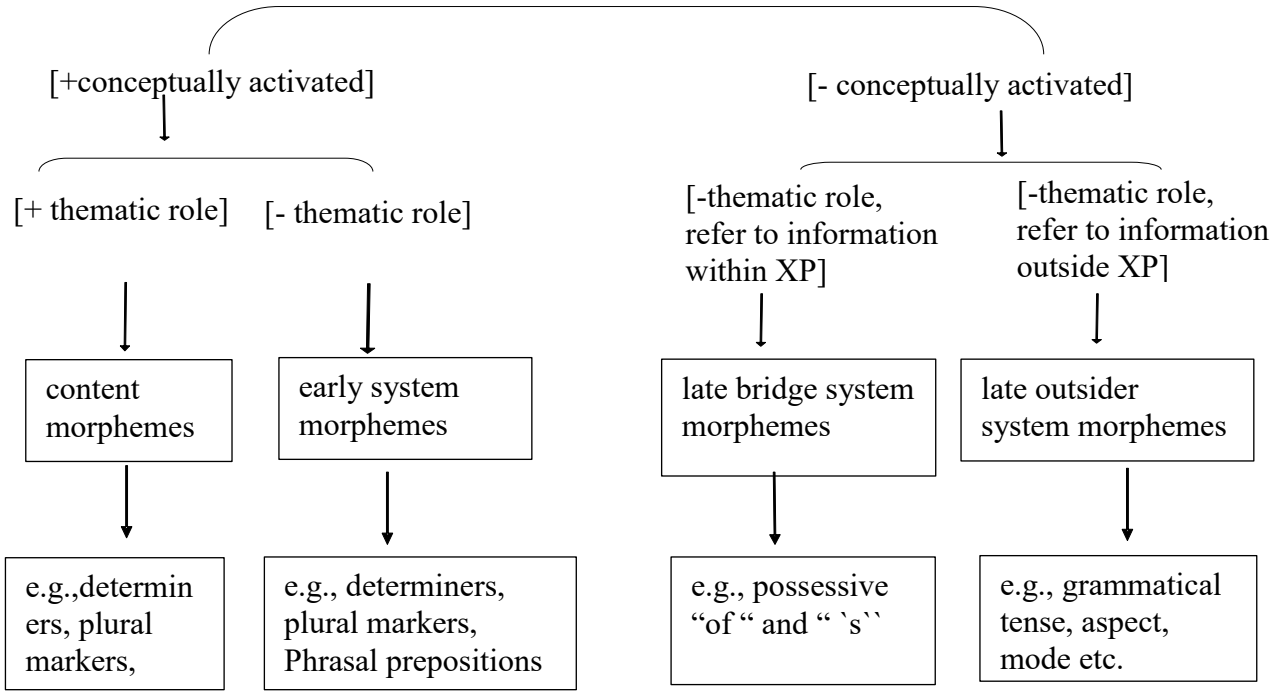

Figure 7.1: Morpheme classification and examples.

The other types of morpheme, the late bridge and late outsider system morphemes do not carry meanings, and are not conceptually activated. They are rather used in building the structure of the sentence. They are structurally assigned at the level of the formulator for building grammatical structure, so they both have minus reading for [-thematic role assignment] and [-conceptually activated]. Although they share the same minus reading for these two features mentioned, they also differ with regards to whether their assignment is within or outside of their maximal head projection. The bridge morphemes have a minus sign for the feature [-referring to grammatical information outside of its maximal projection of head]. The bridge morphemes, e.g., possessive *of* and *'s* join two units to indicate relationships and this assignment is within their NP maximal projection. This is different with the late outsider morphemes that have plus reading for the feature [+referring to grammatical information outside of its maximal projection of head]. The outsider late morpheme, e.g., the 3rd person singular agreement marker, *-s* in the sentence, *The baby likes the toy* depends on grammatical information from the singular subject NP, which is outside of the VP constituent in which it appears. Myers-Scotton (2008, p.23) noted that although all three types of System Morphemes build structure, outsider morphemes are distinct in their building relations within a sentence or clause. One of the ways

outsiders build grammatical structures is through "co-indexing" *across* phrases as against word order juxtaposition. Second, outsiders link elements at another level and contribute to the semantic coherence in the sentence or larger discourse. Because the late outsider system morphemes contribute to semantic coherence, it is critical that they come from the language that provides the morpho-syntactic frame of the bilingual construction.

Although the 4-M model is said to be a refinement of the MLF model, especially with regard to the system morpheme, it still maintains the same tenet of the MLF model, which has to do with the ML/EL opposition, and the Content morpheme/System Morpheme opposition. The refinement in terms of the system morphemes only provides further explanation of the different activations of the morphemes, in order to establish why a particular type of system morpheme, which was already specified in the MLF model as "morphemes which have grammatical relations external to their head, (i.e., which participate in the sentence thematic role grid)" (Myers-Scotton 1993: 83) is regarded as relevant, and must come only from the Matrix language. So both models project more or less the same structural constraints as to code-switching occurrences. Because both models maintain the same tenet of the MLF model, this study will handle both models as referring to MLF model, and integrates both in the analysis of English-Nigerian Pidgin code-switching data.

The application of the MLF model (e.g., Deuchar 2006, Herring et al. 2010, Carter et al. 2011, Ihemere 2016 etc), has been noted to successfully account for code-switching between language pairs that are typologically different. English and Nigerian Pidgin are similar languages, but also distinct in some respect as explained earlier. Because the validity of the MLF is best tested on languages that are typologically different, I used the contrast areas between these languages as the bases of the analysis. For the MLF to be validated in this investigation, it is expected that under morpheme order criterion in the areas of contrast between English and Nigerian Pidgin, one language, which is the matrix language, will play a larger structural role by providing the morpho-syntactic frame, while every single embedded morpheme must follow the structural rules of the matrix language. Secondly, any of the two languages can be the matrix matrix language because of the speakers' level of proficiency in both languages. Additionally, any embedded language island must have embedded language structural dependency, but also follow the rules of the matrix language in the overall construction.

For the system morpheme criterion, it is difficult to test the MLF established late outsider system morpheme in code-switching between English and Nigerian Pidgin, as it has to do with maintaining agreement between the 3rd person subject and the verb, which in Nigerian Pidgin, is not necessarily observed. The late outsider system morpheme is, therefore, analysed here by taking into account, inflectional verbal aspects, e.g., auxiliary verb, tense-aspect-mood marking and negation. These aspects are observed in both languages and also constitute areas of contrast between both languages. The investigation of these aspects under the System Morpheme criterion mirrors an investigation of Igbo-English code-switching by Ihemere (2016). As Igbo language is similar to Nigerian Pidgin in the area of late outsider system morphemes not maintaining agreement between 3rd person subjects and verb, Ihemere redefined the late outsider system morpheme to include all functional morphemes associated with the verb. In testing these aspects, the expectation is that all the identified late outsider system morphemes (auxiliary verb, tense-aspect-mood marking, and negation) must be provided only by the matrix language. The other system morphemes (early and bridge), together with the content morphemes can be provided by both languages, but early system morpheme will preferentially come from the matrix language.

The application of the Matrix Language Framework model is generally aimed to answer the following main research questions:

1. Is the pattern of code-switching between English and Nigerian Pidgin a clear case of classic code-switching?
2. Is there asymmetry in the participation of English and Nigerian Pidgin in code-switching?
3. Do all late outsider system morphemes come from the matrix language?
4. Do EL morphemes maintain word structure of the matrix language?

7.3 Data

The data used in answering the questions above is from the Corpus of English and Nigerian Pidgin Code-switching (CENCOS) described in chapters 4 and 6. This section makes use of only the intra-sentential switching, which is one of the forms of code-switching attested in the data. The distribution of the three forms of code-switching in chapter 6, figure 6.6 records an attestation of over 300 intra-sentential switching. For this section, there is a further cleaning of

the intra-sentential switching, leading to its reduction to 205. Some of the constructions removed are repetitions of the same constructions in different text files. Some constructions with discourse markers like *abi and shey* in such constructions as *He beats ladies ABI*? *And SHEY the video is on Youtube* are also removed. Although these discourse markers, unlike those coded as tag-switches, play semantic functions like agreement to proposition, question etc., which help in the understanding of the constructions, they lack structural integration to the construction as a whole.

