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DUTCH AS A HERITAGE LANGUAGE IN BRAZIL. A DESCRIPTIVE ANALYSIS OF LANGUAGE VARIATION IN PARANÁ DUTCH

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Abstract

This study deals with morphosyntactic variation in Paraná Dutch, an endangered heritage variety of Dutch spoken in the southern Brazilian state of Paraná. Its original objectives were (i) to describe divergences from Dutch as spoken in the Netherlands (NLD) as well as retained dialectal features (ii) to compare these variations to findings of other studies on Dutch as a heritage language (HL), and (iii) to relate the findings to extralinguistic features. Due to the situation of intergenerational language loss encountered during the fieldwork conducted for this study, it was deemed important to add a fourth objective, namely to assess the vitality of the heritage variety. No previous linguistic research on language variation in Dutch as a HL in Paraná exists, and this study will therefore extend our knowledge of morphosyntactic divergences and dialectal retentions in the Dutch heritage varieties.

More than 22 hours of naturalistic speech data of 82 Dutch heritage speakers (HSs) in three communities – Arapoti, Carambeí and Castrolanda – was gathered between November 2018 and January 2019, and coded for morphosyntactic divergence from NLD or dialectal variation. The sample consisted of speakers of different ages (16-91), generations (first till fourth) and with varying levels of exposure to and usage of Dutch.

Two models for language vitality assessment (UNESCO, EGIDS) were used to describe the endangerment of Paraná Dutch. According to the models, the heritage variety is definitively endangered (UNESCO), and threatened or shifting (EGIDS).

Morphosyntactic divergences from NLD found in the speech of the participants include the overgeneralization of SVO word order, omission of determiners, variation in grammatical gender assignment, variation in nominal plural markers, pronoun drop, and variation in present verb inflection. Morphosyntactic divergences from the standard language that can be attributed to Dutch dialects or regional languages include the merger of the verbs *kennen* ‘to know’ and *kunnen* ‘can’, use of *heb* ‘to have’ for the 3SG.PRES, and the use of periphrastic *doen* ‘to do’.

Of the morphosyntactic divergences found in the data, the six mentioned previously were used by a sizeable part of the sample (at least ten participants). Many of these divergences have also been attested in Dutch heritage varieties in Anglophone countries, Indonesia and in other parts of Brazil. The divergences from NLD are either due to interference from the majority language Portuguese, due to internal development in the HL, or due to a combination of the former two (multiple causation). Participants whose speech contained morphosyntactic divergences from NLD tend to be of the second generation or later and have a lower usage of and exposure to Dutch than the average of the sample.

Although most of the dialectal features present in the speech of the first-generation participants have not been attested in the speech of later generations, some have been retained or even spread throughout the community. The three morphosyntactic features that originate from Dutch dialects or regional languages mentioned above have been retained and transmitted to speakers of the second generation or later.

Table of Contents

List of figures and tables

Figures

Tables

List of abbreviations and glosses

Abbreviations

HL	heritage language
HS	heritage speaker
IER	Igreja Evangélica Reformada
L1	first language
NLD	colloquial Dutch as spoken in the Netherlands
O	object
PT	Portuguese
S	subject
V	verb

Glosses

AFF	affirmative
ART	article
AUX	auxiliary
C	common gender
DEF	definite
DIM	diminutive
GER	gerund
INDEF	indefinite
INF	infinitive
N	neuter
NEG	negative
PL	plural
PRES	present tense
PST	past tense
PTC	participle
REL	relative
SG	singular
SUPL	superlative
TAG	question tag

1 Introduction

1.1 Research topic

The present study fits within the field of heritage linguistics and language variation and change. It deals with the effects of language contact on morphology and syntax, and may therefore contribute towards our understanding of processes within bilingual heritage grammars. In this study, morphosyntactic divergences from Dutch as spoken in the Netherlands (NLD) and retained morphosyntactic features from the Dutch dialects or regional languages in Paraná Dutch are described. These variations will be compared to variation found in the Dutch of Heritage Speakers (HSs) in areas with other dominant languages, and related to extralinguistic features such as age, generation, region of origin and language use. The study serves as a stepping stone to future research on Dutch as spoken by HSs in Paraná by providing an overview of common morphosyntactic deviations from NLD and maintenance of regional features.

Paraná Dutch is a contact variety of Dutch that has been spoken as a Heritage Language (HL; for a discussion about the definition see section 2.1) in the southern Brazilian state of Paraná since the early 20th century. Many Dutch migrants and their descendants do not only use this language at home, but also in educational and religious settings. The original and main focus of this study is to analyse variation in Paraná Dutch and compare it to variation found in other Dutch heritage varieties. No previous linguistic research on language variation in Dutch as a HL in Paraná exists, and this study will therefore extend our knowledge of morphosyntactic divergences and dialectal maintenance in the Dutch heritage varieties. During the fieldwork, however, it became clear that the variety is losing ground to Portuguese – the majority language – in all domains, and that a recent decline in intergenerational transmission of Dutch may threaten the survival of the variety. An analysis of the vitality of Paraná Dutch was therefore deemed important and added as a side focus of the research.

The remainder of this introduction describes the presence of varieties of Dutch in Brazil throughout history, with a focus on the Paraná communities[1] (Arapoti, Carambeí and Castrolanda) studied in this thesis. Chapter 2 outlines the theoretical framework and reviews previous research about Dutch as a HL in Brazil and in other parts of the world. Chapter 3 on methodology contains a description of the contemporary sociolinguistic situation in the three communities, the participants, and the research methods. Chapter 4 evaluates the endangerment of Paraná Dutch according to two models for language endangerment assessment. The attested morphosyntactic variation, both the newly arisen divergences from NLD and the retained characteristics from Dutch dialects and regional languages, is described and discussed in Chapter 5. Finally, the concluding chapter recapitulates the different variations and summarizes the discussion of the findings of this study.

[1] These settlements are often being referred to with the word *koloniën* (or *colônias*) 'colonies', both by the inhabitants of these settlements as well as by researchers. To avoid any semantic confusion, I will use the word *communities* to refer to the settlements established by Dutch-speaking migrants.

1.2 History of Dutch in Brazil

1.2.1 Dutch Brazil

The history of the Dutch presence in Brazil starts in 1630 when the Dutch West India Company conquered the city of Recife and started its conquest of New Holland, in the Northeast of Brazil, bringing the Dutch language with them. Besides Dutch army personnel and a Calvinist Dutch governmental elite, thousands of freemen (merchants, settlers, artisans) lived in Dutch Brazil, about half of whom were Luso-Dutch Sephardic Jews from Amsterdam. Dutch developed as a language of trade and diplomacy with indigenous peoples in the area. Indigenous Brazilians communicated with Dutch officials in The Hague directly with letters written in Dutch, and actively supported a Dutch programme that brought some of them to the Netherlands in order to be trained as mediators and translators (Meuwese, 2003).

The linguistic impact of the short-lived Dutch colony in Brazil is, however, very limited. Although large numbers of Dutch speakers moved to cities such as Recife, the Dutch never managed to settle the countryside of the Brazilian land they conquered, where Portuguese colonists owned profitable sugar plantations on which the economy of the colony was based (Ebben, n.d.). Besides that, many people fled or were expelled upon the recapture of the colony by the Portuguese in 1654, mostly for religious reasons. Among those fleeing the colony were also indigenous peoples that had collaborated with the Dutch, most of whom went to Tobago (Meuwese, 2014).

1.2.2 The first settlements

Between 1812 and 1900, 504 migrants left the Netherlands for Brazil. In this period, the Brazilian government stimulated migration to rural settlements called *colônias* owned by the state or by private landowners, in order to develop the land. The majority of the Dutch migrants (323 individuals) went to the state of Espírito Santo (ES) between 1858 and 1862 (Schaffel Bremenkamp et al., 2017)[2]. There, the Dutch ended up in three areas: Urucu (Teófilo Otoni[3]), Rio Novo (Rio Novo do Sul), and Santa Leopoldina. The conditions in the settlement of Urucu were so miserable that it had to be evacuated in the year 1859, after 19 of the 79 Dutch settlers had died (Hulsman, 2012). The Dutch in Rio Novo faced similar conditions with a death rate of 20%. The settlers in Santa Leopoldina also faced harsh conditions as none of the promises (deforested farmland, livestock, housing, i.a.) stated in the contract were met. The Dutch in Rio Novo lived among German migrants and ethnic grouping was not taken into account. In Santa Leopoldina, on the other hand, migrants were divided along ethnic lines. The Dutch in Santa Leopoldina got a tract of land that they would call Holanda (or Holandinha) (Schaffel Bremenkamp et al., 2017).

The remainder of the Dutch migrants in this period went to Rio Grande do Sul (Santa Maria de Soledade (São Vendelino); Nova Petrópolis; Santa Cruz; Santo Ângelo (Agudo)) and Santa Catarina (Dona Francisca (Joinville)). They settled among German migrants who maintained their culture and identity. Little is known about the Dutch in these settlements (Hulsman, 2012).

All Dutch immigrants in Brazil during this migration wave were from the Dutch province of Zeeland, mostly from the Zeeuws-Vlaanderen region. These migrants were typically Calvinists and spoke the Zeeuws-Flemish dialect of Dutch. Their language has been maintained until this day in Holanda, ES, albeit critically endangered according to the UNESCO model for language vitality (Brenzinger et al., 2003; Schaffel Bremenkamp, 2010). This maintenance could be due to religious discrimination and scapegoating against the Calvinists by the surrounding German-speaking Lutheran groups, which led

[2] For a complete history of the Dutch migration to Espírito Santo, see (Roos & Eshuis, 2008a (Dutch version) or 2008b (Portuguese version)).

[3] The municipality of Teófilo Otoni to which Urucu belongs is in the present-day state of Minas Gerais.

to the Dutch being more isolated. The variety has less than twenty speakers as of 2017 and is moribund, as these speakers have not transmitted the language to their children (Schaffel Bremenkamp et al., 2017). The final speakers do not only live in Holanda, but also in other towns nearby such as Jequitibá and São João de Garrafão because of internal migration between 1900 and 1930 (Hulsman, 2012).

The Zeeuws variety is heavily influenced by Brazilian Pomeranian, a Low German heritage variety which at some point was the lingua franca of the area, and to a lesser extent by the national language Portuguese. The variety has been documented by Schaffel Bremenkamp et al. (2017), who recorded four hours of natural speech from nine speakers for their description of language variation in Brazilian Zeeuws (see section 2.3.3 for a short summary of their findings).

1.2.3 The second wave

Between 1884 and 1940, 8200 Dutch migrants arrived in Brazil, with a peak between 1904 and 1914. The main destinations of these migrants were the states of Minas Gerais (João Pinheiro (Sete Lagoas); Vargem Grande (Belo Horizonte); Nova Baden (Belo Horizonte)), Rio Grande do Sul (Comandaí (Santo Ângelo); Ijuí; Guaraní (Guaraní das Missões)) and Paraná (Miguel Calmon (Ivaí); Affonso Penna (São José dos Pinhais); Gonçalves Júnior (Irati)). Just like during the first wave, the migrants were recruited under false promises and faced harsh conditions in Brazil. Many migrants were repatriated in the following years (Hulsman, 2012).

Of particular importance for this thesis are the settlements in the state of Paraná, more specifically that of Gonçalves Júnior in the municipality of Irati. Most of the Dutch that came to this settlement in 1908 were repatriated, but a few moved to other parts of Brazil. Among those were the two brothers Leendert and Jan Verschoor, who joined a settlement project of the Brazilian Railway Company near Ponta Grossa in Paraná. They convinced the De Geus family from 's-Gravendeel to join them, and together with a few other Protestant families of Dutch and German descent, they founded the settlement of Carambeí in 1911. In 1917, Aart-Jan de Geus bought the land from the Brazilian Railway Company, which today is the core of the community. In 1920, there were 49 migrants from the Netherlands and 17 Brazilians of Dutch descent in the settlement, as well as some Germans. In 1925, they founded the farming cooperative called *Sociedade Cooperativa Holandeza de Lacticínios* (Hulsman, 2012), the first production cooperative of Brazil (Wijnen, 2001). The 1930s in Carambeí were marked by the immigration of Dutch-speaking families from the Dutch East Indies. In 1941, the *Sociedade Cooperativa de Laticínios Batavo*, as the farming cooperative was then called, built a dairy factory in the community. During the Second World War, some Carambeians were called to fight for the Dutch army, and speaking German was prohibited in Brazil in these years (Hulsman, 2012; Stapelbroek, 2016).

A policy of nationalization and the concept of 'idiomatic crime' (*crime idiomática*) were introduced by the Vargas regime, who targeted speakers of German and Italian in particular. The government forced them to abandon their heritage languages by taking control over their community schools, by closing presses that published in Italian or German, and by imprisoning and torturing individuals who spoke these languages in public or in their homes between 1941 and 1945. Census data shows a sharp decline in the use of German due to these policies (Müller de Oliveira, 2018).

