



Utrecht University

Structures of multilingual code-switching among Arubans living in the Netherlands.

By Elisha Geerman

6163343

BA Thesis – English Language and Culture

University Utrecht

16 April 2020

7511 words

Abstract

This thesis looks at how Aruban students living in the Netherlands engage in multilingual discourse by looking at code-switching patterns focusing on the pragmatic and syntactic environment of the code-switching. Participants were recorded in two conversational contexts, formal and informal, to examine (1) which languages appeared in both contexts, (2) the structure of sentences containing code-switches, (3) whether Poplack's (1980) syntactic code-switching constraints held true for the present dataset, and (4) in what environment code-switches not accounted for by Poplack's (1980) constraints occur. To gain meaningful insights into the present data, next to the two constraints ten additional 'linguistic-tags' were used to code instances of code-switching, namely: discourse marker, affective aspect, idiom, lexical borrowing, quotation, processing cue, loanword, loan translation, derivation and compound. Results show that speakers use all languages in their repertoire and favoured intrasentential code-switching. Poplack's (1980) syntactic constraints held true for a few instances of code-switching in this study, but not to the extent as it did for Puerto Rican Spanish and Chicano Spanish data. The findings of the present study are a good indication for further research on the topic.

Keywords: affective aspect, Aruba, code-switching, compound, creolization, derivation, discourse marker, equivalence constraint, free morpheme constraint, idiom, intrasentential, intersentential, lexical borrowing, loan translation, loanword, multilingual, pragmatics, processing cues, syntax.

Table of Contents

Abstract.....	2
Table of Contents.....	3
1. Introduction.....	5
2. Theoretical background.....	6
2.1 Multilingualism: Linguistic coexistence, contact and interaction.....	6
2.2 Code-switching: What, why and how?.....	7
2.2.1 General definitions: Language contact phenomena.....	7
2.2.2 Linguistic constraints of code-switching.....	10
2.2.3 Social dimension.....	10
2.3 Tale of two language contexts: Caribbean and European.....	11
2.3.1 Aruba: Past and present.....	11
2.3.1.1 Creolization of Papiamentu.....	11
2.3.1.2 Current linguistic situation.....	13
2.3.2 The Netherlands.....	16
2.3.2.1 Current linguistic situation.....	17

3. Research aims.....	19
3.1 Research questions.....	19
3.2 Hypotheses.....	19
4. Methodology.....	19
4.1 Participants.....	19
4.2 Data collection: Materials and procedure.....	21
4.3 Analysis.....	21
5. Results.....	27
6. Discussion.....	32
6.1 Revisiting research aims.....	32
6.1.1 Languages used and structures of code-switches.....	32
6.1.2 Poplack's (1980) constraints and other linguistic-tags.....	34
6.2 Exceptions to the rule.....	37
7. Conclusion.....	41
8. References.....	43

1. Introduction

Code-switching is commonly investigated in bilingual settings as it involves the alternation between two linguistic varieties, e.g. distinct languages or dialects of a language. This is a different phenomenon from the adoption and adaptation of loanwords or the use of direct translations (calques). According to Blom & Gumperz (1972, as cited in Wardhaugh & Fuller, 2015) code-switching can be situational and/or metaphorical; the former arises when the languages employed change depending on the context in which the speakers find themselves, e.g. in situations of diglossia. In contrast, for metaphorical code-switching the choice of language depends on whether that language fits the message (affective aspect).

Every year many students from different Dutch Caribbean islands move to the European part of the Kingdom to continue their academic careers (*CBS Nederland*; Kester, Buijink, Fun & Hortencia, 2017; *Kabinet van de Gevolmachtigde Minister van Aruba*; *Stichting Studiefinanciering Curaçao*). On Aruba, students grow up surrounded by and receive formal education in four languages: Papiamentu, Spanish, English and Dutch. Depending on the heritage of parents and grandparents, some families speak more languages at home (CBS Aruba). This form of multilingualism is a result of historical linguistic and cultural contact between different social groups in the Caribbean.

This thesis will examine the manner in which Arubans use their languages in a context different from what they grew up in following theories concerning language contact phenomena and studies based on language attitudes and use conducted on Aruba and the Netherlands where participants were asked to report on their language usage (Kester & Van der Linde, 2015; Kester & Fun, 2012; Kester et al., 2017). This will be done by looking at pragmatic and syntactic properties of the linguistic performance of participants.

2. Theoretical background

2.1 Multilingualism: Linguistic coexistence, contact and interaction

The coexistence of languages may occur at individual or societal level; for instance a community may consist of speakers with different linguistic systems though its inhabitants might be monolinguals. The contrary is also possible: a community can be officially monolingual while its inhabitants are fluent in two or more languages. Initially bilingualism was considered an impediment on the development of children (Kaplan, 2016, p. 138). According to Hakuta (1986), design flaws in early studies, for example that of Lewis (1959), may have been attributed to the socio-political climate of the early 1900's. As the years progressed studies started to show that speakers benefit cognitively from being bilingual, e.g. in terms of higher metalinguistic awareness, executive control and theory of mind development (e.g. Ter Kuile et al., 2011; Carlson & Meltzoff, 2008; Goetz, 2003). These benefits are also present in speakers who know more than two languages. Studies suggest that bilinguals perform better (than monolinguals) in third language learning, showing an advantage where multiple languages are involved, resulting in stronger metalinguistic awareness (e.g. Thomas, 2010; Thompson, 2016; Aronin & Singleton, 2012). The definitions for multilingualism and bilingualism are diverse and rely on the specific theoretical and practical methodologies they are described in. For instance, narrow definitions of bi- and multilingualism involve the notion that a speaker needs to be fluent and have native-like control of all his languages. On the other hand, some researchers would consider a speaker who uses idioms from another language or lexical borrowings a bilingual (Edwards, 1994, as cited in Aronin, 2012). In this study, multilingualism is defined as:

“the capacity of societies, institutions, groups and individuals to engage on a regular basis in space and time with more than one language in everyday life. (...) a

phenomenon embedded in the cultural habits of a specific group, which are characterised by significant inter- and intra-cultural sensitivity”

(Francheschini, 2009, p. 33-34).

In the case of the present research, the participants have been naturalistically exposed to a minimum of four languages and subsequently received formal education in them. Their everyday linguistic performance involves all four languages, though at varying levels of overall proficiency in each. In addition, these individuals have strong cultural and non-linguistic knowledge concerning each language in their repertoire, which aids their linguistic performance.

2.2 Code-switching: What, why and how?

2.2.1 General definitions: Language contact phenomena

Definitions of language contact phenomena differ based on the context in which they occur. For the purpose of this study, we will focus on lexical borrowing, loanwords and loan translations (calques).

When a monolingual produces a foreign word in their speech, it is considered lexical borrowing: “the process whereby words from a lending language become entrenched as conventional words in the receiving lexicon” (Backus & Dorleijn, 2009, p. 77). An example is shown in (1):

(1) **Dutch - English**

*Zij heeft hem **gedate**.*

She has him dated.

‘She dated him.’

On the other hand, bilingual speech is central when considering a loan translation. Calques are defined as a word or phrase that is reproduced as a literal translation from language A into language B (Backus & Dorleijn, 2009, p. 77), as can be seen in example (2) below.

(2) **French - Dutch**

Marche aux puces - Vlooiemarkt.

‘Flea market’

In the past, loan translations were a manner in which languages acquired new lexical items; speakers were not exactly mono- nor bilinguals but languages were in close contact, e.g. French and English. Presently, words that were mere loan translations in the past have now been integrated in the receiving language (see Example (2)). This makes it tricky to argue that a French-English bilingual is directly translating words from their language A to language B when they say ‘I’m going to the flea market’.

In bi- and multilingual speech, code-switching includes the occurrence of a word from language A within a sentence in language B (intrasentential code-switching) or of a sentence from A in an utterance in B (intersentential code-switching), as well as the switching from language A to B for a prolonged amount of time. Below are examples for intrasentential code-switching ((3) and (4) from Poplack, 1980, p. 586-587), and examples for intersentential code-switching ((5)):

(3) **English – Spanish (*intrasentential code-switching of a part of a sentence*)**

*Tell Larry **que se calle la boca**.*

Tell Larry that he shut the mouth.

‘Tell Larry to shut his mouth.’

(4) **Spanish – English** (*intrasentential code-switching of a word*)

Una buena excuse.

A good excuse.

‘A good excuse.’

(5) **Papiamento – English** (*intersentential code-switching*)

Pero si bo ta kere den dje, nos ta respeta bo opinion. This is a judgement-free zone.

But if you do believe in it, we respect your opinion. This is a judgement-free zone.

‘But if you believe in it, we respect your opinion. This is a judgement-free zone.’

Instances such as (5) can initiate a prolonged code-switch in conversation; when sections of the conversation continue in English but after a while change to another code.

(6) **Dutch – Papiamento** (*language switching*)

Terrasje pakken pa tres luna.

Terrace taking for three month.

‘Sitting on terraces for three months.’

Example (6) is an instance of language switch because ‘terrasje pakken’ is specific to the Dutch language and carries connotations for the speaker that have no equivalence in Papiamento.

2.2.2 Linguistic constraints of code-switching

Code-switching has been the subject of extensive research. For the purpose of this study we will be using two constraints from Poplack (1980) to see whether they are applicable to multilingual data.

Poplack (1980) looked at the speech of Spanish-English bilinguals using two syntactic constraints to map code-switches. First, the equivalence constraint was used to measure bilingual ability. According to this constraint a speaker will switch between codes at points where both languages map onto each other, so that they do not disrupt any syntactic rule in either language. Secondly, the free morpheme constraint, which posits that “codes may be switched after any constituent in discourse provided that constituent is not a bound morpheme” (p. 585-586). According to Poplack (1980) the constraints suggested in Poplack (1978) “were general enough to account for all instances of code-switching in (...) Puerto Rican data (...) as well as the Chicano data (...), and at the same time restrictive enough not to generate instances of non-occurring code-switching” (p. 586). Results also show that less balanced bilinguals code-switched between sentences more often than bilinguals who were fluent in their languages as fluent speakers tended to favour intrasentential code-switching. This indicates that a speaker needs to be competent in all the languages he knows to then be able to switch more complex linguistic elements.