7.3.1 Data Distribution

Figures 7.2 and 7.3 show the distribution of the intra-sentential switches used in this chapter. Figure 7.2 shows the distribution of single word switches and their grammatical types, while figure 7.3 shows multiple switches and the different switch points. The distributions show more multiple word switches than single word switches. For single word switches, there is a preponderance of copula (COP) and (NOUN) insertions. The other grammatical categories attested are adjectives (ADJ), adverbs (ADV), auxiliary verbs (AUXv), complementizers (CP), main verbs (Mverb), prepositions (Prep) and pronouns (Pron). The multiple word switches mostly occur at points between constituent heads and their complements, and in constructions with embedded clauses. The switch points involve both lexical and functional heads and their complements. The different switch points are shown in the distribution in figure 7.3. The switch points identified are between Adverb and its complement (ADV-CP), Verb Phrase and its complement (VP-CP), Noun Phrase and its complement (NP-CP). Another switch point is between complementizers and their complement clauses. The complementizers are classified as *say* and *wey* complementizers (SAY-CP, WEY-CP, specific to Nigerian Pidgin), and English complementizers (e.g., that and adverbs). There are also null-complementizers. Another switching point is between the subject (either nouns or pronouns) and the verb phrase. These are classified as NP-VP. Below are the distributions.

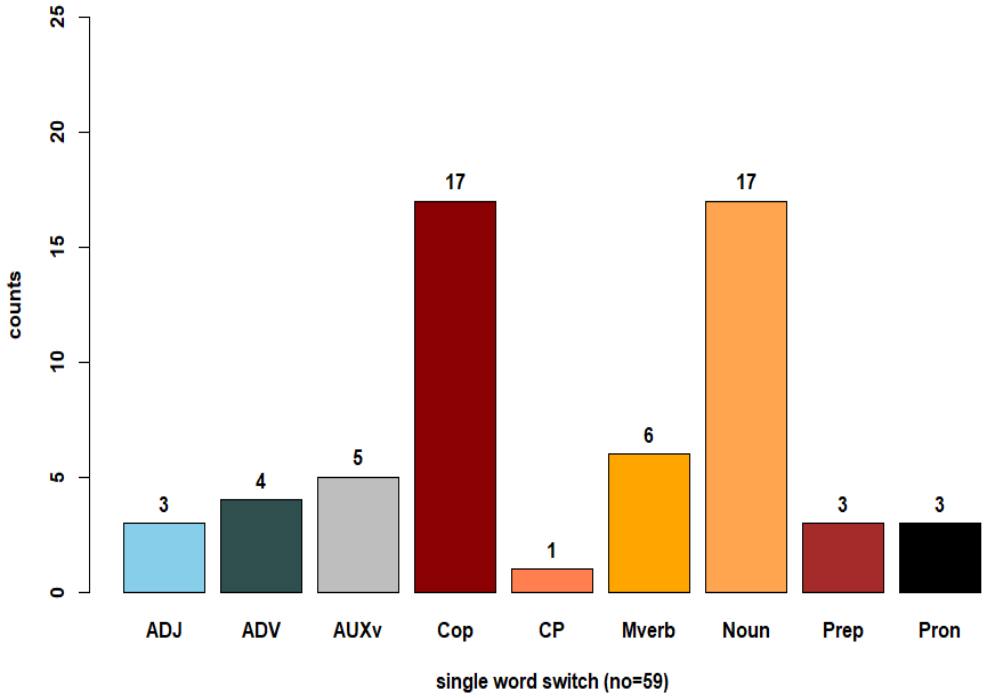

Figure 7.2: Single-word switches. (ADJ-adjective, ADV-adverbs, AUXv-auxiliary verbs, Cop-copula, CP-complementizers, Mverb-main verbs, Prep-prepositions, Pron-pronouns)

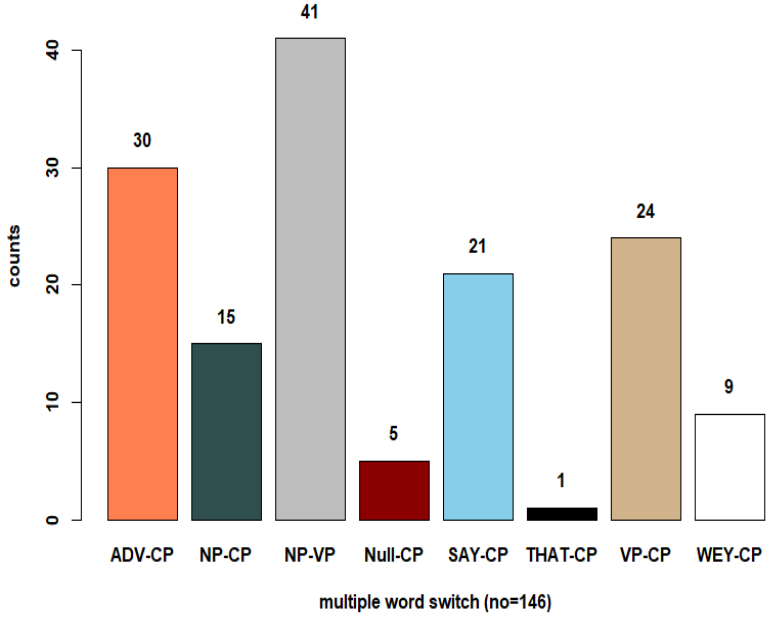

Figure 7.3: Multiple-word switches ADV-CP=Adverb-complement, NP-CP=Noun-complement, NP-VP=Noun-Verb Phrase, Null-CP=Null Complementizer, SAY-CP=Nigerian Pidgin complementizer say-complement, THAT-CP=English complementizer THAT-Complement,VP-CP=Verb-complement, WEY-CP= Nigerian Pidgin complementizer WEY-Complement)

7.4 Testing the Matrix Language Framework (MLF)

The testing of the MLF will start by looking at articles within noun phrase constituents. This is one of the areas both languages contrast in structure, which has also been noted earlier.

7.4.1 Articles within Noun Phrase

Let us see the use of two Nigerian Pidgin nouns *wahala 'problem'* and *moto 'car'* in code-switching constructions. These nouns are specific to Nigerian Pidgin while *problem* and *car* can be used in both languages. These nouns follow Nigerian Pidgin morphemes in examples (8) and (9). The constructions in (9) are not code-switching constructions, but Nigerian Pidgin constructions used here for explanation. In example 8, the code-switched constituents are in bold, and the focused nouns are in capital letters. In example 9, the non-code-switched constituents used for examples are only in bold.

(8) a. *This USB **get WAHALA***
This USB have problem
'This USB has (a) problem'

b. *To feed **na WAHALA***
To feed be problem
'To feed is (a) problem'

(9) a. *Na **moto** una won carry?*
(It is) car you want take
'Do you want to use (a) car?' or 'Is it a car that you want to use?'

b. *I carry Anonymous for **moto**.*
I carry Anonymous in car
I was carrying Anonymous in (the) car

We see that when these nouns come after Nigerian Pidgin morpheme or structure, the nouns are not preceded by any article. Let us look at constructions where they come after English morphemes in example (10).

(10) a *My dear, to even wash their clothes is* ***WAHALA***
My dear, to even wash their clothes is problem
'My dear, to even wash their clothes is [a] problem'

b *Anonymous dey* ***IN FRONT OF*** *moto.*
Anonymous COP in front of 'car'
'Anonymous was in front of [a/the] car'

In the two constructions, we also see the absence of articles preceding the Nigerian Pidgin nouns, even after an English morpheme. Let us compare them with the English nouns *cab* and *date* in Nigerian Pidgin constructions in example (11). *Cab* is a more sophisticated word when compared to *taxi* in Nigerian English, and rarely does it occur in Nigerian Pidgin. The word <u>date</u> 'romantic appointment' is also rarely used. If they occur in Nigerian Pidgin, they are definitely instances of code-switching and not for everyday use.