1.2.4 Post-WWII migration

In the years following the Second World War, half a million Dutch emigrated from the Netherlands. Between 1945 and 1967, the emigration of especially agrarians and low-skilled workers was stimulated by the Dutch government. Popular destinations were Canada, Australia, the United States, New

Zealand and South Africa. About one percent of the emigrants, no more than 5000 persons in total between 1945 and 1964, decided to go to Brazil (Stapelbroek, 2016).

One important motivation for emigrating to Brazil instead of the aforementioned countries is that group migration was allowed, and large groups of Dutch, often of the same religious affiliation, could settle together in one community. Religious organizations such as the *Christelijke Emigratie Centrale* (Christian Emigration Office) and the *Katholieke Centrale Emigratie-Stichting* (Catholic Central Emigration Foundation), as well as the *Algemene Emigratie Centrale* (General Emigration Office) helped with this migration to protect emigrants from some of the problems that earlier emigrants experienced (Hulsman, 2012).

The first organised group migration was in 1948, when Dutch Catholic migrants arrived in the state of São Paulo and founded Holambra with the help of the *Katholieke Nederlandse Boeren- en Tuindersbond* (Catholic Dutch Farmers' and Horticulturist Union). These migrants were mainly from the South and East of the Netherlands (Hulsman, 2012). In 1949, three Dutch Catholic families started farming in Não-Me-Toque in Rio Grande do Sul, and were joined by families from Holambra in 1951. In 1961, the Holambrans bought a large tract of land near Paranapanema in São Paulo state where they founded Holambra II (or Campos de Holambra), which also attracted new migrants from the Netherlands. Ten Swiss families joined the Dutch in Holambra II as well (Stapelbroek, 2016). In 1959 and 1960, nineteen families moved from Holambra to Tijuquinhas and Tijucas, just north of Florianópolis in the state of Santa Catarina. Most of them moved back to the Netherlands, two went back to Holambra, and only a few stayed.

One by one, new migrants came to Carambeí after the war. Soon, the *Christelijke Emigratie Centrale* began to make plans for a Protestant group migration to nearby Castro. Land was bought and between 1951 and 1954, fifty Dutch families from the Northeast of the Netherlands moved to the newly founded Castrolanda. In 1953, the *Noord-Brabantse Christelijke Boerenbond* (North-Brabant Christian Farmers' Union) founded the settlement of Tronco, also near Carambeí. Some pioneers from Holambra moved to Tronco as well, which was slowly integrated in the network of Carambeí and Castrolanda. In 1960, another settlement was founded in Paraná, near the town of Arapoti, which attracted farmers from Carambeí, Castrolanda and new migrants from the Netherlands. A fifth Dutch settlement existed in Paraná from 1949 until 1971 in Monte Alegre near Harmonia (Telêmaco Borba), which was made up of orthodox Protestants (of the Liberated Reformed Churches, also known as Article 31 Churches). The settlement was ended because their lease agreement was not renewed. Most of its inhabitants moved to Canada and the Netherlands. Others founded the community of Brasolândia near Unaí in the state of Minas Gerais with family members and acquaintances in 1985 (Hulsman, 2012). At least one family moved to Carambeí and participated in this research.

As can be noticed so far, the Catholic settlements are somewhat scattered across the southern states of Brazil, whereas the Protestant settlements (excluding the orthodox Protestants in Brasolândia, Unaí) are concentrated in one region in the state of Paraná. All Dutch communities in Paraná, with the exception of Tronco, are mainly made up of Protestants, who united their churches in the *Igreja Evangélica Reformada* (IER).

Some early secondary settlements have already been mentioned, but starting in the 1970s, the farming cooperatives of the Dutch settlements started buying new land across Brazil for young pioneers from their communities. Farmers from the Catholic and Protestant communities went to Maracaju in Mato Grosso do Sul and to Itiquira and Alto Garças in Mato Grosso in 1972. Furthermore, Catholic farmers from the Holambra's settled in the state of Minas Gerais in Paracatu (1972), Frutal (1978) and in Araxá, and in the state of Goiás in the late 1980s near the cities of Rio Verde, Mineiros and Goiânia. Farmers

from Carambeí and Castrolanda bought land in nearby Tibagi (Paraná) and Itararé (São Paulo) in 1972, and some settled there while others stayed in their original community. Dutch descendants from all three Protestant communities also settled in Balsas (Maranhão) in 1995 (Wijnen, 2001).

So far, only agricultural migration to Brazil has been discussed. Between 1952 and 1965, however, there was a programme for skilled labourers to migrate to Brazil, the so-called Urban Workers Scheme (UWS). It is not entirely clear how many migrants were part of this programme, but it is estimated that a few hundred workers moved to Brazil in this period. Most of these labourers came from the former Dutch East Indies to work in the Brazilian industry. They ended up in the cities of Salvador (Bahia), Goiânia (Goiás), Belo Horizonte (Minas Gerais), Curitiba (Paraná), Recife (Pernambuco), Porto Alegre (Rio Grande do Sul), Rio de Janeiro and São Paulo (Hulsman, 2012). The UWS community in São Paulo joined the IER church of the Dutch communities in Paraná. Participants of this research visited the church and reported widespread trilingualism of Malay, Dutch and Portuguese among the elderly. All Dutch agricultural and UWS settlements in Brazil can be found in Figure 1.

The communities of Carambeí, Holambra, Não-Me-Toque, Castrolanda, Arapoti and Campos de Holambra are considered the core of the Dutch migrant community in Brazil. In all of these places, Dutch is or has been used in schools, churches and cultural organizations. Furthermore, these six communities organise a *Zeskamp*, a yearly cultural event attended by many Dutch descendants. It includes a sports contest in which six teams represent their community, and has been running since 1976 (Lima, 2019). These six communities also have their own monthly bilingual magazine called *De Regenboog / Arco-Íris*[4], the first edition of which was published in 1999, after the former magazine *Centraal Maandblad* (1961-1999) was discontinued[5].

[4] The digitalized versions of *De Regenboog / Arco-Íris* are not available online anymore. Information about the magazine and contact information can be found in *Revista de Regenboog* (n.d.).

[5] More information about the magazine and digitalized versions (1964-1973) can be found in *Centraal Maandblad (1961-1999)* (n.d.).

Figure 1: *Dutch group settlement in Brazil (1822-1992) (Hulsman, 2012, p. 5).*[6]

[6] *Hoofdstad* 'capital'; *oude kolonie* 'old colony'; *nieuwe kolonie* 'new colony'; *secundaire vestiging* 'secondary settlement'.

2 Literature Review

Nowadays, many of the migrants and their descendants in the communities that were studied for this research are bilingual, speaking both Portuguese, the majority language, as well as Dutch, the HL. The first part of this chapter focuses on the discussion about the definition of the term Heritage Language. Previous studies on language variation and change in HLs have described different developments and established several hypotheses. The second section deals with this linguistic theory in studies in the research field. The final part of this chapter assesses the current state of the subfield of Dutch heritage linguistics.

2.1 Defining heritage languages

Researchers and policy makers have not reached a consensus on the definition of a HL or a HS. Definitions differ along the criteria of official status of the language, a shift in language dominance, a divergent grammar, personal and ethnic or ancestral connections to the language, age of acquisition, and use within a language community (for an extensive overview of different definitions, see Aalberse et al., 2019). Especially the question of whether community languages should be considered HLs is of importance in this case, as Dutch in Brazil is mostly restricted to but widely used across various domains in a few communities. If we, for instance, consider the definition of Scontras et al. (2015), which states that "(…) heritage speakers are individuals who were raised in homes where a language other than the dominant community language was spoken, resulting in some degree of bilingualism in the heritage language and the dominant language" (p. 3), the question of which language is the dominant community language arises. Is it Dutch, the language spoken not only at home but also with neighbours and fellow church members, or Portuguese, the language of governmental institutions, trade, and the main language of instruction in education?

Besides that, the domains of the two languages have changed in recent years because of further integration of the Dutch communities in the larger Brazilian society. Whereas Dutch used to be the administrative language of the farming cooperation, it has lost this function to Portuguese[7]. Whereas Dutch and Portuguese were each used as language of instruction for half the time in local schools, it has become an elective subject in Arapoti and Castrolanda (Inspectie van het Onderwijs, 2015, 2018), and is not offered anymore in Carambeí[8]. And whereas Dutch used to be the main language of the IER churches founded by the protestant Dutch migrants, Dutch is only used on some Sunday evening services nowadays, while the morning service is in Portuguese[9]. Dutch may have been the most-used

[7] The farming cooperative in Arapoti switched to using Portuguese as the language of internal communication in 1973 (De Abreu Lemos, 2010). Fraga (2008) reports that in the 1970s, Dutch started to lose ground to Portuguese in the farming cooperative in Carambeí as well. Until the 1980s, the monthly magazine and primary source of information of the three cooperatives *Centraal Maandblad* was published in Dutch, but currently the cooperatives do not play a role in the maintenance of Dutch (Fraga, 2008).

[8] Maaike de Geus of the Idiom House, p.c. Section 3.1 provides more information about education in Dutch.

[9] Portuguese-speaking pastors were appointed in the IER churches of Carambeí (1986), Castrolanda (1991) and Arapoti (1996) (IERB, n.d.), although at least Castrolanda already had monthly services in Portuguese since 1958 (Kiers-Pot, 2001). At the

language for some older community members, but it is clear that currently, Portuguese is the dominant language. Which generations do we consider to be HSs of Dutch according to the definition used by Scontras et al. (2015), and which ones not? At what point during these developments and transformations do we draw the line?

As the communities consist of only a few hundred Dutch speakers each[10] and the use of Portuguese in the communities has become widespread, I will consider all of them to be HSs for the purpose of this thesis. Analysis of the linguistic data must show if there is an effect of the status change of Dutch in community institutions and education.

2.2 Language variation and change in heritage languages

Most studies in the field of heritage linguistics study variation and change within the HL (Aalberse et al., 2019). Divergences in the grammar of first generation HSs from that of non-HSs of Dutch may arise due to language attrition: the loss of certain features in a speaker's L1. Language attrition in first generation speakers may cause a qualitatively different input for the second generation, who in turn acquire the language in a different way (differential acquisition). The HL grammar of the second generation may also differ due to quantitatively different input. If a grammatical structure is not offered enough due to a reduced input, it may not be acquired at all, or not robustly enough to be retained. There are numerous hypotheses regarding language attrition and differential acquisition, which argue that different factors such as order of acquisition (Regression Hypothesis: Jakobson, 1941), frequency of the input (Input Strength Hypothesis: O'Grady et al., 2011), transparency of the grammatical category (Transparency Hypothesis: O'Grady et al., 2011), and indirect influence from the grammatical categories of the majority language (Alternation Hypothesis: Jansen et al., 1981) influence the heritage grammar (see Aalberse et al., 2019, pp. 149-158 for a complete overview).

Besides describing the aspects of Paraná Dutch that are susceptible to change, and analysing if these changes in the HL are due to interference from the majority language Portuguese, or due to internal development of the HL, this thesis describes retained features of Dutch dialects and regional languages. As the members of the Paraná communities have ancestors from areas in the Netherlands where different dialects of Dutch and of the regional languages are spoken[11], which may lead to loss of variation in the HL due to the shift from the different varieties of the HL towards one standard. This homogenization has been observed in several heritage communities, such as in Texas German (Boas, 2008)[12] or Tunisian Italian (Orfano, 2014) where new koiné varieties emerged, and in Iowa Dutch (Smits, 2011) where Standard Dutch has replaced the dialects originally spoken by the migrant generation.

With the loss of dialectal variation in HLs, important information for historical linguistics may be lost. There are heritage communities which are the only locations where specific dialects survive, such as East Pomeranian which used to be spoken in what is now Northern Poland but is now only spoken in migrant communities in for instance Brazil. Other heritage communities may provide information about older stages of the dialect situation in the home country, as they may retain dialectal features lost in the home region. For instance, Daan (1987) shows that the Dutch of HSs in the United States

time of the fieldwork (November 2018 until January 2019), there were weekly Dutch evening services in Arapoti, and monthly Dutch evening services in Castrolanda and Carambeí.

[10] Wijnen (2001) estimates the ethnically Dutch population of the three communities in Paraná at 2000 individuals in the year 1999. Note that not all of these Dutch descendants speak Dutch.

[11] Hulsman (2012) reports that many Dutch migrants to Castrolanda are from Drenthe and Overijssel, while Arapoti is made up of Dutch from Drenthe and Groningen, and the first Dutch migrants in Carambeí came from 's-Gravendeel in South Holland.

[12] Boas (2008) argues the koinéisation of Texas German is in progress, but not complete.

may reveal information about the historical position of isoglosses in the Veluwe region of the Netherlands (p. 118-119)[13].

2.3 Dutch as a Heritage Language

This section provides an overview of previous research on Dutch as a HL around the world. Most of the studies have focused on Dutch in Anglophone countries, probably because Canada, Australia, the United States, New Zealand and to a lesser extent South Africa (in that order) were the most popular destinations of post-WWII Dutch emigrants (Stapelbroek, 2016). Research on Dutch HSs in other, non-Anglophone countries make up a minority of the studies. Of special interest for this thesis are of course previous studies on Dutch HSs in Brazil, which will be treated in the final part of this section.