2.2.3 Social dimension

In addition to looking at the structure of code-switching it is also important to consider the social and conversational role of languages when speakers switch between codes. As Li (1998, p. 310) puts it, “code-switching as a contextualization cue has the capacity to bring about higher-level social meanings such as the speakers’ language attitudes, preferences and community norms and values”. In this view code-switches are seen as a tool; speakers use their

knowledge of the local ‘we-‘they’ situation to code-switch and so call on the identity and privileges of the language involved. On the other hand, the conversation analysis approach posits that speakers negotiate the meanings of code-switches in specific contexts by evaluating the social dynamics at play in the moment so that the real meaning of code-switching can only be determined by looking at the context of the conversation in which the switch occurred. Stroud (1998) argues that “code-switching is so heavily implicated in social life that it cannot really be understood apart from understanding of social phenomena” (p. 565) and by solely looking at the meaning each code carries in relation to the speakers’ identities (deliberating ‘we’-‘they’ codes) or only focusing on the context in which each code-switch occurs do not account for code-switching in culturally divergent (non-Western) multilingual societies. For some societies do not have a dominant culture or language in which bilinguals can invoke certain rights from a minority language by code-switching, rather they consist of speakers who know the same languages and code-switch for different reasons, if there are any.

2.3 Tale of two language contexts: Caribbean and European

2.3.1 Aruba: Past and present

2.3.1.1 Creolisation of Papiamentu

The first identifiable inhabitants on Aruba were the Arawak Caquetío Amerindians who migrated by canoes from South America to the island around 2000BC. The first Europeans to arrive on the island were Italians and Spaniards, around 1499. Under Spanish rule, many of the native inhabitants of the island were enslaved and deported to work on other Caribbean islands whose climate was more fruitful to cultivate the grounds. The Dutch commandeered Aruba from the Spanish in 1636 and used it to raise cattle. The island was then seized from the Dutch by the English for a decade, but later returned to the Dutch and became, together with Bonaire, part of Curaçao¹. From the 18th century onwards, the rule of the island was relatively stable

though the cultural and linguistic contact situation never ceased, with the trading of humans, provisions, animals, livestock and raw materials, the oil refineries (Royal Dutch and Lago), migrant workers from other Caribbean islands and South America, government officials from the European part of the Kingdom and tourism. Papiamentu is thought to have risen from this persistent linguistic and cultural contact. There are two main theories concerning the genesis of Papiamentu: (1) from a proto-creole Afro-Portuguese language from West Africa or (2) from a mix of Spanish and South American Indian (Amerindian) languages due to a need for a lingua franca (Department of Education Aruba). While there is no evidence that one theory is more correct than the other, a conflation of both theories is most likely to be the case (ATA, 2018; <http://papiamentu.aw>) as Papiamentu has developed itself through the communication between different inhabitants and visitors, with distinct linguistic and cultural backgrounds, on the island. This means that Papiamentu is born from an Afro-Portuguese variant and continued developing on the basis of the Spanish and Portuguese lexicons. The further pidginization of Papiamentu occurred on the basis of the heavy lexical borrowing from European languages in the Caribbean. This resulted in different creoles, such as Jamaican patois on the basis of English or Haitian patois on the basis on French. Eventually, Papiamentu became the language most widely spoken on the island and acquired native speakers (for recent numbers see Table 1). Instances of grammar, vocabulary and pronunciation in Papiamentu that are adopted and/or adapted from other languages are seen in the following examples:

(7) **Grammar: Forming past participle from Dutch (*voltooid deelwoord*)**

Mi tin €20 gespaar.

Ik heb €20 gespaard.

‘I have €20 saved.’

Past participle in Dutch: ‘ge-’ + stem + ‘t’/‘d’.

¹ All three islands (Aruba, Bonaire and Curaçao) were initially considered ‘Curaçao’. Eventually they became the Netherlands Antilles, the Netherlands Antilles and Aruba in 1986, and ultimately the Kingdom of the Netherlands with Aruba, Curaçao, St. Maarten and the BES-islands in 2010.

(8) **Vocabulary: *Ñapa* from Spanish**

Mi a haya 100 gram di druif di ñapa.

Me dieron 100 gramos de uvas de ñapa.

‘I received 100 grams of grapes for free.’

Ñapa maintained its lexical meaning in both languages.

(9) **Pronunciation: *Sapato* from Portuguese**

M'a perde mi otro pia di sapato.

I did lost my other leg/foot of shoe.

‘I lost half of my pair of shoes.’

Sapato is pronounced both in Portuguese and Papiamentu as [səpato].

Nevertheless, English, Dutch, Spanish and Portuguese remained relatively recognizable compared to the pidgins/creoles that were also developing at the time because, (1) they had enough speakers in the Caribbean and South America and (2) they were imposed on the countries as language of the rulers. On Aruba specifically, Dutch remained as the language of the government and represented ‘the educated’. English was the language for business (refineries) and migrant workers from the Leeward Islands, and eventually for tourism as well. Lastly, Spanish was initially the language used for religion, but later became associated with the Latino migrant workers and entertainment, such as telenovelas or game shows.

2.3.1.2 Current linguistic situation

From the short review of the island’s history, it is clear that language contact was inevitable and over the centuries it has led to the current linguistic situation. This is one where there is a main language on the island, Papiamentu (see Table 1); however, native islanders still grow up

surrounded by three additional languages. Language attitudes on Aruba are partly entrenched in the historical development of the island (Kester & Van der Linde, 2015). Dutch has been imposed as the sole official language of the island from colonial times, while Papiamentu was seen as a lesser language. Now both Dutch and Papiamentu are official languages on the island and taught in school, however, linguistic codes used in daily interactions vary. For instance, if I, a native islander, go shopping the initial language to use is Papiamentu as a greeting. After that based on the sales representative's language of choice, the conversation will continue in Papiamentu, Spanish, English or any language that we both have in common. This holds true for interactions with strangers as well.

	1981	1991	2000	2010
Papiamentu	80.1%	76.6%	69.4%	68.3%
English	10.6%	8.9%	8.1%	7.0%
Dutch	5.0%	5.4%	6.1%	6.0%
Spanish	3.1%	7.4%	13.2%	13.5%

Table 1. Languages most spoken in Aruban households (CBS Aruba, number taken from Kester & Van der Linde, 2015, p. 2).

The language spoken at home varies across households, as can be seen in Table 1; however, it only accounts for the four most dominant languages on the island and excludes minority languages such as Chinese or Portuguese that also occur on the island (CBS Aruba). Despite the language spoken at home, eventually all speakers go to school where the language of instruction is Dutch after kindergarten (first year of primary school). Figure 1. gives an overview of the Dutch educational system, which is similar to that on Aruba as the basics of this system were implemented when Aruba was under Dutch rule in the past century.

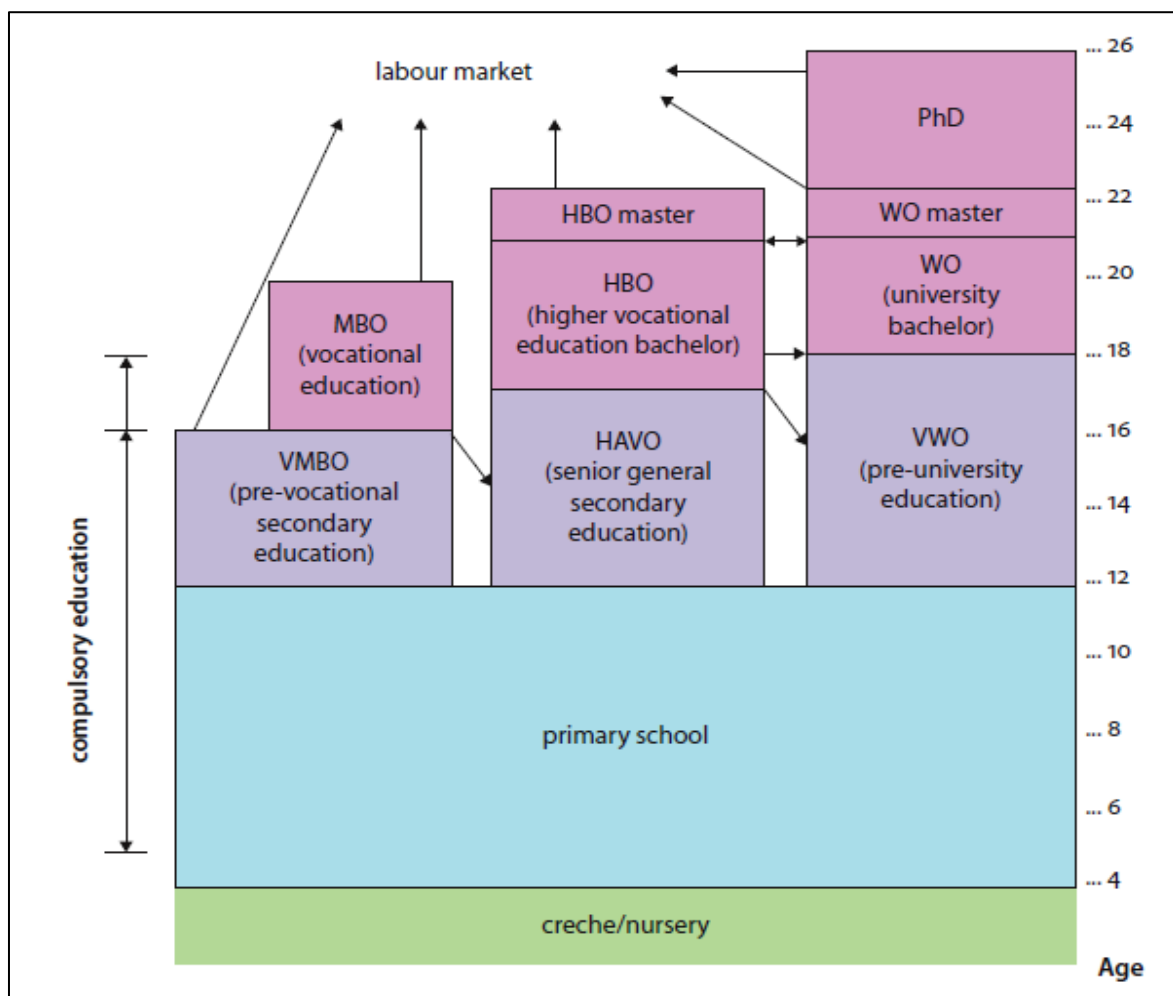


Figure 1. Overview of the Dutch education system (Tijmen Stam, 2006, as cited in Edwards, 2016, p. 26)