(11) a. *Make una go bring CAB come*
Let 1PL ASP bring cab come
'You should go and get a cab'

b. *I go see* ***CAB,***
1 ASP see cab
'I will see a cab'

c. *She get* ***DATE*** *tomorrow*
She Have date tomorrow
'She has a date tomorrow'

We see that within the noun phrase where there is conflict in structure between the two languages as regards the use of articles, Nigerian Pidgin structure is preserved. Whether

Nigerian Pidgin nouns follow English or Nigerian Pidgin morphemes, there is always an omission of the article, which is a structural feature of Nigerian Pidgin. When English nouns are inserted into Nigerian Pidgin structure, the article is also omitted. So whether English nouns follow Nigerian Pidgin morphemes or Nigerian Pidgin nouns follow English morphemes, the Nigerian Pidgin structure is always preferred. If the ML of the code-switching constructions is identified based on the language that prevails in structural conflict within the noun phrases discussed above, Nigerian Pidgin will be identified as the Matrix Language. But we should not forget that the Morpheme Order criterion is just one of the criteria. We now look at the system morpheme criterion.

Let us look at example (10a) above. We should remember that the Nigerian Pidgin noun, *wahala* did not validate the morpheme order principle as it maintained its Nigerian Pidgin structure (i.e., the absence of an article) in the frame provided by English. English maintains the structural well-formedness up until the embedded language insertion at the end. The verbal markers acknowledged as the outsider late system morphemes are not used in this example, but other system morphemes like the pronominal determiners *my* and *their,* which are early system morphemes, are structured according to English. The English copula verb *is* is a bridge late morpheme as it links the subject, *to wash clothes* and the predicate, *wahala*. Although the late outsider system morphemes are not used in example 10a, the Matrix Language is identified as English because the other system morphemes are well-formed according to the structure of English. How do we then resolve the absence of an article preceding the noun, which is the supposed structure that should prevail according to the Morpheme Order principle? Do we take it as a case of bare form?

Bare forms are Embedded Language content morphemes that do not show all the function words and inflections that would make them fully integrated into the Matrix Language (Myers-Scotton 2002:67, 1993:112). Myers-Scotton noted that allowing bare forms in bilingual code-switching is a compromise strategy activated to avoid clashes between the ML and the EL. I will not acknowledge the Nigerian Pidgin *wahala* in (10a) as a bare noun, because the null article is a feature of Nigerian Pidgin, and not really a bare noun. The Matrix Language Framework, therefore, does not account for all code-switching structures as regards the use of articles within noun phrases between English-Nigerian Pidgin code-switching.

Investigating the System Morpheme criterion in example (10b), the prepositional phrase *in front of* is an English expression and hardly occurs in Nigerian Pidgin. It is inserted as a

lexicalized phrase. Looking at the system morphemes, we can see that the grammar of Nigerian Pidgin is more activated than that of English. We see that the prepositional phrase falls under what the Matrix Language Framework calls EL Islands. That is, we see embedded Language material that is larger than single embedded morphemes, and shows internal structure dependency relations that make them well-formed in the embedded Language (Myers-Scotton 2002: 114). In this case, the Matrix Language is Nigerian Pidgin, with an embedded phrase from English, *in front of*. The EL Islands has a dependency relation and is also well-formed according to the overall structure of the matrix language, Nigerian Pidgin. This example supports the Matrix Language Framework. The other examples in (11) also validate the System Morpheme Criterion as the outsider system morphemes- *make* and *go*, are from the same language that structured the insertion of the embedded nouns. There is also the presence of a serialized verb (*go bring come)* and the copula element *(get),* which is a bridge system morpheme joining the subject and the predicate. All these system morphemes come from the Matrix Language, Nigerian Pidgin. So in English-Nigerian Pidgin code-switching with a structural contrast involving article usage with nouns, the Nigerian Pidgin structure always prevails.

7.4.2 Inflections: Plural Markings

Another structural contrast between English and Nigerian Pidgin has to do with plural and past marking. Let us look at the plural marking in line with the Morpheme Order principle to determine the Matrix Language in the constructions. There is variation in plural marking in the data set with both the inflected English plural marker *-s* and the independent post-nominal Nigerian Pidgin marker, *dem.* Example (12) shows the patterning of the Nigerian Pidgin plural marker *dem* in the data.

(12) a. *All those kind things* ***dem***
All those kind things PL
'All those kind (of) things'

b. *I was not really with* ***Anonymous DEM***
I was not really with Anonymous PL

'I was not really with them'

c. *We no carry that paper back where that slipper-**S dem** dey?*
We NEG carry that paper back where that slipper-PL PL COP
'Did we not bring back that bag where those slippers are?'

d. *The girl parent-**S dem** don seal everything*
The girl parent-PL PL ASP seal everything,
'The girl's parents have concluded everything'

For the Nigerian Pidgin plural marker *dem*, note that apart from where it is following someone's name (12b), it usually appears following an already marked plural noun in English. This is particular in the data set for this work. In monolingual Nigerian Pidgin constructions, like the ones used in Faraclas (1996: 168, 234) we see constructions with only the plural marker *dem* like the ones in example (13).

(13) a. *A sel di nyam **dem***
1SG sell ART yam PL
'I sold the yams'

b. *A go tek di pikin **dem** go maket*
1SG ASP take ART children PL go market
'I will go to the market with the children'

The pattern of the plural marker *dem* in the educated data used in this work is an example of what the MLF refers to as double morphology. Myers-Scotton defines double morphology as "a configuration of a single content element (noun or verb) that is doubly marked by certain function words or inflections from both the Matrix Language and the Embedded Language (2002:87). As plural markers are early system morphemes and not late outsiders that are very important in determining the ML, Myers-Scotton noted that doubling them does not violate the System Morpheme Principle. In fact, under the MLF, early system morphemes are the only type that can be doubled in classic code-switching, because they have special relation to their heads.

Double morphology is seen as a "mistiming" by speakers wishing to express their intentions using plural EL nouns. Because early system morphemes are accessed at the lemma together with their nouns, they slip in at the same time. So instead of having the Nigerian Pidgin *dem* as the only plural marker in constructions where Nigerian Pidgin is identified to provide the necessary system morphemes, we see English EL nouns being selected together with their English plural markers. Ihemere (2016:113) noted in his study of Igbo-English bilingual code-switching that it is possible to suggest that one of the reasons the speakers in his data combine both plural markers from Igbo and English is that English EL plural nouns are switched as single lexical unit, instead of a multi-morphemic element. In this case they are treated as single occurring nouns by the speakers. This could also be the case with English-Nigerian Pidgin bilinguals who use double plural marking.

Looking at the constituent structure of the constructions with *dem*, we see that the Morpheme Order criterion cannot be applied within the plural noun phrases as the structure of both languages is maintained by the use of the English plural inflectional suffix-*s* and the Nigerian Pidgin morpheme *dem* in the same construction. Secondly, the nouns are not restricted to English alone. They are nouns used in both languages. The only criterion that can be applied here to identify the ML is the System Morpheme criterion. Even with the System Morpheme criterion, it is still difficult identifying the ML. This is because there are constructions where the late outsider system morphemes are not used, and both languages provided the morphemes that made up the constructions. For example, the pre-modifiers of the noun *things* lack the preposition *of* that would have made the noun phrase well-formed in English. The absence of the preposition does not make the NP well formed in Nigerian Pidgin either, because demonstratives in Nigerian Pidgin do not necessarily agree in number with their nouns. The common demonstrative modifiers in Nigerian Pidgin are *this* and *that* (dis and dat) used in both singular and plural. So the phrase, *all those* in (12a) shows English well-formed demonstratives. It is difficult to identify any language as more activated than the other to be the ML of the construction in example (12a). I will take this construction as a type of composite code switching, where there is symmetry between the languages participating in code-switching.

