THE RELATIONSHIP OF NIGERIAN ENGLISH AND NIGERIAN PIDGIN IN NIGERIA: EVIDENCE FROM COPULA CONSTRUCTIONS IN ICE-NIGERIA

Ogechi Agbo
Heinrich-Heine-Universität Düsseldorf
ogechi.agbo@uni-duesseldorf.de

Ingo Plag
Heinrich-Heine-Universität Düsseldorf
ingo.plag@uni-duesseldorf.de

Abstract

Deuber (2006) investigated variation in spoken Nigerian Pidgin data by educated speakers and found no evidence for a continuum of lects between Nigerian Pidgin and English. Many speakers, however, speak both languages, and both are in close contact with each other, which keeps the question of the nature of their relationship on the agenda. This paper investigates 67 conversations in Nigerian English by educated speakers as they occur in the International Corpus of English, Nigeria (ICE-Nigeria, Wunder et al. 2010), using the variability in copula usage as a test bed. Implicational scaling, network analysis and hierarchical cluster analysis reveal that the use of variants is not randomly distributed over speakers. Particular clusters of speakers use particular constellations of variants. A qualitative investigation reveals this complex situation as a continuum of style, with code-switching as one of the stylistic devices, motivated by such social factors as formality, setting, participants and interpersonal relationships.

Keywords: Nigerian Pidgin – Nigerian English – code-switching – style-shifting, implicational scaling – network analysis – cluster analysis

1. Introduction

In Nigeria, English co-exists with an English-based pidgin, Nigerian Pidgin. Both languages serve as lingua franca (Nigerian Pidgin not officially recognised) amidst over hundreds of other Nigerian languages spoken in Nigeria. These two languages have existed together for a long time in Nigeria and traditionally have been serving different purposes.

English is the official language and serves prestigious functions as the language of the government, education, media, etc. in Nigeria. English in contact with the other numerous languages that exist in Nigeria has given rise to what is called Nigerian English, which is usually regarded as a cluster of different sub-varieties (Jibril, 1986; Jowitt, 1991; see Gut, 2008 for an overview and discussion). There is no description of an acceptable standard Nigerian English available but scholars
agree that Nigerian English is a “recognizable and highly distinctive variety of English” (Gut, 2008: 40). The data for the present work is a variety of Nigerian English as spoken by educated speakers.

Nigerian Pidgin, on the other hand, is an English-based contact language that developed as a result of European contact with West African languages. It is accorded a low prestige in Nigeria because it is not officially recognized and was mostly used by speakers who could not acquire formal education. Over the years, Nigerian Pidgin has gradually gained in importance because educated Nigerians also use it in communication. Research has shown that Nigerian Pidgin is now the language with the highest population of users, and also a first language in some minority groups in Nigeria (Igboanusi, 2008). The most striking change in status is its prominent use in tertiary institutions in Nigeria. Given the status, use and long time co-existence of these languages, contact-induced mutual influence and change is to be expected (e.g. see Thomason 2001, Sankoff 2001).

A lot of research has been carried out on certain questions concerning the co-existence of these two languages, mostly focusing on their status and speakers’ attitudes towards them (e.g. Akande and Salami, 2010; Balogun, 2013; Osoba, 2014; Amakiri and Igani, 2015; Oreoluwa, 2015). Little empirical work has been done, however, on their mutual influence. Deuber (2006) approached this issue from the perspective of Nigerian Pidgin, and found no evidence for the existence of a continuum of lects in her Nigerian Pidgin corpus. The present study shifts the perspective and investigates Nigerian English as used by educated speakers who also speak Nigerian Pidgin. We look at the variable usage of copula constructions to get an understanding of the relationship between the two languages.

In particular, we are interested in answering the following questions:

1. Which copula forms from the two languages do educated speakers of Nigerian English and Nigerian Pidgin use in their conversations?
2. Does the variation in the use of different forms lead to a Nigerian-Pidgin-to-English Continuum in Nigeria?
3. What factors are responsible for the pattern of variation observed in the use of these languages?

The data for this study is a set of conversations from the International Corpus of English (ICE), Nigeria (Wunder et al. 2010). ICE Nigeria is one of the world-wide corpora of English compiled for the analysis of linguistic structures. It represents both written and spoken genres by educated speakers from different countries, where English is spoken as a first, second and as a foreign language. For this study, we use the spoken conversations. Our concentration is on the use of copula constructions, as, across many non-standard varieties of English, these constructions have been shown in numerous studies to be highly variable (e.g. Ferguson, 1971; Holm, 1984; Winford, 1990; McWhorter, 1995; Rickford, 1999; to mention only a few). Deuber (2006) also included the copula in her investigation, which will allow us to compare our results directly to hers.