Aruban senior general secondary education (*HAVO*) and pre-university education (*VWO*) are comparable to *HAVO* and *VWO* in the Netherlands and *MAVO* (general secondary education/pre-vocational secondary education) is comparable to *VBMO-T* in the Netherlands. In school, students use Papiamentu with friends, while Dutch is the language of instruction and a compulsory school subject from the first grade (Kester & Van der Linde, 2015; Department of Education Aruba). Despite being exposed to Dutch from a young age, there are still hurdles for island inhabitants as not speaking Dutch at home negatively influences the academic achievements of speakers on the island (Kester & Van der Linde, 2015) and when they continue their education in, e.g. the Netherlands (Wolff, 2013; Cuppen & Van Essen, 2019). Concurrently, Aruban students seem to have a positive attitude towards the use of Papiamentu

and multilingualism in the school system, and towards Dutch as the language of instruction and as a school subject (Kester & Van der Linde, 2015). English and Spanish are officially introduced to students in the last two years of primary school. In secondary school, English remains a compulsory subject but Spanish and Papiamentu, become electives after the first three years of secondary school (middle school). French is introduced as a compulsory subject in the last year of middle school, after which it is an elective, but only in the curriculum of the higher educational programmes (Department of Education Aruba). From *MAVO*, *HAVO* and *VWO* students are able to follow an *MBO*, *HBO* or *WO* track respectively, and it is at this point in their academic careers that students decide whether to (1) find a job on the island, (2) go on to higher education on the island or (3) in another country, e.g. the Netherlands, United States of America or Costa Rica.

2.3.2 The Netherlands

Dutch is the official language in the Netherlands, along with Frisian in Friesland; there is dialect variation and dialect levelling such that Standard Dutch is the de facto colloquialism *Umgangssprache* in much of the western/central Netherlands (Smakman 2006, p. 36-40). Most inhabitants of the Netherlands can be considered (functional) bilinguals because of the high degree of proficiency in English in the country. According to Edwards (2016), English became a compulsory school subject in 1836, though, German and French, “the traditional foreign languages” (p. 25), were still more popular. After the second world war, the position of English changed as it was seen as the “language of the liberator, the money providers and progress” (Ridder, 1995, p. 44, as cited in Edwards, 2016, p. 25). Fuelled by American popular culture, the popularity of English surpassed that of German and French by the 1960’s (Van Essen, 1997, p. 97, as cited in Edwards, 2016, p. 25). According to Edwards (2016) all levels of education in the Netherlands have had to do with this increase in English in the form of foreign language

learning (EFL) and bilingual education (p. 27). This led to the current linguistic situation where the number of Dutch people who know nothing about English is small compared to that of people who can converse in English, in varying degrees of proficiency of course.

2.3.2.1 Current linguistic situation

The linguistic situation in the Netherlands is different from that on Aruba, as the dominant language is Dutch and daily interactions will usually occur in Dutch. Although Spanish and French are also electives in secondary school in the Netherlands the chances for an Aruban to switch from Dutch to Spanish while running errands is lower than in Aruba. While languages spoken in Dutch households also vary, it will not result in multilingual interactions for Arubans living in the Netherlands if they do not speak that language as well, e.g. Turkish. This is why Aruban students report to speak mostly Dutch with colleagues (78.7%), their boss (80.8%) and strangers (64.9%) when living in the Netherlands (Kester et al., 2017, p. 6). In addition, students who leave Aruba to continue a higher education programme in the Netherlands will follow degrees in *MBO*, *HBO*, *WO* (see Figure 1) which are mostly in Dutch. However in recent years, the institutions who offer these degrees have started to offer more programmes in English. This is noticeable in the attitudes of Aruban students before they move to the Netherlands as they do not find it important to improve (only) their Dutch because it is not an international language, such as English (Kester & Van der Linde, 2015).

Looking at the language attitudes of Aruban and Curaçaoan students living in the Netherlands, Kester, Buijink, Fun & Hortencia (2017) found that the importance of Dutch as a professional language was bound to the career aims of students. Looking specifically at Aruban students, they have a tendency to use (1) Dutch more than Papiamentu in professional contexts and when talking to strangers, and (2) Papiamentu more than Dutch in familiar contexts. This finding is not unexpected as the dominant language in the Netherlands is Dutch, and it is very

rare to work in an environment where Papiamentu is the required language even if a speaker has colleagues that are also from Aruba, Bonaire or Curaçao (abbreviated: ABC). In addition, Kester et al. (2017) looked at aspects of identities of Aruban students, which was split into ‘Aruban identity’ and ‘Dutch identity’. Aruban students scored positively on both their Aruban and Dutch identities. It is possible to assume that this could lead to a more positive identification with Dutch culture which can result in, e.g. more code-switching to Dutch or simply using Dutch more frequently outside of professional contexts.

3. Research aims

3.1 Research questions

Based on the existing literature, this study will examine code-switching patterns among Aruban students engaged in multilingual discourse by focusing on the pragmatic and syntactic environment of the code-switching. Specifically:

- I. What languages are used in multilingual speech in formal and informal contexts?
- II. How are sentences containing code-switches structured?
- III. Do the syntactic code-switching constraints from Poplack (1980) hold true for the present data?
- IV. How are phrases containing code-switches, not falling into Poplack's (1980) constraints, structured?

3.2 Hypotheses

Based on the previous sections, I expect all four languages to be present in both formal and informal contexts. Pertaining to the phrasal structure of the code-switching, I expect there to be occurrences of both intersentential and intrasentential code-switching. Concerning the syntactic constraints from Poplack (1980), I expect both constraints to account for some code-switching but not all, as there are four languages involved which increases complexity.

4. Methodology

4.1 Participants

Four adult Arubans, two males and two females, participated in the present study. All participants come from a middle class background, have obtained their *VWO* diploma (see Figure 1), and are attending university. As all participants have finished pre-university education, they have formal knowledge of the four investigated languages at at least B1 level

according to the Common European Framework of Reference (<http://coe.int>). Participants provided personal data such as age, length of residence in the Netherlands and languages they know apart from Papiamentu. These data are presented in Table 2.

	Age	Gender	Education	Languages besides Papiamentu	Date of Immigration	Current Job/Education	Most frequently used language daily
P. 1	22	F	BA	Dutch English (±)	2019	European Law	Dutch
P. 2	22	M	VWO	Dutch English Spanish French	2015	Earth Sciences	Dutch English Papiamentu
P. 3	21	M	VWO	English Dutch Spanish	2016	Veterinary Medicine	Dutch
P. 4	21	F	VWO	English Spanish Dutch	2017	Psychology	Dutch Papiamentu

Table 2. Information on participants.

For the fourth column, ‘Languages besides Papiamentu’, participants were asked to report what languages they speak and/or feel confident using next to Papiamentu because this might influence a speakers’ linguistic behaviour. Moreover, having attained a *VWO* diploma only indicates the average proficiency level of participants as they were not asked to provide their high school transcripts and languages spoken at home; linguistic performance and ultimate attainment can vary because of (1) choice in electives, (2) languages spoken at home, and (3) efforts to score a passing grade (5.5) or a 9 (excellent performance). This can influence language competence in terms of conversational abilities instead of prescriptive knowledge of a language. Participants were also asked what language they consider they use the most based on an estimate given their weekly activities while living in the Netherlands.

4.2 Data collection: Materials and procedure

Participants were asked to meet in two different contexts, formal and informal. Before the first data collection session, participants were asked to fill in the questionnaire (Table 2). With respect to the audio-recordings, ‘migration’ was the formal topic of discussion and ‘daily life’ was the topic of the informal discussion. Pre-prepared materials, such as specific questions were not used during discussions. To initiate the discussions, the topics were explained to participants with a few examples of sub-topics, but the choice in conversation structure lay completely with the participants. The formal discussion took place at Utrecht University, which all participants attend as this could provide the discussion with a more formal feel. Participants were given the topic of the formal discussion, namely ‘migration’, and instructed to approach the topic in the manner they find best and speak as they normally would in that context. The informal discussion, took place in a restaurant over lunch, to make participants feel more relaxed. Participants were instructed to talk about things in their daily lives, for instance as they would when catching up with an acquaintance. Again, participants were asked to speak as they feel comfortable. No specific instructions were given about taking turns, using a specific conversational structure and/or interrupting each other. The recording device was placed in the centre of the table at which participants were sitting. The device was set to record before the discussion began and was stopped two hours later, after the discussion had ended. Excluding greetings, task explanation and interruptions or silences, such as eating breaks, gives the present research about an hour and a half of conversational data for each data collection session.

4.3 Analysis

Firstly, the hour of data from the audio-recordings were transcribed to examine the context and structure of any instances of code-switching pragmatically and syntactically. Each transcription was then colour-tagged for English (yellow), Dutch (green), Spanish (pink) and Papiamentu (blue). Names of people and places were not part of the colour-tagging because they remain the

same in any language. Dictionaries/vocabulary lists of all four languages were consulted to facilitate the differentiation between instances of code-switching and the use of established loanwords. This is especially important in this study as there are multiple languages at play that have influenced each other, e.g. Papiamentu and Dutch. The former consists of different linguistic elements of languages that came into contact with each other, whereas the latter has recently attained many lexical borrowings from English.