The ML of the other examples in (12b-d) can be identified by the presence of Late Outsider System Morphemes. In (12b), the ML is English because of the English negative marker which is an outsider morpheme in our context, but the conflict within the noun phrase is resolved in favor of Nigerian Pidgin. The ML of (12c) is Nigerian Pidgin as the negative

marker, *no* and the copula, *dey* are both from Nigerian Pidgin. (12d) also has Nigerian Pidgin as the ML because the perfective preverbal marker *don* is from Nigerian Pidgin.

Let us look at the Matrix Language in the patterning of the English inflectional plural marker -*s* without *dem* in example (14). We see in these examples that the nouns take the English structure in plural marking. The embedded English nouns maintain their English plural structure in constructions where the late outsider system morphemes are provided by Nigerian Pidgin. In (14b) and (14c) there is no identifiable late outsider system morpheme, the other system morphemes, e.g., the late bridge system morpheme, the copula, *be* and the Nigerian Pidgin copula element *get* are all Nigerian Pidgin. These English plural nouns are examples of embedded language islands as they are seen as multi-morphemic elements of noun + *s*. According to the embedded language islands rule, these embedded nouns maintained their structural dependency relation, and also suit into the morpho-syntactic structure provided by the matrix language.

(14) a. *Bus come carry OFFICER-S.*
Bus ASP carry officer-PL
'The officers were carried in a bus'

b. *E get the kind mind wey* ***GIRL-S*** *get*
There have the kind mind REL girl-PL have
'Girls have a certain kind of mind'

c. *One thing be say dem get* ***MEMBER-S***
One thing COP REL 3PL have member-PL.
'One thing is that they have members.'

d. ***Most GUYS*** *no dey like visit* ***GIRL-S*** *for their house*
Most guys NEG ASP like visit girl-PL in their house
'Most guys do not like to visit girls in their houses'

7.4.3 Inflections: Past Marking

Another type of inflection contrast is with past marking. English uses the past inflected marker -*ed* orinternal modification to mark past, while Nigerian Pidgin uses preverbal markers: *bin, don,* and *kom.* Let us apply the Morpheme Order and the System Morpheme criteria to identify the Matrix Language using the examples in (15) and (16).

(15) a. *He come dey* ***FOCUS-ED***
3SG ASP ASP focus-PST
'He was focused'

b. *I press am, e dey* ***LOCK-ED***
ISG press 3SG-OBJ 3SG-SUBJ ASP lock-PST
'I press[ed] it, [but] it was locked.'

The matrix language of these constructions in (15) is identified as Nigerian Pidgin as the preverbal *come* and auxiliary verbs, *dey* are in Nigerian Pidgin, but the embedded verbs do not take the surface structure of the ML. If the embedded past verbs *focused* and *locked* are taken as single word insertions, then they violate the surface structure of the matrix language, and past markings are also late outsider system morphemes that must come from the matrix language. In that case, both languages provide the structural frame of the code-switching construction. But the verbs fall under embedded language Islands as the constituents are multi-morphemic. As embedded islands, they have internal dependency relation in English, and also fit into the structure provided by Nigerian Pidgin. This, therefore, does not violate the rules of the MLF. This variation pattern is rare in the data set. This is because past marking is one aspect that differentiates the two languages into distinct languages and is rare to mix in the same construction.

In example (16), we see that the preverbal markers are within Nigerian Pidgin structure. It is never switched within English structure. The constructions in example (16) are structured both in Nigerian Pidgin and English, although one is without late outsider system morpheme. The matrix language of the constructions is identified as Nigerian Pidgin because of the late outsider morphemes. The embedded phrases are islands, with internal dependency relation, and also fit into the structural frame of the whole construction.

(16) a. *She come dey answer **HER FRIEND'S CAL**,*
She ASP ASP answer her friend's call
'She was answering her friend's call'

b. I bin *get problem **THAT TIME WITH MY BANK ISSUE***
1 ASP have problem that time with my Bank issue
'I had a problem that time with my bank issue'

7.4.4 Negation

Another structural contrast between both languages is with negations. Negative marker in English follows auxiliary or modal verbs, while they precede all verbal forms in Nigerian Pidgin. With the Morpheme Order principle, we see that the constructions in (17) follow Nigerian Pidgin word structure in the insertion of the negative marker *no*. There is the omission of the auxiliary verbs that should precede the negative marker in English. As for the System Morpheme principle, all the constructions in example (17) have the negative marker as the late outsider morphemes. Both criteria favor Nigerian Pidgin as the matrix language.

(17) a. *If you **NO** ride benz today…*
If you NEG ride benz today…
'If you (do) not drive Mercedes Benz today…'

b. *You **NO** tell me*
You NEG tell me
'You (did) not tell me'

c. *You **NO** understand anything?*
You NEG understand anything
'You (did) not understand anything?'

d. *I **NO** want a situation…*

I NEG want a situation

'I do not want a situation…'

7.5 Summary of the Matrix Language Framework

The application of the Morpheme Order and System Morpheme principles in areas of contrast between English and Nigerian Pidgin code-switching shows varying outcomes in identifying the Matrix language. At contrast locations involving articles, the contrast is mostly resolved in favor of Nigerian Pidgin. Whether Nigerian Pidgin nouns are inserted into English structure or English nouns are inserted into Nigerian Pidgin structure, the articles are omitted in favour of Nigerian Pidgin. With this outcome, the MLF is not validated in all occurrences of code-switching at the Noun phrase location.

In contrast areas involving inflection, we see variation in plural marking with double markers from the two languages. The contrast areas cannot be resolved in favor of any of the languages, as the structure of both languages is maintained. We also see that in the absence of late outsider morphemes, both languages contribute other system morphemes. In this case, we take it that the languages are symmetrical in their code-switching participation, and so not a clear case of classic of code-switching. In Nigerian Pidgin constructions with English plural markings on embedded English nouns, the necessary system morphemes are from Nigerian Pidgin. This supports the fact that plural markers as early system morphemes are selected indirectly with the noun at the conception level, and sometimes for some bilingual speakers, they are like single words.

For the past marking, structural contrast in most constructions with Nigerian Pidgin past marking is resolved in favor of Nigerian Pidgin. Both the morpheme order and the system morpheme in such constructions are in accordance with Nigerian Pidgin structure. There is also variation with double past marking, where both the English past tense *-ed* and the Nigerian Pidgin post marker *come* are used. In such cases, the structures of both languages are maintained, showing symmetry with the participating languages. With negation, there is hardly an English negation in Nigerian Pidgin structure. With Nigerian Pidgin negation in English structure, the contrast is always resolved in favor of Nigerian Pidgin.

In answering the question of asymmetry as regards these languages, the instances of code-switching in the data do not totally support the Matrix Language Framework tenets. There are occurrences where the instances of code-switching in the data support the tenets of the Matrix Language Framework, for example, the embedded language islands that usually have internal dependency relation and are also constrained by the morpho-syntactic frame of the matrix construction. There are also significant cases where the Matrix Language Framework cannot account for code-switching occurrences between English and Nigerian Pidgin. The investigation here rather shows that both languages can be the matrix language, and from the examples we have seen so far, Nigerian Pidgin functions more as the matrix language than English. This is an interesting finding as the quantitative analysis in the previous chapter shows preference in the use of English and in switch directions where speakers move more from English to Nigerian Pidgin. This movement for the intrasentential type is interpreted as English functioning as the matrix language where Nigerian Pidgin is embedded. This finding opens up an opportunity for more future research on the structural aspect of code-switching between both languages.

7.6 The Functional Head Constraint

The Functional Head Constraint is another structural model, and it differentiates the role of functional morphemes and lexical morphemes in code-switching. This model stipulates that code-switching cannot occur between functional heads (such as, negative, auxiliary verbs, determiners, quantifiers and complementizers) and their complements. These functional morphemes must remain in the same language as their complements. The tenet of the constraint is that "the language feature of the complement f-selected by a functional head, like all other relevant features, must match the corresponding feature of that functional head" (Belazi, Rubin and Toribio 1994:228). The FHC principle is based on "f-selection". Belazi, Rubin and Toribio (1994) take language as one of the features that should be checked alongside other features as gender, tense etc. As Abney (1987:65) pointed out that functional heads have a special relationship with their complements and so are inseparable, the proponents of this model assume that having functional heads and their complements in different languages will block feature checking, rendering the switching ungrammatical. In other words, code-switching is

ungrammatical between functional heads and their complements, but grammatically acceptable between a lexical head and its complement.