An important work in the subfield of Dutch heritage linguistics is the ninth volume of *Studies in Multilingualism*, edited by Klatter-Folmer & Kroon (1997), called *Dutch Overseas*, in which studies on Dutch HSs in different parts of the world were bundled for the first and only time so far. The studies in the edition have been included in the literature discussion in this section.

As not all studies on Dutch HSs bear the same relevance or importance to this study, some will only briefly be mentioned, while studies on (morphosyntactic) divergences or maintenance of dialectal features will be discussed and summarized in more detail. Table 1 at the end of the paragraph provides an overview of these studies, their methods and their findings.

2.3.1 Anglophone countries

There were already early commentaries on the Dutch of contemporary HSs in the late 19th century (e.g. Dosker (1880) and Van den Bussche (1881) on Dutch spoken in the United States). However, modern linguistic analyses and sociolinguistic studies of the Dutch heritage varieties in the United States probably started with Daan (1969*, 1971*, 1987)[14] who collected 75 hours of spoken data from 285 Dutch HSs in 1966. Her main interest was attesting features of older stages of the Dutch and the regional languages' dialects, and interference of the majority language English on the HL, but she also wrote about language maintenance and the sociolinguistic factors facilitating maintenance.

Smits and Van Marle continued to work with Daan's data from 1966, and also collected new naturalistic and experimental data in the American Midwest. They studied different features of the HL, such as variation in nominal, adjectival and verbal inflection (Smits, 1993*, 1996, 2001*; Van Marle, 1995; Van Marle & Smits, 1989*, 1993, 1995), the persistence of dialect features (Smits, 2011; Van Marle & Smits, 2011), the shift to Standard Dutch (Van Marle, 2014*), and norm awareness (Smits & Van Marle, 2015). An overview of general developmental trends (Van Marle & Smits, 1996) and descriptions of the Dutch HL in particular US states (Van Marle, 2005* for Michigan, 2012* for Wisconsin) have also been provided.

The first study of Dutch in Australia by Clyne (1977) appeared about three decades after the first main migration wave to Australia. Although language maintenance was briefly mentioned, the focus of the study was on describing language variation and change in the HL, for which 200 HSs were recorded. Later research included comparisons between Dutch and German HSs in Australia with respect to different phenomena, such as gender assignment in code-switching and morphosyntactic variation (Clyne, 1985, 1991), a longitudinal study of HL attrition (De Bot & Clyne, 1994), a study on language maintenance and shift (Clyne & Pauwels, 1997) and a general description of Dutch as a HL in Australia (Clyne & Pauwels, 2013). Pauwels mainly studied sociolinguistic phenomena of Dutch HSs with a focus

[13] Daan's conclusion is, however, contested by Van Marle & Smits (2011).

[14] Some sources were, partly due to the current health crisis, not available. However, for the sake of completeness of this overview of studies on Dutch as a HL, these unavailable sources have been included and are indicated with an asterisk (*).

on speakers of the Limburgish dialect in Australia. Topics included reading habits (Pauwels, 1981*), language maintenance and shift (Pauwels, 1985a*, 1985b, 1986a*, 1986b, 1988), language attitudes (Pauwels, 1991) and status and function change of Dutch (Pauwels, 1992). Experimental data has been gathered among Dutch HSs in Australia by Ammerlaan (1995*, 1996, 1997) to study attrition and loss in the lexical domain. Finally, Bennett (1992*, 1997) has studied language maintenance and attitudes in second generation HSs.

Although Canada was the most popular migration destination for the Dutch after the Second World War, relatively few studies on their HL have been conducted there. Vermeer (1991, 1997) studied language acquisition and Dutch HL education in Ottawa, while De Vries & De Vries (1997) compare Dutch language maintenance to that of other immigrant groups in Canada. Keijzer (2007, 2010) compared the morphosyntax of Dutch HSs in Canada to that of adults and young adolescents in the Netherlands in her study of language attrition.

Research on Dutch HSs in New Zealand started with (Klatter-)Folmer, who studied language shift and loss among Dutch New Zealanders by conducting sociolinguistic interviews, two language proficiency experiments, and by analysing a corpus of letters written by HSs (Folmer, 1991, 1992*; Klatter-Folmer, 1997). Hulsen (1997) gathered spontaneous speech to study lexical variation and morphosyntactic divergences from NLD. For her research on the relationship between language shift and loss and language processing, she conducted experimental tasks to study lexical attrition (Hulsen, 2000; Hulsen et al., 2002, 1999). Crezee studied language maintenance through sociolinguistic interviews (2012), besides eliciting free speech to describe L2 attrition (2008). Holmes et al. (1993) and Roberts (1999, 2005) compared different heritage communities in New Zealand to the Dutch HSs in terms of language maintenance.

Finally, Mayr et al. (2012) studied phonetic L1 attrition in the speech of a Dutch woman who migrated to the United Kingdom, while her monozygotic twin sister remained in the Netherlands.

2.3.2 Other countries

South Africa presents a special case, as Dutch migrants were absorbed in either Anglophone or Afrikaans-speaking populations. Because of the close linguistic relationship between the Dutch and Afrikaans, the Dutch HL of post-WWII migrants shows a lot of interference from the latter. Raidt (1997, 1998) studies this interference, compares it to 18th century Cape Dutch, and describes language maintenance and shift among Dutch HSs in South Africa.

Few studies have been conducted on Dutch HSs in non-Anglophone countries. Studies on Dutch in Indonesia have been conducted by Giesbers, focusing on code-switching (Giesbers, 1995a, 1995b) and language variation and attrition (Giesbers, 1997). For the latter study, a recording was made of a Dutch man who moved to Indonesia at the age of 13 and has lived for decades in an environment where Indonesian, Javanese and Malang Chinese are spoken. Attrition of HL vocabulary among Dutch HSs in Israel has been studied by Soesman (1993*, 1997). Finally, De Bot et al. (1991, 1997) studied L1 attrition among Dutch migrants in France with two proficiency tests and a grammaticality judgement task.

2.3.3 Brazil

The first linguistic research on Dutch HSs in Brazil (Verburg, 1980) focuses on the acquisition of a phonological feature of the majority language, namely the distinction between Portuguese /ɾ/ and /ʁ/, in Castrolanda. The study also mentions some characteristics of the Dutch spoken there, such as code-switching and the use of Dutch dialects. Fraga (2008, 2009) extended the research of the HSs' pronunciation of Portuguese rhotics to Carambeí, and compared the results to participants' language use, attitudes and linguistic beliefs. Further linguistic research into Dutch HSs in Paraná was conducted

by Greidanus Romaneli (forthc.), who uses a multimethodological approach to study grammatical gender assignment in Dutch-Portuguese code-switched nominal constructions by bilinguals from the three Paraná communities.

Dutch as a HL in Holambra I was investigated by Schoenmakers-Klein Gunnewiek (1997), who created a corpus of letters written by two first generation HSs, and analysed their divergences from Dutch as spoken in the Netherlands, with a focus on the verbal domain. Many of the variations (30% and 54% respectively) were due to interference from Portuguese, for example in auxiliaries, fixed prepositions, and transitivity of the verb. Most of the remaining cases were variations from the Dutch dialects, verbal endings that did not match the subject, and sentence planning errors. Codina Bobia (2017, 2019) ran acceptability judgement tasks about bare singular nouns, i.e. singular nouns without an article, in the same community, and compared them to monolingual Portuguese and Dutch speakers. The Dutch HSs accepted the bare singular nouns in the same way the Brazilian control group did, whereas the Dutch control group rejected them.

The sociolinguistic situation and language vitality of Brazilian Zeeuws in Espírito Santo was studied by Schaffel Bremenkamp (2010), while linguistic variation in this heritage variety was described by Schaffel Bremenkamp et al. (2017). With regards to morphosyntax, divergences were found in relative pronouns, complementizers and diminutives due to interference from Pomeranian, do-constructions were developed due to internal and external influences, and objects were dropped due to interference from Portuguese.

Non-academic sources written by Dutch-Brazilian community members have been explored for this study, in search of word lists or other linguistic descriptions. A word list for Dutch as spoken in Carambeí can be found in De Geus (n.d.), part of which has been published in Guimarães (2011). No other word lists or descriptions of grammatical features of the Dutch heritage varieties in Brazil have been encountered.

Study	Location	Method	Findings (morphosyntax)
Daan, 1987	United States	Corpus of conversational speech recorded in 1966, 7 (of the 285) participants.	0-8 interferences per participant (mean = 3.7), 0-0.29% of morphosyntactic constructions showed interference (mean = 0,16).
Smits, 1996; Van Marle, 1995; Van Marle & Smits, 1993; 1995	United States	Analysis of Daan's 1966 corpus + Van Marle's 1989 corpus of conversational speech, translation exercise, proficiency test. Focus on flectional morphology.	Similar types of variation in 1966 and 1989. Extent of variations has increased in 1989. First generation regularizes irregular plural nouns, later generations deregularize them. Adjective inflection was slightly disintegrating in 1966. In 1989, no gender distinctions were made so distinctions between inflected and uninflected adjectives were lost. *Verbal inflection*: reduction of person, number and tense distinctions
Smits, 2011; Van Marle & Smits, 2011	United States	Analysis of dialect features in Daan's 1966 corpus and Van Marle's 1989 corpus.	Dialect features did not survive.
Clyne, 1977	Australia	Corpus of speech of 200 informants consisting of a 15-minute interview, which included a picture description task and a story retelling task, recorded in 1971.	Extended use of plural ending *-s* and of the auxiliary *hebben*, variation in gender assignment of nouns, use of perfect for present, deletion of reflexive pronouns, generalization of the SVO pattern, bringing closer together of discontinuous auxiliary and main verb, interference from English in adverb placement.
De Bot & Clyne, 1994	Australia	42 fluent Dutch participants from Clyne's 1971 corpus were retested in 1987 to analyse attrition.	Apart from adverb placement which showed more interference from English in 1987, no notable L1 attrition was found.
Clyne & Pauwels, 2013	Australia	Analysis of Clyne's 1971 corpus and of 36 Dutch-German-English trilinguals in the late 1990s.	Findings on morphosyntax similar to Clyne (1977), but it is noted that there are differences in gender assignment between different Dutch communities in Australia.
Vermeer, 1991; 1997	Canada	Oral proficiency test, 15 children.	Regularisation of irregular plurals, participles and past tense forms.
Keijzer, 2007; 2010	Canada	Wug test and story retelling task, 45 first generation HSs, 35 Dutch children and 45 Dutch adults as a control group.	HSs showed attrition in the formation of plural nouns, agentive nouns, diminutives, past tense forms, participles, passive constructions, and in article and future tense auxiliary selection.
Folmer, 1991; Klatter-Folmer, 1997	New Zealand	Corpus of written letters of 8 participants, who also completed an interference correction task.	Written letters: variation in articles, word order and verbal inflection. First generation participants score better than those of later generations in the correction task.
Hulsen, 1997	New Zealand	Corpus of conversational speech, 32 participants.	Divergent gender assignment, comparative and superlative formation, generalization of SVO word order.
Raidt, 1997; 1998	South Africa	Corpus of 275 letters written by different Dutch HSs.	Variation in verb suffixes, regularization of irregular verbs, generalization of common gender, uninflected 1_{PL} possessives and adjectives, variation in plural formation of nouns, generalization of *hebben* as auxiliary.
Giesbers, 1997	Indonesia	Conversational speech, one participant, 55 minutes.	Drop of verbal suffix *-t/-d*, generalization of common gender, variation in demonym derivations, omission of plural suffix, subject-verb incongruence, omission of anaphoric elements.
De Bot et al., 1991, 1997	France	Editing task, Foreign Service Interview (FSI), grammaticality judgement task, 30 participants.	Only the FSI showed an effect of amount of contact and time since migration on attrition.
Schoenmakers-Klein Gunnewiek, 1997	Holambra, SP, Brazil	Corpus of 176 written letters by two HSs, focus on verbal domain.	Auxiliary *hebben* overgeneralized, *kennen* for SD *kunnen*, variation in fixed prepositions and prepositional prefixes, intransitive verbs used as transitive.
Codina Bobia, 2017; 2019	Holambra, SP, Brazil	Acceptability judgement task, 60 HSs, 30 speakers of Portuguese, 30 speakers of Dutch.	HSs and speakers of Portuguese accepted bare singular count nouns (72% and 78% resp.), while speakers of Dutch did not (96% unaccepted).
Schaffel Bremenkamp et al., 2017	Espírito Santo, Brazil	Conversational speech, 9 participants.	Interference from Pomeranian: variation in relative pronouns, do-support, complex complementizers, loss of diminutive. Interference from Portuguese: topic drop.

Table 1: *Overview of previous studies of Dutch HSs' morphosyntax*.