To tag all Papiamentu words, the official vocabulary list of Papiamentu (Department of Education Aruba) was consulted. Next, the *American Heritage English Dictionary* was used because the influence of the American language and culture has been strong on Aruba since the previous century (refineries and tourism) and we referred to the *Oxford English Dictionary* as that is what is taught in schools. For Dutch, I consulted Van Dale and Prisma dictionaries as these are the most popular and easiest to acquire on the island, especially for school, which is where most Arubans learn and interact with the Dutch language. Lastly, I looked at the official dictionary of *La Academia Real Española* and the *Diccionario de Venezolanismos* (Castro Pumarega, n.d.) because the former represents the Spanish taught in schools and the latter the most influential variety of Caribbean/Latin-American Spanish on Papiamentu and Aruba. After the transcriptions were tagged according to the languages mentioned above, the total number of words in each discussion and the number of tags each code had in both formal and informal discussions was tallied. Monolingual utterances were subtracted from the total number of tags, which left us with the total quantity of code-switches that occurred in the discussions.

The next step in the analysis was to examine the sentence structures of the code-switches and the environment in which the switches occurred. First, each sentence containing different colour-tags was coded based on whether the switches occurred between sentences, intersentential, or within a sentence, intrasentential. Next, I looked again at the points where the colour-tags meet each other, which is essentially the code-switch, to analyse the environment

in which it occurs, which was then coded according to the tags in Table 3. Initially, affect, lexical borrowing, loanword and calques were the only tags next to Poplack's (1980) constraints (coded as EQ and FM in the table). The rest of the tags in Table 3 were added as the analysis of the data progressed because there were different recurrent identifiable linguistic environments where switches occurred throughout the data.

#	Tag	Name	Description (and examples)																								
Syntax																											
1	MARKER	Discourse marker	<p>Word or phrase that organises the discourse into segments.</p> <p>Example(s): ‘well’ or ‘I mean’ or ‘like’</p>																								
2	EQ	Equivalence constraint	<p>Codes may be switched at points where the syntax of both languages will not be violated.</p> <p>Example(s): According to this constraint all lexical items in for English and Spanish in their own ‘box’ can be substituted with each other, resulting to the four instances of code-switching shown below.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tbody> <tr> <td>Eng.</td> <td>I</td> <td>told him</td> <td>that</td> </tr> <tr> <td>Sp.</td> <td><i>Yo</i></td> <td><i>le dije</i></td> <td><i>eso</i></td> </tr> <tr> <td>CS.</td> <td>I</td> <td><i>le dije</i></td> <td>that</td> </tr> <tr> <td></td> <td><i>Yo</i></td> <td>told him</td> <td><i>eso</i></td> </tr> <tr> <td></td> <td>I</td> <td>told him</td> <td><i>eso</i></td> </tr> <tr> <td></td> <td><i>Yo</i></td> <td><i>le dije</i></td> <td>that</td> </tr> </tbody> </table> <p style="text-align: right;">(Poplack, 1980, p. 586)</p>	Eng.	I	told him	that	Sp.	<i>Yo</i>	<i>le dije</i>	<i>eso</i>	CS.	I	<i>le dije</i>	that		<i>Yo</i>	told him	<i>eso</i>		I	told him	<i>eso</i>		<i>Yo</i>	<i>le dije</i>	that
Eng.	I	told him	that																								
Sp.	<i>Yo</i>	<i>le dije</i>	<i>eso</i>																								
CS.	I	<i>le dije</i>	that																								
	<i>Yo</i>	told him	<i>eso</i>																								
	I	told him	<i>eso</i>																								
	<i>Yo</i>	<i>le dije</i>	that																								
3	FM	Free morpheme constraint	<p>Codes may be switched after any free morpheme in the utterance.</p> <p>Example(s): ‘This is Kevin’s book, he bought it at his favourite bookstore.’</p> <p>According to this constraint, there cannot be code-switched after ‘Kevin’s’ as the possessive marker (‘s’) is a bound morpheme.</p>																								

*Table 3. Description of tags used to code the data:
Syntactic tags (Category I).*

(Continued on next page.)

Pragmatics											
4	AFF.	Affective aspect	<p>The choice of language depends on whether that language fits the message (emotive).</p> <p>I tagged switches as affective if when looking at the topic and testing the other linguistic-tags it turned out that using another language in this context would not have made the same point, whether that be to dramatize, share a personal feeling or refer to something in popular culture (American, Dutch, Latino or Aruban) to make a joke/pun.</p> <p>Example(s):</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Pap. – Eng.</td> <td>‘<i>Mi por relate hopi na feeling trapped na Aruba si paso (...)</i>’</td> </tr> <tr> <td>Trans.</td> <td>‘I can relate a lot to feeling trapped on Aruba because (...)’</td> </tr> <tr> <td>Context</td> <td>Participants decided to share their personal stories/reasons why they moved to the Netherlands to begin the discussion.</td> </tr> <tr> <td>Sentence Alternatives</td> <td> <p><u>Pap.</u> <i>Mi por relata hopi na sinti atrapa na Aruba si paso (...)</i> ❖ This would be considered too formal</p> <p><u>Eng.</u> I can relate a lot to feeling trapped on Aruba because (...) ❖ This could be seen as the speaker creating a distance between themselves and the other speakers</p> <p>With both these alternatives, the risk would have been that the speaker had been perceived as not being sincere or sensitive to the others, topic or context.</p> </td> </tr> </table>	Pap. – Eng.	‘ <i>Mi por relate hopi na feeling trapped na Aruba si paso (...)</i> ’	Trans.	‘I can relate a lot to feeling trapped on Aruba because (...)’	Context	Participants decided to share their personal stories/reasons why they moved to the Netherlands to begin the discussion.	Sentence Alternatives	<p><u>Pap.</u> <i>Mi por relata hopi na sinti atrapa na Aruba si paso (...)</i> ❖ This would be considered too formal</p> <p><u>Eng.</u> I can relate a lot to feeling trapped on Aruba because (...) ❖ This could be seen as the speaker creating a distance between themselves and the other speakers</p> <p>With both these alternatives, the risk would have been that the speaker had been perceived as not being sincere or sensitive to the others, topic or context.</p>
Pap. – Eng.	‘ <i>Mi por relate hopi na feeling trapped na Aruba si paso (...)</i> ’										
Trans.	‘I can relate a lot to feeling trapped on Aruba because (...)’										
Context	Participants decided to share their personal stories/reasons why they moved to the Netherlands to begin the discussion.										
Sentence Alternatives	<p><u>Pap.</u> <i>Mi por relata hopi na sinti atrapa na Aruba si paso (...)</i> ❖ This would be considered too formal</p> <p><u>Eng.</u> I can relate a lot to feeling trapped on Aruba because (...) ❖ This could be seen as the speaker creating a distance between themselves and the other speakers</p> <p>With both these alternatives, the risk would have been that the speaker had been perceived as not being sincere or sensitive to the others, topic or context.</p>										

Table 3. Description of tags used to code the data:
Pragmatic tags (Category II).

(Continued on next page.)

5	IDIOM	Idiom	A semantic unit whose meaning cannot be deduced from the meanings of each word. Example(s): ‘over the moon’ or ‘ <i>eigen schuld dikke bult</i> ’
6	QUOTE	Quote	Repeating word(s)/utterances produced by another person in the exact word(s) and/or language. Example(s): Papiamento – Dutch <i>Yen hnd cu sa cu mi nunca a wak sneeuw nan ta mane “X! Kijk kijk!”</i> Translation ‘Lots of people who knew that I never saw snow were like “X! Look look!”’
7	PRO.Q.	Processing cues	Brief sounds or words that mark a pause, hesitation or emotional reaction in speech. Example(s): ‘uh’ or ‘you know’ or ‘pff’ or ‘ugh’
Word Class			
8	LEX.B.	Lexical borrowing	Word(s) that have been borrow from a lending language and became established in the receiving lexicon. Example(s): ‘yoghurt’ (Turkish)
9	LOANW.	Loanword	An adopted foreign word that is not (or minimally) modified. Example(s): <i>doppelgänger</i> (German)
10	LOANT.	Loan translation (Calque)	An adopted foreign word/expression that is translated in the receiving language literally. Example(s): <i>übermensch</i> (German) – superman (English)
11	DERI.	Derivation	The process of creating words by adding affixes to existing words. Example(s): happy – unhappy
12	COMP.	Compound	A word consisting of two stems, free morphemes, that create a new word. Example(s): ‘classroom’ or ‘blackboard’

*Table 3. Description of tags used to code the data:
Pragmatic Tags (Category II) and Word Class tags (Category III).*

5. Results

Figure 2 depicts the languages used in both the formal and informal discussions based on the number of words uttered in each language. Papiamentu is the most used language in both contexts; however, the use of English increases and that of Dutch decreases in the informal context.