The validity of the FHC in disallowing code-switching between functional heads and their complements and allowing it between lexical heads and their complements are evaluated here. The different switching points are checked for language feature. The application of the FHC is aimed to answer the following structural research questions:.

(1) Do lexical and functional categories pattern differently in the data?

(2) Which category (functional or lexical) determines the code-switching structure?

(3) What factor allows selection between these lexical entities?

7.6.1 Testing the Functional Head Constraint

The data distribution in figures 7.2 and 7.3 shows that most code-switching constituents occur as multiple word switches, e.g. phrases and clauses rather than single insertions. The multiple word switches mostly appear as what Muysken (2000) calls alternation, where one language starts and the other ends. Although there are a few that occur as insertions within a construction, the switches are all well-formed in one language or the other. The embedded constituents are also mostly clauses embedded into a matrix clause, with their separate system morphemes. This pattern of clausal switches observable in the speech of the speakers in the CENCOS data do not concern the contrast areas investigated in the Matrix Language Framework. The Functional Head Constraint will be applied to this clausal pattern of switching, and also on single word switching in the data at switch points involving functional heads, such as complementizers, auxiliary verbs and negations and their complements as attested in the intra-sentential data,

7.6.2 FHC on Single Word Insertion

For single word insertion, switches involving complementizers, auxiliary verbs and negations, are rarely attested in the data. The only observed construction with single embedded complementizer is the example below (18). This example violates the Functional Head Constraint. The complementizer, *wey* 'that' is in a different language from its complement. The translation of construction (18) in English can take *where*, but in Nigerian Pidgin, *where* 'wie' is written differently from *wey.*

(18) *The area **WEY** I wrote my exam they cancel their result.*
The area REL I wrote my exam they cancel their result
'The result of the area that I wrote my exam was cancelled'

Switching of auxiliary verbs is also rare in the data. Example (19) shows the patterning of the very few in the data. The problem with applying the Functional Head Constraint in these examples is that the main verbs that complement the auxiliaries could be English or Nigerian Pidgin, as these words are also used in Nigerian Pidgin, especially by the educated speakers. The auxiliary complements are analysed as English here if they maintain the English structure and as Nigerian Pidgin if they maintain Nigerian Pidgin structure. Constructions in (19c) and (19e) with the switching of *dey* 'are' validate the Functional Head Constraint because the verbal complements take the Nigerian Pidgin structure. The English alternation of the verbal complements 'invest' and 'happen' in (19c) and (19e) will require the progressive marker *–ing*. Based on that, (19c) and (19e) validate the FHC as the complements are interpreted as Nigerian Pidgin and are in the same language with the auxiliary verbs .

(19) *a.* *We **GO** beat you*
We ASP beat you
'We will defeat you'

b. *She **GO** put milk inside sour bitter leaf.*
She ASP put milk inside sour bitter herbs
'She will put milk in sour bitter herbs'

c. H*ow many people **DEY** invest here*
How many people ASP invest here
'How many people are investing here'

d. *Boys **GO** stay there*
Boys ASP stay there
Boys will stay there

e. *Things **DEY** happen*

Things ASP happen

'Things are happening' or 'things happen'

Negation patterns in the same way as auxiliary verbs in code-switching between the two languages. There are no insertions of single negative markers from English into a structure provided by Nigerian Pidgin. What is attested is always Nigerian Pidgin negation *no* in English structures, or what looks like English structures, as we see in example (17) above. The problem is that one cannot tell whether the morphemes that complement the auxiliary verbs are English or Nigerian Pidgin as the morphemes are the same in both languages. In this case, the Functional Head Constraint model cannot be tested.

7.6.3 FHC on Multiple Word Insertions

For multiple word switches, switch points are mostly between lexical/function heads and their complements. Most of them are embedded clauses with different complementizers introducing the embedded clauses. Complementizers are functional categories and some of the English complementizers attested in the data are *that*, *if*, *whether, because* and *where*. In Nigerian Pidgin, two morphemes that function as complementizers are *say* and *wey. Say* is a lexical verb, and also performs the grammatical function of a complementizer. The other Nigerian Pidgin complementizer, *wey,* is a relative clause introducer, also occupying the complementizer node. It is preceded by the nominal element it modifies. Faraclas (1996: 35) noted that the only clause type in Nigerian Pidgin that can modify nominal elements is the relative clause because Nigerian Pidgin, unlike English, lacks adjectives that modify nouns. Both *say* and *wey* are functional heads, and just like English complementizers, they structurally form a constituent with the clause they introduce as shown in the tree diagrams below. *Say* in figure 7.4 is a sister to the embedded clause and *wey* in 7.5 is a sister to the VP of the embedded sentence. As functional heads, the Functional Head Constraint predicts that both English and Nigerian Pidgin complementizers will be in the same language as their complements in code-switching. In subsequent sections, the constructions with switching at boundaries involving complementizers are investigated to test the validity of the Functional Head Constraint.

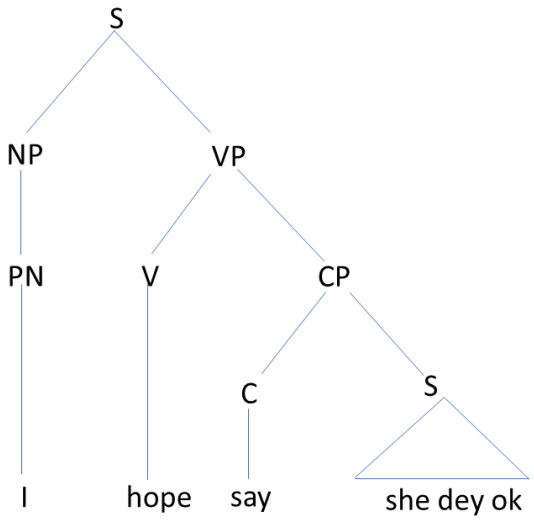

Figure 7.4: *Say* complementizer as head of embedded clause.

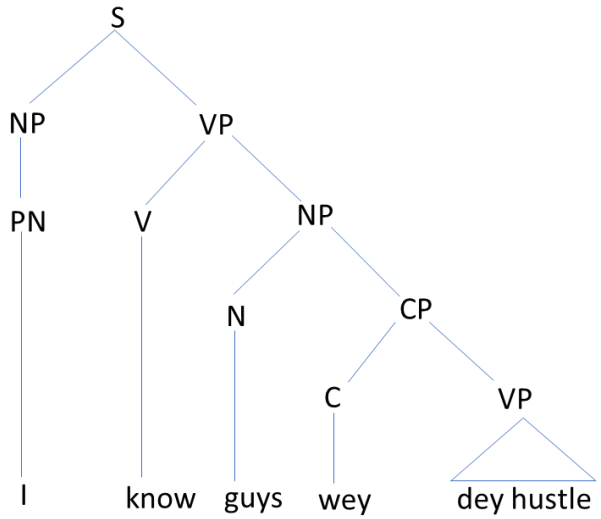

Figure 7.5: *Wey* complementizer as head of embedded clause

7.6.3.1 FHC on Nigeria Pidgin Complementizer, *say*

The constructions in (20) below are examples from the corpus showing the structure of embedded constituent switches at boundaries with the Nigerian Pidgin *say* complementizer. The main finding is that the embedded complementizer clauses do not consistently follow the Functional Head Constraint. Some constructions validate the Functional Head Constraint as the complementizers and their complements are in the same language. We see this in examples

(20a), (20c) and (20e). The others fail to validate the Functional Head Constraint rule as the complementizer *say* is in a different language from that of the complements as in (20b) and (20d). One observed pattern with the *say* complementizer is that those that validate the Functional Head Constraint principle are in constructions where the embedded clauses are in Nigerian Pidgin. The matrix clause is in English and the embedded clause is Nigerian Pidgin. The constructions that fail to validate the Functional Head Constraint have English as the embedded clauses. So whether the switch is from Nigerian Pidgin clause to English or from English to Nigerian Pidgin, the complementizer *say* is mostly always present, showing the importance of *say* in embedded clauses in Nigerian Pidgin. The examples are clear evidence that the Functional Head Constraint model is not validated in every code-switching construction.