3 Methodology

3.1 Community selection and characteristics

As shown in the last section of the previous chapter, linguistic research had only been conducted in three of the six main Dutch communities in southern Brazil (Carambeí, Castrolanda, Holambra I), while no (socio-)linguistic descriptions were available for the other three (Arapoti, Holambra II, Não-Me-Toque). Comparative research between the communities was lacking altogether. Therefore, before leaving for fieldwork, two contacts who were born and raised in Dutch communities in Brazil – one in Holambra, the other in Arapoti – and moved to the Netherlands were consulted about the social and linguistic situation in the communities and advised on the selection of the communities in which the data collection would take place. As the focus of the research would be on attesting morphosyntactic variation in the HL, it was important that Dutch is widely spoken in the communities of choice. The network of Dutch communities in Brazil consists of six main communities and a number of secondary settlements. According to the informants, plenty of speakers of Dutch could be found in the main six communities, but HL maintenance in the main catholic Dutch communities (Holambra I, II and Não-Me-Toque) was thought to be less than the protestant ones (Arapoti, Carambeí and Castrolanda), where the HL had been transmitted to a larger share of the migrants' children and later generations. The protestant settlements are coincidentally located relatively close to each other in the state of Paraná, hence the choice for these three communities.

The three communities have many similarities and are in close contact, even though Arapoti is located about 100km north of Castrolanda and Carambeí. People have moved between the communities and community members of all generations have married or are in a relationship with members of different communities. They share the same religion, and even though the initial immigrants used to be members of different Protestant churches, they founded an intercommunity church, the *Igreja Evangélica Reformada* (IER), together. The IER offers Dutch evening services in all three communities, provided by Protestant clergymen from the Netherlands that live in the community for a few years. Besides that, the three communities are all marked by the same migration wave. Although Carambeí was founded in 1911, the main migration wave was in the years following the Second World War when Castrolanda (1951) and Arapoti (1960) were founded. The communities differ in various aspects, however, to which the remainder of this paragraph will be dedicated. The main differences are the spatial separation between them and Brazilian Portuguese-speaking residential nuclei, and education in the HL. The Dutch regions of origin of the migrants also differ per community, which will be treated in section 3.3.5.

Castrolanda consists of a core community where most of the Dutch descendants live and make up the majority of the population (see Appendix D1, within the yellow circle). The other Dutch descendants live on farms nearby. The community is located in the municipality of Castro, about 5km away from the city of Castro. In the small residential centre, there are schools, churches, hotels, banks, the farming cooperative and a cultural centre. Workers from the city of Castro commute to Castrolanda to work in

the factories of the farming cooperative. The cultural centre consists of a large windmill, housing a restaurant, museum, gift shop and a library with Dutch literature, and of a farmhouse in Dutch architectural style, housing a museum and an archive. The cultural centre attracts about ten thousand tourists from the wider region every year[15].

There are two private schools in the community, the *Escola Evangélica da Comunidade de Castrolanda* and the Dutch school *Escola Holandesa Prins Willem Alexander*, which are attended by most of the Dutch descendants in Castrolanda, and one public school, the *Escola Estadual do Campo de Castrolanda*, mostly attended by children that are not of Dutch descent. The *Escola Holandesa* complements the *Escola Evangélica*, with lessons about Dutch culture, language and history (Rickli, 2004). The *Escola Holandesa* and the *Escola Evangélica* are located next to each other, across the IER church of Castrolanda. The *Escola Estadual* is located on the other side of the town, near the Catholic church. The *Escola Holandesa* received funding from the Netherlands before budget cuts in 2014 and is evaluated by the Dutch Inspectorate of Education. In 2017, 62 students attended the *Escola Holandesa*, and the school offers six lessons of 45 minutes (4,5 hours) a week to each student (Inspectie van het Onderwijs, 2018).

Arapoti has a very small community centre with an IER church, the *Colégio Colônia Holandesa*, the *Museu do Imigrante Holandês* which also houses the Dutch library, and a few residential buildings. Most Dutch descendants live in farmhouses on the six hill ridges near the town (see Appendix D2). There is a small field of about 200 metres between the Dutch community centre and the city of Arapoti, where the farming cooperative is located and where some of the Dutch descendants live as well. Arapoti attracts considerably less tourists than Castrolanda and Carambeí. The *Museu do Imigrante Holandês* has limited opening hours, and two other museums curated by Dutch migrants located on the farms (*Casa dos Kok*, *Museu do Trator*) only open on request.

The primary education department of the *Colégio Colônia Holandesa* in Arapoti had 35 students in its elective Dutch classes in 2018, and offers them 5 to 7,5 hours of Dutch culture, language and history classes per week. Just like the *Escola Holandesa* in Castrolanda, the *Colégio Colônia Holandesa* received subsidies from the Dutch government and is evaluated by the Dutch Inspectorate of Education (Inspectie van het Onderwijs, 2015).

The Dutch descendants in Carambeí live throughout the town among non-Dutch speakers, but there is a concentration of them in one road, the Avenida dos Pioneiros (Appendix D3). This was the first road of the town where the Dutch immigrants settled. The IER church, the historical park (*Parque Histórico*) with replicas of the original settlement and of Dutch-style houses, the farming cooperative, and Dutch-style businesses such as a café (*Frederica's Koffiehuis*) and a hotel (*Hotel de Klomp*) are located at the Avenida dos Pioneiros. When Carambeí started to attract Brazilians that were not of Dutch descent, a town developed near the main road to the nearby city of Ponta Grossa and a section of the Avenida dos Pioneiros became part of the town. Farmers of Dutch descent generally live further away from the town than in the other two communities. Carambeí, in particular the Avenida dos Pioneiros, is a major attraction for tourists from the state of Paraná.

The *Escola Evangélica de Carambeí* and the language school *Idiom House* are located at the Avenida dos Pioneiros as well. Elective Dutch classes were offered at the *Escola Evangélica* until the year 2014, and outsourced to the *Idiom House* until 2017, when they were cancelled due lack of support from the parents' side. Since then, only adult students have followed Dutch courses at the *Idiom House*[16].

[15] Rafael Rabbers of the *Centro Cultural Castrolanda*, p.c.
[16] Maaike de Geus of the *Idiom House*, p.c.

3.2 Procedure

3.2.1 Participant selection and recruitment

The first days of the fieldwork in each community were used to understand the sociocultural context of the Dutch HSs there. In these days, the communities and their cultural attractions were explored, and meetings with key figures in the communities were arranged. These key figures were curators of local museums, teachers or active church members who knew all families in the community and had regular contact with many of them.

Most of the participants that were tested were found through these key figures. A method that proved very useful was to go through the member list in the church booklet with them, as most of the Dutch descendants are members of the previously mentioned IER churches present in all three communities. They provided information about each member's generation, in order to keep diversity and balance in the participant sample, and about their Dutch proficiency, as not all church members of Dutch descent speak Dutch as a HL. Other participants were found through people that had already participated, or by encountering them in town.

Potential participants that these key figures or previous participants referred me to were sent a WhatsApp message (in Dutch) with a short introduction of the researcher and an explanation of the procedure (a questionnaire and a recording). People that wanted to participate could choose if the interview would take place at their own house or at a public location in town. This would be done over a coffee while the researcher would bring typical Dutch sweets, to keep it as casual and informal as possible.

3.2.2 Interview protocols

As the Dutch of HSs in Paraná had not been described before, recordings of naturalistic speech were made to attest various morphosyntactic variations in language production. The researcher was present during the interviews, which were open-ended and non-structured to avoid that speakers used the so-called Interview Style, described by Feagin (2002) as a formal, self-conscious, less natural speaking style. Instead, the general questions expected in a more structured interview were saved for the questionnaire (see 3.2.4). Ideally, participants would be tested in pairs with a family member or friend, to create a more informal, comfortable atmosphere.

As explained by Hazen (2000), the researcher's identity affects access to data as well as the data itself. As the researcher is an L1 Dutch speaker who was born and raised in the Netherlands, it would have been difficult to elicit Portuguese or mixed speech while being present during the interview, as participants may try to accommodate by avoiding Portuguese. The researcher's presence could, on the other hand, ensure that the participants produced Dutch data, hence the choice to focus on variation in Dutch morphosyntax. Especially the less fluent, later generations of Dutch speakers needed this stimulation to speak Dutch instead of Portuguese, as they often were not used to speaking Dutch with their peers. Therefore, it was usually not mentioned that the researcher spoke more than basic level Portuguese before the interviews.

There are, of course, some limitations to the method of recording naturalistic speech. Evans (2010, Ch. 10) illustrates that even an infinitely large corpus does not contain all the combinations of a speaker's inner grammar, and explains that, "[…] speakers tend to have an inner grammar of what their language permits that is much richer than what they actually say. The trick for the linguist is to sense where these shadowy nodes of complexity are, and to probe them by targeted questioning that enriches the documentary record beyond what natural speech would yield" (p. 225). Thus, as the researcher was present during the interviews, notes were taken about interesting variations in the participants'

speech, so that the elicitation strategy could be altered to better attest and understand these phenomena.

The majority of the participants wanted to conduct the interview in their own home, often with one or more friends or family members. Other participants were tested at the school they (had) attended, at their workplace or at a coffee bar. These locations were ideal as participants were already used to them, which contributed to a less formal, comfortable atmosphere.

The participants were familiar with the location, whereas the researcher was the newcomer, which made elicitation easier as participants could, for instance, be asked about objects or photos in their home and could tell the story behind them. Examples of other conversation topics included family life, religious life, the history of the family and the Dutch communities in Brazil, daily activities of the informants such as work (often at the farm) or school, and trips to the Netherlands or other places. A topic that turned out to encourage great discussions was the perception of their own bicultural identity.

Assuming that the average person utters about 100-200 words per minute[17], recordings were on average about 10-15 minutes per person, which would be enough to elicit very frequent morphosyntactic structures such as gender in determiners or number in nouns, as well as some data on less common structures such as word order in subordinate clauses or gender in relative pronouns.

3.2.3 Equipment

One of the informants in the Netherlands warned that people in the Dutch communities in Brazil could be hesitant to be recorded, especially if the interviews would be videotaped. Besides that, observation effects needed to be minimized in order to "find out the way people talk when they are not systematically observed" (Labov, 1972, p. 209). Possible reluctance about being recorded and the attempt to minimize the effects of the Observer's Paradox led to the decision to only make audio recordings with small, unobtrusive recorders.

Two mobile phone-sized linear PCM recorders (Tascam DR-05) were used to record the corpus data. These could be placed out of the participants' sight, for instance on a cupboard nearby or at the end of the table where the participants were seated, in the hope that they would not be reminded to the fact that they were being recorded during the conversation, which would lead to data closer to unobserved speech.

3.2.4 Consent and questionnaires

Before the interview, participants filled in a consent form (Appendix A) and a questionnaire (Appendix B) in either Dutch or Portuguese. Participants could choose the language of their preference. In this section, the reasoning behind the contents of the consent form as well as the questions in the questionnaire will be discussed.

Signing the consent form, participants gave their copyright and explicit permission to use the information from the questionnaires and the recording. It was made clear in several bullet points that all the information would be anonymized. An extra emphasis was put on anonymization of the data to take away any doubts or reluctance participants had about being recorded. At the end of the form, after the signature, participants had the option to write down their e-mail address in case they wanted to be contacted about further research.

[17] Coekaerts & Wuyts (2014) find an average speech rate of 131-188 words per minute for 134 Dutch news anchors between 1993 and 2013, but mention this is probably higher for conversational speech due to reduction of syllables.

The questionnaire was kept as short as possible, on two A4 pages, so that participants would not feel overwhelmed or swamped in paperwork. It starts off with general questions about the participant's gender, age, place of birth and profession. The main aim of the other questions in the questionnaire is to get an overview of the language input the participant received and of their language usage.

Question 5 informs about the places where the participant has lived and the length of their stay in different places. Having lived in places with different dominant languages may affect the participant's speech, as the participant's language exposure and usage is different. The length of their stay as well as the participant's age at that time may influence the extent of this effect. Another question providing information about exposure and usage was question 7 about the frequency of the participant's visits to the Netherlands, which is a factor in NLD input and interaction with NLD speakers. Question 12 and 13 inform about the participant's usage of Dutch with family members and in non-family situations, whereas question 14 consists of several sub questions about the participant's exposure to Dutch media, such as books, television and social media. Question 10 informs about the participant's brothers and sisters, making a specific distinction between older and younger brothers and sisters. Bridges & Hoff's (2014) study of bilingual children in the US suggests that there is a difference in usage, exposure and therefore acquisition of the HL between younger and older siblings, with older siblings using the HL more often and showing less L1 attrition than younger siblings. This difference may have an effect on bilingual's speech at a later age.

The only difference between questionnaires for the first generation and the later generations is question 6 (Appendix B3 and B4). For first generation participants, this question informs with whom they migrated to Brazil, whereas for later generation participants, it asks which ancestors migrated to Brazil from the Netherlands, in which year, and from which location in the Netherlands. On the basis of this question, participants can be grouped according to generation, and dialect features in their speech may be explained. Another question aimed at explaining possible dialect features is question 11, which asks if the participant speaks a regional language or dialect from the Netherlands. The line between regional language and dialect is often blurred in the Netherlands, depending on their status and stigmas, with West Frisian usually being considered a language while variants of Low Saxon are considered to be dialects of Dutch by some, hence the decision to keep this question as open-ended as possible.