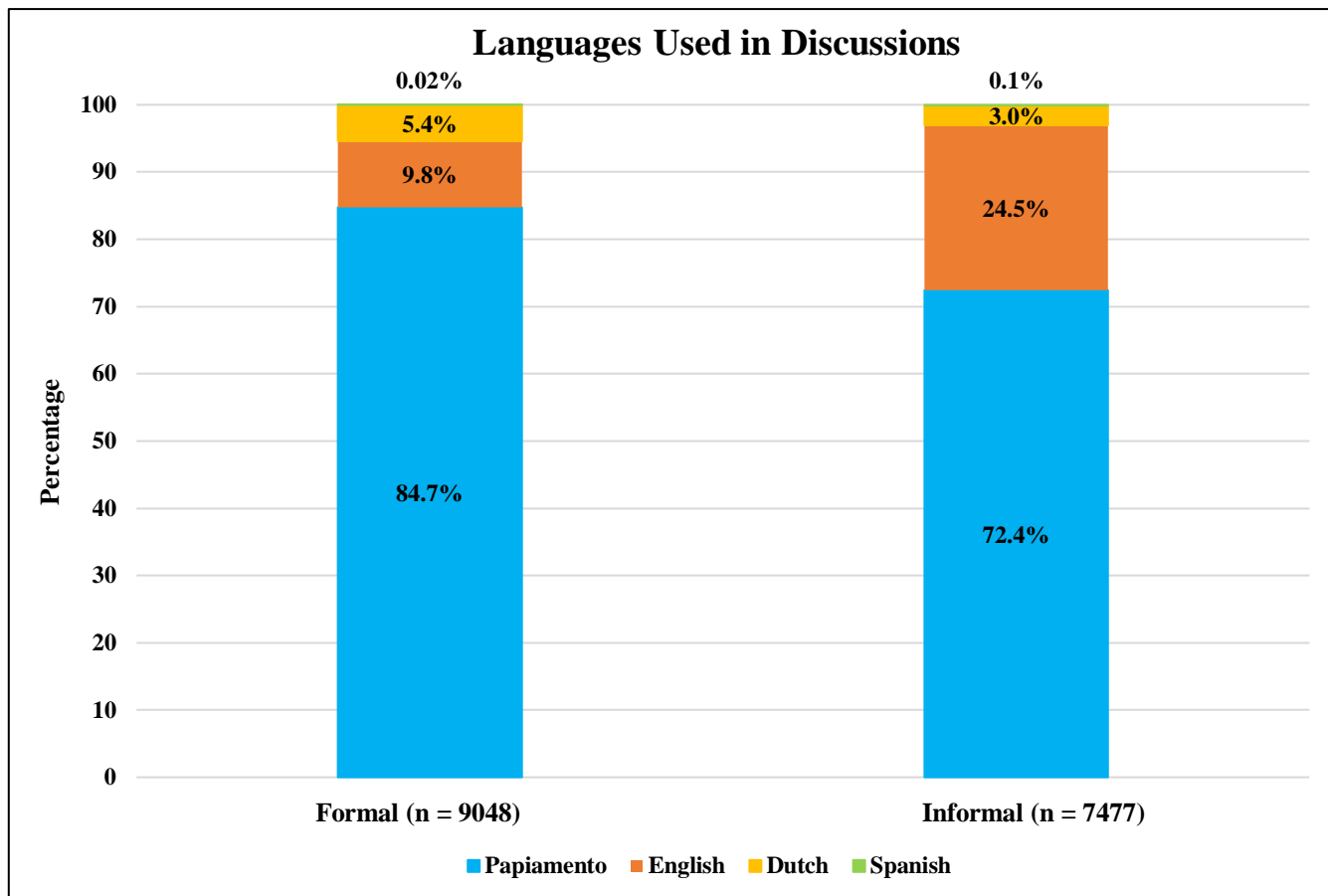


Figure 2. Languages used in discussions.

Figure 3 presents the number of code-switches in each context for each language. Code-switches were defined as the points where colour-tags met. These were counted as moving away from the previous lexical item; a similar movement as reading in all these languages, from left to right. An example is given in Example (10).

(10) **Papiamento (blue) – English (yellow) – Dutch (green)**

Bo ta like neem nan op as you go.

You do like take them up as you go.

‘You, like, take them up as you go.’

In example (10), there are five instances of switches: (1) Papiamento-English, (2) English-Dutch, (3) Dutch-Papiamento, (4) Papiamento-Dutch and (5) Dutch-English. This accounts for the difference between the percentages in Figure 2 and Figure 3: there are two Dutch words in the sentence but four instances of switching containing Dutch.

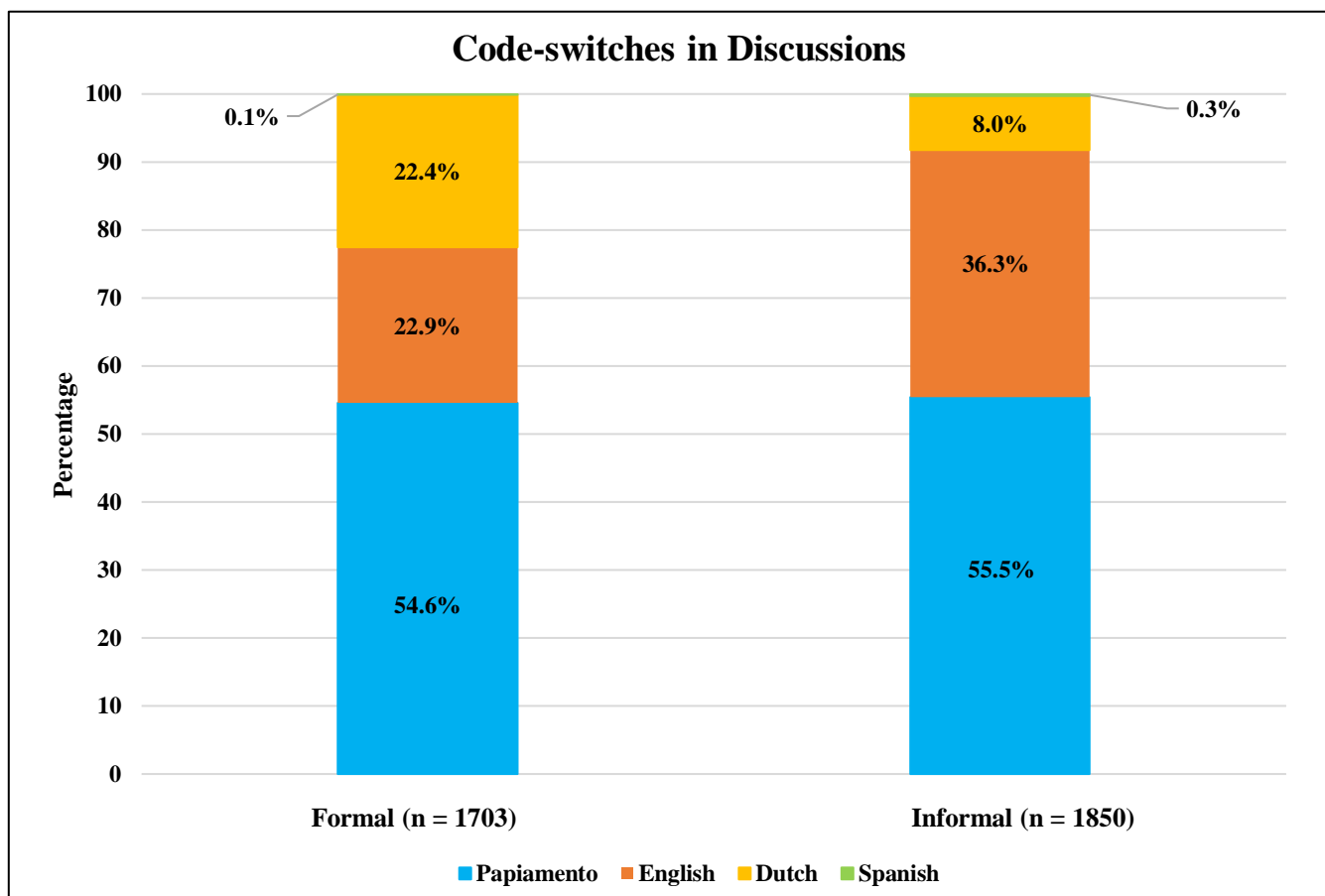


Figure 3. Code-switches in discussions.

Table 4 shows the absolute number of intersentential and intrasentential code-switching and the corresponding percentage to the total sum of switches in each context. A third category, ‘Inter-Intra Combination’, was added when quantifying the data as a number of instances were a combination of the aforementioned forms of code-switching. Specifically, intersentential code-switching between sentences that contain instances of intrasentential code-switching. An example of ‘Inter-Intra Combination’ is given in (11) and (12).

	Formal (n = 1703)	Informal (n = 1850)
Intersentential	3 0.2%	4 0.2%
Intrasentential	1677 98.5%	1834 99.1%
Inter - Intra Combination	23 1.4%	12 0.6%

Table 4. Structures of sentences containing code-switches.

(11) **Inter-Intra Combination**

Papiamento (blue) – English (yellow) – Dutch (green)

Mi ta sinti e invisibility ki nan tambe, pero e momento cu bo sali for di un stad grandi e invisibility ta gone. Hende ta notice bo manera bo drent un dorp.

I am feel the invisibility here too, but the moment that you go from a city big the invisibility is gone. People do notice you as you are enter a village.

‘I feel the invisibility here too, but the moment you leave a big city the invisibility is gone. People notice you the minute you enter a village.’

(12) **Intrasentential code-switches**

Papiamento (blue) – English (yellow) – Dutch (green)

Diasabra anochi bay para eynan sowieso ta bay tin un accident. Dijs wrda, it's a matter of when not if.

Saturday night go stand there, anyway there will have an accident. Just wait, it's a matter of when not if.

‘Go stand there on a Saturday night, there's going to be an accident for sure. Just wait, it's a matter of when not if.’

Instances such as Example (11) fall under the third category because a switch in codes occur at the border between the two sentences in the utterance, as opposed to Example (12).

Figure 4 depicts the environment of the code-switches based on the linguistic-tags from Table 3 in Section 4.3. The percentages add up to 100%, which represents the total number of code-switches (formal (n = 899) and informal (n = 952)) that were clearly definable based on the twelve linguistic-tags in both contexts. About half of the total instances of code-switches in the present study were not ‘clearly’ identifiable (formal: 47.2% (n = 1703) and informal: 48.5% (n = 1850)). They are not presented in the present study as they cannot be accounted for within the scope of the twelve linguistic-tags defined in Table 3.

