Spanish Grammatical Gender Interference in Papiamentu

MA Thesis

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ABSTRACT

This thesis examines the effects of Spanish grammatical gender in Papiamentu, a Western Romance-lexified creole language spoken on Curaçao, Bonaire, Aruba and in the Netherlands. More specifically, this thesis focuses on Papiamentu speakers that reside in Curaçao, a Caribbean island in close proximity to Spanish-speaking South America (approximately 50 miles from Venezuela).

Papiamentu and Spanish are highly cognate languages in terms of their lexicons. However, in contrast to Spanish, Papiamentu lacks grammatical gender. Grammatical gender is a class system in which the noun is assigned to gender, for example masculine, feminine or neuter gender. The large presence of Spanish in Curaçao leads to language contact of two languages that share many cognate words, but that contain grammar systems with major morpho-syntactic differences as illustrated in (1) below:

1. a. Papiamentu: e hòmber; e muhe
   b. Spanish: el$_{masc}$ hombre$_{masc}$; la$_{fem}$ mujer$_{fem}$
   "the man"; "the woman"

The aim of this study is to determine whether Spanish-like gender agreement causes interference in Papiamentu speakers who are also exposed to Spanish. The Spanish language is relatively transparent when it comes to gender agreement, as all nouns in Spanish are classified by assigning them to one of the gender classes (Hopp 2012, p. 29). This is not the case in Papiamentu because it does not contain a grammatical gender system.

This thesis takes inspiration from Lipski (2015, 2017), who tested the acceptability of Spanish-like gender agreement in another Spanish-lexified creole language, Palenquero. There are, however, important distinctions between the two studies. In particular, the participants in Lipski's study were dominant Spanish speakers acquiring Palenquero as an L2 in a socio-political context in which Spanish is the government-sanctioned language. In contrast, Spanish remains primarily a minority language in Curaçao with environmental presence on the media and through tourism and is supplemented with formal education in public schools. Consequently, this study allows us to examine the directionality of cross-linguistic effects of morpho-syntactic transfer in cognate languages and to compare the role of environmental factors.

41 participants with different linguistic backgrounds performed a forced-choice acceptability and repetition task where they had to listen to 82 Papiamentu sentences. Out of all sentences, 40 stimulus were manipulated by inserting a Spanish gender-agreeing element on the Determiner, Adjective, or Determiner + Adjective and with half of the experimental items marked with overtly masculine (i.e., *-o*) and the other half with feminine (i.e., *-a*) gender morphology.

After completing the data collection, all participants (n=41) were divided into 4 different groups, determined by their LHQ[1] responses; (1) Dutch Dominant: (n = 7); (2) Papiamentu Dominant (n = 22); (3) Spanish Dominant (n = 6); and (4) Heritage Spanish (HS) Papiamentu (n = 6). Despite this group division, it is important to note that speakers in all four groups are highly multilingual.

Results show that dominant Spanish speakers experienced the greatest interference of Spanish gender features in Papiamentu. This suggests that in cases where the speaker must suppress gender in their L2, this is not easy to do. This is especially the case in highly cognate languages that differ in the realization of gender features.

[1] LHQ = Language History Questionnaire

[3] Parts of this thesis have been published in Valdés Kroff, Jorge R, Rooijakkers, Frederieke, & Parafita Couto, M.

As a follow-up of this study, the same experiment is being conducted in the Netherlands with Papiamentu speakers who reside in the Netherlands. Up until today, 6 participants have been tested. The biggest difference between these participants and the participants that have been tested in Curaçao is that they have been living in an environment where Dutch is the dominant language. Results show that these 6 participants accept an average of 4 stimuli out of the 40 that contain Spanish grammatical gender. However, there is a big difference between the results of these participants.[3]

Keywords: Gender-Agreement, Papiamentu, picture-naming, forced acceptability

[3] Parts of this thesis have been published in Valdés Kroff, Jorge R, Rooijakkers, Frederieke, & Parafita Couto, M. Carmen. (2019). Spanish Grammatical Gender Interference in Papiamentu. Languages (Basel), 4(4), 78.

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List of abbreviations

Adj = Adjective

Det = Determinder

ENG = English

HS = Heritage speaker

Masc = Masculine gender

Fem = Feminine gender

L1 = First language

L2 = Second language

LHQ = Language History Questionnaire

NP = Noun phrase

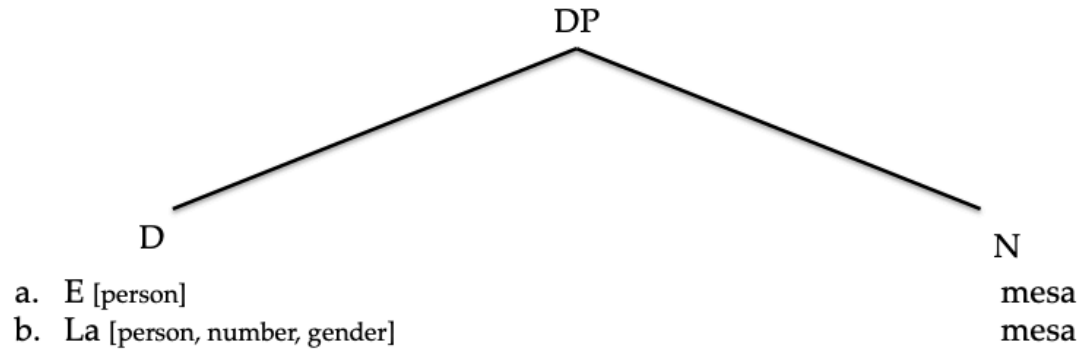
PAP = Papiamentu

PL = Plural

1. Introduction

In this thesis, a forced acceptability and repetition experiment was conducted in Curaçao to test if Papiamentu speakers, who are also exposed to Spanish, re-produce and/or accept Spanish-like gender agreement in the gender-less Papiamentu language. The linguistic contact between Spanish and Papiamentu in Curaçao is unique because these languages share many lexical cognates.[4] Cognates are words that are similar in form and meaning in two languages. However, an important difference between Papiamentu and Spanish is that unlike Spanish, Papiamentu lacks grammatical gender. Figure (2) illustrates this difference, where (a) gives an example of the noun 'the table' in Papiamentu and (b) in Spanish:

2. Example of the cognate word 'table' in Spanish and Papiamentu



In this case, the Spanish and Papiamentu noun 'mesa' is the same word and has the same meaning in both Spanish and Papiamentu. However, unlike in Papiamentu, the determiner 'la' in Spanish has feminine grammatical gender. Spanish nouns are either grammatically masculine or feminine. Most Spanish nouns and adjectives mark grammatical gender in canonical endings such as -o for masculine and -a for feminine. Spanish determiners and adjectives agree with the noun in gender and number, with most adjectives following the noun. Unlike Spanish, Papiamentu has no gender distinction and the relative position of Papiamentu adjectives with respect to the noun is similar to Spanish, i.e. post nominal. Adjectives in Papiamentu are invariant and typically end in -o or in -u. Figures (3) and (4) give another examples of the lexical and word order similarities between Spanish

[4] There exist other contact languages that share lexical cognates, for example Palenquero and Spanish, Galician and Spanish, Catalan and Spanish and Dutch and English.

and Papiamentu and the difference between grammatical gender in these two languages:

3. a. (Spanish) La$_{fem}$ mesa$_{fem}$ redonda$_{fem}$

b. (Papiamentu) E$_{ø}$ mesa$_{ø}$ rondó$_{ø}$

The table round
'The round table'

4. a. (Spanish) El$_{masc}$ pato$_{masc}$ blanco$_{masc}$

b. (Papiamentu) E$_{ø}$ patu$_{ø}$blanku$_{ø}$

The duck white
'The white duck'

Papiamentu is an Iberian-lexifier creole language[5] spoken on the islands of Aruba, Bonaire, and Curaçao (former Dutch Antilles) and in the Netherlands. There are some lexical and phonological differences between the Papiamentu that is spoken on the three Caribbean islands. In general, the Papiamentu that is spoken in Aruba has more similarities to Spanish. For example, many words are written with a 'c' instead of a 'k'. The total number of Papiamentu speakers is estimated at 270,000 (Jacobs 2012, p. 3) and Papiamentu became one of the official languages of Curaçao in 2007 (the other two official languages are Dutch and English). Papiamentu speakers in Curaçao are highly multilingual, often speaking to varying degrees Papiamentu, Dutch, English, and Spanish (its historical lexifier). Despite the variety of languages present on the islands, Papiamentu is the mother tongue of more than 80% of the population on the Caribbean islands (Kester 2011). Additionally, despite being part of the Kingdom of the Netherlands, only 6 percent of the pupils in Curaçao speak Dutch at home.[6] During the last years, Papiamentu started to play an increasingly important

[5] There exist many different definitions of "creole languages". For this thesis, we follow the definition of Mufwene (2015), who describes creoles as languages that "emerged in settlement colonies whose primary industry consisted typically of sugar cane or rice cultivation, for which non-European slaves or contract laborers were employed who constituted the overwhelming majority of the plantation populations" (p. 134).

[6] This was stated in an official document from the president of the Second Chamber of the General State of the Ministry of Education, Culture and Science on the 11th of June 2019 (ref nr: 8544106).

role in the education in Curaçao as it is obligatory to take the final exam in Papiamentu in public schools.[7]

Many dominant Papiamentu speakers in Curaçao are also exposed to Spanish. Especially after the 20th century, Caribbean migration studies characterize Curaçao as a sending and receiving society for labor migrants, also from Spanish speaking Latin America (Gowricharm 2006, p. 79). Most of the time these migrants were seasonal agricultural workers. However, this changed during the third decade of the 20th century when the short-term emigration shifted to the migratory influx of people from other Caribbean islands, Europe and Latin America to Curaçao (Gowricharm 2006).

The Spanish influence on the island increased even more during the 21st century, as a result of the large increase of immigrants from Caribbean Spanish speaking islands such as the Dominican Republic, Colombia and various other South American countries (Gowricharm 2006). Most of these immigrants were drawn to Curaçao because of the better economic opportunities on the island at the time. As a consequence of this migration, the Spanish presence on the island increased. Nowadays, many television and radio programs are in Spanish and Spanish is one of the courses that is taught in primary schools.

Most inhabitants of Curaçao are bilingual speakers. In general, bilingualism can be defined as 'the ability to speak two languages perfectly', where perfectly means having the ability to use both languages fluently (Filipović 2019, p. 11). One of the challenges in the field of bilingualism is that there are many ways in which it can be classified. For example, we call it 'simultaneous bilingualism' if the acquisition of both languages is concurrent, and 'sequential bilingualism' if one language is acquired after the other (Filipović 2019, p. 11).

Another classification is related to language dominance. Bilinguals can have one of their two languages as the dominant language or have their first language deteriorate under the influence of their second language (Filipović 2019, p. 11). Speakers can be classified as 'heritage bilinguals' when immigrant parents "may have diminished language skills in their native tongue under the influence of the language spoken in their new country. Their children's acquisition of the parental native tongue is then limited to the home environment

[7] Consult the official website of the government of Curaçao as a national decree for the final exams of VWO, HAVO and VSBO:
http://decentrale.regelgeving.overheid.nl/cvdr/XHTMLoutput/Actueel/Cura%C3%A7ao/144662.html.

whilst the language of the living and schooling environment becomes their stronger language" (Filipović 2019, p. 11).

This thesis takes inspiration from a study by Lipski (2015). He carried out a research that focused on Palenquero-Spanish bilingualism. Just like in our research, Palenquero and Spanish share many lexical cognates. More specifically, Lipski studied whether Spanish-Palenquero bilinguals accept Spanish gender agreement in Palenquero. Palenquero is a Spanish-based Afro-Colombian creole language that is spoken in San Basilio de Palenque in Colombia. However, Palenquero morpho-syntax is what Lipski describes as a subset of Spanish, e.g. it lacks grammatical gender. The main objective of his studies (Lipski 2015; Lipski 2017) was to test to what extend Palenquero-Spanish bilinguals accept Spanish gender agreement in Palenquero. The following is an example of a short sentence that contains lexical cognates between Spanish and Palenquero given by Lipski (2017b):

(Spanish)	un-a	mujer	viej-a
	a-fem	woman	old-fem
(Palenquero)	un	muhé	bieho
	a	woman	old

In this example, the Spanish noun 'mujer' is a lexical cognate from the Palenquero noun 'muhé'. Additionally, this example illustrates that Palenquero lacks grammatical gender. However, traditional Palenquero speakers, heritage Palenquero speakers and L1 Spanish L2 Palenquero speakers do accept the inserted feminine gender agreement in Palenquero sentences at different levels (see Lipski 2015, 2017 for the exact numbers and a detailed description).

The participant groups in this study consisted of 10 traditional Palenquero speakers, 10 L2 Palenquero speakers who received Palenquero language classes in school, and 4 Palenquero language teachers. Overall, the results of these studies (Lipski 2015, 2017) suggest that traditional Palenquero speakers and Palenquero language teachers accept about half of the feminine gender-agreeing stimuli in Palenquero. On the other hand, the L2 Palenquero speakers showed an acceptance level of around 75% of the Palenquero stimuli that contained a feminine gender-agreeing element. Thus, "less" (no gender agreement) is

not always preferred to "more" (gender agreement). Lipski posits that the appearance of Spanish-like gender agreement in the speech of L2 and heritage Palenquero speakers may be due to the failure to turn off cognate Spanish items and the corresponding syntactic projections responsible for gender agreement.