The paper is organized as follows. The next section introduces the reader in more detail to the two languages under discussion and to the issues tackled in the present article. Section 3 describes the methodology and sections 4 and 5 present the empirical results. Section 6 looks at the sociolinguistic variation and 7 concludes the paper.

2. Nigerian English and Nigerian Pidgin

2.1 Nigerian English

English was officially introduced in Nigeria by the British colonial administration. It was mainly used as the language of administration and by the missionaries in
educating parts of the population (see, for example, Adetugbo, 1979; Bamgbose, 1991). At the end of the colonial era, Nigeria retained English as its official language, in line with Nigeria’s “extreme linguistic diversity” (Elugbe, 1994).

Nigeria has diverse languages, of which three (Igbo, Hausa and Yoruba) are regarded as major languages without mutual intelligibility among them. According to a recent estimate (Simons and Fennig, 2018) there are 526 languages spoken in Nigeria. It was difficult to pick one of these 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. To avoid such national prejudice, English was retained as the official language, since it was considered a neutral language that belongs to no ethnic group in Nigeria. This has helped to foster peace and unity in diversity.

English is acquired through formal education in Nigeria, so most proficient English speakers are educated, at least up to the secondary level. Other proficient English speakers or near-proficient English speakers are children who are monolinguals in English. These are mostly the children of elites, who grew up in highly cosmopolitan urban cities like Lagos, Port-Harcourt or Abuja and attended high quality nursery and primary schools. Kperogi (2015: 27) refers to such monolingual 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. So given that most Nigerians speak English, it is really difficult to estimate the number of English speakers in Nigeria, which has varied over the years (see Jowitt, 2019: 10 for a summary).

At present, English still enjoys a prestigious status in Nigeria. Literacy is measured based on one's proficiency in speaking and writing English, even when one is highly proficient in the local languages. English is used solely in education in most of the regions from pre-nursery school level to the tertiary level. This even contradicts the National Policy on Education (2004: 12, 16) that states:

According to this policy the government shall ensure that the medium of instruction in pre-primary education is principally the mother tongue or the language of the immediate community. The medium of instruction in the primary school shall be the language of the environment for the first three years. During this period, English shall be taught as a subject. From the fourth year, English shall progressively be used as a medium of instruction and the language of immediate environment and French shall be taught as subjects.

English is also used in other sectors. For instance, it is the sole language of government administration. It is highly used in communications and media, science and technology etc.

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". 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 standard English, while the accepters are the descriptivists, who are interested in the description of "Nigerianism". At present, there is no description of an acceptable standard Nigerian English available, but scholars agree that Nigerian English is a "recognizable and highly distinctive variety of English" (Gut, 2008: 40). It is "English, which has become ‘nativized’, ‘domesticated’, ‘indigenized’, and it has taken on distinctively Nigerian quality" (Jowitt, 2019: 26).

2.2 Nigerian Pidgin
Nigerian Pidgin is an English-based contact language. Like most Pidgins, Nigerian Pidgin has a superstrate, English, and many substrate languages, i.e. the local Nigerian languages. Most of the vocabulary of Nigerian Pidgin is from English, with additional contributions to the word stock from the local languages and also Portuguese. Nigerian Pidgin is estimated to be spoken by more than half of the Nigerian population (Faraclas, 2004: 828; 2008: 240; Ihemere, 2006: 297), and it is also the language with the highest number of speakers in Nigeria (Jibril, 1995; Faraclas, 2008). Jowitt (2019: 11) suggests, however, that the idea that half of the Nigerian population is fluent in Nigerian Pidgin, as asserted by Faraclas (2008), should be treated with caution. Jowitt’s reason being that Nigerian Pidgin is not used in the north at the same level as it is used in other parts of the country, given that Hausa is a major lingua franca in the north and serves the same function that Nigerian Pidgin serves in the south. The people in the North might not be fluent speakers of Nigerian Pidgin, but a good number of Hausas are speakers of 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 will not be an overgeneralization to say that almost every English speaker in Nigeria speaks or understands Nigerian Pidgin to some degree.

Nigerian Pidgin, unlike English is not acquired through formal education and has no standardized orthography. Until rather recently, it was accorded a low prestige in Nigeria and relegated to the less educated. It is now increasingly used also by and among educated people, for example in tertiary institutions. Nigerian Pidgin has also creolized to a first language in some minority groups in Nigeria (Igboanusi, 2008).

Nigerian Pidgin is mostly an informal language used primarily in informal settings like markets, among friends, office colleagues etc. In Nigerian tertiary institutions, Nigerian Pidgin is the speakers’ language of identity. English is used in the classroom, while Nigerian Pidgin and English compete in other interactional settings. Nigerian Pidgin is also widely used in the military barracks. The language is widely used in these places because of the conglomeration of individuals from different regions of the nation.