Questions 8 and 9 inform about the participant's education. According to Köpke & Schmid (2004), the level of education is likely to be an important factor in language attrition, summarizing several case studies supporting this vision. This factor has, however, been neglected in language attrition research, possibly because of problems with the definition and methodology. In an attempt to overcome definition problems, and because participants had been enrolled in vastly different education systems (i.e. the Dutch and Brazilian systems), question 8 asks about the level of education in very broad categories. A more easily testable effect on language acquisition and attrition is that of education in the HL. Bylund & Díaz (2012), for instance, show that weekly HL classes reduce, at least on the short term, the effect of language attrition among Spanish HSs in Sweden. As the primary schools in the communities used Dutch as a language of instruction and continue to use it as such in elective courses, question 9 asks about the languages of the lessons at different stages of the participant's education instead of asking about Dutch as a subject.

3.3 Sample characteristics

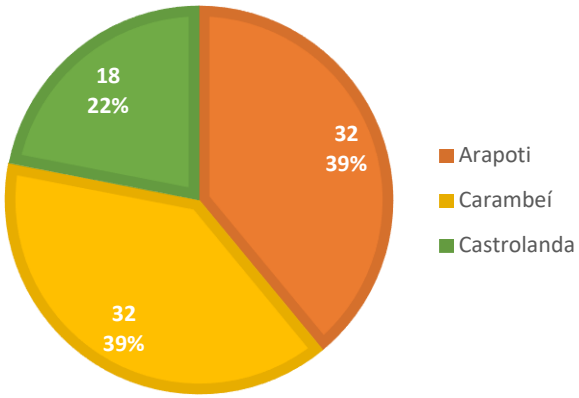
As the objective of the research was to describe language variation in general, and not to, for instance, study the effect of one extralinguistic feature by comparing two groups of speakers with only one different variable, the goal was to create a diverse sample with participants of different ages, generations, and educational backgrounds. A diverse sample, however, creates a lot of variables.

Therefore, a large sample size was necessary. A total of 32 recordings were made, with 82 participants being recorded. The total length of the recordings is 22 hours, 3 minutes and 16 seconds. In Appendix C, the recorded participants, date, and length of each recording can be found. The following sections will discuss different extralinguistic characteristics of the participants of the sample. The anonymized data is publicly available at Boers (2020).

3.3.1 Location

As can be seen in Figure 2, more people were tested in Arapoti and Carambeí than in Castrolanda. This is not due to the number of speakers in each community, but probably because of the date of testing. Testing in Arapoti happened mostly before the summer holidays in Brazil, which are in December and January. Testing in Castrolanda began when many people, especially those of later generations, left for holidays. In Carambeí, more people were available for testing because students living in Curitiba or other cities returned to their family for the holidays in January.

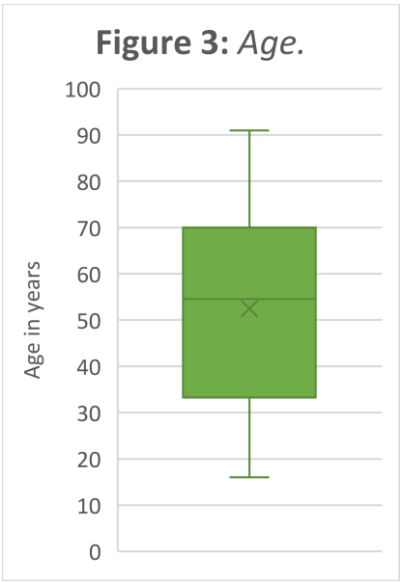
Figure 2: *Testing location*



3.3.2 Age and generation

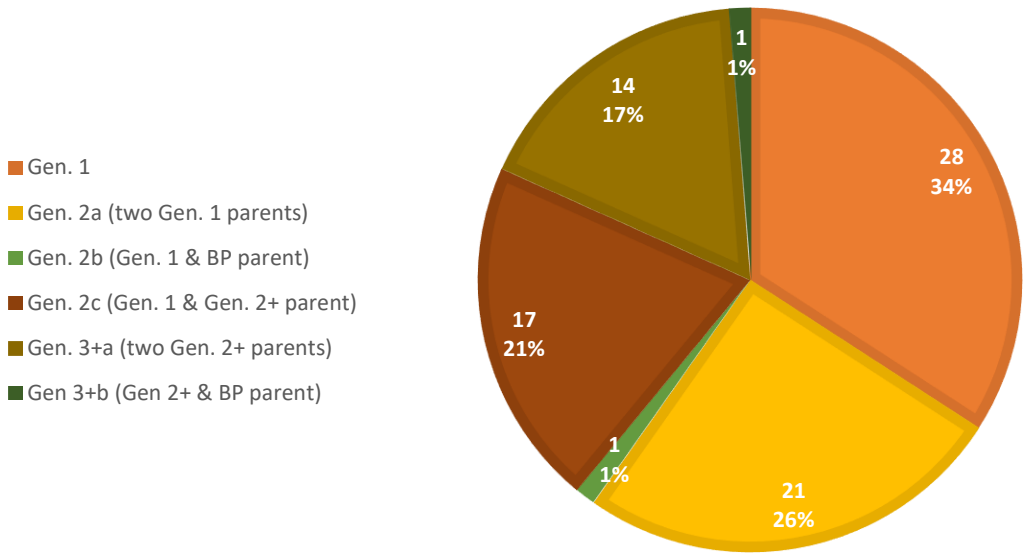
The youngest speaker that participated in the research was 16 years old, while the oldest was 91 years old. The mean age of the participants was 52.5 years. Figure 3 shows the distribution of age across the sample.

Figure 3: *Age.*



Participants of the same age are not necessarily of the same generation. Figure 4 shows that the first generation (Gen. 1) makes up about one third of the sample. The second generation is divided into three groups: (a) those that have two parents of the first generation, (b) those that have a first generation parent and a Brazilian Portuguese-speaking parent that does not speak Dutch (BP), and (c) those that have one parent of the first generation and one of a later generation (Gen. 2+). The third generation and later (Gen. 3+) is divided into two groups: (a) those that have two parents of Dutch descent of the second generation or later, and (b) those that have one parent of the second generation or later and one Brazilian Portuguese-speaking parent. Only two participants in the sample are from a so-called 'mixed marriage', where one parent is of Dutch descent and one is not.

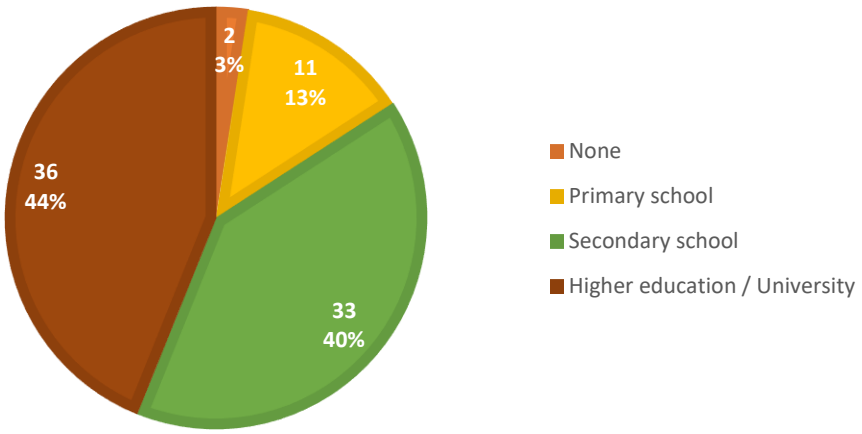
Figure 4: *Generation.*



3.3.3 Education

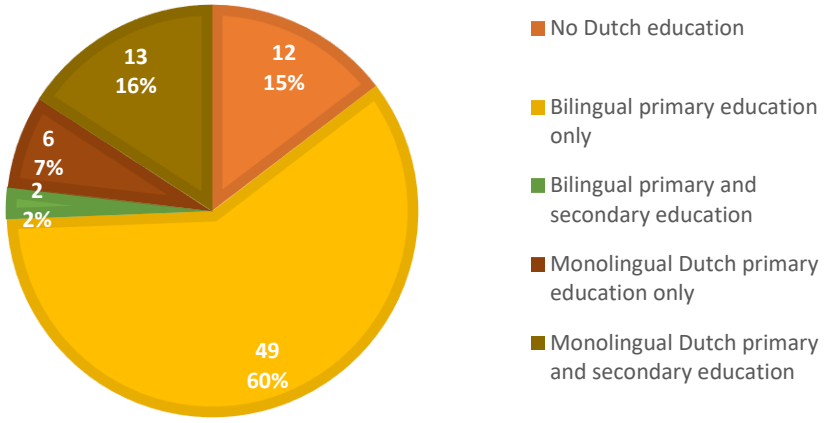
As can be seen in Figure 5, very few participants had no diplomas at all. All participants that were younger than 60 years old had at least finished secondary school, or were close to finishing it. Almost half of the participants had finished university or other higher education programmes.

Figure 5: *Highest diploma.*



Dutch language education was available for most participants, and only a small percentage did not have any education in Dutch at all, as shown by Figure 6. Some of the participants that followed Dutch education chose Dutch as an elective in one of the schools in the communities, while others (often of the older generation) did not have a choice and could only follow bilingual education, or were educated in the Netherlands and therefore followed monolingual Dutch education. Most people did not have education in Dutch in secondary school.

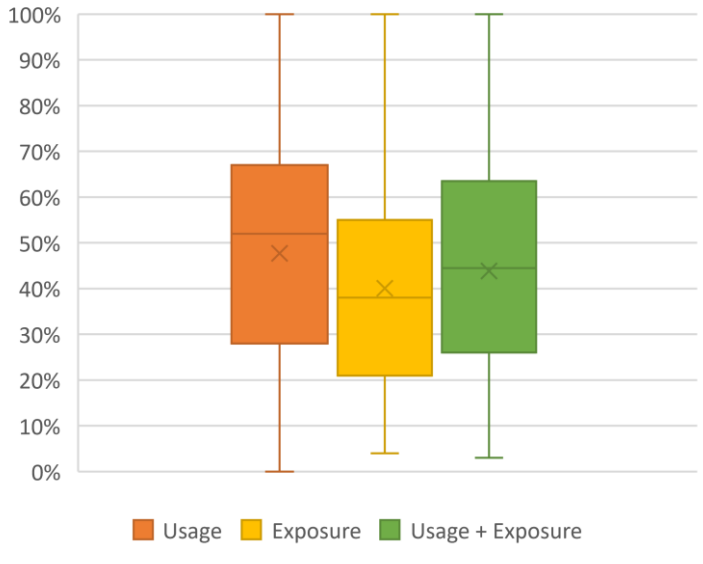
Figure 6: *Dutch language education.*



3.3.4 Language use and exposure

Figure 7 provides an overview of participants' self-reported usage of (question 12 and 13 of the questionnaire) and exposure to (question 14) their HL. The participants were asked about their language usage in percentages with their (i) mother, (ii) father, (iii) partner, (iv) grandparents, (v) siblings, (vi) children, and (vii) grandchildren. For language exposure, participants could choose the frequency on a five-step scale (always, often, sometimes, rarely, never) with which they (i) read Dutch newspapers, books or magazines, (ii) read online news in Dutch, (iii) listened to Dutch radio or watched Dutch television, (iv) listened to Dutch music, (v) used Dutch on social media, and (vi) called to the Netherlands.

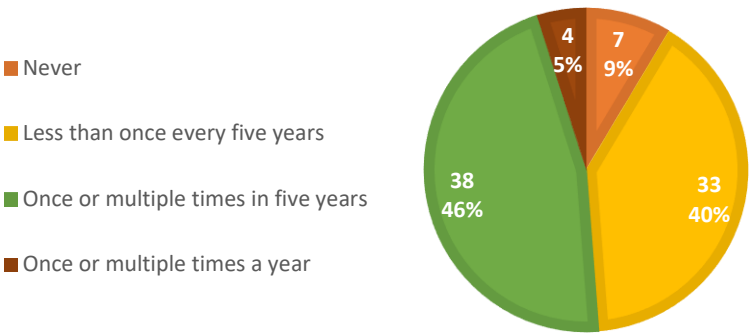
Figure 7: *Usage of and exposure to Dutch.*



To get a clearer overview of participants' language usage and to make the data more presentable and better compare them to their linguistic data, the mean was taken of the percentages of their self-reported usage of Dutch with different persons and in different situations. The usage of Dutch with the parents weighed double, as this likely reflects usage in the childhood home, which is of large influence on HL acquisition (mean usage = 48%). Likewise, the mean of each participant's self-reported exposure to different Dutch media has been taken (mean exposure = 40%; combined mean of usage and exposure = 44%).

Another factor indicating usage and exposure to Dutch is the frequency of visits to the Netherlands (Figure 8). Only few had never visited the Netherlands in their life. The group that visited the Netherlands every year was also small.