(20) a. The guy begged me [**SAY MAKE I HELP AM ENTER INSIDE**]
The guy begged me [COMP let I help 3SG-OBJ enter inside]
'The guy begged me that I should help him go inside'

b. *Im go tell me say* [***I WILL CALL YOU BACK***]
3SG ASP tell me COMP [I will call you back]
'he would tell me that he will call me back.'

c. *It is too early to tell her* [***SAY I LIKE AM***]
It is too early to tell her [COMP I like her]
'That it is too early to tell her that I like her'

d. The girl tell you say [**SHE IS NO LONGER INTERESTED**]?
The girl tell you COMP [she is no longer interested]
'Did the girl tell you that she is no longer interested?'

e. *I don't even think* [***SAY E GO GIVE ME HER NUMBER***]
I don't even think [COMP 1SG ASP give me her number]
'I don't even think that she will give me her number.'

7.6.3.2 FHC on Nigerian Pidgin Complementizer, *wey*

Contrary to the *say* complementizer, the *wey* complementizer in example (21) validates the FHC. There is no code-switching between *wey* complementizers and their complements. One observation is that the code-switching is asymmetrical. In all cases, the direction of the switches is from English to Nigerian Pidgin, with *wey* as the head of the Nigerian Pidgin embedded clauses. There is no attestation in the data set where the switch is from Nigerian Pidgin to English, like we saw with the *say* complementizer. Anytime *wey* appears, the complement is always in Nigeria Pidgin. The closest to what looks like an English complement following the complementizer *wey* is in such constructions where the *wey* complementizer clauses post modify subject noun phrases as in *That thing wey you tell me that time…*, *The one wey use laziness scatter themselves*. We see that the verbs, *tell* and *use* are Nigerian Pidgin verbs as they did not inflect for past tense as would English in such constructions. So *wey* always takes Nigerian Pidgin complement.

(21) a. I transferred her 50k that day [**WEY WE TALK]**
I transferred her 50k that day [COMP we talk]
'And I transferred her 50k that day that we talked'

b. You don't do the work [**WEY I TELL YOU SAY MAKE YOU DO]**
you don't do the work [COMP I tell you that let you do]
'you don't do the work that I told you to do'

c. You should know this guy [**WEY I DEY TELL YOU**]
You should know this guy [COMP I be tell you]
'You should know this guy that I am talking about'

d. See the door [**WEY DEM DO]**
See the door [COMP they do]
'Look at the door that they built'

e. You know that plate [**WEY DEY SINK**]

You know that plate [COMP be sink]
'You know that plate that is in the sink'

7.6.4 FHC on English Complementizers

Unlike the Nigerian Pidgin complementizers *say* and *wey* that functions well in code-switching in the CENCOS data used in this chapter, the English complementizers rarely occur in code-switching. The *that* complementizer, for example, is attested only once in the intra-sentential data as seen in example (22) below. Even with its single occurrence, it fails to validate the FHC as it is in a different language from its complement. Looking at the construction in (22), it is obvious that the use of the English copula *is* mandatorily calls for the English complementizer *that*, instead of its Nigerian Pidgin counterpart *say*. The collocation *is say,* unlike *be say* does not appear in English-Nigerian Pidgin code-switching, and that calls for the use of *that* in replacing *say*, which we have seen above as important in joining embedded clauses in Nigerian Pidgin.

(22) The truth is that [**IM TELL ME SAY HE DEY COME]**
The truth is that [3SG tell me COMP he ASP come]
'The truth is that he told me that he was coming'

Apart from the *that* complementizer, other English morphemes are also used as complementizers to mark embedded clauses in code-switching between the two languages. These are adverbial complementizers. For code-switching at switch points involving adverbial complementizers, the problem is that the adverbial morphemes are the same in English and Nigerian Pidgin, so it is impossible to determine the language they belong to. For instance, they are used in the following monolingual Nigerian Pidgin constructions from the data set: *I no understand WHETHER na network*, *I go make am, BECAUSE I no fit die poor*. In such constructions, they are not taken as switches from English into Nigerian Pidgin structure but they are integrated into the language of the constructions either as conjuctions or adverbials. So they are used in both languages. We see these complementizers, for example, *where, whether, because* and *if* used in the code-switching examples in (23) to introduce embedded complements from one language to the other. Whether the switching is from English to Nigerian Pidgin, or vice versa, the adverbial complementizers are present without any clue which language they

belong to and which language heads the IP complements. In this case, the Functional Head Constraint cannot be tested.

(23) a. You don't know where [**IM DEY COME FROM]**
You don't know where [3SG ASP come from]
'You don't know where he is coming from'

b. I don't know whether [**NA ANONYMOUS**]
I don't know whether [It is anonymous]
'I don't know whether it is Anonymous'

c. if na me sef [**I WILL MARRY**]
If It is me even I will marry
'If I am the one, I will marry'

d. *Make I show you* where ***[MY CAR STOPPED ME THAT DAY]***
Let I show you where my car stopped me that day
'Let me show you where my car stopped me that day'

7.6.5 FHC on Switch Points between NPs and VPs

The FHC predicts code-switching restrictions between auxiliary heads and their VP complements. We now look at switches at syntactic boundaries involving verbs in the data set. Examples (24) and (25) show the pattern of code-switching at the verbal boundaries. The Functional Head Constraint is empirically supported at this switch points in the data set. All the auxiliary verbs are in the same language with their complements. The switches occur between subject NP and VP, or between VP and their complements, but not between auxiliary verbs and main verbs as in example (24) below.

(24) a. All of us **GO JUST DEY TALK**
All of us ASP just ASP talk
'All of us will just be talking'

b. I will rewrite so that my own **GO DEY REACH 200**
I will rewrite so that my own ASP ASP REACH 200
'I will rewrite [it], so that I will be getting up to 200 '

c. if you say you **NO GO DEY EAT, DEM GO SAY HMM**
if you say you NEG ASP ASP eat, 3PL ASP say hmm.
'if you say you will not be eating, they will say hmm'(sign of relieve)

d. You don't know that things **DEY HAPPEN**
You don't know that things ASP happen
'You don't know that things are happening'

e. You will know that anonymous **DON FINISH**
You will know that anonymous ASP finish
'You will know that Anonymous has finished'

The examples in 25 show switch pattern between Verbs and its complements. We also see in all the examples that switches do not occur between auxiliary and main verb. Another prediction of the FHC is that switches are restricted between negations and their verbal complements and we also see that in all the instances involving negation, the FHC is validated. All the instances, in which negation from either of the languages is used, follow the structural pattern of their language and also have complements in the same language. And just as the FHC also predicted, there is no restriction between lexical heads like nouns and verbs and their complements in the data set.

(25) (a) She said **SHE NO DEY BORN AGAIN**
She said She NEG COP christian convert
'She said she is not converted'

(b) But dem no get **ACTIVE OFFICERS**
But 3PL NEG have active officers

'But they don't have active officers'

(c) I no go even want **MY ENEMY TO GO THROUGH THAT KIND OF THING**
I NEG ASP even want my enemy to go through that kind of thing
'I will not even want my enemy to go through that kind of thing'

7.6.6 Summary of FHC

The previous section looked at the syntactic patterning of code-switching in line with the Functional Head Constraint predictions. The examination of the different syntactic heads and their complements shows varying empirical outcomes as regards the role of functional heads in accounting for code-switching in the data set. Single word insertions are not well attested in the corpus, but with the few attestations of the functional heads in the data, we see that the Functional Head Constraint model could not account for all the instances in the data.