Nigerian Pidgin is also gaining popularity in some formal domains like in communication and media. A radio station in Lagos, WAZOBIA, broadcasts in Nigerian Pidgin. Some television and radio adverts, posters, and billboards are done in Nigerian Pidgin. The BBC launched BBC News pidgin in 2017, with its base in Lagos. Some Nigerian writers like Ola Rotimi and Eriatu Oribhabor use Nigerian Pidgin in literary composition. In the entertainment industry in Nigeria, Nigerian Pidgin plays a prominent role. It features in songs, drama and it is almost solely the language used in stand-up comedy. It is obvious that Nigerian Pidgin is expanding extensively in function and status and gradually competing with English even in some formal domains.

2.3 This study

The long-term co-existence of the two languages, and the complex patterns of their usage in almost all walks of life open up a rich field of research. This paper investigates the relationship between Nigerian English and Nigerian Pidgin in the speech of educated Nigerians. We take as a starting point the most prominent variationist study of the potential linguistic continuum in Nigeria, Deuber (2006). We infer from Deuber’s study, that two issues may have prompted her investigation of a linguistic continuum 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 an English based Creole co-exist
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 favours the development of a continuum as people with multilingual backgrounds move from one part of the country to another. Furthermore, 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 more standard variants. Deuber (2006) pointed out, however, that there is no detailed empirical evidence to support these assumptions. Earlier, Agheyisi (1984) had contradicted Bickerton by saying that the relationship that exists between these languages 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. With regard to copula constructions, Deuber interprets her data as evidence against the existence of a linguistic continuum. As a general result, she finds the two languages as two separate varieties with no evidence for intermediate varieties as found in the Anglophone Caribbean. Going back to Bickerton’s assertion that social mobility enhances the development of a continuum, Deuber wonders 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 differed with regard to the continuing presence of the substrates. The presence of the substrates in Nigeria may have been detrimental to the development of a continuum. Deuber looked at the Pidgin-to-English continuum, focusing on the changes Nigerian Pidgin may have undergone as a result of the influence of English. The present work, however, investigates Nigerian English, looking at possible mutual influence between English and Nigerian Pidgin. Like Deuber, we make use of corpus data for the analysis.

3. 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 copular constructions or clauses. Mikkelsen (2005: 1805) sees copula constructions as “a minor sentence type in which the contentful predicate is not a verb, but some other category like adj. phrase, noun phrase or prep. Phrase.” Copulas are found in many languages and their inventory and usage varies across languages (e.g. Curnow 1999, Pustet 2003). For example, the Nigerian languages Igbo and Hausa have a number of different copulas in their inventories (e.g. Uchechukwu 2015, Abubakar 2016). In Igbo the use of copulas is dependent on the semantic type (e.g. identification, locatives, animacy) of the copula construction or its complements, the Hausa copula is dependent on gender.

3.1 The copula in English

In English, copula constructions are overtly marked by a form of BE (be, am, are, is, was, were) and copula clauses follow the same structural rules of English word order except in cases of inversion e.g. Are you sure?. The complement following the copula may be a noun phrase, an adjective phrase, or a prepositional phrase, as shown in (1).
There are other verbs that have been analyzed as copulas (e.g. *seem*, *become*, etc.), but we restrict the scope of this work to the English copula *be* and its functional equivalents in Nigerian Pidgin English.

### 3.2 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 verbs *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 we restrict the scope of this work 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.

#### 3.3 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). *Bi* also takes clause complements as in (2c) (examples from Faraclas 1996: 48, 51).

- **(2) a.** *Im bi man.*
  
  3SG COP man
  
  ‘He is a man.’

- **(2) b.** *Ma pikin bi dat.*
  
  1SG.POSS children COP that
  
  ‘My children are those (ones).’

- **(2) c.** *Di wahala bi [se a no get moni].*
  
  DET problem COP [that I NEG have money]
  
  ‘The problem is that I don’t have money.’

#### 3.4 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.*

1SG COP

'I am (fine).'

b. *A de haws.*

1SG COP house

'I am at home.'

c. *Di gari de layk sansan.*

DET gari COP like sand

'The gari is like sand.'

d. *A dè kari nyam.*

I ASP carry yam

'I am carrying yam.'

We distinguish 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'.

3.5 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*

DET woman 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 (Ibid: 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 (Ibid: 50). The other two forms can take auxiliaries and negators.

Some other structural issues about Nigerian Pidgin that are worth mentioning are about 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 English. Consider example (5), where the adjective afraid serves as a stative verb.