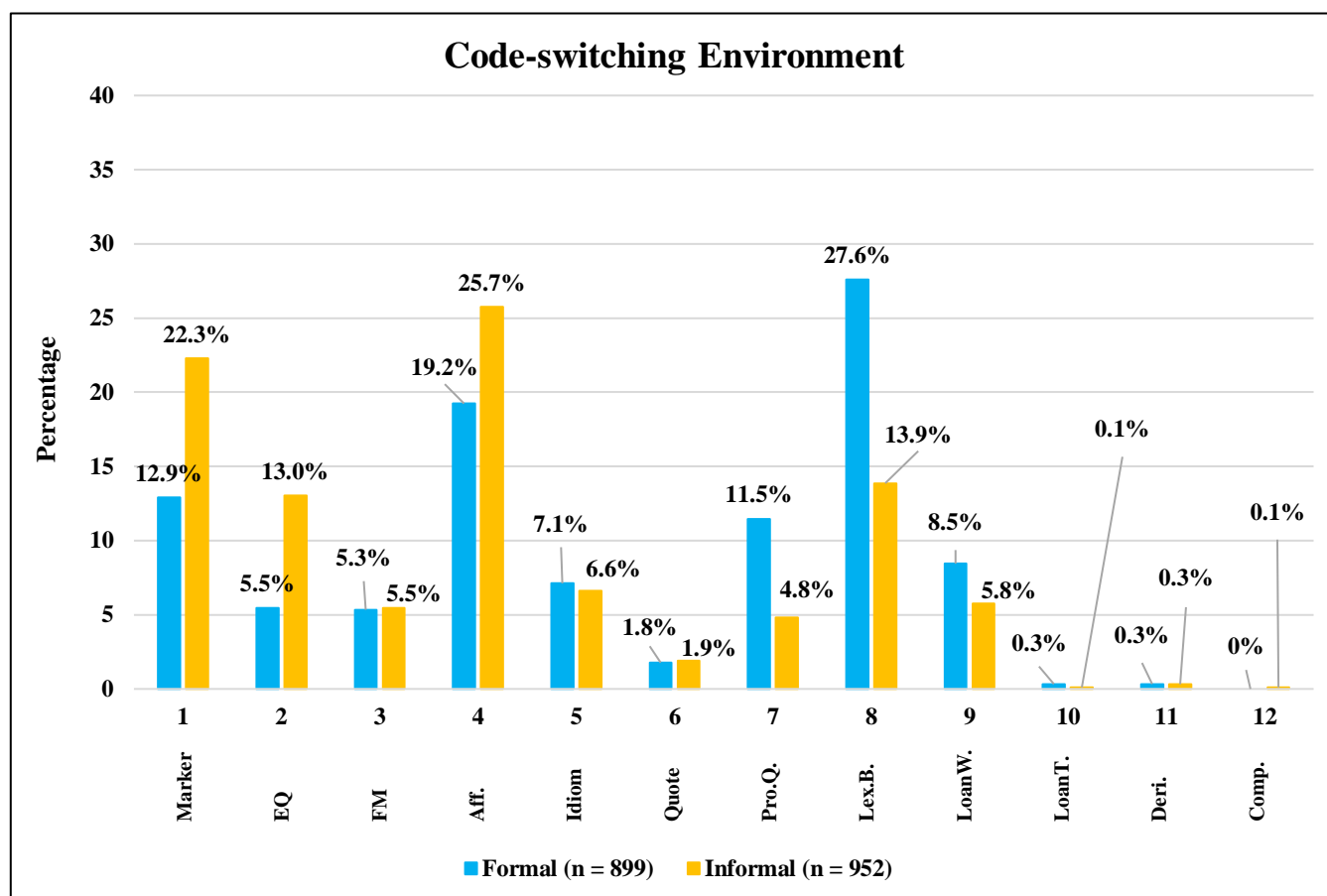


Figure 4. Environment of code-switches in discussions.

Table 5, Example (13) and Figure 5 show instances where a code-switch adhered to more than one of the twelve linguistic-tags. The percentages shown in the table are the portions from the total sum of code-switching in each context (formal (n = 899) and informal (n = 952)).

(13) **English (yellow) – Papiamentu (blue)**

I mean, mi ta sinti invisibility ki nan.

I mean, mi do feel invisibility here.

‘I mean, I feel invisibility here.’

All switches in Example (13) are tagged as instances of the equivalence constraint as can be seen in Figure 5:

Eng.	I mean,	I feel	invisibility	here
Pap.	<i>Mi kemen,</i>	<i>mi ta sinti</i>	<i>invisibilidad</i>	<i>kinan</i>
CS.	I mean,	<i>mi ta sinti</i>	invisibility	here
	<i>Mi kemen,</i>	I feel	<i>invisibilidad</i>	here
	I mean,	<i>mi ta sinti</i>	<i>invisibilidad</i>	<i>kinan</i>
	<i>Mi kemen</i>	<i>mi ta sinti</i>	invisibility	<i>kinan</i>

Figure 5. Overview of the underlying structure of Example 13.

Additionally, the first switch, from ‘I mean’ to ‘*mi ta sinti*’ is tagged as a discourse marker, and from ‘*mi ta sinti*’ to ‘invisibility’ is tagged as a free morpheme.

	Formal	Informal
Code-switches with more than one linguistic-tag	28 3.1%	27 2.8%

Table 5. Code-switches with more than one linguistic-tag

6. Discussion

6.1 Revisiting research aims

This study explored code-switching patterns among Arubans engaged in multilingual discourse in formal and informal contexts centred around the following research questions:

- I. What languages are used in multilingual speech in formal and informal contexts?
- II. How are sentences containing code-switches structured?
- III. Do the syntactic code-switching constraints from Poplack (1980) hold true for the present data?
- IV. How are phrases containing code-switches, not falling into Poplack's (1980) constraints, structured?

6.1.1 Languages used and structure of code-switches

First off, all four languages were present in both contexts as expected. The relative frequencies of the languages used in conversation are not surprising, given Kester & Van der Linde's (2015) results. Their participants, in particular VWO students, reported their best language, their language use with family and with friends. Papiamentu was rated the highest for use with friends (68%), followed by English (52%), Dutch (20%) and Spanish (0%). This is a similar trend to what was found in the present data. The increase in the use of English in the informal context is in line with Leuverink's (2011, as cited in Kester & Van der Linde, 2015) results, where participants had positive attitudes towards English, finding it the most attractive language and the language of the next generation (p. 3) which could be tied to the development of English as a world language, a language of media and modernity. The decrease in use of Dutch from formal to informal context is in line with language attitudes among Aruban students, who relate to Dutch in more formal settings, such as school or professionalism on the job market (Kester & Van der Linde, 2015; Kester et al., 2017). Interestingly, the occurrence of Spanish is minimal

in both contexts, which is once again similar to Kester & Van der Linde's (2015) results concerning language use in different contexts: with friends Spanish was reported to be used 0% of the time, as well as a language of instruction in VWO (0%) classrooms. Looking specifically at the few instances of Spanish in the present data, they were restricted to idioms, which are used frequently in Papiamentu. Although they do not appear in the official vocabulary of Papiamentu, it is possible to consider them lexical borrowings instead.

Secondly, the structure of multilingual code-switching in Aruban speech was examined. Concerning the sentence structure, the hypothesis was corroborated, as intrasentential code-switching (within a sentence) arose far more often than intersentential code-switching (between sentences). The addition of a third category (intersentential-intrasentential combination) was deemed necessary because of instances where there was intersentential code-switching involving sentences that were not monolingual, so that the code-switching was between intrasententially code-switching sentences, such as Example (11) (section 5) and (14):

(14) **Papiamentu (blue) – English (yellow) – Dutch (green)**

Si, either nan ta echt bon. It's two things, e sushi mester ta bon y e mester t limpi.

Yes, either they are really good. It's two things, the sushi has to be good and they have to be clean.

'Yes, either they are really good. It's two things, the sushi has to be good and they have to be clean.'

Utterances as shown above were more frequent than pure intersentential code-switching. This is not surprising, as Poplack's (1980) data demonstrated that the more fluent a speaker is in their languages the more likely they are to code-switch intrasententially because of the complexity involved.

6.1.2 Poplack's (1980) constraints and other linguistic-tags

Firstly, the present study set out to see whether Poplack's (1980) code-switching constraints, equivalence and free morpheme, held true for multilingual discourse (see Figure 4). Both constraints held true for a number of code-switches, but not to the same extent as in Puerto Rican Spanish and Chicano Spanish data (Poplack, 1980). Occurrences of the equivalence constraint and the free morpheme constraint observed in the present dataset are depicted in Example (15) and Example (16).

(15) **Equivalence Constraint: Papiamento (blue) – English (yellow)**

Mi actually no a coi mas napkins.

I actually not take more napkins.

'I actually did not take any more napkins.'

(16) **Free Morpheme Constraint: Papiamento (blue) – Dutch (green)**

No e ta dijs nos nicht di Aruba.

No she is just our niece from Aruba.

'No, she is just our niece from Aruba.'

Secondly, discourse markers were used more frequently in the informal context in form of, e.g. 'I mean', '*mi kemen*' (Papiamento: I mean), 'anyways', '*dus*' (Dutch: so) and 'so'. It is plausible to ascribe this difference to the fact that in informal conversation, speakers are more prone to change conversation topics because they do not have a predetermined topic, such as the participants did in the formal discussion of this study. The results for the 'Processing Cues' category can be seen as contradicting this interpretation because they occurred more frequently in the formal conversation. However, it is not far-fetched if we consider that the formal conversation required more cognitive processes, listening and responding, on the part of each

speaker as they were engaged in a discussion of a specific topic. Even so, the effect of the different contexts on the speech of participants is not conclusive as interactions with Arubans usually account for a less formal and/or monolingual speech despite the context it occurs in (Kester & Van der Linde, 2015; Kester et al., 2017). Moreover, the use of quotations, loan translations, derivations and compounds were quite similar and limited in both contexts. Idioms and loanwords have similar frequencies and are mostly words in Dutch that participants inevitably use to navigate their new linguistic and cultural context in the Netherlands, such as ‘*sprinter*’ (Dutch: train), ‘*dorp*’ (Dutch: village), ‘*pluk de dag*’ (Dutch: seize the day) and ‘*wijk*’ (Dutch: neighbourhood).