Looking at the complementizers *say* and *wey*, which are the equivalent of *that* in English, the Functional Head Constraint accounts for all attestations of *wey*, but not for *say*, which prompts the question as to what constitutes the differences in the structure of both complementizers? We see that the complementizer *say* behaves differently depending on which language the code-switching appears in. When there is a switch from English to Nigerian Pidgin, *say* maintains its relationship with its complement by appearing in the same language with its complement. When the switch is otherwise, i.e., from Nigerian Pidgin to English, *say* is also retained instead of the English counterpart *that*. I will assume from this that *say* is an obligatory category in embedded clauses in Nigerian Pidgin. This is an interesting discovery that requires further investigation, as the *say* complementizer does not only function as such in Nigerian Pidgin, but has been acknowledged to also function as such in a number of English-based creole languages and African languages (Plag 1993:38). *Wey*, on the other hand, patterns in the same way in all its instances in the data. The direction of switches is always from English to Nigerian Pidgin, with *wey* as the embedded clause introducer. As regards the Functional Head Constraint model, it goes a long way to account for the use of *say* and *wey*, but it cannot account for all instances of *say* in English-Nigerian Pidgin code-switching.

The Functional Head Constraint perfectly accounts for code-switching at verb boundaries. No code-switching was allowed between the auxiliary verb and the VP, and between negations and their verbal complements, which shows that the auxiliary verbs develop strong relationship with their VP complement even in code-switching. The observations with the adverbial complementizers show that the Functional Head Constraint cannot account for all language combinations in code-switching. It is best suited for languages that have different lexical orthography. As regards the languages investigated here, the conclusion is that the Functional Head Constraint is not able to account for every instance based on its predictions of head-complement restrictions on some functional heads and their complements.

7.7 Conclusion

The present chapter attempted to account for the syntactic structure of single and multi-word intra-sentential code-switching attested in CENCOS data by educated English-Nigerian Pidgin bilinguals in Nigeria, using the Matrix Language Framework and The Functional Head Constraint. The focus of the Matrix Language Framework is on establishing asymmetry between the participating languages in providing the syntactic frame of code-switching constructions. The Matrix Language Framework model went a long way to account for the pattern of code-switching between both languages, but it didn't account for all instances of code-switching attested. The Morpheme Order principle failed in some instances, as some contrast areas between the languages are not resolved in favor of one language. There are cases of double morphology, where the structures of the two languages are maintained at boundaries of structural contrast between the languages. In such situations, the language that provides the late outsider system morphemes becomes the ML language. However, there are cases where the late outsider system morphemes are not available and both languages participated in providing the structure of the code-switching construction. The pattern of code-switching between both languages, therefore, does not depict a clear case of classic type of code-switching, but shows the occurrences of both classic and composite types of code-switching. The data however, shows more cases of classic than composite type of code-switching. With this qualitative structural analysis, it is obvious that Nigerian Pidgin plays more the role of Matrix Language than it appeared to be the case in the quantitative analysis in the previous chapter.

The Functional Head Constraint model, on the other hand, focused on functional heads and their complements as constraining code-switching. The examination of this prediction in the data shows that the Functional Head Constraint goes a long way in accounting for some functional heads, but did not empirically account for all the pertinent switches in the data set. Switching at juncture between auxiliary verbs and verbs are well accounted for under the Functional Head Constraint in the data. The universality of the Functional Head Constraint at junctures involving complementizers is questionable as it accounted for some instances in the data, instead of all instances attested, although surface word similarity between both languages hindered the effective application of the Functional Head Constraint model at some junctures.

In the failure of both models to account for all syntactic structure of code-switching in the data, I presume that for the types of languages involved and the similarities that exist between them, the main constraining factor is equivalent category at the code-switching boundaries. If we look at instances where both the Matrix Language Framework and the Functional Head Constraint fail to account for code-switching in the data, we see that the switched categories always matched the syntactic position of the host language. So what matters, for example, is that the complementizers select the right category, which is a complement clause. The verb selects the right category, either the subject NP, and/or object complement. Code-switching between English and Nigerian Pidgin can occur at any juncture involving both functional and lexical entities as long as they maintain categorical equivalence. In other words, equivalence plays important role in code-switching between English and Nigerian Pidgin. This is more or less in line with Poplack's equivalence constraint. But whereas Poplack's equivalence constraint deals with linear equivalence (i.e., where linear word order of the embedded morphemes are the same with the host language), what is observed between English and Nigerian Pidgin is categorical equivalence (i.e., the syntactic category of the switch constituents are the same with the host language, e.g., nouns, noun phrases, complements etc.). Taking into account the examples in the data between both languages, the conclusion drawn is that code-switching may occur between a lexical head and its complement and between a functional head and its complement. In other words, a head-complement relationship does not necessarily constrain code-switching between both languages, neither does the matrix/embedded language distinction.

Chapter 8

Summary and Conclusion

The rationale of this thesis is to empirically investigate actual language use between English and Nigerian Pidgin in Nigeria. It is set to examine the relationship between these two languages that function as lingua franca in Nigeria. These two languages have long history of co-existence in Nigeria and yet, the nature of their relationship has remained underexplored. The fact is that their long term coexistence has given rise to variation in their use. The empirical investigation of this variation, as it occurs in the speech of the educated bilingual speakers in Nigeria, and the establishment of the kind of relationship that exists as a result of their co-existence are the main issues investigated in this thesis.

These two issues have been empirically and extensively investigated in this thesis. One angle to this investigation has been to empirically establish the type of variation that exist between these languages, and to also see whether the variation has given rise to the existence of a linguistic continuum in Nigeria. This line of investigation has been approached in this thesis through the investigation of copula constructions as used by the educated English-Nigerian Pidgin bilinguals. Both quantitative and qualitative analyses were employed in this investigation, and results showed variant alternations of copula forms from both languages, but with complex usage patterns.

The usage patterns show a sociolinguistic situation where speakers cluster according to variant usage. This pattern of clustering is not in alignment with the known dialect continuum, as all speakers in the corpus used the English variants. The ideal situation of a linguistic continuum is that speakers are only able to function perfectly in a particular lect, but can also understand or use variants of a lect that is closer to them in a certain degree, but not those at the two extremes. Although the results of the implicational scaling analysis shows this one dimensional pattern with the standard English variety at one end, the intermediate variety at the middle and the Nigerian-Pidgin variety at the other end, the speakers at the two ends are able to understand each other perfectly. The qualitative analysis of this usage pattern rather shows code-switching and style-shifting as the prevalent sociolinguistic phenomena between both languages in Nigeria. The observed usage patterns are regarded in this thesis as stylistic code-

switching, as code-switching is used in the same way as style-shifting in monolingual languages.

The remaining parts of the study presented a more detailed investigation of code-switching between both languages from the CENCOS data. The collection, transcription and annotation of this corpus are major achievements of this thesis. With the CENCOS data, a quantitative sociolinguistics investigation was conducted, followed by a qualitative structural analysis of code-switching constructions. One of the things investigated in the quantitative aspect is language preference, which in this study simply refers to the language the speakers like to use more in conversations. Results of the quantitative analysis on language preference show preference for English over Nigerian Pidgin, although Nigerian Pidgin was also significantly attested.

The quantitative analysis also investigated code-switching patterns by looking at switch location and direction. Results of the switch location show switches within sentences, between sentences of a given speaker, and between sentences of different speakers. The location of switches within sentences also showed whether the switches are inter-sentential or intra-sentential. They also showed switches as insertions or alternations. The switch directions show both symmetric and asymmetric directions, depending on whether the switches are inter-sentential or intra-sentential. Inter-sentential switches show little variation in their direction, but intra-sentential switches show significant direction from English to Nigerian Pidgin. What is observed in the direction of the intra-sentential code-switching is that English functions more frequently as the matrix language in code-switching between English and Nigerian Pidgin, but the structural analysis proved otherwise. Results of the quantitative analysis also proved that social factors like region, gender and education status correlate with the switching patterns.