(5)  

\[ \text{Di man fyar} \]
\[ \text{DET man fear} \]
\[ 'The man is afraid.' \]

However, we do find 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)  

\begin{itemize}
  \item a.  \text{Ma pikin de smol} \\
  \text{1SG.POSS child COP small} \\
  'My child is small.'
  \item b.  \text{Di sup swit} \\
  \text{DET soup sweet} \\
  'The soup is sweet.'
\end{itemize}

We will remain agnostic as to the kind of syntactic analysis one would want to assign to examples such as (6a) and (6b), but we will refer 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 languages. We will see in subsequent sections how speakers vary the use of these copulas within the same conversation.

4. Methodology

4.1 Data

The data used for this study come from 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 (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), with a total number of 1,010,382 words.

The conversation part of ICE Nigeria represents spontaneous speech of speakers from different geopolitical zones in Nigeria. We made use of all the conversations, which are 67 in number (tagged Con 01 through 67). The conversations feature 140 speakers, with each conversation having two or more speakers. For some of the speakers some demographic information, like gender, age, ethnic group and occupation is 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 Selection of Copula constructions
We extracted utterances with copula constructions from the ICE-Nigeria conversations. The extraction was done both systematically and manually as to include constructions with copula omission. We restrict ourselves to declarative copula constructions because they are structurally and pragmatically more simple and thus allow for a more straightforward comparison across languages.

The English constructions are further restricted to 3rd person forms and infinitival be. While including other English inflected forms would have increased the amount of work enormously, it would have also increased the proportion of the standard forms in the data set without providing important insights into the variation between standard, i.e. Nigerian 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)

We entered the copula constructions into a spreadsheet according to their forms and we classified the forms according to their functions or construction types. English copula forms were classified as standard forms while the Nigerian Pidgin forms together with the other attested forms were classified as non-standard forms. The standard forms were further classified as inflected (e.g. is) or contracted (‘s), respectively. 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. The Nigerian Pidgin copula form na is classified as focus marker (FocusNa) or copula (CopNa), depending on its function in the respective sentence. Deis coded as auxiliary (AuxDEY) or copula (CopDEY). In addition, we coded the conversation and the speaker.

5. Results
5.1 Distribution of variants
Let us first look at the distribution of standard and non-standard constructions in our data. This is given in figure 1 (the numbers on top of the bars give the number
of observations for each category). We can see 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 1: Distribution of the Standard and non-Standard English forms](image1)

![Figure 2: Distribution of variant copula forms in ICE-Nigeria](image2)

Figure 1: Distribution of the Standard and non-Standard English forms

AD = AuxDEY, CD = CopDEY, CNA = CopNA, CNT = Contracted, FNA = FocalNa, INF = Inflected, INV = Invariant, NS = NoSubject, ZR = Zero.

Figure 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. A sizable number of NoSubject forms is also attested.

5.2 Statistical analysis

In order to get a better understanding of this variation, we first implemented a traditional implicational analysis. Implicational scaling was introduced in pidgin and creole studies 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 matrices and they have been used in many disciplines to model various kinds of relationships in physics, biology and the social sciences. In the following, we will first use the technique that is probably most well-known, implicational scaling. We will then implement a network analysis and a cluster analysis to get an even better understanding of the nature of the variation in our sample.

Implicational scaling

De Camp used implicational scaling to account for the variable behavior of the speakers in Jamaica by means of implicational statements: if F1 then F2, if F2 then F3 etc. The distribution of features can be arranged in such a way that implicational relationships may hold between each environment. A continuum of lects is formed when all the plus (+) signs are in the same direction and all the minus (-) signs are in the same direction. Table 1 shows an ordered implicational scale between seven speakers in Jamaica by De Camp (1971: 355), which was restructured by Fasold (1990: 191).

Table 1: Example of ordered implicational scaling based on Decamp (1971: 355).

<table>
<thead>
<tr>
<th>Speaker</th>
<th>B</th>
<th>E</th>
<th>F</th>
<th>A</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>1</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>6</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>7</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

The continuum represents the variable use of language, ranging from the basilectal (the variety that most diverged from the standard language) to the acreolectal (the standard, prestigious variety), with the mesolectals (intermediate varieties) between the basilectal and the acreolectal. The implicational hierarchy implies that there is no random use of forms from the two extreme poles, rather speakers use forms that are more related, than forms that are wide apart. Speakers are thus normally associated with one lect but are able to also navigate to neighboring lects to varying degrees.