The current thesis extends Lipski's (2015, 2017) studies to the case of Papiamentu-Spanish bilinguals. However, there are a few important differences between Lipski's research and this thesis. Spanish is the dominant language in Colombia. In contrast, Spanish remains primarily a minority language in Curaçao with environmental presence on the media and through tourism and is supplemented with formal education in public schools from 8th grade in Curaçao, partly due to close proximity to Venezuela. Consequently, this study allows us to examine the directionality of cross-linguistic effects of morpho-syntactic transfer in cognate languages and to compare the role of environmental factors. This issue is examined through the grammatical construct of Spanish-like gender agreement.

The first group (N = 22) learned Papiamentu at a young age, speak Papiamentu at home, and are also exposed to Spanish (Dominant Papiamentu speakers). In the second group (N = 6), participants were born in a Spanish-speaking country or Spanish-speaking family, but learned Papiamentu at a young age in primary school (Spanish Heritage Speakers). Participants in the third group (N = 7) were born and raised in Curaçao, but in a Dutch-speaking family (Dutch-Papiamentu Speakers). All the participants in this group have mostly been exposed to Dutch. Finally, in the fourth group (N = 6), participants were born in a Spanish speaking country and learned Papiamentu as an adult (Dominant Spanish Speakers).

During the experiment, participants were asked to listen to 82 Papiamentu sentences of which 40 contained a Spanish gender-agreeing element on the Determiner, Adjective, or Determiner + Adjective. Half of the experimental items are marked with overtly masculine (i.e., -o) Spanish gender morphology and the other half with feminine (i.e., -a) Spanish gender. Participants were asked to perform a forced-choice acceptability task and to repeat each Papiamentu sentence exactly as they had heard it. All answers from both experiments were digitally recorded. An example of stimuli that was used in the experiment is provided in (5):

5. Stimuli example with Spanish-like feminine gender agreement:

Example stimulus: La$_{fem}$ pluma blanka$_{fem}$ ta suave
Correct Papiamentu: E pluma blanku ta suave
DET feather white TAM soft
'The white feather is soft'

Results suggest that the dominant Spanish speakers show the greatest interference of Spanish-like gender agreement in Papiamentu. The Dutch-Papiamentu group also scored lower in rejecting Spanish gender features as compared to the Dominant Papiamentu speakers and Spanish HS. At the same time, Spanish HSs were better than dominant Spanish speakers at suppressing Spanish-like gender interference in Papiamentu. This suggests that going from a dominant language with gender to a language without gender is harder than suppressing gender from a less-dominant language.

The core of this thesis consists of 8 different chapters. The first chapter, chapter 2, focuses on the definition of pidgins and creoles and provides a brief history of the Papiamentu language. Papiamentu has a complex linguistic history with influences of many different languages. This chapter focuses on the different theories about the lexical origin of modern Papiamentu, especially the Spanish and Portuguese influence.

Chapter 3 provides definitions of grammatical gender and gender assignment. Additionally, different studies on the acquisition of grammatical gender and the representation of grammatical gender in bilinguals are presented. L2 learners of a language that contains a different gender system compared to the gender system of their first language often have difficulty acquiring the correct gender system of the L2, even after extensive exposure to the L2.

Chapter 4 addresses the most important lexical difference for this thesis between Papiamentu and Spanish: Unlike Spanish, Papiamentu does not have a grammatical gender system. However, there is linguistic contact in Curaçao between these two languages and they share many lexical cognates. Taken all of this together, Curaçao provides the perfect environment to study if the morpho-syntactic transfer of grammatical gender happens in the case of cognate languages, of which only one contains a grammatical gender system.

Chapter 5 provides an overview of the two relevant studies by Lipski (2015, 2017) that examine Spanish grammatical gender agreement in Palenquero. Furthermore, chapter 6

addresses the main research question and the hypotheses for this thesis. Finally, the last chapters of this thesis consist of a detailed description of the experiment that was carried out in Curaçao and a discussion of the results of the experiment. Research on cross-linguistic transfer between a language with grammatical gender and a language lacking gender has been limited. Lipski presented the first attempt at addressing linguistic transfer when the first language has grammatical gender and the second language contains the same words, but without gender agreement (Lipski 2015, p. 1144). The aim of the current study is to extend Lipski's research to Papiamentu-Spanish speakers.

As a follow-up of this thesis, chapter 8 includes a description and a short analysis of a follow-up study that has been carried out in the Netherlands. In this study, Papiamentu speakers who reside in the Netherlands conducted the same forced acceptability and repetition experiment. The biggest difference between the two studies is that in the follow-up study, all tested Papiamentu speakers were residing in the Netherlands when they participated in the experiment. It is interesting to test if these participants accept less Spanish gender agreement since they are less exposed to Spanish in the Netherlands. Unfortunately, due to the COVID-19 crisis, only data from 6 participants have been collected. This final chapter provides a brief analysis of the participants' backgrounds and the results that have been collected so far.

2. The Papiamentu Language vs Spanish

2.1 Defining pidgins and creoles

Papiamentu is a creole language that is primarily spoken on the Caribbean islands of Curaçao, Bonaire and Aruba. The word 'creole' derives from the Spanish 'crear' and the Portuguese 'criar', which means to create, raise or nurture (Fouse 2002, p. 9). Creoles and pidgins are languages that are develop "out of a need for communication among people who do not share a common language" (Siegel 2008, p. 1). Most of the lexicon in the creole or pidgin derives from one of the languages in the contact situation, usually the language of the group in control of the area where the contact occurs (Siegel 2008, p. 1-2).

These contact languages start to emerge when people develop their own ways of communicating. In this case, they start using words and phrases that they have learned from other languages that they think other might be familiar with. This individualized way of communicating is called 'pre-pidgin' or 'jargon' (Siegel 2008, p. 1). The new language can be called a 'pidgin' as soon as the groups start using this pre-pidgin as a lingua franca.[9] It is important to note pidgins are primarily used as a mean of communication, have a small vocabulary and have little if any grammatical morphology (Siegel 2008, p. 3 & Arends et al. 1994, p. 3).

A pidgin language can be classified as a creole as soon as the pidgin is acquired as a first language by the next generation of speakers (Siegel 2008, p. 3). Pidgins and creoles are grammatically simplified languages that are used for communication between people who do not speak the same language and can therefore not communicate with each other.[10] In this context, the expanded pidgin becomes the community language and develops a full lexicon and grammatical rules. Additionally, unlike pidgins, the creole language has some native speakers and is used in different functions, not only for communicative purposes.

Most of the creoles that are spoken in the Caribbean have characteristics of multiple European languages, West African languages and indigenous Caribbean and South American languages (Horan 2012, p.3). Many creoles started to exist during or right after the

[9] A lingua franca is a language that has been adopted as a common language between speakers whose native languages are different.

[10] Pidgins also have a restricted lexicon, no inflectional morphology and a variable word order

European colonial expansion from the 16th century onwards, when slaves from Africa were deported to America. In many cases, creole languages emerged in settlement colonies whose primary industry consisted of sugar cane or rice cultivation, for which non-European slaves or contract labourers were employed who constituted the overwhelming majority of the plantation population (Mufwene 2015, p. 134).

Taking all of this together, it can be stated that you have to know something about the history of a language before we can claim it to be a creole. This is important because in many cases creoles share similarities among the socio-historical processes through which these languages came into being (Arends et al. 1994 p. 8). The next paragraphs briefly discuss the diverse linguistic history of Curaçao and the creole language Papiamentu.

2.2 Brief history of the Papiamentu language

The Papiamentu language can be seen as a product of complex linguistic circumstances on the ABC islands throughout the course of history. It has an intriguing situation as regards to the origin of its dual lexical base, Spanish and Portuguese, and the language itself (Schwegler 2010). Following Eckkrammer (1999) "almost two third of the Papiamentu vocabulary has a Spanish and/or Portuguese origin[11], 28% of the lexical borrowings derive from the Dutch language, a small number of words evolved from English and French lexicon and minor influences are observed from African and Indian languages, especially in terms of proper names for plants, animals, food and music" (Eckkrammer 1999, p. 60).

The history of the linguistic interaction in Curaçao is complex because there has been interaction between Indigenous American groups, a diversity of African groups, and Spanish-speaking and Portuguese speaking Europeans. Curaçao was discovered in 1499 by the Spaniard Alonso de Ojeda. Before this year, the island was inhibited by the Aruac Indians (Eckkrammer 1999, p. 60). This changed when the Dutch colonised Curaçao in 1660. After this year, most Spaniards and Indians drew back to the South American continent and protestant Dutch families as well as a growing number of Sephardic Jews arrived from Amsterdam or Brazil (Eckkrammer 1999 p. 60). During the 17th century, the Dutch West Indian Company (WIC) extended their power in the Caribbean and Curaçao became the

[11] It is impossible to estimate the exact percentages of Portuguese and Spanish in Papiamentu's lexicon, due to the lexical similarities of Spanish and Portuguese. Additionally, Spanish and Portuguese were even more similar during the 17th and 18th century than they are today in the 21st century.

main slave depot in the Caribbean region with the main goal to provide the Spanish colonies with slaves (Martinus 1996, p. 4).

There is a lot of uncertainty about the origins of Papiamentu, mainly because of the complex mixture of all languages that were spoken on the island throughout the course of history and because of the shortage of information and records of Papiamentu. However, the initial period of intensive slave trade, approximately from the year 1650 until 1700 is considered to be the period in which Papiamentu emerged as a vehicle of interethnic communication (Jacobs 2012, p. 5).

Jacobs (2012) investigated the origins of Papiamentu. More specifically, he analysed if Papiamentu can be seen as a Spanish-based creole or whether it was imported from elsewhere as an originally Portuguese-based variety, only to be subsequently relexified towards Spanish (Jacobs 2012, p. 1). He calls these two different views the 'Spanish hypothesis' and the 'Portuguese hypothesis' of the origins of Papiamentu.

According to the Spanish hypothesis, Papiamentu originates from the Spanish that was spoken on Curaçao during the Spanish colonization of the Caribbean island in the 16th century. Jacobs (2012) states that, according to the supporters of this hypothesis, "Papiamentu is the direct descendant of the Spanish spoken on Curaçao during the period in which the ABC-islands pertained to the Spanish crown. The African grammar was applied to the Spanish lexicon and, this way, Amerindians and Africans have conserved until today the Spanish linguistic tradition without interruption" (Jacobs 2012, p. 25).

Penny (2000) also argues that Papiamentu is one of the few Spanish-based creoles that have survived into the twentieth century (Penny 2000, p. 167). According to this research, Papiamentu remained the language of the large majority and was used alongside Dutch after the Spanish lost control over the island.

On the other hand, it is estimated that between 5% and 25% of Papiamentu's lexicon derives from Portuguese. According to the Portuguese hypothesis, Papiamentu started to exist in the mid 17th century during the intensive slave trade and originates from Portuguese creole. Fouse (2002) calls this school of thought the 'monogenesis theory'. This means that the creole language has a major language as its lexical base, which may be relexified over a period of time under the influence of other dominant languages (Fouse 2002 p. 12). In the case of Papiamentu, Fouse (2002) argues that Portuguese is the major

language in Papiamentu. The Spanish influence on the vocabulary of Papiamentu is a result of the close proximity of the ABC islands to the South American mainland (Fouse 2002, p. 12).

By the end of the 18th century Papiamentu became the native tongue of a large part of the inhabitants of Curaçao (Jacobs 2012, p. 35). Many dominant Papiamentu speakers in Curaçao also have knowledge of Spanish or even speak Spanish fluently. This can be explained by the fact that Spanish is one of the courses you can take in the educational system, but also by the fact that Papiamentu has been in close linguistic contact with Spanish since its apparent origin in Curaçao in the late seventeenth century (Singler 1990).

To speakers of both languages, Spanish and Papiamentu are not mutually intelligible in terms of their grammar and lexicon. For example, in Papiamentu, number is marked only once in the noun phrase either by a modifier with a plural sense or by the ending 'nan'. Tense and aspect in the verb are marked by a series of particles, which precede an invariable verb form, demonstrated in (6):

6. Tense and aspect examples in Papiamentu, Spanish and English

a)	Papiamentu:	Mi *ta* limpia e kushina	(duration/repetition)
	Spanish:	Estoy limpiando la cocina	
	English:	I *am* cleaning the kitchen	
b)	Papiamentu:	Mi *tabata/a* limpia e kushina	(past time)
	Spanish:	Estaba limpiando la cocina	
	English:	I *was* cleaning the kitchen	
c)	Papiamentu:	Mi *lo* limpia e kushina	(futurity)
	Spanish:	Estaré limpiando la cocina	
	English:	I *shall/will be* cleaning the kitchen	

Examples 6a, 6b and 6c illustrate a few important characteristics in both Spanish and Papiamentu that are important for this thesis. First of all, it shows that Papiamentu and Spanish share lexical cognates. The verbs 'limpiar' in Spanish and 'limpia' in Papiamentu, and the nouns 'limpiar' in Spanish and 'limpia' in Papiamentu can be seen as lexical cognates. Because of these lexical similarities, it is very likely that Spanish speakers might understand short phrases in Papiamentu, also if they have no or little knowledge of Papiamentu.

Example 6a also illustrates that, in contrast to Spanish, Papiamentu does not have a grammatical gender system. In Papiamentu, the article 'e' precedes all nouns, where as in Spanish this depends on the number and the gender of the noun. Since Spanish and Papiamentu are in contact in Curaçao, it is likely that cognates could function as 'bridges' for the transfer of grammatical features (Broersma 2009, p. 447), in this case grammatical gender agreement.