Figure 8: *Visits to the Netherlands.*



Participants of the first generation have spent varying amounts of years in the Netherlands. Two groups can be distinguished in the first generation: those that moved with their parents during the post-WWII migration wave (*n* = 19; aged 4-18), and those that moved to the communities on their own, often for marriage (*n* = 9; aged 21-37). Participants of the second generation or later that have lived in the Netherlands (*n* = 8) have spent between one and five years there. Most of the participants have never lived in the Netherlands (*n* = 46).

An indication of a reduced input of Dutch is having lived outside of the communities in a non-Dutch speaking area. Twenty four participants, mostly those of the second and later generations, have lived in other Portuguese-speaking Brazilian cities (and one in Portuguese-speaking Angola). Most of them stayed one to seven years (*n* = 22), but two stayed there for 37 and 44 years respectively. Participants that have lived in areas where neither Portuguese nor Dutch was spoken (*n* = 9) only stayed for one or two years. Eight of them stayed in Anglophone countries (Australia, Canada, United States) and one of them in Spanish-speaking Uruguay.

3.3.5 Dialects, regional languages and region of origin

The migrants that came to Arapoti, Carambeí and Castrolanda came from different parts of the Netherlands and brought with them their own varieties of not only the Dutch language, but of the Low Saxon and Frisian languages spoken in the Netherlands as well. These languages are related to Dutch and consist of many different dialects, which are influenced by Dutch to different extents.

As can been seen in Appendices E1 and F1, the most important regions of origin are (i) the province of South-Holland and neighbouring Utrecht, and (ii) Southern Drenthe and Northern Overijssel. Other regions of importance are (iii) Western Groningen and (iv) the province of Frisia. In South-Holland and Utrecht, varieties close to Standard Dutch, the national language, are spoken, whereas in Frisia, the

regional language Frisian is spoken, and in Groningen, Drenthe and Overijssel, different dialects of the regional language Low Saxon are spoken.

The rest of the figures in Appendices E and F show the differences in origin regions of the three communities. Participants from Castrolanda have their origins almost exclusively in Northern Overijssel and Southern Drenthe (E4 and F4), whereas Arapoti (E2 and F2) and Carambeí (E3 and F3) show variation in origin region, although the origins of participants in Carambeí are more focused in South-Holland.

Table 2 shows that more than half of the first generation participants reported speaking a dialect or regional language. Almost all of the reported varieties (with the exception of Zeeuws) are from the north-eastern part of the Netherlands. Note that three participants of the second generation considered their local Brazilian Dutch variety (Castrolandees, Carambiaans) a separate dialect.

	Total	*Speaks dialect/ regional language*	*Dialects/regional languages listed (number of participants)*
Generation 1	28	16	Twents (3), Frisian (3), Gronings (3), Drents (3), Zeeuws (1), Overijssels (1), plat (1), no name (1).
Generation 2	39	6	Drents (3), Castrolandees (2), Carambiaans (1)
Generation 3+	15	0	-

Table 2: *Participants' self-reported ability to speak a Dutch dialect or regional language.*

Although a total of 22 speakers reported speaking a non-standard variety, only six participants of the first generation, and none of the other generations, reported using a dialect or regional language when asked about language usage with different family members and in other situations. Two of them reported speaking Frisian with almost all of their family members. The other four spoke Frisian, Gronings or *plat*[18] only with their parents, and in none of the other situations.

3.4 Data analysis

To describe language change, the speech of the HSs must be compared to morphosyntactic characteristics of other speech, which ideally is the speech of the first generation at the time of migration. As recordings of this speech are not available, an obvious alternative object of comparison would be Standard Dutch. Standard Dutch, however, does not reflect the actual speech of the migrants at the time of migration. Most HSs of this study come from or have their origins in rural areas where different dialects of Dutch and regional languages are spoken. Therefore, in order to describe the grammatical divergences in Paraná Dutch, the speech of HSs will be compared with colloquial Dutch as spoken in the Netherlands (NLD), keeping in mind that NLD may also have undergone changes and that participants have different regions of origin. In order to describe the retention of dialect features, their speech is compared to Standard Dutch, which is the language that is (or was) taught at the community schools and is available through print and broadcast media.

All morphosyntactic divergences from NLD have been transcribed, grouped by grammatical feature and made available through Boers (2020). Each divergence that was used by at least ten participants has been further coded for certain variables to determine the linguistic environment in which the divergence occurs. This number was chosen as a way to demarcate the study and to make sure that the most widespread divergences from NLD were described. The linguistic variables that were coded

[18] An informal way to refer to a local variety, without specifying its location.

were different for each grammatical feature. The extralinguistic data of all participants that uttered a certain divergence were then compared to find out if there were any similarities in their profiles that set them apart from the rest of the sample. Similarities in variables such as age, generation, HL exposure and usage may indicate that these extralinguistic features have an effect on the participants' speech. Morphosyntactic variations that originate in Dutch dialects or regional languages have been transcribed, grouped similarly, but have only been further coded, compared and described if not only HSs of the first generation but also of the second generation or later used them.

4 Language Endangerment

4.1 Endangerment of Paraná Dutch

The original aim of the collection of extralinguistic data was to understand the differences in the use of morphosyntactic variations in the HL, i.e. divergences from NLD and maintenance of dialectal features, between sociolinguistic groups in the three communities. However, during the fieldwork, it became clear that Paraná Dutch was losing ground to Portuguese in different domains, and that not all speakers used the HL with their children, indicating potential endangerment of the heritage variant. As no studies on the vitality of Dutch in southern Brazil have been conducted before, it was deemed important to use the extralinguistic data gathered for this study to describe the vitality of this heritage variant of Dutch. Before moving on to the results and discussion of morphosyntactic variations, this chapter assesses the vitality of Paraná Dutch, which also serves to provide more context to the language situation in which the data was collected.

Because of the presence of Standard Dutch in education and media such as television, books and the Internet, speakers of Paraná Dutch are to a certain extent aware of the differences between their local variety and the standard language, and can accommodate their speech for Dutch speakers from the Netherlands. However, few of them consider their variety to be a different dialect, as became clear from the results of the questionnaire that was taken for this research (see 3.3.5). New vocabulary, grammatical divergences and productive patterns have risen within the variety of the heritage communities of Paraná (see Chapter 5). Meanwhile, since the migration, Dutch in the Netherlands has also undergone different innovations[19]. Even though Standard Dutch does exert some influence on Paraná Dutch through education and media, the two varieties have drifted apart, as will become clear in Chapter 5.

The number of speakers of Paraná Dutch is, however, small, and the influence of the national language Portuguese has grown over the recent decades of socio-cultural integration into the Brazilian society. Whereas the original migrants intended to create closed Dutch farming settlements in Brazil, the younger generations have the opportunity to study and work in Brazilian cities, and often marry non-Dutch descendants as endogamy is not the norm anymore (Stapelbroek, 2016). This integration may pose a threat to the survival of the variety if no measures are taken. This section discusses the vitality of Paraná Dutch using two tools for language endangerment assessment (the UNESCO and EGIDS models) with data provided by the literature or answers to the background questionnaire taken for the current study. Further research on language maintenance in the communities, including a speaker count and a complete sociolinguistic study, must be done to provide a clearer image of the gravity of the situation.

[19] For a study of innovations in the pronunciation of Standard Dutch in the 20th century, see Van de Velde (1996), who also mentions studies on lexical, morphological and syntactic change in section 1.1.4. For a chronological dictionary of Dutch, indicating lexical innovations since the time of migration, see Van der Sijs (2001).

4.2 The UNESCO model

The UNESCO model for language endangerment assessment (Brenzinger et al., 2003) depends on eight factors, and there is a ninth factor to assess the urgency for documentation. None of these factors can be used on their own to assess the vitality or endangerment of a language. Instead, they should be taken together to describe the sociolinguistic situation of a language. For each factor (except for the second), there is a scale of six different grades of endangerment (0 to 5), with grade 0 indicating that the factor contributes towards endangerment and grade 5 indicating that the factor contributes towards vitality. The following sections will discuss each of the factors and the degree of endangerment that this factor poses. Table 3 provides an overview of the language endangerment assessment according to the factors identified by the UNESCO model.

	Factor	**Grade[20]**	**Degree of endangerment**
Major evaluative factors	1. Intergenerational language transmission	3	Definitively endangered
	2. Absolute number of speakers		<2000 (in 1999)
	3. Proportion of speakers within the total population	3 / 2	Definitively / severely endangered
	4. Trends in existing language domains	3	Dwindling domains
	5. Response to new domains and media	1	Minimal
	6. Materials for language education and literacy	5	[Available]
Language attitudes and policies	7. Governmental and institutional language attitudes and policies	3	Passive assimilation
	8. Community members' attitudes toward their own language	2	[Some support]
Urgency for documentation	9. Amount and quality of documentation	2	Fragmentary

Table 3: *Assessment of the endangerment of Paraná Dutch, according to the UNESCO model (Brenzinger et al., 2003).*

As stated before, there is a decline in the intergenerational transmission of Paraná Dutch (Factor 1). Nowadays, the language is spoken by most of the parental generation, but many do not speak it with their children. Although 35 of the 70 children who are of Dutch descent in the primary school of the Colégio Colônia Holandesa in Arapoti, the most recent settlement, take Dutch classes, many of them do not speak the language with their parents (November 2018)[21], which indicates this decline in transmission. The participants' use of Dutch with their children in Table 4 (next page) clearly shows a decline between the first and second generation. While most of the first-generation participants use Dutch with their children more than half the time, most of the later generations never use Dutch with their children.

The absolute number of speakers of Paraná Dutch (Factor 2) is not clear. The last Brazilian census that inquired about language was that of 1950, before migrants came to Castrolanda and Arapoti. In the census, numbers for Dutch are not given as it is gathered under 'other languages' (IBGE, 1950). Wijnen (2001) counts 430 families with 2000 individuals of Dutch descent in the three communities in the year

[20] Grades are from 0 to 5, with 0 being least likely to be vital and 5 being most likely to be vital.
[21] Koosje Bronkhorst of the Colégio Colônia Holandesa, p.c.

1999, but it is not clear if all these individuals spoke Dutch. In comparison, the town of Carambeí had almost 15,000 inhabitants in the year 2000, while Arapoti had almost 24,000 inhabitants (IBGE, 2000). No exact numbers are known for Castrolanda, as it is part of the municipality of Castro. The Dutch and their descendants seem to make up the majority of the population in Castrolanda, unlike the other two communities. Therefore, as for Factor 3, grade 3 (a majority speaks the language, definitely endangered) applies to Castrolanda, and grade 2 (a minority speaks the language, severely endangered) applies to Carambeí and Arapoti.

Use of Dutch with children (number of participants)					
	Never	**Less than 50%**	**50% or more**	**Always**	**Total**
Generation 1	2	5	18	2	27
Generation 2	14	8	1	2	25
Generation 3+	4	3	1	0	8
Total	20	16	20	4	60

Table 4: *Participants' use of Dutch with their children.*

As for existing domains (Factor 4), Dutch is losing ground to the majority language. Education in Dutch and Portuguese used to be more or less balanced, at least in primary education. Over time, however, the main language of education has become Portuguese, while Dutch became an elective course in Castrolanda and Arapoti (Inspectie van het Onderwijs, 2015, 2018) and has fully disappeared from the formal educational domain in Carambeí. The morning services in the IER churches used to be in Dutch, but the Dutch service has been moved to the less popular evening slot in the three communities. Although Dutch is used in more domains than just the home domain, Portuguese has started to permeate in all domains, including the home domain.

Regarding new domains (Factor 5), use of Dutch by the 82 participants of this research is minimal. Usage of Dutch in new domains inquired about in the questionnaire are online news and social media, see Table 5. In both domains, Dutch is on average used only seldom.

	Using Dutch in social media	*Reading online news in Dutch*
Never	27 participants	30
Seldom	19	18
Sometimes	23	23
Often	11	9
Always	2	2

Table 5: *Participants' self-reported usage of Dutch in new domains.*

Educational materials (Factor 6) in Standard Dutch are available. Dutch classes are offered in primary schools in Arapoti (Colégio Colônia Holandesa) and Castrolanda (Escola Holandesa Prins Willem Alexander), as well as private language education through a language school (Idiom House) in all three communities. The communities have small libraries with limited opening hours where Dutch literature can be borrowed.

Unlike in some Italian and German migrant communities in the South of Brazil, the HL is not an official language of the municipalities where the communities are located (Factor 7). No explicit policy for the maintenance of Paraná Dutch exists, and Portuguese prevails in the public domain.

During the fieldwork for this research, I noticed indifference about the survival of Dutch in Brazil among many community members (Factor 8). Other languages such as Portuguese and English were deemed more important and useful, especially to the younger generation. In response to that, fellow student Miriam Greidanus Romaneli, who conducted linguistic research in the same communities, and I

organized bilingual discussion meetings open to anyone in the three communities in order to create an inclusive and informed environment to discuss the maintenance of their HL. During these discussions, we hope to have communicated the importance of maintaining this linguistic heritage by showing the positive sides of bilingualism and speaking a HL, reducing the negative connotations that bilingualism still carries, and handing tools for a bilingual upbringing.