Implicational analysis became a viable tool in the study of dialect continua (see, e.g., Bailey, 1971; Winford, 1988; Patrick, 1998; Deuber, 2009; Hinskens, 1992 etc.), but has also been used for purposes other than dialect-standard studies, for example in second-language learning, (Pienemann, 1998a; Pienemann and Keßler, 2011; and Ho and Platt, 1993), 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 and Baayen, 2009; and Zirkel, 2010).

For the implicational scaling we selected only those speakers for which there are more than 10 utterances with copulas. We first devised a table which lists for each speaker which constructions this speaker uses. The table was then rearranged in such a way that the speakers with the largest range of constructions occupy the topmost rows, and that 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 2, which shows an ordered scale of the pertinent 34 speakers and 9 variables, giving the number of tokens for each variant. Table 3 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 language, the NoSubject and the Zero copula, are sandwiched between the copula constructions of the two languages. As for the speakers, we find 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.

Network analysis

We implemented a network analysis using the package ‘network’ (Butts, 2008) in R. The resulting network is shown in Figure 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 3: Network of speakers and constructions. Color coding: Red = Speaker, Blue = copula forms, Black lines = edges connecting speakers to the forms.

The graph allows us a closer inspection of the patterning 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 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.

Cluster analysis

To gain further insights into usage similarities among speakers and among constructions we used hierarchical cluster analysis (e.g. Baayen, 2008: chapter 5; R package ‘cluster’, Maechler et al., 2018, with the function ‘hclust’ with single linkage agglomeration method). Cluster analysis is a multivariate statistical tool that helps detect meaningful structures and relationships between features. A clustering algorithm conducts a pairwise 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 4 shows how the different constructions cluster according to their usage.
Figure 4: Dendrogram for constructions

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. In the dendrogram for the similarity between speakers, given in Figure 5, we can also discern four main clusters, indicated by the four boxes.

Figure 5: Dendrogram for speakers

The interpretation of the four clusters can be informed by comparing the clusters to the nodes in figure 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 our statistical analyses can be interpreted as evidence for a continuum. Returning to table 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 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 English 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 we find in our data is, however, quite different. We have two distinct languages with their own constructions, plus two intermediate constructions. In our 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. We did not find 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. Structured sociolinguistic variation may arise circumstances. Having ruled out a continuum of lects, other possible patterns of variability need to be taken into consideration: diglossia, code-switching and style shifting.

6. Sociolinguistic variation

6.1 Diglossia

The variation pattern in a diglossic situation is characterized by complementary distribution. 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. Ferguson (1959) described a diglossic situation using characteristics like function, prestige, literary heritage, acquisition, standardization, stability, grammar etc. In general it seems that the standard criteria for diglossic situations are not fulfilled when it comes to the ICE-Nigerian data. We would expect one of the two languages to function separately at a particular situation, depending on the formality of the situation in a diglossic situation. What we find, 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 and that makes it difficult to interpret the variation pattern in our data as a case of diglossia.

6.2 Code-switching

Variation analysed under the name of code-switching involves a shift between distinct languages in the same discourse. This pattern of variation has been widely studied within different approaches (see Weinreich, 1953; Blom and Gumperz,
Like Botzepe (2003) pointed out, code-switching is a cover term under which different forms of bilingual behaviour are subsumed. The terms ‘alternation’ and ‘code-mixing’ have been used interchangeably to represent code-switching (see Auer, 1995; Muysken, 1995, 2000). Some linguists apply the terms ‘code-switching’ and ‘code-mixing’ depending on whether the switch is intra-sentential or inter-sentential, that is, within utterances or between utterances (Kachru, 1983; Singh, 1985; Sridhar and Sridhar, 1980).

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 Nigerian Pidgin are used, the definitional criteria for code-switching are fulfilled. We find both inter-sentential and intra-sentential switches between the two languages. In addition to such switches, we also find, however, 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 when we look at style-shifting.

6.3 Style-shifting

Style shifting is defined as the alternation of 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.1 The general assumption is that style-shifting occurs within a single language of a monolingual speaker. The term 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 and Finegan, 1994).

Wolfram et al. (2015) point out that it is not always easy to differentiate when a shift in style involves different registers of a language, different dialects of a language or even different languages. In the latter case, the term code-switching is commonly used, but it seems that in such cases the different terms only reflect slightly different perspectives on the same phenomenon. While ‘code-switching’ foregrounds the use of two very distinct language varieties, ‘style shifting’ foregrounds the function of the variation. Based on such considerations Wolfram and Schilling-Estes (2015: 388) come to the conclusion that “there is no clear dividing line between style shifting and code-switching”.