Thirdly, lexical borrowings form a large part of the present data and consist mostly of Dutch and English words that have been integrated into Papiamentu and that are used frequently, e.g. ‘*echt*’ (Dutch: real), ‘*letterlijk*’ (Dutch: literally), ‘joke’, ‘*sowieso*’ (Dutch: in any case) and ‘friend(s)’. Some of these lexical borrowings, I would argue as a native speaker, should be listed on the official vocabulary list of Papiamentu as other words have been listed over time in the past from Dutch, English and Spanish because they are frequently used but they are also more nativized, phonologically and concerning its lexical content. For example, ‘*echt*’ is Dutch for ‘real’, ‘really’ or ‘seriously’ and is usually pronounced as [ext]. As a borrowed lexical item in Papiamentu, it has the same meaning(s) but is pronounced as [ɛht]. Another example, ‘*sowieso*’ [zo:wizo:] which has also been incorporated into the lexicon of Papiamentu. Lexically it is used as an equivalent to ‘of course’ and is pronounced as [so:wiso:] but in most cases it is written as ‘*zowiezo*’ similar to the Dutch pronunciation. Prescriptively, all the words in the dataset belong to one of the four investigated languages. However, this has led to some instances where I had to colour-tag a code-switch that could also be argued to be a monolingual utterance (see Table 6).

Lexical borrowings in Dutch		Lexical borrowings in English	
Echt	Sowieso	Pop	Chill
Letterlijk	Gang	Joke	Get
Bezig	Herfst	Friends	Skip
Vooral	Moeilijk		
Lente	Let op		
Erg	Juist		
Verschil	Eigenlijk		
Dus			

Table 6. A few words that should be added to the vocabulary list of Papiamentu.

Next to the occurrence of words that should be added to the Papiamentu vocabulary list, I also found instances where the word ‘haber’ had to be tagged as a code-switch, in Spanish, because it occurred with ‘que’. ‘Haber’ is a lexical borrowing from Spanish that has made its way onto the wordlist for Papiamentu, in which case saying ‘*E no tin nada **di** haber cu esey*’ (Translation: It has nothing to do with that.) is considered a monolingual utterance and saying ‘*E no tin nada **que/de** haber cu esey.*’ is considered code-switching. In this case, I would not argue that ‘que’ should be added to the vocabulary of Papiamentu as a lexical item, but because Arubans seem to use ‘*di/de/que haber*’ interchangeably, it might be that they consider this structure as a whole. While an official vocabulary list will not change the manner in which speakers use their language, the Papiamentu list was last updated in 2009, roughly a decade ago. It is important to update official resources to not only allow Arubans, experts and non-experts alike, to better understand and use their own languages, but also to support Papiamentu as a (still developing) elective subject in secondary school and as a research topic. For example, the impact of using an out-dated vocabulary list for the present research was increased labour intensity due to the colour-tagging of words as foreign that could have easily been considered a part of the Papiamentu lexicon.

6.2 Exceptions to the rule

The present thesis has observed multilingual discourse of Arubans living in the Netherlands in formal and informal contexts by (1) looking at what languages were present in the discourse of Arubans, (2) how their code-switching behaves, (3) if there are any differences in contexts and, (4) if there is any discernible any pattern that may be helpful for future research. Such research can further aid in restructuring educational approaches that can help students hone their linguistic and cognitive skills. This can have a positive effect on the integration of students when moving to the Netherlands, as it is evident that they do not lose their linguistic capacities in a new, more monolingual, linguistic and cultural environment as can be seen from the following, relatively innovative, utterances in Example (17), (18) and (19).

(17) **Papiamento (blue) – Dutch (green)**

Bo mester cuminsa bisti mas ros licht paso esey ta saca e tintje di bo color.

You need start wear more pink light because that does bring out the tint of you colour.

‘You need (should) start wearing more light pink because it brings out the (soft) hue of your (skin) colour.’

The sentence in Example (17) is a translation of a quotation with two lexical items embedded that are not translated. The equivalence constraint can account for the sections in which there is code-switching; however it might conflict with the affective aspect that the speaker seems to be going for. When looking at the conversational context, speakers were sharing experiences in which they felt caught off guard by an off-comment from a Dutch fellow student. Saying ‘*licht*’ and ‘*tintje*’ instead of ‘*cla*’ or ‘light’ and ‘*tint*’ or ‘hue’, it invokes an image that the other participants might also be familiar with.

According to Poplack’s (1980) equivalence constraint there are permissible code-switching points, as exemplified by the dotted lines in Figure 6, where constituents in both languages can be substituted for the other.

A.	Eng	I	told him	that	so that	he	would bring it	fast.
		↑	↙ ↘	↑	↑	↑	↙ ↘	↑
B.	Sp	(Yo)	le dije	eso	pa' que	(él)	la trajera	ligero.
C.	Cs	I	told him	that	PA' QUE		LA TRAJERA	LIGERO. (04/73)

Figure 6. Permissible code-switching points (Poplack, 1980, p. 586)

The utterance in Example (18) is a common manner in which Arubans apply Dutch words and grammar to their Papiamentu.

(18) **Dutch (green) – Papiamentu (blue)**

(...) *dus mi kier a daag mi mes uit.*

(...) so I want to challenge myself.

‘(...) so I wanted to challenge myself.’

At first glance, the equivalence constraint does not hold true for Example (18) as can be seen in the following figure.

Dutch	<i>dus</i>	<i>ik wou</i>	<i>mezelf</i>	<i>uitdagen</i>
Pap.	<i>dus</i>	<i>mi kier a</i>	<i>desafia</i>	<i>mi mes</i>

Figure 7. Equivalence constraint for Example (18)

Technically, no switch should occur between ‘challenge myself’ as the syntax of both languages will be violated as indicated by the dotted lines. Nonetheless, this speaker has managed to construct an utterance based on the conjugation of Dutch verbs, in which *uitdagen* as an infinitive is *daag uit* in first person singular present tense (*onvoltooid tegenwoordige tijd*). In the form of *daag uit*, the constituents can be separated in a sentence, e.g. ‘*ik daag mezelf uit*’ and this utterance can be mapped onto ‘*desafia mi mes*’. In this case, the present tense is a

‘dummy tense’ as a ‘dummy verb’ would work in English, to keep the sentence grammatical but not adding any lexical content because ‘*mi kier a*’ indicates the past tense in which ‘*wou uitdagen*’ would have done in Dutch. This is depicted in Figure 8.

Dutch	<i>dus</i>	<i>ik wou</i>	<i>mezelf</i>		<i>uitdagen</i>
Pap.	<i>dus</i>	<i>mi kier a</i>	<i>desafia</i>		<i>mi mes</i>
	<i>dus</i>	<i>mi kier a</i>	<i>uitdagen (inf)</i>		<i>mi mes</i>
			<i>present tense</i>		
	<i>dus</i>	<i>mi kier a</i>	<i>daag</i>	<i>uit</i>	<i>mi mes</i>
			<i>daag</i>	<i>OBJ</i>	<i>uit</i>
CS.	<i>dus</i>	<i>mi kier a</i>	<i>daag</i>	<i>mi mes</i>	<i>uit</i>

Figure 8. Illustration of the composition of Example (18).

From example (18), it is clear that the equivalence constraint does not hold true for multilingual speech as it is formulated in Poplack (1980) and the underlying resources a speaker uses to produce a grammatical utterance should be considered more closely.

Another instance of ‘creative’ language use is the derivation ‘non-*cushina*’ in Example (19).

(19) **English (yellow) – Papiamentu (blue)**

To this day ainda mi no a actually come gewoon mane non-cushina sushi.

To this day still I not did actually eat just like non-cooked sushi.

‘To this day I still haven’t eaten, like, just raw sushi.’

This utterance invites some speculation as to how this ‘word code-switch’ came about since in this context ‘raw’ or ‘*curu*’ would have been the go-to lexical item for a native speaker because in both English and Papiamentu ‘non-cooked’ and ‘*no-cushina*’ are not exactly conventional words. Nevertheless, the message the speaker wished to assign to their utterance was received by the other participants without any break down in communication. The addition of affixes to words is not uncommon in Aruban multilingual speech, as high school students for example use ‘*cijfersnan*’ to refer to their school grades, here the Papiamentu plural marker *-nan* is added on to an already plural lexical item as can be seen from the Dutch plural marker *-s*. This is not exactly a derivation because a new word is not being created, but a suffix is added onto an existing word regardless. It might be that *-nan* is added to ‘*cijfer(s)*’ when speaking about grades in Papiamentu to integrate it in the language because ‘*cijfersnan*’ does not occur when speaking in Dutch. It could also be that speakers do not pay much attention to what they say or do not mind producing ‘ungrammaticalities’ because they know that their interlocutors will understand what they are saying.