Structural aspect of code-switching between English and Nigerian Pidgin was also investigated. The two structural models employed are the Matrix Language Framework and the Functional Head Constraint models. These models are used to check the linguistic factors that constrained or allowed code-switching between both languages. The application of the tenets of these two models, however, show that both models could not empirically account for all instances of code-switching between both languages. A different structural model that takes into account categorical equivalence will be best suited for the structuring pattern of code-switching between English and Nigerian-Pidgin by the educated speakers in the data. Although the two models fail to empirically account for all the instances of code-switching between both

languages, their application is useful in proving that English does not function more as matrix language in code-switching between the two languages. Apart from instances of insertion of Nigerian Pidgin discourse markers into English structures, Nigerian Pidgin play more matrix function than English in code-switching between both languages.

The overall results of this investigation of the language situation in Nigeria as regards the co-existence of both languages have shown that the status of both languages affect their use by the educated speakers. Both languages are not in a diglossic situation in Nigeria, but situational factors affect their use. Speakers can choose to maintain English in a conversation if they feel distanced to the interlocutor, or if the setting is a formal one that requires a standard form of language. They can also diverge from either of the languages that suits a particular situation in order to signal a particular social meaning. We see this in some examples where speakers code-switched from English to Nigerian Pidgin to maintain inter-personal relationship, and where they used English because of the formality of their interlocutors and the interactional context. For the educated speakers in the two corpora used, language choice as regards both languages is dependent on the speaker, accepting to converge or diverge to the situation surrounding the conversation.

The use of both languages by the educated speakers in Nigeria does not present Nigerian Pidgin as an inferior language to English, but a language of solidarity. Because these speakers are educated, their attitude toward Nigerian Pidgin is not with contempt as to believing that those who speak it are of a lower status in the community. Although Nigerian Pidgin does not have economic value in Nigeria, its use by the educated in Nigeria has given it a national value. Nigerian Pidgin has not yet been officially recognized as a national language in Nigeria, but its use by the educated has opened it up to a language of informal social gathering. While English enjoys its status as a formal language, Nigerian Pidgin enjoys its status as a language of social solidarity. We see in both the ICE and CENCOS data that students use Nigerian Pidgin as a language of in-group solidarity, showing equal and intimate relationships. In Nigeria, as long as the setting is an informal one, the alternation of both languages is inevitable, especially by the educated speakers.

The exploration of both sociolinguistics and structural aspects of code-switching in this work shows that both factors play crucial role in motivating code choices. Whereas linguistic factors only affect the structuring of code-switching, social factors motivate both the performance and structural of code-switching. The different code patterns established in the

data are embedded in such micro and macro sociolinguistic factors as language proficiency, the social domain of language use, the status and functions of both languages in Nigeria, gender of the speakers, education status and region of language use. Speakers' proficiency in both languages, for example, motivates the alternation pattern we see between speakers. The speakers maintain the structure of each language, and at the same time, make different code choices. Social domain of language use and the status of these languages in Nigeria motivate the preponderance use of Nigerian Pidgin in CENCOS data, than in ICE data because of the informal nature of the CENCOS data.

Social factors do not only motivate code-switching occurrences, but also motivates their structural type. Students' competence in both languages, e.g., motivates the pattern of more embedded clauses witnessed in intra-sentential switching. Gender, e.g., motivates more switching into Nigerian Pidgin by male as they are known to use more informal form of speaking than women. The women's preference for insertional type is motivated by their preference to use less informal form of language. Even when they use it, they prefer mostly single word insertions, unlike the men that use mostly multiple words and stretches of sentences in Nigerian Pidgin.

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Appendices

Table 5.2: Implicationally ordered distribution of variants by speakers (token counts). Empty cells indicate the lack of observations.

Speakers	Inflected	Contracted	NoSubject	Zero	Invariant	Focal NA	Cop NA	Cop DEY	Aux DEY
Con 4-1	4		2	3	2	32	8	35	38
Con 4-2	5	3		1	5	21	7	17	15
Con 58-1	4	2	1	1		3	2	1	
Con 9-1	17	9	1	1	1	3			
Con 6-1	27	15	4	1	2				
Con 11-5	7	1	2	1					
Con 51-1	11	1	3	1					
Con 31-1	2	1	6	5					
Con 5-1	23	9	9	3					
Con 1-3	11	2	1						
Con 2-2	15	13	4						
Con 3-1	3	8	1						
Con 3-3	11	6	4						
Con 6-2	13	5	1						
Con 7-2	12	9	4						
Con 8-1	1	6	2						
Con 9-2	5	7	1						
Con 11-1	6	2	3						
Con 12-1	9	7	11						

Con 13-2	6	5	3						
Con 14-1	2	7	1						
Con 4-2	6	1	4						
Con 19-1	11	1	1						
Con 1-4	9	1	1						
Con 5-1	8	1	5						
Con 2-1	3	15	2		1				
Con 15-2	29		1						
Con 46-2	7		4						
Con 1-1	8	7		1					
Con 3-2	3	8							
Con 7-1	1	7							
Con 1-1	8	7		1					
Con 46-1	11	4		2					
Con 38-1	5	8			1				

Table 5.3: Implicationally ordered distribution of variants by speaker (binary coding, presence = '+', absence= '-').

Speakers	Inflected	Contracted	No Subject	Zero	In variant	Focal NA	Cop NA	Cop DEY	Aux DEY
Con 04-1	+	-	+	+	+	+	+	+	+

Con 04-2	+	+	-	+	+	+	+	+	+
Con 58-1	+	+	+	+	-	+	+	+	-
Con 09-1	+	+	+	+	+	+	-	-	-
Con 06-1	+	+	+	+	+	-	-	-	-
Con 11-5	+	+	+	+	-	-	-	-	-
Con 51-1	+	+	+	+	-	-	-	-	-
Con 31-1	+	+	+	+	-	-	-	-	-
Con 05-1	+	+	+	+	-	-	-	-	-
Con 01-3	+	+	+	-	-	-	-	-	-
Con 02-2	+	+	+	-	-	-	-	-	-
Con 03-1	+	+	+	-	-	-	-	-	-
Con 03-3	+	+	+	-	-	-	-	-	-
Con 06-2	+	+	+	-	-	-	-	-	-
Con 07-2	+	+	+	-	-	-	-	-	-
Con 08-1	+	+	+	-	-	-	-	-	-
Con 09-2	+	+	+	-	-	-	-	-	-
Con 11-1	+	+	+	-	-	-	-	-	-
Con 12-1	+	+	+	-	-	-	-	-	-
Con 13-2	+	+	+	-	-	-	-	-	-
Con 14-1	+	+	+	-	-	-	-	-	-
Con 40-2	+	+	+	-	-	-	-	-	-
Con 19-1	+	+	+	-	-	-	-	-	-
Con 01-4	+	+	+	-	-	-	-	-	-
Con 50-1	+	+	+	-	-	-	-	-	-
Con 02-1	+	+	+	-	+	-	-	-	-
Con 15-2	+	-	+	-	-	-	-	-	-
Con 46-2	+	-	+	-	-	-	-	-	-

Con 10-1	+	+	-	+	-	-	-	-	-
Con 03-2	+	+	-	-	-	-	-	-	-
Con 07-1	+	+	-	-	-	-	-	-	-
Con 01-2	+	+	-	+	-	-	-	-	-
Con 46-1	+	+	-	+	-	-	-	-	-
Con 38-1	+	+	-	-	+	-	-	-	-

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Declaration

Ich erkläre hiermit, dass ich die vorliegende Arbeit selbständig und ohne Benutzung anderer als der angegebenen Hilfsmittel angefertigt und die aus fremden Quellen direkt oder indirekt übernommenen Gedanken als solche kenntlich gemacht habe und dass die Arbeit bisher in gleicher oder ähnlicher Form keiner Prüfungsbehörde vorgelegt und auch noch nicht veröffentlicht wurde. Bereits veröffentliche Teile sind in der Arbeit gekennzeichnet.

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