Ervin-Tripp (1972) already acknowledged the similarities between style shifting and code switching, in that in both cases speakers draw on their linguistic capabilities to communicate shared social meaning and they are also shaped by the same situational factors and speaker motivations. According to current theoretical approaches, variation under the label ‘style shifting’ is conceived to arise as a response to three motivational factors:

- **Attention to Speech**: This factor was proposed by Labov (1966a), who contrasts speakers’ use of ‘casual’ and ‘careful’ speech. The degree of

---

1 This signifying of social meaning through style is often referred to as ‘indexing’ (see, for example, Bucholtz, 2012 for discussion). The two terms thus overlap considerably, with ‘style-shifting’ referring not only to variation in form but also to the social function of this variation, and ‘indexing’ referring not only to the social function but also to the variation in form that is used to signal the social function. We use the term ‘style-shifting’ as it operates on the same level as code-switching. This is desirable in the context of this paper since we make the claim that the use of English and Nigerian Pidgin is in fact code-switching, with characteristics and functions reminiscent of style-shifting/indexing.
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 will become; if they pay less attention to their speech, their speech becomes more casual.

- **Audience Design**: This approach focuses on the role of the listeners. 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.

- **Speaker Design**: This approach views style shifting as influenced by the speaker's identity 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.

Very similar motivating factors have been attributed to code switching.

- **Context**: This is a central factor in determining language choices among bilinguals (Wardhaugh, 2011). A speech context encompasses a lot of things, ranging from the words and sentences (linguistic context) to the social context (e.g., the speakers’ social status, setting, mood etc.). If we restrict ourselves to the physical social setting where interactions take place between participants, we can say that the setting will co-determine language choice. A conversation that takes place in a lecture room will be socially more formal and will tend to induce the use of more formal language than a conversation that happens at the speakers’ home.

- **Participants**: These are the audience or the speakers participating in the conversation. Like in style-shifting, speakers either converge or diverge from the audience. Speakers converge to maintain group identity with their interlocutors or in Ennaji’s (2005: 139) view, to preserve their group or cultural identity, while they diverge to maintain social distance and disapproval of their interlocutors.

- **Topic**: This is the theme of the conversation. Holmes (2000) asserts that people switch code to discuss a particular topic. In other words, selection of a code is mostly determined by the topic of discussion. Some topics are better discussed using a particular code and speakers switch to these codes when such topics come up.

- **Interpersonal Relationship**: Speakers may switch from one language to the other to show their intimacy with someone. Speakers can comfortably switch into an informal language while speaking with intimate family members or friends than they would switch when talking with their colleagues in the office. Speakers use code-switching to express feelings like disapproval, happiness, excitement etc. depending on their interpersonal relationship with their interlocutors.
These similarities leave style shifting and code switching as having the same function, but differing in the nature of the linguistic material that is being employed. In the case of code-switching it involves what would be considered two different languages while style shifting involves different variants from one language. In both cases speakers vary their speech as they draw on their linguistic repertoire to communicate shared social meaning.

In the following we will illustrate how in our data code-switching is used in the same way as style-shifting in monolingual communities. We will refer to this phenomenon as 'stylistic code-switching'. Our data do not lend themselves to a proper quantitative variationist sociolinguistic analysis because the corpus does not provide the kind of speaker- and situation-related information that would be necessary for such an endeavour. As will become clear, a qualitative analysis is quite revealing, too.

6.4. **Stylistic code-switching in ICE-Nigeria**

The speakers in our data code-switch as a matter of stylistic choices in order to enact different social meaning. In this section we will demonstrate this 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 our 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 our 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 our 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.

Our 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. The interview participants in ICE Nigeria conversations code-switch very rarely. 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 in our data use more informal forms of language here, and comfortably switch between the two languages.

All the code-switching in our conversation data happen in informal settings. Although the settings of the conversations are not explicitly given in our corpus data, one can infer the settings of each conversation through the content of the conversations. We start our 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

---

2 This terminological tradition thus reflects the traditional distinction between dialect and language, which is notorious for being problematic in many ways.
Pidgin structures, as shown in (8b) and (8c), with the Pidgin parts given in bold print. 'S' stands for 'Speaker'.

(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?"
   S 1 "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. (9) illustrates the code-switching in such a setting.

---

3 The ICE corpus is transcribed according to the orthographic conventions of English. The Nigerian Pidgin stretches in the following transcripts are predominantly using English words. Glossing these stretches of text would not be helpful because it would result in basically a repetition of the same words in the same order in the gloss line. We therefore refrained from glossing and provide only translations.
(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*
S 1  *this this one wey be say…*
  ‘this one that is ..’
S 5  *this one na Okada money na*
  ‘This one is little money’
S 1  *eh?*
S 5  *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 ANON that is the pr- there’s one the one we put*
  ‘… no-it’s’
S 5  *here is almost eighty five thousand*
S 2  *Jesus, no be small small pump o*
  ‘Jesus! They are not cheap pumps’

b. 