7. Conclusion

The results from this study have provided a small, but detailed, look at how Arubans code-switching patterns look like in multilingual speech. All four languages were present in the data; however, following the line of argument concerning the colour-tagging of ‘*di/de/que haber*’ in Section 6.1.2 (p. 36), Spanish would not be at all present in this study which would render the first hypothesis void. This is in line with the language attitudes among students on Aruba concerning the infrequent use of Spanish, with friends (0.5%), at home (17.4%), and as a favourite language to read (6.0%) and speak (10.9%) (Sollie, 2015, as cited in Kester & Van der Linde, 2015). On the other hand, the use of Spanish as a language spoken at home has increased from 1982 to 2010 (see Table 1, p. 14), as opposed to Papiamentu and English. To understand or further speculate on this development, further investigation is required (on Aruba) but this does not fall within the purview of the present study. In addition to languages used, the present study also found that Poplack’s (1980) syntactic constraints did not account for all instances of code-switching in Aruban multilingual speech. The underlying complexity found in instances such as Example (17) in section 6.3, and the fact that about half of the total number of code-switches in both contexts (formal: 52.8% (n = 1703) and informal 51.5% (n = 1850)) in this study were coded according to the linguistic-tags presented in Table 3 (section 4.3) indicate that further research is necessary if patterns or some kind of understanding of the code-switching were to be found. For example, the need for more specific ‘linguistic-tags’ when examining Aruban multilingual speech by focusing on phonetics as it might be the case that some instances of code-switching occur because of the similarities (or differences) between the properties of sounds and phonological rules occurring in the four languages. This could be beneficial for organisations or educational institutions that want to aid Aruban students in pursuing their studies in, e.g. the Netherlands. It may also simply help speakers who want to manage their languages better as unintentional transfer may be exasperating in certain contexts

such as when writing or speaking in a monolingual environment. From a pedagogical point of view, it would be beneficial to understand utterances such as (17), and use this in teaching so that students become aware of what they are doing (subconsciously) and help them reflect on these structures. As some speakers do not place the object in a sentence between '*daag*' and '*uit*', which results in a seemingly 'ungrammatical' utterance. Of course in a multilingual context the occurrence of 'ungrammaticalities' is not significant because they are constructed fluently by speakers that have several languages available to them, and understood by other speakers with similar linguistic repertoires. Notably, speakers might not be bothered by this, but when it comes to language learning it might pose a hinderance that could possibly account for the difficulty in language learning in a multilingual context, as the norm for each language is usually native-speaker-like which is synonymous to monolingual in most cases. For example in school Dutch is taught and quizzed as a first language while that is not the case for the majority of students. Unfortunately, this enlarges the gap between the students' capabilities and what they need to learn to succeed leaving them with 'subpar' Dutch as opposed to Spanish or English (Kester & Van der Linde, 2015; Wolff, 2013). In addition, students have the opportunity to stay on the island or move to different (monolingual) countries so that the interest of language learning varies per individual and influences linguistic performance. For example, the recurrent use of '*daag uit*' as one whole structure might not pose a problem until this is transferred to Dutch when speaking it monolingually. Again, as Stroud (1998) points out, code-switching is tightly knit into social life that using popular methods might not account for what happens in culturally divergent multilingual societies so we have to look at all instances independently.

8. References

- Aronin, L., & Hufeisen, B. (Eds.). (2009). *Exploration of multilingualism : Development of research on L3, multilingualism and multiple language acquisition* [E-book]. Retrieved from <http://ebookcentral.proquest.com>
- Aronin, L., & Singleton, D. (2012). *Multilingualism* [E-book]. Retrieved from <http://ebookcentral.proquest.com>
- Auer, P., & Auer, P. (Eds.). (1998). *Code-switching in conversation: Language, interaction and identity* [E-book]. Retrieved from <http://ebookcentral.proquest.com>
- Backus, A., & Dorleijn, M. (2009). Loan translations versus code-switching. In B. Bullock, & A. Toribio (Eds.), *The Cambridge handbook of linguistic code-switching* (pp. 75-93). Cambridge: Cambridge University Press.
- Bullock, B., & Toribio, A. (Eds.). (2009). *The Cambridge Handbook of Linguistic Code-switching*. Cambridge: Cambridge University Press.
- Burke, P. (2005). *Towards a social history of early modern Dutch* [E-book]. Retrieved from <http://ebookcentral.proquest.com>
- Carlson, S.M., & Meltzoff, A.N. (2008). Bilingual experience and executive functioning in young children. *Developmental Science*, 11, 282-298. doi:10.1111/j/1467-7687.2008.00675.x
- Castro Pumarega, D. (n.d.). *Diccionario de Venezolanismos* [Web page]. Retrieved from <http://projetbabel.org/>
- Central Bureau of Statistics, Aruba. (2019). *Census* [Web page]. Retrieved from <http://www.cbs.aw>
- Central Bureau of Statistics, the Netherlands. (2019). Information on population, education and migration (*Regionale kerncijfers Nederland*) [Web page]. Retrieved from <http://opendata.cbs.nl/statline/#/CBS/nl/>

- Council of Europe. (2020). Qualitative aspects of spoken language use – Table 3 (CEFR 3.3): Common reference levels [Web page]. Retrieved from <http://www.coe.int>
- Cuppen, J., & Essen, M. van. (2019). *Aanvullende analyses Caribische studenten in het hoger onderwijs*. Nijmegen: ResearchNed (for the Ministry of Education, Culture and Science).
- Departamento di Enseñansa Aruba. (2007). Vocabualrio di Papiamento [Web page]. Retrieved from <http://papiamento.aw>
- Departamento di Enseñansa Aruba. (2007). Regla di Grammatica di Papiamento [Web page]. Retrieved from <http://papiamento.aw>
- Departamento di Enseñansa Aruba. (2007). Historia: Origen di Papiamento [Web page]. Retrieved from <http://papiamento.aw>
- Departamento di Enseñansa Aruba. (2019). Structura di enseñansa na Aruba [Web page]. Retrieved from <http://ea.aw>
- Edwards, A. (2016). English in the Netherlands : Functions, forms and attitudes [E-book]. Retrieved from <http://ebookcentral.proquest.com>
- Franceschini, R. (2009). The genesis and development of research in multilingualism: Perspectives for future research. In L. Aronin, & B. Hufeisen (Eds.), *Exploration of multilingualism: Development of research on L3, multilingualism and multiple language acquisition* (pp. 27-61). Amsterdam, Netherlands: John Benjamins.
- Fromkin, V. A. (Ed.). (2000). *Linguistics: An introduction to linguistic theory*. New York, NY: Blackwell.
- Gobierno Aruba. (n.d.). 13.03AB02.091 Landsbesluit landsexamen v.w.o., h.a.v.o., m.a.v.o. [Web page]. Retrieved from <http://gobierno.aw>
- Goetz, P.J. (2003). The effects of bilingualism on theory of mind development. *Bilingualism: Language and Cognition*, 6, 1-15. doi:10.1017/S1366728903001007

Hakuta, K. (1986). *Mirror of language: The debate on bilingualism*. New York, NY: Basic Books Inc.

Historia di Aruba. (2007). *Historia di Aruba (History of Aruba)* [Web page]. Retrieved from <http://historiadiaruba.aw>

Hua, Zhu. (2014). *Exploring Intercultural Communication: Language in action* (2nd ed.). New York, NY: Routledge.

Kaplan, A. (2016). *Women talk more than men: ...And other myths about language explained*. Cambridge: Cambridge University Press.

Kester, E.-P., & Van der Linde, R. (2015). Attitudes toward Dutch among high school students in Aruba. In N. Faraclas, R. Severing, C. Weijer, E. Echteld & W. Rutgers (Eds.), *Envisioning the Greater Dutch Caribbean: Transgressing geographical and disciplinary boundaries* (pp.13-33). Curaçao/Puerto Rico: Fundashon pa Planifikashon di Idioma/University of Curaçao/RPR.

Kester, E.-P., Buijink, S., Fun, J., & Hortencia, T. E. (2017). Language use, language attitudes and identity among Aruban and Curaçaoan students in the Netherlands. In N. Faraclas, R. Severing, C. Weijer, E. Echteld, E. Rutgers & R. Dupey (Eds.), *Archaeologies of Erasures and Silences. Recovering othered languages, literatures and cultures in the Dutch Caribbean and beyond* (pp. 13-29). Curaçao/Puerto Rico: UoC/UPR.

Lewis, D. G. (1959). Bilingualism and non-verbal intelligence: A further study of test results. *British Journal of Educational Psychology*, 29, 17-22. doi:10.1111/j.2044-8279.1959.tb01470.x

Li, W. (1998). The 'why' and 'how' questions in the analysis of conversational code-switching. In P. Auer, & P. Auer (Eds.), *Code-switching in conversation: Language, interaction and identity* (pp. 280-321). London, England: Routledge.

- Li, W. (2016). New Chinglish and the Post-Multilingualism challenge: Translanguaging ELF in China. *Journal of English as a Lingua Franca*, 5, 1–25. doi: 10.1515/jelf-2016-0001
- Peal, E., & Lambert, W.E. (1962). The relation of bilingualism to intelligence. *Psychological Monographs: General and Applied*, 76, 1-23.
- Poplack, S. (1980). Sometimes I'll start a sentence in Spanish y termino en Español: Toward a typology of code-switching. *Linguistics*, 18, 581-618. doi:10.1515/ling.1980.18.7-8.581
- Real Academia Española. (2019). Diccionario de la lengua Española [Web page]. Retrieved from <http://dle.rae.es>
- Smakman, D. (2006). *Standard Dutch in the Netherlands. A sociolinguistic and phonetic description*. (Doctoral dissertation). Available from ResearchGate.
- Stroud, C. (1998) Perspectives on cultural variability of discourse and some implications for code-switching. In P. Auer, & P. Auer (Eds.), *Code-switching in conversation: Language, interaction and identity* (pp. 562-608). London, England: Routledge.
- Ter Kuile, H., Veldhuis, M., Van Veen, S., & Wicherts, J. (2010). Bilingual education, metalinguistic awareness, and the understanding of an unknown language. *Bilingualism: Language and Cognition*, 14, 233-242. doi:10.1017/s1366728910000258
- Thomas, J. (2010). The role played by metalinguistic awareness in second and third language learning. *Journal of Multilingual and Multicultural Development*, 9, 235-246. doi:10.1080/01434632.1988.9994334
- Thompson, A. S. (2016). How do multilinguals conceptualize interactions among languages studied? Operationalizing Perceived Positive Language Interaction (PPLI). In L. Ortega, A. E. Tyler, H. I. Park & M. Uno (Eds.), *The Usage-based Study of Language Learning and Multilingualism* (pp. 91-111). Washington DC: Georgetown University Press.
- Wardhaugh, R., & Fuller, J. M. (2015). *An introduction to sociolinguistics* (7th ed.). London, England: Wiley.

Wolff, R. P. (2013). *Presteren op vreemde bodem: Een onderzoek naar sociale hulpbronnen en de leeromgeving als studiesuccesfactoren voor niet-westerse allochtone studenten in het Nederlandse hoger onderwijs (1997-2010)* (Doctoral dissertation). Retrieved from <http://dare.uva.nl>