3. Grammatical Gender and Gender Assignment

3.1 Defining grammatical gender

Grammatical gender is a common feature of Indo-European languages. However, it is largely absent in many languages around the word as approximately half of the sampled languages (n = 257) in the World Atlas of Language Structures (WALS)[12] have no gender system (Bellamy et al. 2018, p. 16). Grammatical gender is a class system in which the noun is assigned to masculine, feminine or neuter gender. In most languages that have gender agreement systems, the noun is the controller and possible agreement targets include determiners, numerals, adjectives, verbs and pronouns (Corbett 1991, p. 105 – 112).

Compared to other grammatical features of a language, for example number agreement, gender is a remarkable one because it can be seen as an inherent property of the noun. This means that the speaker of a language cannot choose the gender of the noun or the agreement targets and that gender is part of the native speakers' knowledge of the nouns. Furthermore, the nominal gender does not modify the meaning of the noun, nor does it change from one context to the other (Kraaikamp 2017, p. 2).

In many gendered languages, there appears to be an unpredictable link between gender and word meaning. According to Cubelli et al. (2011), "…within the same language, nouns of different gender may refer to the same object: Consider, for instance, the Italian noun pairs *sasso* (masculine) and *pietra* (feminine) for *stone*, *uscio* (masculine) and *porta* (feminine) for *door*, and *schiaffo* (masculine) and *sberla* (feminine) for slap" (p. 450).

In contrast to grammatical gender, the number of the noun is not an inherent property and indicates whether it is just one person that talks or several. In most cases, a grammatically correct sentence will stay grammatically correct when the speaker changes the number of the noun. [13] In contrast, if the speaker would change the gender of a noun the sentence becomes ungrammatical. Example (7) illustrates this difference between number and gender agreement:

[12] See Corbett, Greville G. 2013. Number of Genders. In The World Atlas of Language Structures Online. Edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology. Available online: http://wals.info/chapter/30 (accessed on 2 November 2017).

[13] This does not apply to all sentences. For example, when the speaker changes 'la puerta' to 'las puerta' the sentence becomes ungrammatical.

7. Gender and Number agreement on the noun in Spanish

1.	Spanish:	*Dos* mujeres (ENG: two women)	Grammatically	correct
	Spanish:	*Tres* mujeres (ENG: three women)	Grammatically	correct
2.	Spanish:	*Las* mujeres (ENG: the women)	Grammatically	correct
	Spanish:	*Los* mujeres (ENG: the women)	Grammatically	incorrect

The existing definitions of grammatical gender vary and focus on different aspects of gender (e.g. the type of grammatical gender, the function of gender and the classification of gender). For example, "Grammatical gender is a classification of nouns which in most cases is based on perceived properties of the referents of the nouns. The most common basis is according to animacy and sex" (Franceschina, 2005 p. 71).

On the other hand, Adger (2003) defines grammatical gender as "many languages have what is called grammatical gender, where words are assigned a gender category (masculine, feminine, neuter), which bears no obvious semantic relation to what the word refers to" (Adger 2003, p. 40). These definitions illustrate the contrast between the central functions of gender that are based on the following distinctions between natural and grammatical gender:

1. male : female
2. animate : inanimate

According to the first definition, the gender of a noun is based on semantic divisions like the biological sex of the noun. A clear example of a strict semantic two-gender system is the Australian Aboriginal language Diyari. The language is divided into masculine and feminine, with no exceptions. The first gender is for "all animates whose biological reference is distinctly female, for example, women, girls, kangaroos etc.; the second is for all others, that is, male animates, non-female animates, non-sexed animates and all in animates" (Corbett 1991, p. 11). In this language, the grammatical gender appears to reflect semantic information of the noun (Cubelli et al. 2011, p. 450).

The second definition states that the gender category of a noun has no obvious semantic relation to what the word refers to. Gender can be seen as functionally independent from the conceptual structure and semantic properties of the noun (Cubelli et

al. 2011, p. 450). For example, in Spanish the categorization of the noun depends on the form of the nouns rather than on the meaning, which means that the nouns that belong to the same class have a similar form (e.g. many nouns that end in *–o* in Spanish are masculine).

3.2 Defining Gender Agreement and Gender Assignment

It is challenging to provide a general, full and brief description of gender agreement and gender assignment. For this thesis, we follow the definition of gender agreement that is provided by Kraaikamp (2017): "The attribution of a particular gender to a noun is called gender assignment" (Kraaijkamp 2017, p. 2).

The term agreement commonly refers to some systematic covariance between a semantic or formal property of one element and a formal property of another. Following Hockett (1958), gender systems are defined by the existence of gender agreement. Agreement in general can be described as the "systematic covariance between a semantic or formal property of one element and a formal property of another" (Steele 1978, p. 610). For example, adjectives may take some formal indication of the gender of the noun they modify. Example (8) illustrates this indication of gender in Spanish:

8. Example of gender controllers and targets in Spanish

Mañana yo voy a comprar una$_{FEM}$ mesa$_{FEM}$ nueva$_{FEM}$ para mi amiga$_{FEM}$ (ENG: tomorrow I am going to buy a$_{FEM}$ new$_{FEM}$ table$_{FEM}$ for my friend$_{FEM}$)

In this example sentence, the noun 'mesa' is the feminine controller noun because it is combined with the feminine targets 'una' and 'nueva'. This is a clear example of a Spanish feminine noun that ends with the vowel –a. However, the relationship between the noun and the gender of the noun is not always as straight forward as in this example. Also, many nouns that end in –a in Spanish are feminine, however, there are many exceptions. For example the noun 'día' ends in –a, but marks masculine gender (el día; ENG: the day).

The Spanish language illustrates how complex the relation between grammatical gender, biological gender and the inflectional marker can be. For example, the inflectional marker *–a* is found in masculine and feminine nouns and in nouns referring to humans of both sexes (Franceschina 2005, p. 73). For example, the Spanish noun 'el planeta' marks masculine

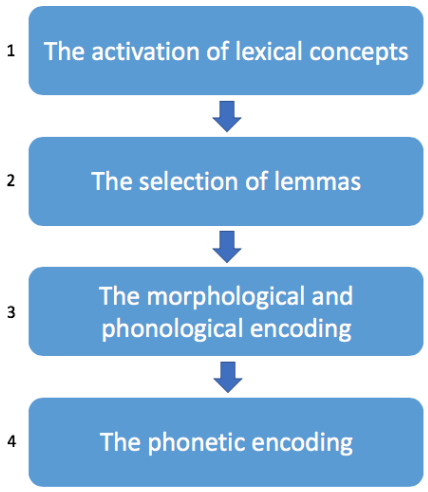
gender while most Spanish nouns ending in –a are feminine (e.g. 'la niña' (ENG: the girl), 'la mesa' (ENG: the table) and 'la iglesia' (ENG: the church).

The following sections of this chapter focus on the production and retrieval of gendered nouns. In this thesis, the model of lexical access by Levelt, Roelofs and Meyer (1999) is followed, taking into account the complex relation between biological gender, grammatical gender and inflectional class. The main focus is on the process of the retrieval and production of the gendered noun, especially in the case of a bilingual speaker of two languages that have different gender systems. It is important to explain this model because most Papiamentu speakers are multilingual and speak several languages that have different gender-agreement systems, or no gender agreement at all. The question is if the grammatical structures of these languages interfere and 'compete' prior to accessing the phonological form or not, especially when the languages share many lexical cognates.

3.3 Grammatical Gender and lexical retrieval

When the speaker of a certain language has to produce a word, the thoughts have to be turned into sounds (i.e. the "lexicalization" process). According to the model of Levelt et al. (1999), this process consists of four different stages. Figure (9) is an abstract and simplified representation of the lexicalization process that is explained by Levelt, Roelofs and Meyer (1999):

9. Abstract representation of the lexicalization process according to the model of Levelt et al. (1999)



When the speaker knows what he or she wants to express, the right lemma has to be selected. According to the Oxford Dictionary of English Grammar, a lemma is "a word in abstract sense, of which a number of actual forms may exist for use in different morphosyntactic roles".[15] A selection mechanism is needed because several lexical representations are activated due to spreading activation from the semantic system to the lexical level (Costa & Santesteban 2004, p. 492). The lemma has to be retrieved from the mental lexicon in the conceptual stage (Levelt et al. 1999, p. 4). Field (2004) defines the conceptual stage as a stage where the proposition that is to be expressed is identified in abstract form (Field 2004, p. 284). It is important that the lexicon(s) that are chosen match the speaker's communicative intention.

For example, the noun "house" has several different forms, depending on what the speaker wants to express (for examples *building*, *home*, *flat*, or *bungalow*).[16] Thus, in this case, the lexical selection mechanism would pick out the noun with the highest level of activation (Costa & Santesteban 2004, p. 492).

The question is if the lexical selection mechanism is language specific, because it only considers the activation-levels of words in the intended languages (Costa & Santesteban 2004, p. 492). On the one hand, it can be assumed that the words from the non-intended language will not be included in the 'pool of possible candidates for production' and therefore will not be able to interfere during lexical access (Costa & Santesteban 2004, p. 492). For example, when a bilingual speaker of Spanish and English choses to speak in Spanish, the lexical representations of words in English decreases and the lexical properties of the words in Spanish become available for the lexical selection mechanism.

In contrast, it could also be that the bilingual speaker considers all activated lexical nodes for selection, irrespective of the language to which they belong (Finkbeiner et al. 2006). In this case, the grammatical structures of the L1 and L2 interfere and there is competition prior to accessing the phonological form (see Lipski 2015). This is very different to the language-specific selection mechanism, as different nouns in both languages are considered

[15] Retrieved from http://www.oxfordreference.com.ezproxy.leidenuniv.nl:2048/view/10.1093/acref/9780199658237.001.0001/acref-9780199658237-e-775#

[16] The selection of the lemma is a speedy process. Levelt et al. (1999) state that in normal speech, we retrieve two or three words per second from a lexicon that contains tens of thousands of items (p. 4).

as possibilities. If there is interaction between the semantic and the phonological features of the lexical systems in bilinguals, we can expect between-language competition when it comes to grammatical gender (Morales, Paolieri & Bajo 2011, p. 2).

To sum up, we can state that there exist contradictory insights regarding the processing of grammatical gender and noun formation. On the one hand, grammatical gender has been proposed to be a property of the noun that is stored at one representational level that is different from the conceptual and phonological information (see Morales, Paolieri & Bajo 2011). In this case, the selection mechanism is language specific and there is less competition between two languages with different gender systems. In contrast, there could be interaction between semantic and phonological features of the lexical systems, especially when the selection mechanisms are not language specific. This could also result in more between-language competition in the case of grammatical gender This is particularly interesting for this thesis, as the two languages under investigation share many lexical cognates but different gender systems.

3.4 The acquisition of Grammatical Gender and Gender Agreement

The process of acquiring a grammatical gender system seems different in first (L1) and second (L2) language learning.[17] When children learn their first language, they acquire grammatical gender relatively easy. Past studies show that the acquisition of gender agreement is unproblematic in L1 acquisition (Akpinar et al. 2013, p. 158). However, Montrul et al. (2008) argue that gender agreement causes difficulty for L2 learners, especially in spontaneous oral production of speech, even at high levels of proficiency.

In general, children acquire the grammatical gender system at a relatively early age and they make a very few errors in spontaneous speech.[18] The critical period plays an important role in this. The critical (or sensitive) period refers to the period of time in which the brain structures are sensitive to environmental input (Costa & Sebastián-Gallés 2014). The critical period in second language acquisition still is a debated topic and the general argument is that native-like grammatical structures of a language can be acquired during the critical period. Many authors agree on the fact that the critical period takes place before

[17] Retrieved from Grammatical Gender (2014). Encyclopedia of Language Development.

[18] Retrieved from Grammatical Gender (2014). Encyclopedia of Language Development. Additionally, it should be noted that the critical period and the age of acquisition of grammatical gender is different in all languages.

puberty, however, another common assumption places this limit before the age of seven (Costa & Sebastián-Gallés 2014). The acquisition of grammatical gender is language dependent. In the case of Spanish, the grammatical gender system is acquired before the age of 5 (Lipski 2017b).

Oh the other hand, other studies show that the L1 acquisition of grammatical gender show that children make different types of agreement errors acquiring the gender system of their L1. For example, Kirova (2016) argues that the L1 gender errors that occur in children's speech can be caused by the lexical and morphological complexity of the gender systems, because they contain many exceptions and unreliability of forms. The acquisition of the gender system in Russian is a good example, as children acquire different gender constructions at different ages due to the complexity of this grammatical feature (Kirova 2016).[19]

L2 learners of a language that contains a different grammatical gender system compared to the gender system of their first language often have more difficulties to fully acquire the correct gender system of the L2, even after extensive exposure to the relevant language. This can be explained by the fact that L2 learners have a decreased amount and quality of input compared to L1 learners of the gendered language. For example, when a native English speaker who lives in the United Kingdom acquires Spanish as a second language, the amount and quality of Spanish input is likely to be less compared to a Spanish learner who lives in Spain.

It is interesting to note that there is no difference between the results of L2 learners whose L1 does not have gender (e.g. English) and L2 learners whose L1 has gender (e.g. Dutch) (Kirova 2016, p. 57). Especially when the gender systems of the L1 and L2 are different, it is not very likely that the gender system of the L1 helps with the acquisition of the gender system of L2.

For example, When the L1 German L2 Spanish speaker has already assigned a gender to a noun in German, it will be difficult for this speaker to reassign a different gender to the same noun in Spanish. The following is a clear example of this difference:

[19] Kirova (2016) explains on page 54 that Russian children acquire end-stressed neuter nouns between the ages of 3-4, and agreement on stem-stressed neuter nouns by the age of 7. This may be the case because of the complexity of the gender assignment of the stem-stressed neuter nouns compared to the end-stressed neuter nouns.