S 1  *well, you never try it ni. We use this one plenty fa I’m*
  ‘you have not tried it’
S 2  *telling you what I have been using, but I don’t want to argue with you because I don’t know why where you read your own. Me I know where I read mine, what you’re saying is*
  ‘I myself’
S 1  *the same*
S 2  *if na surface, I will go and buy one for eight thousand five*
  ‘If it is a Surface, I will buy one at eight thousand five hundred’

Another example is in conversation 09. The speakers are students conversing outside the classroom. The setting gives them the comfort of using language freely, code switching between English and Pidgin. Consider (10).
(10) From conversation 09
S 1 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 can’t find some
    I like him sha. Na bulala be that one o. Cane abi. ‘anyway. That one is bulala. Cane, isn’t it?’
    Na you lost mark already. ‘You are the person that has already lost mark’
S 2 Okay your OS abi ‘Okay, you’re OS, 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 it’s all that ‘So I pray that I will get good grade on that’
    You guys went for a wedding this her top is very nice ‘her top’
    Her dress abi ‘isn’t it?’
    Hope that it’s not Lebanese she’s following sha ‘anyway’
    Don’t spoil her runs o
S 3 I want to change my phone anyway, for my old phone is broke ‘isn’t it? Free stuff!’
    You’ve written the stuff you submitted abi? Awuf!

As expected, the kinds of participants in a conversation also play a vital role in switching between languages. In our data set, the speakers that code-switch are mostly students, friends, classmates or members of the same family. One example is conversation 04 in our data set. This conversation features more code switching in the data than any other conversation, with two Nigerian speakers in diaspora. The speakers are both masters students in a university in Germany. They are in a foreign setting, away from their home. This creates a sense of solidarity which is the basis for code switching. (11) is a sample from the beginning of their conversation, where they discuss the university elections.

(11) From conversation 04
S 1 so who did 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 ‘What I know is that people were voting for’
    something. but I don’t know wetin the thing be all about ‘what it was all about’
    Them dey vote...
    ‘They were voting’
The first speaker started with what we could call question in standard English except for the repetition. 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 our 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) in conversation 09, the speaker shifts to Nigerian Pidgin to express surprise: *na wa 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
   S 1  ANON I’m really hungry o let’s go and eat now
   S 2  maybe I will go out I wou- I
   S 1  you’re waiting for ANON
   *na wa o*
   ‘It’s incredible!’
   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 conversation 27, the speaker uses code switching to lighten a situation that would have ordinarily been unpleasant.

(13) From conversation 27
   S 2  when did he call
   S 1  erm
   S 2  you lied to me
   S 1  erm erm I didn’t lie to you
   S 2  when did he call
   S 1  erm *omo ya wa, I de hungry o I beg wan go chop* 
   ‘troublesome person! I’m hungry, please do you want to go and eat?’
   S 2  *abi, erm*
   ‘Isn’t it?’
   S 1  okay, so what’s going to happen now
   S 2  *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 having lied to her. As a reaction to Speaker 1’s switch, Speaker 2 also switches to 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, our data demonstrate 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).

7. Summary and Conclusion

In this paper we investigated the relationship between English and Nigerian Pidgin as used by educated speakers. We used the English copula *BE* and its functional equivalents in Nigerian Pidgin as our test bed, analyzing conversations as recorded in ICE-Nigeria.

The data reveal an unexpected amount of variation among the different copula forms. Apart from the use of the standard English copula variants, we also find 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. We have argued, however, that unlike in some Caribbean varieties of English like Jamaican English, the implicational pattern of variation should not be interpreted as a continuum of individual lects.

To get a better understanding of the nature of the variation, we used network analysis and cluster analysis. These analyses showed that speakers form groups that systematically prefer specific constellations of variants. Viewed from the reverse angle, it was shown that the variants pattern according to the specific ways speakers select them. A sociolinguistic investigation reveals this complex situation as a continuum of style, with code-switching as one of the stylistic devices. A qualitative analysis of the conversation provides evidence that code-switching is motivated by such social factors as formality, setting, participants and interpersonal relationships.

Comparing our results to those of Deuber (2006), we can say that our 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, we find a significant amount of variation in the use of copula constructions in the speech of educated Nigerians, and this variation is structured. 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 we have called ‘stylistic code-switching’.