The documentation of Paraná Dutch, and in general of all Dutch heritage variants around the globe, is fragmentary (Factor 9). Although the communities have produced literature in Dutch, this is mostly in Portuguese or Standard Dutch and not in the local variety. Videos and documentaries about the communities exist, but these are meant for Dutch or Brazilian audiences. More about previous linguistic research on Paraná Dutch can be found in section 2.3.3 of this work.

4.3 The EGIDS model

Whereas the UNESCO model evaluates different factors and does not assign more weight or importance to certain factors, Fishman (1991) argues that intergenerational transmission is the key factor in language maintenance and developed the Graded Intergenerational Disruption Scale (GIDS). Other circumstances such as governmental and societal factors influence the parents' choice to transmit the language. Lewis & Simons (2010) expanded the GIDS model by combining it with features of different models, which gave rise to the Expanded GIDS (EGIDS). The EGIDS identifies 13 different levels of language vitality, which can be found in Figure 9. Paraná Dutch would most likely fit in category 6b (threatened) or 7 (shifting), quoted below.

> **EGIDS Level 6b (Threatened)** – This is the level of oral use that is characterized by a downward trajectory. (…) Level 6b represents the loss of that stable diglossic arrangement with the other oral domains being overtaken by another language or languages. At Level 6b, many parents are transmitting the language to their children but a significant proportion are not, so that intergenerational transmission is partial and may be weakening. With each new generation there will be fewer speakers or fewer domains of use or both. There may only be barely discernible portents of language shift and few in the community may have any sense of impending danger. (Lewis & Simons, 2010, p. 112)
>
> **EGIDS Level 7 (Shifting)** – This is the level that identifies clear cases of language shift in progress. The fact that parents are not passing the language on to their children is clearly discernible because that has become the norm within the language community. Consequently the domains where use of the language is dominant are decreasing. Language revitalization through reestablishing home transmission would still be a possibility at this stage since the language was the first language of most of the parents. (Lewis & Simons, 2010, p. 112)

4.4 Summary

To summarize, Paraná Dutch is at least definitively endangered according to the UNESCO model, and threatened or shifting according to the EGIDS model. Revitalization is, however, still a possibility with sufficient support from within the community. As mentioned earlier, a complete sociolinguistic study like Schaffel Bremenkamp (2010) did for the Zeeuws variety spoken in Espírito Santo must be conducted in Paraná to better determine the vitality of the Dutch variety spoken in the communities studied in this thesis.

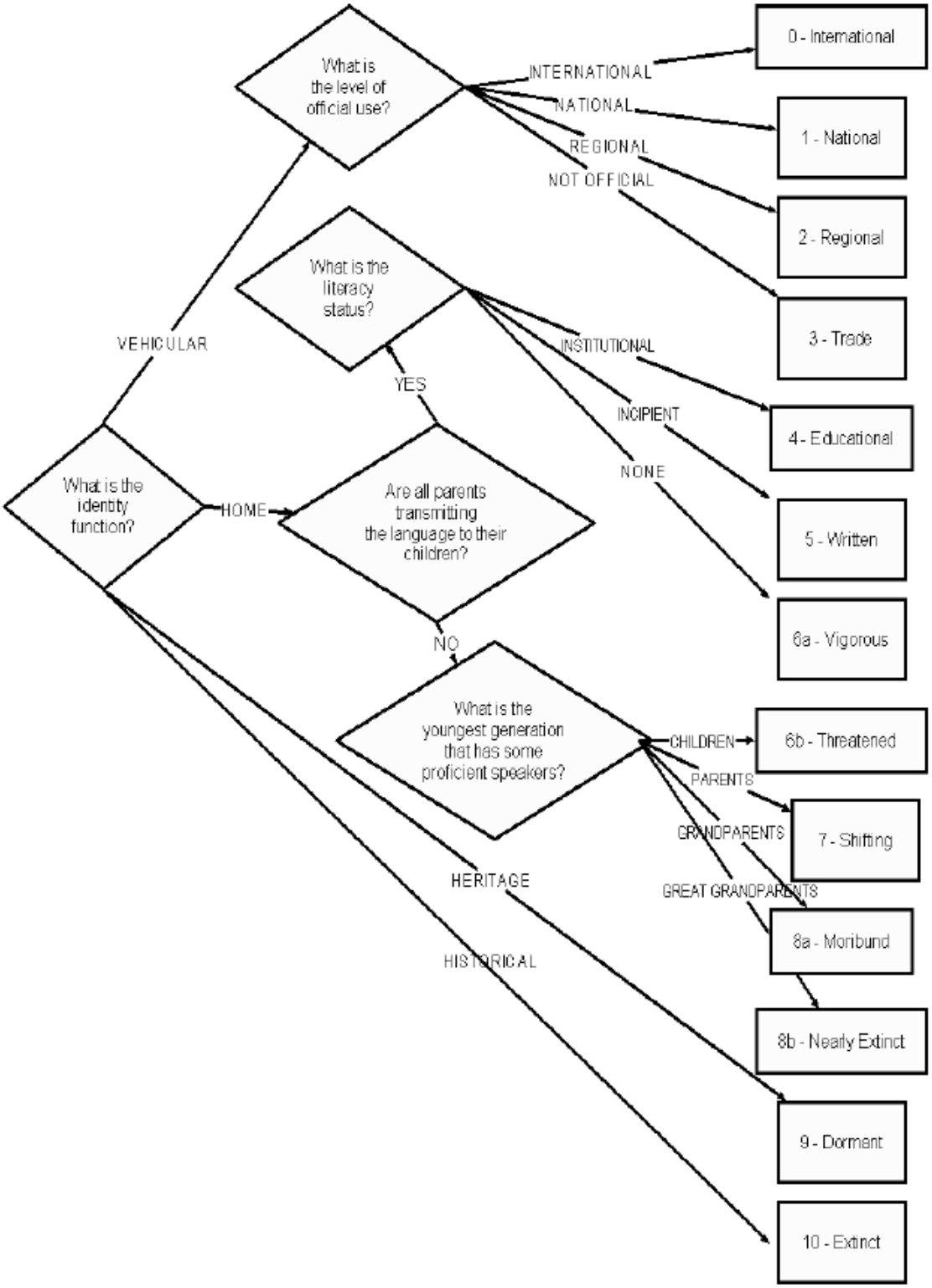


Figure 9: *EGIDS diagnostic decision tree (Lewis & Simons, 2010, p. 114).*

5 Results & Discussion

5.1 Divergences in Paraná Dutch

The current section discusses six common (i.e. used by at least ten participants in the sample) divergences from NLD (overgeneralization of SVO word order; determiner omission; overgeneralization of the common gender; variation in pluralizing patterns; pronoun drop; variation in present verb inflection) found in the Dutch heritage varieties of Paraná. Some less common divergences will be briefly touched upon in the final part of this section. Table 6 below shows all morphosyntactic divergences found in the data. All data is available at Boers (2020).

Domain	**Divergence**	**Participants (*n*)**	**Instances (*n*)**
Adjectives	Analytic comparative/superlative	4	4
	Adjective suffix omitted	2	3
	Postnominal adjective position	2	2
Adverbs	Inflected adverb	1	1
	Adverb position	8	13
	Locative *er* omission	2	3
Nouns	Analytic compound	7	8
	Divergent demonym formation	3	7
	Divergent plural inflection	12	15
	Nominal gender divergences	47	212
Pronouns	Nominative pronoun for accusative	1	1
	Divergent relative pronouns	8	12
	Pronoun drop	30	89
	Object pronoun position	1	1
Verbs	Divergent use of auxiliaries	9	15
	Divergent use of tense	3	4
	Omission of verbal suffix *-t*	4	4
	Addition of verbal suffix *-t*	7	7
	Regularization of irregular stems	8	10
	Suffix *-t* for NLD *-en* on participle	3	3
	Subject-verb incongruence	8	15
	Verb position	6	7
Prepositions	Divergent use of prepositions	21	41
	Preposition omission	4	5
	Preposition position	2	2
	Omission of *te* before verb	4	7
Determiners	Determiner before names	2	2
	Determiner omission	12	22
	Negation *niet* for NLD *geen*	2	2
Word order	SVO overgeneralization	17	46
	Unclear / disfluencies	28	42

Table 6: *Overview of morphosyntactic divergences found in the data set.*

Each of the following sections describes the grammatical feature of interest in NLD, the divergence in Paraná Dutch with examples from the data, the extralinguistic similarities between participants using these divergences, other heritage variants where similar divergences occur, and discusses possible causes for the divergence in Paraná Dutch.

5.1.1 Overgeneralization of SVO

Whereas in Portuguese the SVO (Subject, Verb, Object) word order is most common, several different word orders are used in Dutch. In main clauses of affirmative phrases in Dutch, the verb always comes in second position (V2). If the verb is preceded by the subject, the word order will be SVO (1). But if the verb is preceded by another element, other word orders are possible, namely VSO (2) if the verb is preceded by for instance an adverb, or OVS (3) where the verb is preceded by the object. In subordinate clauses, the verb takes the final position and the word order is therefore SOV (4).

(1) *Ik* *las* *dit* *boek* *gisteren*
I (S) read.PST (V) this.N book (O) yesterday
'I was reading this book yesterday.'

(2) *Gisteren* *las* *ik* *dit* *boek*
yesterday read.PST (V) I (S) this.N book (O)
'Yesterday, I was reading this book.'

(3) *Dit* *boek* *las* *ik* *gisteren*
this.N book (O) read.PST (V) I (S) yesterday
'I was reading this book yesterday.'

(4) *Ik* *zei* *dat* *ik* *gisteren* *dit* *boek* *las*
I say.PST that I (S) yesterday this.N book (O) read.PST (V)
'I said that I was reading this book yesterday.'

Seventeen participants (out of 82) in the sample overgeneralize the SVO word order in Dutch, with a total of 46 instances, both in subordinate clauses (5; *n* = 21) as well as in main clauses (6; *n* = 25). As Giesbers (1997) remarks, it is hard to decide whether a variation in word order is due to language change or attrition or due to speech planning strategies such as pausing, hesitating and looking for the right words. Considering, however, that all participants showing SVO order in non-SVO environments except one were of the second generation or later and that their Dutch usage and exposure is below average, it seems probable that this variation is due to a reduced input of Dutch.'

Participant C006:

(5) *Van* *die* *mens-en* *die* *breng-en* *de* *vee* *helemaal* *van* *Zuid-Brazilië*
of that.PL people-PL REL.PL bring-PL ART.C cattle.N all.the.way from Southern.Brazil
naar *Sorocaba*
to Sorocaba
'Those people that bring the cattle all the way from southern Brazil to Sorocaba.' (NLD: *van die mensen die het vee helemaal van Zuid-Brazilië naar Sorocaba brengen*)

Participant C015:

(6) *Hier* *thuis* *we* *et-en* *aardappel-s* *en* *bloemkool*
here at.home we eat-PL potato-PL and cauliflower
'Here at home, we eat potatoes and cauliflower.' (NLD: *hier thuis eten we (…)*)

The same overgeneralization of the SVO word order has been attested for first and second generation HSs of Dutch in Australia (7) and New Zealand (8). The example of Australian Dutch contains two overgeneralizations: one in a subordinate clause where NLD would use SOV, and one in the main clause

where the subordinate clause acts as the first element in the phrase which should be followed by the verb (V2). The New Zealand Dutch example is also a V2 environment, where the verb should follow the adverb *nu* 'now'.

Australian Dutch (Clyne, 1977; De Bot & Clyne, 1994):

(7) *maar als wij prat-en in het Hollands ze verstaa-n drommels goed*
but if we speak-INF in ART.N Dutch they understand-INF all.too well
'But if we speak in Dutch, they understand all too well.' (NLD: *maar als wij in het Hollands praten* (SOV)*, verstaan ze [het/ons] drommels goed* (V2))

New Zealand Dutch (Folmer, 1991)

(8) *nu ik moet stopp-en*
now I must stop-INF
'Now I have to stop.' (NLD: *nu moet ik stoppen*)

Although word order in German and North-Germanic languages is similar to that in Dutch, not all contact varieties of these languages in Anglophone countries show the same overgeneralization of the SVO order. Instead, the original syntax has often been retained. Hopp & Putnam (2015) show that speakers of a moribund German heritage variety in Kansas do not produce phrases that were syntactically different from monolingual German, although SVO word order in subordinate clauses was accepted in an acceptability judgement task. Speakers of Pennsylvania Dutch (a variety of German, not of Dutch) also mostly retained their original word order systems, with the SVO order mostly occurring in code-switched subordinate clauses preceded by the English subordinator *because* (Fuller, 1997). Håkansson's (1995) study of Swedish HSs in the United States also shows there is no attrition in the word order domain, but these speakers would be classified as first generation speakers according to the current study, and her results therefore match those of the first generation HSs in Paraná. Westergaard & Lohndal's (2019) study on Norwegian HSs in the United States, however, notes that the number of contexts where non-subject-initial V2 word order occurs may be reduced because of cross-linguistic influence from English. HSs in their study who produce less non-subject-initial V2 environments show more SVO overgeneralizations. Grewendorf & Poletto (2005) study German language islands in a non-Anglophone, Romance-speaking area, i.e. Italy, and show that these heritage varieties are in the process of shifting towards SVO.