Die$_{FEM}$ Hand$_{FEM}$ (ENG: the hand)	L1
El$_{MASC}$ mano$_{MASC}$ (ENG: the hand)	L2

In this example, the gender of the noun 'hand' is different in the L1 and L2. Following the argument of Kirova (2016), the German gender agreement system could influence the choice for the gender in Spanish, especially in this case when the gender of the noun is different in the two languages.

3.5 The representation of grammatical gender in bilinguals

An important question in bilingual language production is how bilingual speakers represent two linguistic systems and how they are able to control their linguistic production for the two different languages. Previous research suggests that bilinguals have the ability to separate their two languages during the production of speech. Kousta et al. (2008) researched if fluent bilingual speakers of Italian-English are able to separate these languages by comparing them with monolingual speakers. They used the responses of monolingual speakers of Italian and English as a baseline and found that the English-Italian bilingual speakers behaved like the monolingual English speakers when the task was in English and like monolingual Italian speakers when the task was in Italian.

Several studies show that the lexical nodes of the language that is not in use are active during bilingual speech production. For example, Costa et al. (2000) tested Spanish-Catalan bilinguals in a picture-naming experiment with cognate and non-cognate pictures. Cognate words have similar phonology in two languages. If the bilinguals respond faster to the pictures with the cognate names, this could mean that the lexical nodes of both languages are activated (Costa et al. 2000).

The results of this experiment show that bilingual participants named the pictures with cognate names faster than those with non-cognate names. This outcome supports the notion that during naming, the semantic system activates the lexical nodes of a bilingual's two languages (Costa et al. 2003, p. 168). This suggests that if both semantic systems of the bilingual speaker are activated during the production of speech, it is more likely that linguistic transfer will occur.

Research into the acquisition of gender agreement in bilingual children has shown correct gender marking and sensitivity to gender cues from a very early age in languages with transparent gender cues (Akpinar 2013, p. 159). For example, a study by Kuchenbrandt (2005) shows that German-Spanish bilingual children exhibit 90% accuracy in gender marking in Spanish. This is no different from monolingual Spanish-speaking children.

Some studies have shown incomplete acquisition of gender marking in bilinguals. For example, Montrul et al. (2008) compared gender agreement in heritage Spanish speakers and L2 learners of Spanish. In this study, Spanish is the heritage language because the speakers grew up in an environment with a different dominant language. The results show that heritage Spanish speakers performed better than L2 learners in the oral tasks (90% vs. 72%), while L2 learners of Spanish outperformed the heritage Spanish speakers in comprehension-based written tasks (Kupisch et al. 2013, p. 160).

In a more recent study, Boers et al. (2020) investigated the production of gender of Spanish heritage speakers in the Netherlands. In this research, 21 Spanish heritage speakers participated in a director-matcher task. The experiment consisted of 3 different modes: (a) unilingual Spanish mode (b) unilingual Dutch mode (c) code-switched mode in both directions (Dutch to Spanish and Spanish to Dutch) (Boers et al. 2020). Dutch and Spanish consist of two different gender systems.

During the task, 2 participants were sitting in front of each other. Each participant had the same set of 30 cards and they were not able to see each other's side of the table. One of the 2 participants, the director, had to give the matcher instructions in order to put the images in the same order as the cards that were put in front of him/her in random order (Boers et al. 2020). They specifically tested the default gender strategy and analogical gender strategy. If a bilingual speaker uses a default strategy, he or she would assign all nouns to one gender category, for instance feminine gender in Spanish. On the other hand, if the heritage speaker uses the analogical gender strategy, "masculine gender would be assigned to hamer ('martillo' (masc) in Spanish, 'hammer'), while feminine gender would be assigned to 'huis' (cf. casa (fem) 'house')" (Boers et al. 2020, p. 68).

Evidence was found for the gender default strategy (common in Dutch and masculine in Spanish), and 2 unattested strategies that are a combination of a default gender and a non-prototypical word order (Boers et al. 2020). Additionally, one of the most

interesting findings is that participants showed non-target use of gender in both their heritage language, Spanish, and the dominant societal language, Dutch (Boers et al. 2020). It should be noted that external factors (for example age, the amount of exposure of both languages) had an effect on the gender assignment strategies.

3.5.1 Gendered vs genderless language in bilinguals

Linguistic transfer among bilinguals who speak one language that has a grammatical gender system and one that lacks grammatical gender has been studied before. Bellamy et al. (2018) investigated how early sequential Purepecha-Spanish bilingual speakers assign Purepecha nouns inserted into an otherwise Spanish utterance. Purepecha is spoken in the highlands of Mochiacán in Mexico, especially in the city Michoacán. Language contact between Spanish and Purepecha dates back to over 500 years that has led to a situation of stable bilingualism amongst the Purepecha speakers (Bellamy et al. 2018). Unlike Spanish, Purepecha does not have grammatical gender. All words in this language terminate in a vowel and only possesses the indefinite article -ma. Additionally, adjectives can either proceed or follow the noun.

In order to test how bilingual Spanish-Purepecha speakers assign gender to Purepecha nouns in otherwise Spanish speech, participants performed a forced-switch director-matcher task and a two alternative forced choice comprehension task. In the first experiment, all participants (n = 11) were early sequential Purepecha-Spanish bilingual speakers who were born in Michoacàn and live there today. Out of all tokens that were used, 484 displayed gender agreement on the Spanish adjective. Overall, the results suggest that there is a preference for masculine gender agreement on the adjective (98% of the tokens) (p.11).

In the acceptability judgment experiment, participants had to choose between a masculine or feminine definite article in Spanish to accompany the Purepecha noun in a mixed sentence (Bellamy et al. 2018, p. 11). For the Spanish masculine nouns (Purepecha's equivalent ends in –a*)* the masculine Spanish definite article (-el) was chosen in only 33.33% of the trials. Furthermore, the nouns in Purepecha that end in –i or –u and whose Spanish translation equivalent is feminine, participant chose the masculine Spanish definite article (-el) in 73.75% of the cases. These results suggest that the –a ending of the nouns made the

participants choose for a feminine article, and when the noun ends in –i or –u they tend to choose for the masculine article.

In another study, Valdés Kroff (2016) investigated the use of grammatical gender in Spanish-English mixed noun phrases. Unlike in English, Spanish determiners encode for grammatical gender. When excluding the gender-less determiners in Spanish (e.g. se), there are three possible mixed NP constructions: English determiner + Spanish NP, Spanish feminine determiner + English NP, and Spanish masculine determiner + English NP. For this study, the Bangor Miami Corpus was used, which consisted of 27 separate sound files composed of 85 speakers. 73% of the participants rated their proficiency as high in both English and Spanish. Mixed noun phrases were extracted from 25 of the 27 sound files, and a total number of 316 noun phrases were extracted. Out of all these NP's, 96% consisted of a Spanish determiner with a following English noun. 93.7% of these Spanish determiners were marked with Spanish-masculine gender agreement and the feminine-marked mixed NP's were infrequent in the corpus.

In this study by Valdés Kroff (2016), the two languages of the bilingual speakers are very different in terms of their lexicon, as English and Spanish do not share many lexical cognates. According to Broersma (2009), it is more likely for bilingual speakers to produce L1-like gender agreement in L2 production when these two languages share lexical cognates. In this case, cognates can operate as 'bridges' for the transfer of certain grammatical features. If the existing syntactic structures in L1 differ from the syntactic structures in L2, cognates could provide a bridge for the transfer of syntactic information, like gender agreement. If languages are morphologically and syntactically distinct, it is unlikely that transfer would happen.

4. Spanish Gender Agreement vs. gender-less Papiamentu

4.1 Spanish Grammatical Gender

In Spanish, 99.87% of all nouns ending in –o are masculine and 96.30% of those ending in –a are feminine (Alarcon 2009, p. 815). Although the gender distribution between masculine and feminine nouns is roughly half, masculine is characterized as the default or unmarked gender (Harris 1991). Most Spanish nouns and adjectives mark grammatical gender in canonical endings such as -o for masculine and -a for feminine. This means that the Spanish language is relatively transparent, as these nouns are classified by assigning them to one of the gender classes (Hopp 2013, p. 29).

Grammatical gender is an important feature of Spanish grammar as the determiners and adjectives agree with the noun in gender and number, with most adjectives following the noun. Example (10) shows how -in Spanish- other grammatical parts of the sentence change depending on the gender of the noun.

10. Example of Spanish gender agreement

L-a plum-a roj-a es mí-a

The_{FEM} red_{FEM} $\text{feather}_{\text{FEM}}$ $\text{is mine}_{\text{FEM}}$

In contrast to Spanish, Papiamentu does not have grammatical gender and adjectives are invariant typically ending in -o or -u. In Spanish the adjective 'bueno' can change to 'bueno','buenas' or 'buenos', depending on the gender and the number of the noun. This change of the ending of the adjective according to the gender to the noun does not exist in Papiamentu, as the only adjective that is used is 'bueno', regardless of the noun that is chosen.

Additionally, in Spanish, the determiner can change from 'un' to 'una', 'unas' or 'unos', which also does not exist in Papiamentu as you can only use the determiner 'un' for all nouns. Examples (11) and (12) illustrate the lexical and word order similarities and differences between Spanish (a) and Papiamentu (b):

11. a. La_{FEM} mesa_{FEM} $\text{redonda}_{\text{FEM}}$

b. Eø mesaø rondóø

The table round
'The round table'

12. a. El$_{MASC}$ pato$_{MASC}$ blanco$_{MASC}$

b. E$_{Ø}$ patu$_{Ø}$ blanku$_{Ø}$

The duck white
'The white duck'

4.2 Dutch Grammatical Gender

In is important for this thesis to address Dutch grammatical gender, since many Papiamentu speakers also speak fluent Dutch or have at least basic knowledge of Dutch. In contrast to Papiamentu, Dutch has a two-way gender system that distinguishes between common gender (nouns that are preceded by the Dutch article 'de') and neuter gender (nouns that are preceded by the Dutch article 'het'). These two gender categories are distributed unequally as the common gender comprises around 75% of all Dutch nouns (Pablos et al. 2019). Gender can be seen as lexically specific property of nouns, which is part of a noun's lexical entry rather than being computed online (Blom et al. 2008). Example (13) exemplifies the two gender categories in Dutch and their English equivalent:

13. Example of the two Dutch gender categories in Dutch

a.

Dutch:	De tafel
English equivalent:	The table-COMMON
Papiamentu equivalent:	E mesa

b.

Dutch:	Het huis
English equivalent:	The House-NEUTER
Papiamentu equivalent:	E kas

Grammatical gender in Dutch is marked on a number of agreeing elements accompanying the noun or referring to it. Definite and demonstrative articles, relative pronouns and adjectives agree with the gender of the noun (Brouwer et al.

2017; Blom et al. 2008). The gender encoding of attributive adjectives in Dutch also comes in two forms. (14a) and (14b) provide two examples of this distinction:

14.
a.
Een grote kat
A big cat-COMMON

b.
Een groot meisje
A big girl-NEUTER

The distinction between common and neuter gender in Dutch is neutralized in the plural form. Plural nouns in Dutch always precede the common determiner de (Blom et al. 2008). Examples (15a) and (15b) illustrate the plural forms of the common noun 'table' and the neuter noun 'house' in dutch:

15.

a.

De tafels

The tables-PLURAL

b.

De huizen

The houses-PLURAL

Furthermore, in monolingual and bilingual speech of Dutch, the common gender 'de' is being overgeneralized (Cornips 2008). The following example illustrates this overgeneralization:

Dutch:	Hij snijdt *de* gebak (COMMON gender 'de')
English:	He cuts the cake
	[the-COMMON cake-NEUTER]

Cornips argues that the overgeneralization of Dutch common gender in the case of bilingual speakers can be seen as a contact effect as observed in creole and other languages. In another research, Unsworth (2013) investigated whether Dutch-English bilingual chindren's knowledge of grammatical gender is affected by current and previous amount of exposure to Dutch (Unsworth 2013, p. 86). In short, results of this study suggest that in a bilingual context, the amount of exposure to the language may affect their acquisition of gender marking on the determiners and adjectives. In other words, if bilingual Dutch-Papiamentu speakers are mostly exposed to Papiamentu, it is likely that they will overgeneralize the common gender in Dutch, as Papiamentu does not have grammatical gender at all.

5. Gender Interference in Palenquero-Spanish Speakers

Before the 1980's, the dialectologists and general linguists that were interested in the Latin American region had not paid much attention to pidgin or creole languages (Schwelger 2010). Nowadays, the sociocultural significance of these speech varieties has grown and pidgin and creole studies have started to receiving more attention among linguists (Schwelger 2010).

In this chapter, two studies of Lipski (2015; 2017) are analysed where he investigated the effect of automatization of grammatical gender in a first language in the online processing of modifier-noun constructions in a second language. His studies are focused on the Palenquero language, an Afro-Iberian creole that is spoken in San Basilio de Palenque, a community of around 3000 residents in northern Colombia (Lipski 2015, p. 1145). The language contact between Spanish and Palenquero is unique because most of the Palenquero lexicon is cognate with Spanish and the relative position of Palenquero modifiers is identical to Spanish. However, Palenquero lacks Spanish grammatical gender (Lipski 2015, p. 1145 – 1146). The next two subparagraphs summarize two of Lipski's previous studies (2015; 2017) that are most relevant to this study.

5.1 Lipski 2015; from more to less

In 2015, Lipski carried out a study to test whether Spanish-Palenquero bilinguals accept and/or reproduce Spanish gender agreement in Palenquero. To determine this, he used a picture-describing experiment in which participants had to describe 35 photos of natural objects only using Palenquero. Out of these 35 photos, 19 were cognate with grammatically feminine nouns in Spanish, e.g. yellow flowers (Lipski 2015, p. 1147). He tested a wide variety of participants: 10 traditional Palenquero speakers, 10 L2 Palenquero speakers, 10 heritage Palenquero speakers and 4 Palenquero teachers.