The language situation in Nigeria is reminiscent of the situation in Singapore. Much like the situation in Nigeria, Singapore is multi-ethnic, with some form of standard English as the official lingua franca. In addition, Singlish, “Singapore’s culturally iconic brand of colloquial English” (Kheng 2015: 186) also exists alongside English as an unofficial lingua franca, used mostly in informal settings. Two approaches have been used to understand this language complexity in Singapore: one the one hand a unidimensional continuum ranging from non-standard to standard, on the other hand diglossia (see, for example, Gupta, 1989, 2001, Platt, 1975; Pakir 1991). These approaches have not gone unchallenged in more recent work on the language situation in Singapore (see Ansaldo 2004, Alsagoff 2007, Leimgruber 2008, Alsagoff 2010, Leimgruber 2012). Leimgruber (2012), for instance, points out that a continuum approach cannot explain how a given speaker can use variants from the two opposite ends of the alleged English-Singlish continuum, sometimes in the same sentence. Instead, Leimgruber argues for an indexical approach that is highly similar in spirit (even if not in terminology, see our footnote 1) to the one advocated here.

What seems to unite the language situations in Nigeria and Singapore at the macro level is the existence and use of other local languages as native languages
alongside the high and the low English-related varieties, i.e. English and Nigerian Pidgin in Nigeria, and English and Singlish in Singapore. This is different in the Caribbean where in typical Anglophone Caribbean societies only different varieties of English prevail. A more detailed comparison of different macro-linguistic constellations and their effect on patterns of language use is beyond the scope of the present paper, but certainly merits further study.

Acknowledgements

We thank the anonymous reviewers and the editors Peter Siemund and Henning Schreiber for helpful comments on previous versions of this paper. We are also grateful for the feedback provided by the audiences at the 11th Creolistics Workshop, March 2017 in Gießen and at the meeting of The Society for Pidgin and Creole Linguistics in June 2017, in Tampere, Finland.

References


Maechler, Martin, Peter Rousseeuw, Anja Struy, Mia Hubert, and Kurt Hornik. 2018. Cluster: Cluster analysis basics and extensions. https://CRAN.R-


## Appendix

**Table 2** Distribution of variants by speaker, implicationally ordered (token counts). Empty cells indicate the lack of observations.

<table>
<thead>
<tr>
<th>Speakers</th>
<th>In-reflected</th>
<th>Contracted</th>
<th>No Subject</th>
<th>Zero</th>
<th>Invariant</th>
<th>Focal NA</th>
<th>Cop NA</th>
<th>Cop DEY</th>
<th>Aux DEY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Con 4-1</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>32</td>
<td>8</td>
<td>35</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td>Con 4-2</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>5</td>
<td>21</td>
<td>7</td>
<td>17</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Con 58-1</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Con 9-1</td>
<td>17</td>
<td>9</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Con 6-1</td>
<td>27</td>
<td>15</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Con 11-5</td>
<td>7</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Con 51-1</td>
<td>11</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Con 31-1</td>
<td>2</td>
<td>1</td>
<td>6</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Con 5-1</td>
<td>23</td>
<td>9</td>
<td>9</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Con 1-3</td>
<td>11</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Con 2-2</td>
<td>15</td>
<td>13</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Con 3-1</td>
<td>3</td>
<td>8</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Con 3-3</td>
<td>11</td>
<td>6</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Con 6-2</td>
<td>13</td>
<td>5</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Con 7-2</td>
<td>12</td>
<td>9</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Con 8-1</td>
<td>1</td>
<td>6</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Con 9-2</td>
<td>5</td>
<td>7</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Con 11-1</td>
<td>6</td>
<td>2</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Con 12-1</td>
<td>9</td>
<td>7</td>
<td>11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Con 13-2</td>
<td>6</td>
<td>5</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 3: Distribution of variants by speaker (binary coding, presence = ‘+’, absence= ‘-’), implicationally ordered.

<table>
<thead>
<tr>
<th>Speakers</th>
<th>Inflected</th>
<th>Contraction</th>
<th>No Subject</th>
<th>Zero</th>
<th>Invariable</th>
<th>Tonal</th>
<th>Focal On</th>
<th>Copy DE</th>
<th>Copy Y</th>
<th>Aux DE</th>
<th>Aux Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>Con 04-1</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Con 04-2</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Con 58-1</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Con 09-1</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Con</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Con 06</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Con 11</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Con 51</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Con 31</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Con 05</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Con 01</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Con 02</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Con 03</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Con 03</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Con 06</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Con 07</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Con 08</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Con 09</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Con 11</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Con 12</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Con 13</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Con 14</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Con 40</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Con</td>
<td>19</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>-------</td>
<td>----</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Con 01</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Con 01-4</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Con 50-1</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Con 02-1</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Con 15-2</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Con 46-2</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Con 10-1</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Con 03-2</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Con 07-1</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Con 01-2</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Con 46-1</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Con 38-1</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>