The results confirmed his hypotheses that Spanish gender agreement cannot be fully suppressed by L2 Palenquero speakers, who introduced some feminine gender agreement –a in Palenquero determiners and adjectives modifying nouns whose Spanish cognates are grammatically feminine. At the same time, traditional speakers who learned Palenquero as a first language as well as the meta-linguistically sensitive Palenquero language teachers exhibited no Spanish-like feminine agreement in their descriptions of the photos.

In the second experiment, Lipski tested the passive acceptance and active production of Spanish-like feminine gender agreement in Palenquero (Lipski 2015, p. 1148). Participants were asked to listen to 105 Palenquero stimuli, out of which 75 contained a Spanish gender agreeing element. For each stimuli, respondents were asked to state whether the stimuli was 'correct' Palenquero or not. Additionally, they were asked to repeat each sentence as they had heard it, rather or not they had found it to be acceptable. He hypothesised that traditional Palenquero speakers would accept Spanish-like feminine gender agreement at a higher rate than Palenquero language teachers, but both groups would spontaneously ¨correct¨ some feminine gender (-a) marking to Palenquero gender invariant -o during repetition. If L2 Palenquero speakers are unable to fully suppress Spanish gender agreement, then they should accept feminine gender agreement at a higher rate, they should retain Spanish-like feminine gender during repetition, and even ¨correct¨ cognate Palenquero gender-invariant forms to Spanish-like feminine forms. As for heritage speakers, he hypothesized that they might span the range between traditional and L2 Palenquero speakers, depending on their individual linguistic background.

Results showed that traditional speakers and Palenquero language teachers patterned together in accepting about half of the feminine gender-agreement stimuli. Heritage and L2 speakers, on the other hand, both displayed an acceptance level of around 75%. As Lipski had predicted, traditional speakers changed many feminine endings in -a to Palenquero gender-invariant -o while L2 speakers almost never did. Palenquero language teachers behaved like traditional speakers when modifiers were immediately adjacent to the head noun, but more like heritage speakers for predicate adjectives. Lipski attributed this to the fact that even though the teachers were metalinguistically self-conscious, Palenquero was never their dominant language. Regarding stimuli that contained noun + adjective combinations cognate with grammatically feminine items in Spanish but which end in Spanish masculine-like -o in Palenquero, some L2 and heritage Palenquero speakers shifted the adjectives in -o to Spanish-like -a during repetition. Both teachers and traditional speakers rejected feminine gender agreement at high rates.

5.2 Lipski (2017); Does gender agreement carry a production cost?

In a more recent study, Lipski investigated the trade-off between the online construction of modifier-noun gender agreement and the automatization of agreement, focussing on L1 Spanish speakers who are acquiring Palenquero as L2 (Lipski 2017, p. 123). This study builds on the results of the pilot experiments described in the previous chapter, by examining gender marking in more detail. For this experiment, 57 L2 Palenquero speakers were recruited. None of these speakers participated in previous experiments and they were between the ages of 18-19 years. 37 out of these 57 participants only used Palenquero in school and occasionally with friends. The remaining 20 participants occasionally speak Palenquero at home and are classified as heritage Palenquero speakers.

In the first experiment, participants listened to 50 Palenquero utterances of which 18 contained combinations of nouns and adjectives whose Spanish cognates require feminine gender agreement (Lipski 2017, p. 132). All participants were instructed to listen to the numbers and retain the first and the last of the four digits in memory and then listen to the Palenquero utterance. After hearing the beep, they had to repeat the first and last digits held in memory and then repeat the test utterance as they had heard it. The rationale is that the sentence passes through their own grammar before repeating it.

According to the results, both L2 Palenquero (N=37) speakers and the Palenquero heritage speakers (N=20) show interference from Spanish, although the heritage speaker group is better able to suppress feminine gender shifts. The L2 Palenquero speakers accepted 52% of the gendered stimuli, while the young heritage speakers only accepted 15% of the same utterances. Additionally, acceptability of the utterances with a shift of adjectives with the Spanish-like feminine marker -a to -o was low for both groups, although the young heritage speakers show a slightly increased correction to the Palenquero appropriate -o.

In the second experiment, participants were asked to listen to 90 utterances: 30 in Palenquero, 30 in Spanish and the remaining 30 were mixtures of Palenquero and Spanish. 97 Palenquero-Spanish bilinguals participated in this experiment, out of which 51 were young Palenquero speakers [20], 23 adult heritage palenquero speakers, 16 traditional Palenquero bilinguals and 7 Palenquero language teachers. All participants were instructed to translate the Palenquero sentences into Spanish and the Spanish sentences into

[20] 36 speakers of this group also participated in the first experiment.

Palenquero upon hearing a beep. Again, the results of this speeded translation experiment show an increased difficulty to suppress the Palenquero-inappropriate -a gender inflection from Spanish, with herirage speakers showing an advantage.

Taken together, the results of Lipksi's studies (2015; 2017) suggest that "less" (no gender agreement) is not always preferred to "more" (gender agreement). Lipski posits that the appearance of Spanish-like gender agreement in the speech of L2 and heritage Palenquero speakers may be due to the failure to turn off cognate Spanish items and the corresponding syntactic projections responsible for gender agreement.

6. Research Question and Hypotheses

6.1 Research question

The current study extends Lipski (2015; 2017) to the case of Papiamentu-Spanish bilinguals. The main purpose of this thesis is to test if Papiamentu speakers – who are also exposed to Spanish – accept and/or reproduce Spanish-like gender agreement in Papiamentu. The main research question of this thesis is: Does Spanish-like gender agreement cause interference in Papiamentu speakers who are exposed to Spanish? The main idea is that the "respondents' errors frequently reflect their own grammars, i.e. what they would have said instead of what was actually said" (Lipski 2015).

6.2 Hypothesis

Following Lipski (2015), the hypothesis is that dominant Papiamentu speakers would tend to reject Spanish gender agreement in Papiamentu sentences, and they would correct many of the gendered determiners and/or adjectives to the correct Papiamentu gender-invariant forms. According to Lipski (2015), "L2 Palenquero speakers and some heritage speakers are not simply overlooking Spanish-like gender marking in Palenquero, they are actively using the morphosyntactic mechanisms responsible for gender agreement in Spanish" (Lipski 2015, p. 1150). Since Papiamentu and Palenquero both lack grammatical gender and share many lexical cognates with Spanish, it is likely that the same patterns will happen in this study, because Spanish is present on the island and many inhabitants of Curaçao are exposed to Spanish on a daily basis.

In this research, four different participant groups have been tested in Curaçao: (1) Dominant Spanish speakers; (2) Spanish-Papiamentu heritage speakers; (3) Dutch dominant speakers and (4) Spanish dominant speakers. It is expected that Spanish-Papiamentu heritage speakers and L1 Spanish speakers accept more sentences that contained Spanish-like gender agreement compared to the dominant Papiamentu speakers. Spanish is the native language of all participants in these groups and several studies have shown that proficiency and dominance of a language may play an important role in linguistic transfer with regard to the development of the L2 grammatical system (Koronkiewicz 2018). The participants in these groups are also expected to leave Spanish-like feminine or masculine gender unchanged during the repetition of the sentences in the second experiment. Additionally, a group of dominant Dutch speakers (but who are also at least exposed to Spanish through their environment) has been included in order to test whether the presence of grammatical gender more generally, may lead to greater gender agreement interference.

Despite the experimental design and linguistic similarities between the two language pairs, this study is different from Lipski´s (2015) study in several ways. First, Lipski's participants were dominant Spanish speakers acquiring L2 Palenquero in a sociopolitical context in which Spanish is

the prestige, government-sanctioned language and in which formal education is conducted. However, in this thesis, Spanish remains primarily a minority language with environmental presence on the media and through tourism and is supplemented with formal education in public schools from 8th grade in Curaçao, partly due to close geographic proximity to Venezuela. Thus, this study allows us to examine the directionality of cross-linguistic effects of morpho-syntactic transfer in cognate languages and to compare the role of environmental factors.

7. Experiment: forced acceptability and speeded repetition task

7.1 Participants

In total, 41 participants were tested in Curaçao during the period of June 2018 until August 2018. All participants were divided into four different categories:

Dutch Dominant: (n = 7)
Papiamentu Dominant (n = 22)
Spanish Dominant (n = 6)
Heritage Spanish (HS) Papiamentu (n = 6)

This group-division was determined by LHQ responses on the Spanish and Papiamentu proficiency of the participants, their age of acquisition of Spanish and Papiamentu, the dominant language that is spoken at home and in school, and their country of birth. (16) is an overview of these requirements for all four groups:

16. Language history questionnaire requirements per participant group in Curaçao

Variable	Dutch Dominant	Papiamentu Dominant	Spanish Dominant	Heritage Spanish-Papiamentu
Papiamentu AoA[1]	Primary/Secondary School	1-4 years	> 18 years	Primary School
Country of Birth	Curaçao, The Netherlands	Curaçao	Colombia, Venezuela, Spain	Curaçao, Venezuela
Papiamentu Ability	Extended Conversation	Extended Conversation	Basic Conversation	Extended Conversation
Spanish Ability	Basic Conversation	Basic Conversation	Extended Conversation	Basic/Extended Conversation
Language at School	Dutch	Papiamentu and Dutch	Spanish, some English	Papiamentu and Dutch
Language at Home	Dutch	Mostly Papiamentu	Spanish	Mostly Spanish

[1]AoA = Age of Acquisition

Participants in the Dutch-dominant group were born in Curaçao, learned Papiamentu at a young age and speak Dutch at home as the dominant language. Additionally, most participants in this group lived in the Netherlands when the experiment took place and thus are primarily exposed to Dutch. The Papiamentu-dominant group

consists of L1 Papiamentu speakers that learned Papiamentu at a young age and grew up in households where Papiamentu was the dominant language. Most of the participants in this group are multilingual and learned Spanish in primary school. A few participants in this group were exposed to Spanish under the age of two.

For the Spanish-dominant group, participants were born in a Spanish-speaking country, speak Spanish at home, and were exposed to Papiamentu as adults. Finally, the Spanish HS-Papiamentu group includes participants who were either born in a Spanish-speaking country or in Curaçao and learned Papiamentu in primary school. Their home language was reported to be Spanish. All participants of this group moved to Curaçao at a young age and still live in Curaçao today.

7.2 Materials

In total, 82 sentences were created of which forty enclosed a Spanish gender-agreeing element. Out of these forty sentences, twenty sentences contained combinations of adjectives and/or determiners whose Spanish cognates would have contained feminine gender (ending in –a) and the remaining twenty sentences would have required masculine gender-agreement in Spanish (ending in –o). It was essential to manipulate the stimuli and insert Spanish-like gender agreement because naturalistic Papiamentu speech that is produced by L1 Papiamentu speakers does not have Spanish-gender agreement. The remaining forty-two filler sentences were Papiamentu sentences with no gender manipulations (i.e., 'correct' Papiamentu sentences). Two native Papiamentu speakers from Curaçao verified all sentences before the stimuli were recorded.

All recordings took place in the phonetics lab at Leiden University. For the recordings, the voice of a male student from Curaçao was used who speaks both Spanish and Papiamentu fluently, in order to make the manipulated gendered sentences sound as natural as possible. After the recordings, each item was modified with PRAAT software (version 5.3.16; Boersma & Weenink, 2012). The entire list of eighty-two stimuli was randomized in Excel using the (=rand) function and four different lists were created. All stimuli were loaded on a laptop and headphones with built-in microphones were used to get a better sound quality. A native Papiamentu speaker verified all Papiamentu items before conducting the experiment in Curaçao.

After completing the two experiments, all participants completed a language history

questionnaire and signed a consent form that gives permission to use all recorded data. All participants had the option to complete all forms in Spanish or Papiamentu.

7.3 Materials

Out of the eighty-two sentences, only forty sentences consisted a Spanish gendered element. (17a) and (17b) give two examples of manipulated stimuli that were used in the experiment, containing a masculine and feminine Spanish gender-agreeing element:

17. Two examples of stimuli that were used in the experiment

a. Spanish-like feminine gender agreement:

Manipulated stimuli:	La$_{fem}$ pluma blanka$_{fem}$ ta suave.
Correct Papiamentu Equivalent:	E pluma blanku ta suave "The white feather is soft"

b. Spanish-like masculine gender agreement:

Manipulated stimuli:	E paranan chikito$_{masc}$ ta kanta bunito$_{masc}$
Correct Papiamentu Equivalent:	E paranan chikitu ta kanta bunita "The small birds are singing beautifully"

As shown in (17a) and (17b), the manipulated adjectives and determiners occurred in different positions in the sentence. For the experimental items, 30 contained gender agreement on the adjective and 25 contained gender agreement on the determiner. Tables (18) and (19) provide a more detailed overview of the distribution of the gendered adjectives and determiners, respectively.

18. Examples and distribution of experimentally-manipulated adjectives

Adjective Endings	Feminine -a (-o in PAP[1])	Feminine -a (-u in PAP)	Masculine -o (-a in PAP)	Masculine -o (-u in PAP)
Example stimulus	rondá	chikita	delegó	blanko
Number	5	8	9	8
Papiamentu	rondó	chikitu	delegá	blanku
Spanish equivalent	redondo/a	pequeño/a	delgado/a	blanco/a
English translation	'round'	'small'	'thin'	'white'

[1]PAP = Papiamentu

19. Examples and distribution of experimentally-manipulated determiners

Determiners	Masculine singular -el[1] (-e in PAP)	Feminine singular -la/una (-e/-un in PAP)	Masculine plural -los (-e in PAP)	Feminine plural -las (-e in PAP)
Example stimulus	**el** aros	**una** kara	**los** piskánan	**las** islanan
Number	2	7	8	8
Papiamentu	e aros	un kara	e piskánan	e islanan
Spanish equivalent	el arroz	una cara	los peces/pescados	las islas
English translation	'the rice'	'a face'	'the fish (plural)'	'the islands'

[1]Spanish indefinite determiner *un* was not used because of its cognate status with Papiamentu

A full overview of all manipulated stimuli and filler items is provided in Appendix A and Appendix B of this thesis.

7.4 Procedure

The experiment followed the Ethics Code for linguistic research in the faculty of Humanities at Leiden University, which approved its implementation. Before taking part in the experiment, all participants were instructed that they would listen to 82 Papiamentu sentences over noise-cancelling headphones. Each sentence was immediately followed by a short "beep" sound. Upon hearing the beep, all participants were asked to indicate if the sentence was correct[22] Papiamentu by responding with "yes" or "no" within two seconds - and to repeat the Papiamentu sentence exactly as they heard it. All answers outside the two-second frame were not used for the analysis and the instructions were given in English or Dutch. All forty-one participants completed the task without any objection and all answers were digitally recorded.

All participants were asked to repeat eighty-two Papiamentu sentences, with or without Spanish-like gender agreement. Spanish-like gender interference in Papiamentu seldom occurs in spontaneous speech and this experiment allowed us to study the acceptability and reproduction of Spanish-like gender agreement under controlled conditions. When the participants listen to a sentence, they try to repeat it as accurate as possible. The rationale is that as soon as the sentence contains an ungrammatical feature, it is

[22] For this experiment, 'correct' Papiamentu means that the participants would consider the Papiamentu sentence to be a grammatically good sentence when speaking to another Papiamentu speaker.

very likely that this element will be changed during the repetition and this may reflect their own grammar.

7.5 Results

In this thesis, we report on the results for accuracy for the acceptability judgment task. First, the unchanged Papiamentu filler items were analyzed to ensure that participants were not randomly selecting answers. One participant from the L1 Papiamentu group was removed from this analysis and all subsequent analyses for having scored only about half correct (45%) on filler trials. For the remaining 40 participants, the Dutch-Papiamentu group correctly identified 93% (range: 76-100%); the L1 Papiamentu group correctly identified 90% (range: 73-100%); the L1 Spanish group correctly identified 89% (80-95%); and the Spanish HS group correctly identified 88% (88-100%) of filler items. Thus, all remaining participants show high accuracy on identifying all correct Papiamentu sentences.

For the main analysis, we conducted a 3 x 2 x 4 repeated-measures ANOVA in R[23] (v. 3.5.1) with the within-subjects factors Condition (Adjective, Determiner, Determiner + Adjective) and Gender (Masculine, Feminine) and the between-subjects factor Group (Dutch-Papiamentu, L1 Papiamentu, L1 Spanish, Spanish HS). The omnibus model revealed a main effect for Condition ($F[2,72] = 7.68$, $p < 0.001$), a main effect for Gender ($F[1,36] = 23.69$, $p < 0.001$), and a main effect for Group ($F[3, 36] = 28.46$, $p < 0.001$). The model also confirmed an interaction between Group and Condition ($F[6,72] = 5.6$, $p < 0.001$) and a 3-way Condition x Gender x Group interaction ($F[6,72] = 5.44$, $p < 0.001$). Due to the 3-way interaction, we conducted separate 3 x 2 repeated-measures ANOVA's per group.

7.5.1 L1 Dutch Group

For the L1 Dutch - L2 Papiamentu group ($n = 7$), the statistical model revealed a main effect for Condition ($F[2,12] = 4.83$, $p = 0.029$) and a main effect for Gender ($F[1,6] = 16.24$, $p = 0.007$). There was no significant interaction between the two variables. As illustrated in Figure (20), this group was least accurate with the determiner condition and masculine-marked trials.

[23] ANOVA is used to compare and measure significance of differences comparing different groups.For this thesis, the 'within subject design' is used because the participants performed a forced acceptability and speeded translation task, both receiving and re-producing stimuli.

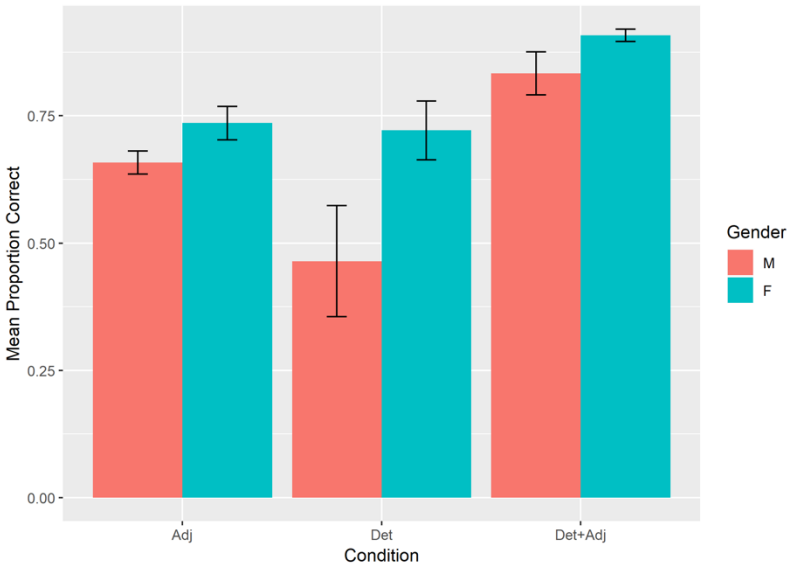


Figure 20. Mean accuracy as a proportion for the Dutch-Papiamentu group. Condition is plotted on the horizontal axis. Adj = adjective, Det = determiner, Det+Adj = determiner + adjective, M = masculine, F = feminine

7.5.2 L1 Papiamentu Group

For the L1 Papiamentu group (n = 21), the statistical model revealed a main effect for Condition ($F[2,40] = 8.45$, $p < 0.001$), a main effect for Gender ($F[1, 20] = 22.1$, $p < 0.001$), and a significant interaction between Condition and Gender ($F[2,40] = 4.05$, $p = 0.025$). Due to the interaction, we conducted pairwise comparisons corrected for multiple comparisons using Tukey's test. In comparisons that test differences between gender within the same condition, the difference between feminine-marked adjectives and masculine-marked adjectives was significant (difference = 0.168, $t = 4.702$, $p < 0.001$), indicating that this group was more accurate on rejecting trials in which the adjective was overtly marked with Spanish-like feminine agreement. Amongst contrasts of the same gender type but across conditions, the difference between masculine-marked determiners and masculine-marked adjectives was significant (difference = 0.133, $t = 3.705$, $p = 0.004$) as well as the difference masculine-marked Determiner+Adjective trials and masculine-marked adjectives (difference = 0.146, $t = 4.085$, $p = 0.001$). In both cases, the rejection of Spanish-like masculine-marked adjectives was less accurate than the other conditions. All other contrasts were not significant (ps > 0.27). The results are plotted in Figure (21).

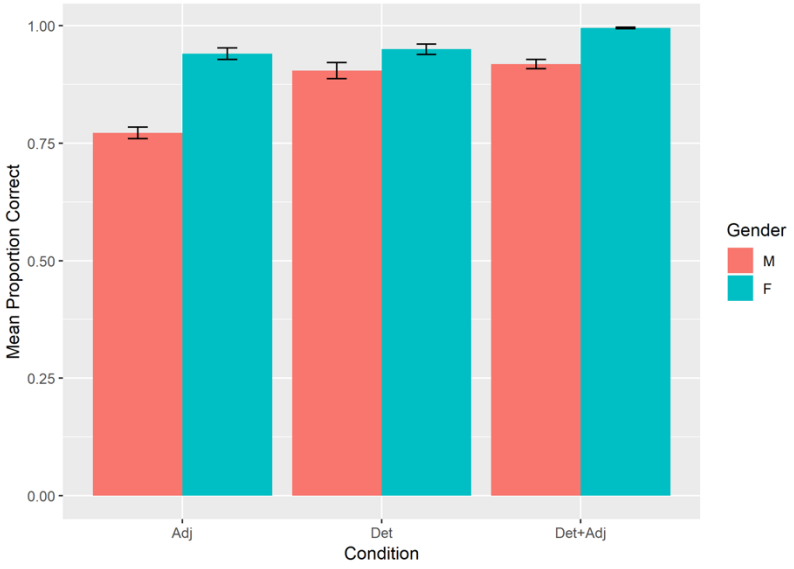


Figure 21. Mean accuracy as a proportion for the L1 Papiamentu group. Condition is plotted on the horizontal axis. Adj = adjective, Det = determiner, Det+Adj = determiner + adjective, M = masculine, F = feminine

7.5.3 L1 Spanish Group

For the L1 Spanish - L2 Papiamentu group (n = 6), the model revealed a main effect for Condition ($F[2,10] = 5.167$, $p = 0.029$) and a significant interaction between Condition and Gender ($F[2,10] = 13.711$, $p = 0.001$). No main effect was detected for Gender. We again conducted pairwise comparisons using Tukey's test. Only the contrast between masculine-marked determiners and adjectives was significant (difference = -0.509, $t = -3.244$, $p = 0.031$). This contrast indicates that the L1 Spanish group was less accurate in rejecting Spanish-like masculine-marked features when manipulated on the determiner. All other contrasts were not significant ($ps > 0.385$). Results are plotted in Figure (22):

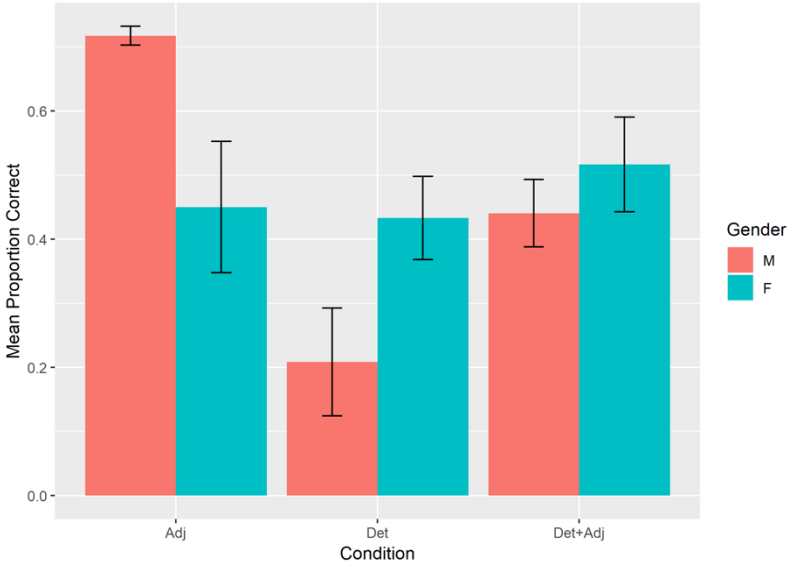


Figure 22. Mean accuracy as a proportion for the L1 Spanish group. Condition is plotted on the horizontal axis. Adj = adjective, Det = determiner, Det+Adj = determiner + adjective, M = masculine, F = feminine

7.5.4 Spanish HS Group

For the Spanish heritage speaker group (n = 6), the statistical model only found a marginal effect for Gender ($F[1,5] = 5.8$, $p = 0.061$) and no main effect for Condition or interaction between Condition and Gender. The marginal effect is reflected on the overall lower accuracy on masculine-marked trials as depicted in Figure (23):

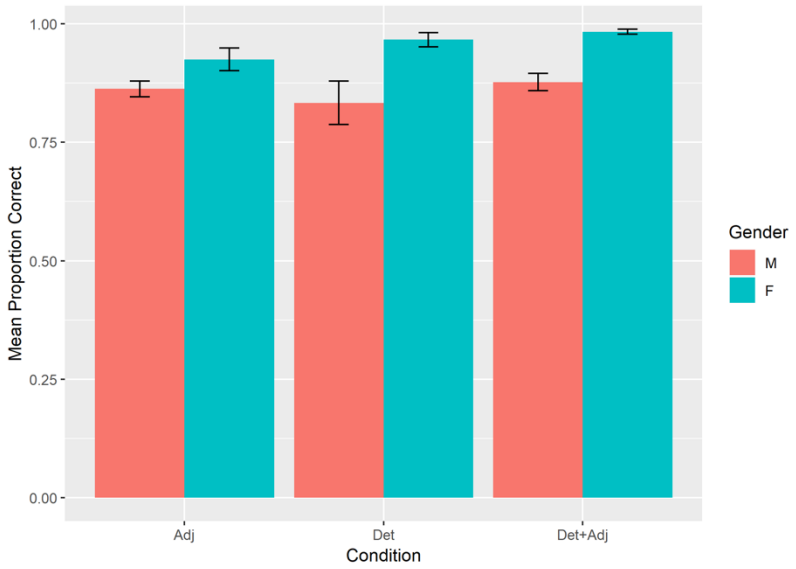


Figure 23. Mean accuracy as a proportion for the Spanish HS group. Condition is plotted on the horizontal axis. Adj = adjective, Det = determiner, Det+Adj = determiner + adjective, M = masculine, F = feminine

8. Follow up study: the Netherlands

As a follow-up study, the same experiment has been conducted with Papiamentu speakers that are living in the Netherlands. The most important difference between these participants and the participant groups that were tested in Curaçao is that they have been exposed to Dutch for a longer period before conducting the experiment. It is interesting to test if the Spanish gender interference will be reduced for this participant group, as Spanish is not a common language in the Netherlands. The big difference between the participants in the Dutch dominant group that have been tested in Curaçao and the participants in this follow-up study is the languages they were mainly exposed to when they participated in the experiment. The Dutch dominant group in Curaçao was mainly exposed to Papiamentu when they took part in the experiment, whereas the participants in this follow-up study are mainly exposed to Dutch. Additionally, the participants in this follow-up experiment are less exposed to Spanish compared to the participants that were tested in Curaçao.

Up until today, 6 Papiamentu-speaking participants were tested in the Netherlands. Unfortunately, because of the Coronavirus pandamic, it was not possible to test more Papiamentu speakers that reside in the Netherlands. The goal of this follow-up chapter is to give a detailed overview of the participant backgrounds and compare them with the participants that have been tested in Curacao. Furthermore, this chapter provides a brief descriptive overview of the results up until today.

8.1 Participant background information: the Netherlands experiment

The participants that were tested in the Netherlands have similar linguistic backgrounds. All participants are young adults (between 18 and 25 years old), were brought up in Curaçao and moved to the Netherlands in order to study after finishing High School in Curaçao. Table (24) gives an overview of the participants' linguistic backgrounds, based on their LHQ response:

24. Linguistic backgrounds participants in the Netherlands

Participant Number	Age *	Country of Birth	Amount of years spent in the NL**	Spanish AoA***	Papiamentu AoA	First contact language(s)
1	24	Curaçao	6	Primary school	Age of 4	Pap & Dutch
2	25	Curaçao	7	Primary school	Age of 2	Pap & Dutch
3	18	Curaçao	1	Primary school	Primary school	Dutch
4	19	Curaçao	3	High school	Primary school	Dutch
5	20	Curaçao	2	Primary school	Age of 4	Pap & Dutch
6	25	Curaçao	6	High school	Primary school	Dutch

* Participants age on the date of the recordings in 2019

** All participants spent these years living in the Netherlands without interruption before the day of the recordings

*** AoA = Age of Acquisition

Something that stands out is that the first contact language of half of the tested participants is Dutch and the other half is Papiamentu and Dutch when they conducted the experiment.

One of the big differences among the participants in this group is that half of them learned Papiamentu at the age of 4 or younger. The same participants have both Papiamentu and Dutch as their first contact language. The other half of the participants learned Papiamentu in primary school and have Dutch as their first contact language. It is likely that these participants were more exposed to Dutch compared to the other half of the participants that learned Papiamentu at a younger age.

Another big difference within this participant group is the amount of years that they spent in the Netherlands before conducting the experiment. The youngest participant of this group has been living in the Netherlands for 1 year, whereas the 2 oldest participants have been living in the Netherlands for 6 years. This means that there is a difference between the amount of exposure to Dutch within this group before taking part in the experiment.

8.2 Participant background information: Curaçao experiment

Dutch is one of the official languages in Curaçao and plays an important role in the daily lives of most participants that have been tested on the island. The following table is a clear overview of the influence of the Dutch language on the participants, comparing the 4 different participant groups that were tested in in Curaçao in 2018. In table (25), 3 different variables are compared for all 4 participant groups. These variables are:

(1) The % of the participants that use Dutch as the main language in Primary school

(2) The % of the participants that use Dutch as the main language in Secondary school

(3) The % of the participants that use Dutch as their first contact language

All data are acquired from the LHQ that the participants had to complete after taking part in the experiment.

25. Dutch influence on the participants that have been tested in Curaçao

Participant Group	% of the participants with Dutch as their main language in primary school	% of the participants with Dutch as the main language in secondary school	% of the participants with Dutch as their first contact language
Papiamentu dominant (N=22)	90,1%	100%	18,18%
Dutch dominant (N=7)	100%	100%	83,33%
Spanish dominant (N=6)	0,0%	0,0%	0,0%
Heritage Spanish/Pap (N=6)	83,33%	100%	16,67%

Table (25) shows that the participants from the Papiamentu dominant group (N=22) and the Dutch dominant group (N=7) are the ones that use Dutch the most in school and as a first contact language. For the Dutch dominant group, this is a logical outcome since Dutch is the language that is spoken at home and because most of the participants in this group used to go to Dutch private schools or local schools where Dutch is the main language.

However, looking more closely at the results of the Papiamentu dominant group, it stands out that there is a big difference between the amount of Dutch that is used as a first contact language (18,18%) and the amount of Dutch that is used in primary or secondary school (90,1% and 100%). This difference can be explained by the fact that these participants mainly use Papiamentu in informal gatherings with their friends, sport club or at home. On the other hand, Dutch is used as the main language in primary and secondary school.

The results of the heritage Spanish/Papiamentu group are in line with the results of the Papiamentu dominant group, as 16,67% of these participants use Dutch as their first contact language and 83,33% of the participants speak Dutch in primary school. However, a big difference between this group and the Papiamentu dominant group is that most participants speak Spanish as their first contact language instead of Papiamentu.[24] The participants in the Spanish dominant group do not use Dutch at all. This can be explained by the fact that these participants grew up in Spanish speaking countries and moved to Curaçao when they were adults. It is likely that the participants of this group are the least influenced by the Dutch language, as they did not learn Dutch in school or speak Dutch in informal gatherings.

Comparing the linguistic backgrounds of the Papiamentu speakers in Curaçao and the Papiamentu speakers in the Netherlands, it stands out that most of the Papiamentu speakers that were tested in Curaçao use Dutch as their main language in primary and secondary school. In contrast, they hardly use Dutch in informal gatherings or to communicate with their friends or parents. This is different in the case of the Papiamentu speakers that have been tested in the Netherlands. It is likely that their first contact language shifted from Papiamentu to Dutch as soon as they moved to the Netherlands. All 6 participants in this group learned Papiamentu at a young age and learned Spanish in primary school or high school. It is likely that they have not been exposed to a lot of Spanish while living in the Netherlands. Despite this, they accepted more than 10% of the stimuli that contain Spanish grammatical gender.

[24] The results in the LHQ show that 50% of these participants use Spanish as the first contact language. Additionally, all participants in this group (100%) speak Spanish with both of their parents.

8.3 Experiment: Forced Acceptability and Speeded Repitition task

The same experiment, materials, stimuli and procedure were used for this follow-up study. All participants completed the same Language History Questionnaire that was used in Curaçao after completing all tasks.

8.3.1 Results: Descriptive Analysis

Due to the COVID-19 pandamic, only 6 participants participated in this follow-up study so far and we are only able to report on these results. As in the experiment that was conducted in Curaçao, the filler items were analysed to make sure that the participants were not randomly selecting answers. The missed items were removed and the raw data were reported for each participant. An average of 5 out of the 40 manipulated stimuli has been accepted per participant. However, as table (26) shows, there is a big difference between the results of the participants in this group:

26. Results for the 6 tested Papiamentu speakers in the Netherlands

Participant Number	Accepted stimuli that include Spanish gender	Spanish elements 'corrected' to Papiamentu	Sentences with the insertion of Spanish elements	Sentences with the insertion of Dutch elements
1	1	3	4	0
2	4	3	4	0
3	4	3	0	4
4	8	2	1	7
5	3	8	0	0
6	9	11	1	1

The second column in this table shows the numbers of the accepted stimuli that contain Spanish grammatical gender per participant. The third column shows the numbers of the Spanish gender agreeing elements that were changed to Papiamentu during the repetition task. For example, one participant in this group 'corrected' the stimuli 'mi a kumpra una$_{FEM}$ mesa rondá$_{FEM}$' to 'mi a kumpra **e** mesa rondá$_{FEM}$', where he or she changed the spanish feminine determiner *una* to the correct genderless determiner *e* in Papiamentu during the repitition task.

The fourth column of table (26) contains the number of the sentences in which the participants inserted Spanish elements during the repitition task. For example, one of the participants in this group changed the stimuli 'Las$_{FEM}$ bòternan ta será *ku* un tapa temporal' to

'Las bòternan ta será *con* tapa [..] natural'. During the repetition, the participant replaced the Papiamentu preposition 'ku' (ENG: with) with the Spanish preposition 'con'. This is an interesting finding because the participants' exposure to Spanish has been minimal in the Netherlands.

Further data collection and analysis is needed in order to compare the results of the follow-up study to the Papiamentu speakers that have been tested in Curaçao. In particular, it will be interesting to discuss the role of environmental factors as the participants in the Netherlands have less exposure to Spanish compared to the participants that were tested in Curaçao.

9.Discussion

Most L2 acquisition studies that focus on how grammatical gender is acquired by speakers of a non-gendered language have shown that acquisition of gender assignment and agreement is difficult. Similar to Lipski (2015), this study has shown that this difficulty is bidirectional. That is, in cases where the L2 speaker must suppress gender, gender interference can happen. This is especially the case in highly cognate languages that differ in the realization of gender features. Dominant Spanish speakers experienced the greatest interference of Spanish gender features in Papiamentu. However, the Dutch-Papiamentu group also scored lower in rejecting Spanish gender features as compared to L1 Papiamentu and Spanish HS groups, possibly indicating that the presence of gender in Dutch also played a role. At the same time, Spanish HSs were better than L1 Spanish speakers at suppressing gender interference. This suggests that going from a dominant language with gender to a language without gender is harder than suppressing gender from a less-dominant language. Additionally, the proficiency in Papiamentu of the participants may have played a role in our current results. It is perhaps not surprising that those groups who arguably have the highest proficiency in Papiamentu (Papiamentu-dominant and Heritage Spanish-Papiamentu) are least likely to experience gender interference.

Regarding interference according to word type (determiners and adjectives), the results are mixed in our groups, but the general tendency is to experience more interference with Determiners as compared to Adjectives (Dutch-Papiamentu, L1 Spanish, Spanish HS). As for interference related to gender (masculine vs. feminine), the results are also mixed. However, overall, we observed a greater interference on words marked with a Spanish masculine feature (-o) compared to Spanish feminine (-a). This was not surprising given the status of feminine as marked gender in Spanish and masculine as default (Harris 1991).

Moving away from the phenomenon under investigation, we see an interesting parallel with the results of this study and prior work on code-switching between gendered and non-gendered languages and the use of the analogical criterion vs the default gender strategy. Across different language pairs and bilingual communities, the analogical criterion strategy seems to be absent from speakers who are not Spanish L1 speakers (cf. Bellamy, Parafita Couto & Stadthagen-Gonzalez 2018 for Purepecha-Spanish bilinguals), while L1 Spanish speakers seem more likely to follow the analogical criterion (see Liceras, Fernández Fuertes,

Perales, Perez-Tattam & Spradlin 2008 for Spanish-English or Munarriz, de Castro Arrazola, Parafita Couto & Ezizabarrena 2019 for Basque-Spanish).

Liceras et al. (2008) argue that the cognitive mechanisms involved in a grammaticality judgments task make different use of the linguistic units available to the bilingual, the Spanish L1 speaker and the Spanish L2 speaker. The results of our study show parallel results as the Papiamentu-dominant group rejected more Papiamentu sentences that contained Spanish grammatical gender compared to Spanish-Papiamentu bilingual speakers. Both participant groups have at least basic knowledge of both Spanish and Papiamentu, the Spanish-dominant group and Spanish HS have been exposed and have knowledge of both Spanish and Papiamentu.

This result is also in line with the Grammatical Features Spell-out Hypothesis, according to which bilingual speakers of one gendered language and the other that lacks grammatical gender prefer to use determiners that contain grammatical gender. Language dominance does not play a role in this preference. This could be an explanation for the fact that participants in the Dutch dominant group accepted more Papiamentu sentences that contained Spanish grammatical gender compared to the Papiamentu dominant group, despite their arguably weaker proficiency in Spanish. Both Spanish and Dutch have a binary gender system and both have default genders (masculine in Spanish and common in Dutch). It can be argued that the Dutch-dominant participants accepted more determiners that contain grammatical gender compared to the Papiamentu dominant group, since Dutch contains a grammatical gender system.

At the same time, certain bilingual communities may also settle on specific code-switching patterns. For example, Valdés Kroff (2016) observed that Spanish-English bilinguals in Miami tend to use masculine as default, and Krolikowska et al. (2019) compared the gender assignment patterns of four Spanish-English bilingual populations and observed that the more the bilinguals engaged in code-switching, the greater the tendency to assign the default masculine gender to mixed nominal constructions. Thus, the observed differences in gender assignment strategies across communities and language pairs may be due to a combination of proficiency and environmental factors. Returning to the issue of gender interference in cognate languages, future research should also delve more deeply into these factors.

Furthermore, the results of this study parallel with prior work on code switching between non-gendered and gendered languages. Across different language pairs and bilingual communities, the analogical criterion strategy seems to be absent from speakers who are not Spanish L1 speakers (cf. Bellamy, Parafita Couto & Stadthagen-Gonzalez 2018 for Purepecha-Spanish bilinguals), while L1 Spanish speakers seem more likely to follow the analogical criterion (see Liceras, Fernández Fuertes, Perales, Perez-Tattam & Spradlin 2008 for Spanish-English or Munarriz, de Castro Arrazola, Parafita Couto & Ezizabarrena 2019 for Basque-Spanish).

One limitation of this research is the small sample sizes for three of the participant groups in the experiment that has been conducted in Curaçao and for the participants that have been tested in the Netherlands in the follow-up study. We only report on the data of the 6 participants in the Netherlands to test whether Spanish gender interference would be reduced. The results are mixed and differ per participant, as one participant accepted 9 of the manipulated stimuli and another participant only 1. The aim is to test more Papiamentu speakers in the Netherlands and analyse and compare the results to the findings of the participants in Curaçao. Additionaly, it would be interesting to pay exta attention to the lingusitic backgrounds of the participants that reside in the Netherlands in order to possibly find patterns in order to explain the big differences between the results.

What is noteworthy is that we observe a similar entrenchment effect of L1 Spanish gender across (i) code-switching studies in different bilingual populations, (ii) Lipski's (2015; 2017) studies on Palenquero-Spanish and (iii) our current study on Papiamentu-Spanish. However, the state of the research to date calls for further work to be able to determine both the theoretical and empirical implications of our findings.

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Appendix A: Experimental Papiamentu materials used in the study

Stimuli	Condition	English Translation	Inserted Spanish Gender
Mi amigunan tin un banjo koró .	Adj	My friends have a red bathroom.	M
E kamisa tin hopi boton koró.	Adj	The shirt has many red buttons.	M
E mucha a disidí ku nos mester traha una pisina rondá di e buraku.	Det + Adj	The child decided that we had to make a round swimming pool out of the well.	F
El kurason a kuminsá bati masha lihé.	Det	The heart started beating faster.	M
El ehérsito semper tabata armó.	Det + Adj	The army was always armed.	M
Las islanan ta chikita.	Det + Adj	The islands are small.	F
Las bentananan habrí ta bunita.	Det	The open windows are beautiful.	F
Las bòternan ta será ku un tapa temporal.	Det	The bottles are closed with a temporary cork.	F
Mi primu semper ta bebe biña koró.	Adj	My cousin always drinks red wine.	M
Kada djadumingu nos ta bai na misa blanka.	Adj	Every Sunday we go to the white church.	F
E stranheronan ta bebe serbesnan bon fria.	Adj	The foreigners are drinking nice cold beers.	F
Las palombanan preta ta kome pan.	Det + Adj	The black pigeons are eating bread.	F
Einan mester a bende los piskánan.	Det	They sold the fish.	M
E mucha hòmber ta bisti un sombré chikito.	Adj	The boy is wearing a small hat.	M
Las baiskelnan tin una kadena korá.	Det	The bicycles have a red chain.	F
Los brasanan di e señora ta blanko.	Det + Adj	The arms of the woman are white.	M
La pluma blanka ta suave.	Det + Adj	The white feather is soft.	M
Los kangreunan ta kome e piedra.	Det	The crabs are eating the stone.	M
E eksibishon tin una pintura preta.	Det + Adj	The exhibition has a black painting.	F
Mi ta stima el aros blanko.	Det + Adj	I love the white rice.	M
Los paranan chikito ta kanta bunito.	Det + Adj	The small birds are singing beautifully.	M

Mi amigu tin una kara rondá.	Det + Adj	My friend has a round face.	F
Los pannan preto no ta dushi.	Det + Adj	The black loaves are not delicious.	M
Mi bisiña tin un kabai preto.	Adj	My neighbor has a black horse.	M
E hembra ta yuda brui los webunan.	Det	The female helps breading the eggs.	M
Den la kaha korá, e hòmber a haña algun potrèt.	Det + Adj	The man found a picture in the red box.	F
Una bela blanka a paga durante e seremonia.	Det + Adj	The white candle went out during the ceremony.	F
Mi tin un mapa koró di mundu.	Adj	I have a red world map.	M
Las uñanan di mi bisiña ta preta.	Det + Adj	The nails of my neighbor are black.	F
Mi a kumpra una mesa rondá.	Det + Adj	I bought a round table.	F
Los sapatunan tin furu preto.	Det + Adj	The shoes have black lining.	M
Nos ta respetá las banderanan komo un símbolo nashonal.	Det	We respect the flags as a national symbol.	F
Las kamisanan blanka ta grandi.	Det + Adj	The white shirts are large.	F
Kòrsou tin hopi playa turístika	Adj	Curaçao has many touristic beaches.	F
Mi ruman tin un kurpa delegó.	Adj	My brother has a skinny body.	M
Los avionnan ta chikito.	Det + Adj	The airplanes are small.	M
Mi ofisina ta un edifisio koró.	Adj	My office is a red building.	M
Ayera mi a kumpra kuminda spañá.	Adj	Yesterday I bought Spanish food.	F

Appendix B: Filler materials used in the study

Fillers	English Translation
Chile tin un desierto hopi seku.	Chile has a very dry dessert.
Mi tin un kama maron.	I have a brown bed.
Mi amigu ta bebe awe lamunchi.	My friend is drinking lemon water.
E kurá grandi tin palunan bèrdè.	The big garden has green trees.
E alumno ta korta e siboyonan.	The student is cutting the onions.
E kasadó a tira e flechanan bèrdè.	The shooter is shooting green arrows.
E kriá ta limpia e kushina.	The cleaning lady is cleaning the kitchen.
E mucha ta buska e yabinan di kas.	The kid is searching for the house keys.
Mi tawela di ochenta aña sèmper ta bebe te.	My grandma who is 80 years old is always drinking tea.
E ekstranheronan ta siña e idioma.	The foreigners are learning the language.
E ladron ta hòrta e bòter di awa.	The thief is stealing a bottle of water.
E a papia malu di otro hende.	He/she is talking bad about other people.
Mi ke biba den un pueblo chikitu.	I want to live in a small village.
E suelo maron ta hopi sushi.	The brown floor is very dirty.
Mi kas sèmper ta limpi.	My house is always clean.
Mi pueblo tin un kastio grandi.	My village has a big castle.
Mi bisiña tin un barba maron.	My neighbor has a brown beard.
E mucha-muhé ta pinta un strea bèrdè.	The girl is painting a green star.
E kurá tin hopi kamindanan largu.	The garden has many large pathways.
E eskritor ta skibi e karta.	The writer is writing the card.
E oro ta hopi karu.	The gold is very expensive.
E pianan di mi ruman-muhé ta chikitu.	The feet of my sister are small.
E homber tin dos man grandi.	The man has two big hands.
E a bati na porta di un kas grandi.	He is walking towards the door of a big house.
Mi a habri mi boka.	I am opening my mouth.

E reina di Hulanda tin tres yiu.	The queen of the Netherlands has three children.
Ora mi a yega kas, mi a mira un revista habrí riba mesa.	When I arrived at home, I saw a newspaper laying on the table.
Tin hopi ola grandi na Playa Kanoa.	There are many big waves at Playa Kanoa.
Mi frei solamente ta kome berdura bèrdè.	My girlfriend only eats green vegetables.
E arañanan maron ta kome blachi.	The brown spiders are eating leaves.
Mi ta traha hopi duru.	I am working very hard.
E sèmper tin hopi pregunta.	He always has many questions.
Nos a kuminsá un biahe peligroso.	We are starting a dangerous trip.
E duaneronan a habri nos ekipahe.	The customs employees are opening our luggage.
Ora ta hasi kalor den dia, tin ku bebe hopi awa.	When it gets hot during the day, you need to drink a lot of water.
E laman di Hulanda ta hopi friu.	The ocean in the Netherlands is very cold.
E bendedó ta bisti un kamisa grandi.	The saleswoman/men is wearing a big shirt.
E kortina maron no ta bunita.	The brown curtain is not beautiful.

Appendix C: Language History Questionnaire (LHQ)[25]

Cuestionario

Le estaríamos muy agradecidos si nos pudiera dar la siguiente información para ayudarnos con nuestro estudio.

1. ¿Es usted: Hombre ☐ Mujer ☐ ? **2.** Fecha de nacimiento:……

3. ¿A qué se dedica actualmente (si está jubilado o desempleado, ¿cuál fue su último trabajo antes de retirarse o entrar en el paro?)?

……

4. Por favor, indique los sitios donde vivió durante periodos largos:

e.g.:	Lugar: *La Habana, Cuba*	Fecha: *1975-93*
	Lugar: *New York City, US*	Fecha: *1993-99*
	Lugar: *Melbourne, Australia*	Fecha: *1999-2002*
	Lugar: *Miami, US*	Fecha: *2002-05*

Lugar: …… Fecha: ……

Lugar: …… Fecha: ……

Lugar: …… Fecha: ……

Lugar: …… Fecha: ……

Lugar: …… Fecha: ……

Lugar: …… Fecha: ……

5. ¿Cuál es su nivel más alto de educación?

☐ Junior High o equivalente
☐ MAVO/VMBO
☐ MBO
☐ HAVO
☐ VWO
☐ HBO
☐ Bachelor's (licenciatura/diplomatura), o equivalente
☐ Master, Doctorato, o equivalente
☐ Ninguno de los mencionados

[25] The Language History Questionnaires were available in both Spanish and Papiamentu

6. ¿Desde cuándo habla español?
- ☐ Desde que tenía dos años o incluso antes
- ☐ Desde que tenía cuatro años o incluso antes
- ☐ Desde la escuela primaria
- ☐ Desde la escuela secundaria
- ☐ Aprendí a hablar español de adulto

7. ¿Desde cuándo habla papiamentu?
- ☐ Desde que tenía dos años o incluso antes
- ☐ Desde que tenía cuatro años o incluso antes
- ☐ Desde la escuela primaria
- ☐ Desde la escuela secundaria
- ☐ Aprendí a hablar papiamentu de adulto

8. En una escala del 1 al 4, ¿cómo piensa que es su nivel de papiamentu?
- ☐ **1** Sólo sé algunas palabras y expresiones
- ☐ **2** Puedo mantener conversaciones básicas
- ☐ **3** Puedo mantener conversaciones un poco más avanzadas
- ☐ **4** Puedo mantener todo tipo de conversaciones

9. En una escala del 1 al 4, ¿cómo piensa que es su nivel de español?
- ☐ **1** Sólo sé algunas palabras y expresiones
- ☐ **2** Puedo mantener conversaciones básicas
- ☐ **3** Puedo mantener conversaciones un poco más avanzadas
- ☐ **4** Puedo mantener todo tipo de conversaciones

10. ¿Qué lengua(s) le hablaba su madre cuando estaba creciendo (si es aplicable)?
- ☐ Español
- ☐ Papiamentu
- ☐ Holandés
- ☐ Ingles
- ☐ Otro (por fabor nombra kua)……
- ☐ N/A

11. ¿Qué lengua(s) le hablaba su padre cuando estaba creciendo (si es aplicable)?
- ☐ Español
- ☐ Papiamentu
- ☐ Holandés
- ☐ Ingles
- ☐ Otra (Por favor, especifique) ……
- ☐ N/A

12. ¿Qué lengua(s) le hablaba cualquier otro tutor cuando estaba creciendo (si es aplicable)?
- ☐ Español
- ☐ Papiamentu
- ☐ Holandés
- ☐ Ingles

☐ Otra (Por favor, especifique) ……
☐ N/A

13. ¿En qué lengua(s) le enseñaban en la escuela primaria?
☐ Español
☐ Papiamentu
☐ Holandés
☐ Ingles
☐ Otra (Por favor, especifique) ……
☐ N/A

14. ¿En qué lengua(s) le enseñaban en la escuela secundaria?
☐ Español
☐ Papiamentu
☐ Holandés
☐ Ingles
☐ Otra (Por favor, especifique) ……
☐ N/A

15. Haga una lista de las cinco personas que hablan más con usted en su vida diaria, tanto en persona como por teléfono, e.g. su pareja, su hijo/a, un amigo, un compañero de trabajo, etc. Después anote qué lengua (s) habla en general con esa persona, como se muestra en la siguiente tabla.

Nombre de la persona, o relación	**Lengua hablada generalmente con esta persona: (por favor marque la casilla que corresponda)**			
	Papiamentu	**Español**	**Holandés**	**Otra lengua**
1. *Juana*	✓			
2. *Madre*		✓		
3.*compañero de trabajo*			✓	
4. *Michael*				✓
5. *Hermana*		✓		

Por favor rellene la siguiente tabla

Nombre de la persona, o relación (use nombres ficticios si lo prefiere)	**Lengua hablada generalmente con esta persona: (por favor marque la casilla que corresponda)**			
	Papiamentu	**Español**	**Holandés**	**Otra lengua**
1.				
2.				
3.				
4.				

5.				

16. ¿Cómo caracterizaría a la lengua papiamentu siguiendo una escala del 1 al 5 de acuerdo con las siguientes propiedades? Circule un número en cada línea.

Antigua	1	2	3	4	5	Moderna
Desamigable	1	2	3	4	5	Amigable
No influyente	1	2	3	4	5	Influyente
No inspirante	1	2	3	4	5	Inspirante
Inútil	1	2	3	4	5	Útil
Fea	1	2	3	4	5	Bonita

17. ¿Cómo caracterizaría a la lengua español siguiendo una escala del 1 al 15 de acuerdo con las siguientes propiedades? Circule un número en cada línea.

Antigua	1	2	3	4	5	Moderna
Desamigable	1	2	3	4	5	Amigable
No influyente	1	2	3	4	5	Influyente
No inspirante	1	2	3	4	5	Inspirante
Inútil	1	2	3	4	5	Útil
Fea	1	2	3	4	5	Bonita

18. ¿Hasta qué punto está de acuerdo con la siguiente declaración?:
"En mis conversaciones diarias, mantengo el español y el Papiamentu separados."

- ☐ **1** Totalmente en desacuerdo
- ☐ **2** En desacuerdo
- ☐ **3** Ni de acuerdo ni en desacuerdo
- ☐ **4** De acuerdo
- ☐ **5** Totalmente de acuerdo

19. ¿Hasta qué punto está de acuerdo con la siguiente declaración?:
" La gente debería evitar mezclar el español y el papiamentu en la misma conversación."

- ☐ **1** Totalmente en desacuerdo
- ☐ **2** En desacuerdo
- ☐ **3** Ni de acuerdo ni en desacuerdo
- ☐ **4** De acuerdo
- ☐ **5** Totalmente de acuerdo

Muchas gracias por su tiempo y colaboración.