Deviations in the domain of word order may be due to interference from the majority language, as SVO is the most common word order in Portuguese, due to a development in the HL itself, namely the generalization of the SVO word order that is already present in Dutch, or due to multiple causation of both these factors.

5.1.2 Determiner omission

Twelve of the participants did not use a determiner in phrases where a determiner would be required in NLD. In half of the instances (11 out of 22), a determiner is omitted before a noun indicating a language (9). This can be explained by interference of the majority language, since the use of the article is optional in Portuguese. Two other cases of determiner drop can also be explained by interference of Portuguese (10, cf. PT *temos sotaque* 'we have an accent'; 11, cf. PT *reconhecer de voz* 'recognize by voice'). There are only two instances of superfluous determiners in Dutch, even though Portuguese uses determiners in situations where Dutch would not, such as before names of most countries or before possessive adjectives. These two instances both occurred before personal names.

Participant C015:

(9) *Soms praat je wel met oma en zeg je iets in Engels*
sometimes talk you AFF with grandma and say you something in English
'Sometimes you talk with grandma and you say something in English.' (NLD: *in <u>het</u> Engels*)

Participant A013:

(10) *Maar wij hebb-en ook accent*
but we have-3PL also accent
'But we have an accent too.' (NLD: *<u>een</u> accent* 'an accent')

Participant A019:

(11) *Meestal door stem kan je het wel [herkenn-en]*
usually by voice can you it AFF recognize-INF
'Usually you can recognize it by voice.' (NLD: *aan <u>de</u> stem* 'by voice')

The other instances of determiner omission (*n* = 9) cannot be explained by interference from Portuguese, as Portuguese would also use a determiner in those cases (12, cf. PT *conta <u>a</u> história* 'it tells <u>the</u> story'; 13, cf. PT *n<u>o</u> Sul do Brasil* 'in <u>the</u> South of Brazil').

Participant C010:

(12) *Het vertel-t verhaal van de Nederlander-s die naar Castro kwam-en*
it tell-3SG story of the Dutch-PL REL.PL to Castro come.PST-PL
'It tells the story of the Dutch who came to Castro.' (NLD: *<u>het</u> verhaal* 'the story')

Participant C003:

(13) *En vorig-e week in zuiden van Brazilië heef-t het nog ge-vror-en*
and last-C week in South of Brazil AUX-3SG it still PTC-freeze-PTC
'And last week, in the South of Brazil, it was still freezing' (NLD: *in <u>het</u> zuiden* 'in the South')

All participants who omit determiners are of the second generation or later. The group of participants that showed interference from Portuguese has a low usage of and exposure to Dutch, between 11-27%, while the average of all participants is 44%, and the average for participants of the second generation and later is 32%. They are also younger than average, between 17-35 years old, while the average is 52 and the average age of participants of the second generation and later is 43 years. The other participants who omitted determiners were of varying ages and had a varying percentage of usage and exposure, albeit around or below average.

Studies have shown that there is cross-linguistic variation in the acquisition of determiners, with monolingual learners of Germanic languages acquiring determiners later than monolingual learners of Romance languages (Lleó & Demuth (1999) for Spanish and German; Guasti et al. (2008) for Catalan, Italian and Dutch; Bassano et al. (2011) for Dutch, Austrian German and French). Kupisch' (2007) study of determiner omission in bilingual German-Italian children argues that in cases of unbalanced bilingualism, if the language (i.e. Portuguese, a Romance language) that is beneficial to the acquisition of the grammatical domain in question (i.e. determiners) is the stronger language, this is likely to accelerate acquisition in the weaker language (i.e. Dutch, a Germanic language). This effect does not seem to be present in the determiner-dropping adolescent and adult participants of this study, who can be argued to be unbalanced bilinguals who are more dominant in Portuguese since they report a low usage of and exposure to Dutch, as article omission is still present in their speech. Although Codina Bobia (2017, 2019) shows that Dutch HSs in Brazil accept bare singular count nouns in the context of genericity due to interference from Portuguese, such forms have not been produced by the HSs in Paraná.

In short, there is interference of Portuguese on determiner omission, both in acceptability judgements (Codina Bobia, 2017, 2019), as well as in production. The reason why determiners in non-interference contexts are omitted remains unclear.

5.1.3 Grammatical gender

Both Dutch and Portuguese have a two-way grammatical gender system in the nominal domain, but while Portuguese distinguishes between masculine and feminine gender, Dutch distinguishes between common gender and neuter. Grammatical gender in Dutch is only indicated on determiners and adjectives when the noun is singular. Nouns do not show phonological cues indicating the gender category. Apart from some morphological indications, e.g. the diminutive suffix *-tje* (neuter), the deadjectival nominalizer *-heid* (common gender) and other derivational affixes, and semantic classes that always take a certain gender, e.g. the names of languages, cities and (most) countries which are neuter, the gender system is opaque (Blom et al., 2008).

The part of speech that shows the gender in nominal constructions depends on the definiteness of the phrase. If the phrase is definite, the gender is indicated on the determiner, whereas the attributive adjective shows the gender of the noun in indefinite phrases. The determiners that show a gender distinction are the articles (*de* 'the' for common gender, *het* 'the' for the neuter) and the demonstratives (*deze* 'this' and *die* 'that' for common gender, *dit* 'this' and *dat* 'that' for the neuter). The adjective in definite nominal constructions always takes the suffix /-ə/ (orthographic <-e>). When the phrase is indefinite, i.e. when no article or the indefinite article *een* 'a(n)' is used, the gender is indicated on the adjective. Adjectives agreeing with common gender nouns receive the suffix /-ə/, while adjectives agreeing with neuter nouns receive no suffix. Table 7 below provides an overview. Possessive adjectives are not inflected for gender, except for that of the 1PL which is *ons* 'our' for the neuter, and *onze* for common gender. The relative always agrees with the gender of singular nouns, with *die* for common gender and *dat* for neuter nouns.

	Definite	**Indefinite**
Common	*de kleine boom* 'the small tree'	*een kleine boom* 'a small tree'
Neuter	*het kleine huis* 'the small house'	*een klein huis* 'a small house'

Table 7: *Agreement in Dutch nominal constructions. The elements modified for gender have been underlined.*

Several studies have shown divergences in gender assignment by Dutch HSs, which may be due to either attrition or differential acquisition, depending on the amount of time the speaker spent in the L1 environment. Giesbers (1997) who studied variation in the speech of one HS in Indonesia found neuter nouns that were assigned common gender articles and adjectives. He did not find any common gender nouns agreeing with neuter determiners or adjectives. Clyne (1977) did find common gender nouns with the neuter article *het*, although the large majority of gender deviations were neuter nouns with the common gender article *de*. The majority of these neuter words were near homophones of English words (cf. NL *bed* 'bed', *zand* 'sand', *boek* 'book'), and it is argued that they are assigned common gender because of the similarity between the Dutch common gender article *de* and the English article *the*. Gender deviations were present in the speech of 43 of the 200 participants, and most common among second generation speakers and first generation speakers who migrated as young children. Folmer (1991) who analysed written data also notices that there are phonetic and orthographic similarities between English nouns and many of the Dutch neuter nouns that receive common gender. For the first generation, the only deviations found are neuter nouns with common gender articles, but for the second generation, deviations in both directions are found, although neuter nouns agreeing with common gender articles are most common. Greidanus Romaneli's (forthc.)

unilingual gender assignment task revealed a slight overgeneralization of the common gender among Dutch HSs in the Paraná communities.

Studies reveal that HSs of different languages who live in the Netherlands show a differential acquisition of the Dutch gender system (cf. Cornips & Hulk, 2008; Hulk & Cornips, 2006), depending on quality and quantity of the input. Different extralinguistic factors such as age of onset, exposure to non-native Dutch speakers and length and intensity of the input may have an effect on the acquisition of Dutch gender by HSs in the Netherlands.

In the data of this research, a total of 212 gender deviations were found in the speech of 47 participants. Most common were the neuter nouns receiving common gender articles, demonstratives, adjectives, possessives, relatives (*n* = 187), used by 44 participants. Less common were common gender nouns agreeing with neuter elements (*n* = 25), used by 17 participants (Table 8). In total, 109 unique lexical items have been used with a deviating gender. A list of all these items including their frequency of divergent use in the corpus, the number of participants using them, and their translation in English can be found in Appendix G.

Deviating element	**Neuter > common**	**Common > neuter**	**Total**
Adjective	39	7	46
Article	113	16	129
Demonstrative	28	1	29
Possessive	2	1	3
Relative	5	0	5
Total	187	25	212

Table 8: *Divergent gender assignment according to part of speech.*

As mentioned before, the Dutch gender system is mostly opaque. For most instances of variation in gender in the data, there are no morphological or lexical elements that indicate to which gender class the noun belongs. However, there are five instances of diminutives that agree with common gender elements produced by four participants. In Dutch, diminutives always belong to the neuter class. Another morphological indication for the neuter class is the gerund suffix *-en*, of which there was one occurrence in the data (*stijg-en* 'ascend-GER; ascension') that took a common gender article. Furthermore, names of languages (*n* = 5) and of a city (*n* = 1) were treated as common gender nouns by three participants, while they would be classified as neuter by NLD speakers based on their semantic class. Among the common gender nouns treated as neuters was one form with the deverbal nominalizer suffix *-ing*, which in Dutch always takes the common gender.

Participants of all generations showed variations in gender assignment, even of the first generation (*n* = 11). The first generation participants that produced these variations did not all migrate during their childhood. Some migrated in their late teenage years (*n* = 2) and in their mid-twenties (*n* = 3). Most were of the second generation (*n* = 29) and some of the third generation or later (*n* = 7). Their mean language use and exposure is 39.8%, whereas the group that did not produce deviating gender assignment (*n* = 37) report their language use and exposure at 49.2%.

Five of the first generation speakers that migrated as (young) adults, when acquisition of Dutch gender has certainly been completed (Weerman et al., 2006), showed instances of deviating gender assignment. This means that there is attrition in the domain of grammatical gender for these first generation HSs of Dutch, which may have led to their children receiving a different input. Considering that both the quantitative and qualitative input has been affected, HSs of the second generation and later may have acquired the Dutch gender system in a differential manner.

The share of participants using gender deviations is larger than that found in Australia by Clyne (1977), which may be explained by the fact that his research took place only a few decades after the migration, whereas this research took place about 100 to 60 years after the first migrants arrived. In contrast to Folmer's (1991) findings in New Zealand, two first generation HSs of Dutch in Paraná did produce two instances of a common gender noun agreeing with neuter elements.

One conclusion that applies to all previous studies, is that the overgeneralization of the common gender is more common than that of the neuter. Hulk & Cornips (2006) estimate that about 25% of the Dutch nouns in the dictionary is neuter, whereas Van Berkum (1996) shows that the usage of neuter gender nouns is about 33%. Even though the class of neuter nouns is smaller than the class of common gender nouns, the findings of this study show about eight times as many neuter words agreeing with common gender elements than the other way around. Neuter and common gender therefore do not appear to be used in free variation. Instead, there seems to be a preference for and shift towards the common gender.

5.1.4 Plural nouns

Dutch and Portuguese both use the suffix *-s* to form plural nouns, but whereas Portuguese exclusively uses this suffix, Dutch mainly uses the suffix *-en* [ə(n)]. Dutch plural nouns tend to end in a trochee, i.e. an accented syllable followed by an unaccented one. If the (singular) noun ends in an unaccented closed syllable, the *-s*-plural is used (14a). If the noun, however, ends in an accented syllable, the (unaccented) *-en*-suffix is used to form the plural (14b). Note that secondary accent (`) also counts as accented (14c). If a noun ends in an unaccented open syllable, both plurals can be used (14d), although there are some exceptions to this rule. If a singular noun ends in *-s*, the *-en*-plural is always used, even if the final syllable of the singular noun is unaccented (14e). Nouns ending in *-ing* always take the *-en*-plural, even if *-ing* is unaccented (14f). Some individual base nouns form exceptions to the trochaic rules, as do many nouns with derivational morphology. Besides those, there are fifteen nouns that are extended with the ending *-er-* before the plural suffix is attached (14g). Lastly, there is also a number of nouns that are synchronically irregular because of a lengthened or ablauted stem vowel (14h). For a more extensive overview of plural nouns in Dutch, see Booij & Van Santen (1998, section 4.2).

(14) a. sg. *bézem* 'broom', pl. *bézem-s.*
b. sg. *ballón* 'balloon', pl. *ballónn-en.*
c. sg. *ólifànt* 'elephant', pl. *ólifànt-en.*
d. sg. *káde* 'quay', pl. *káde-s*, *kade-n.*
e. sg. *saláris* 'salary', pl. *saláriss-en.*
f. sg. *kóning* 'king', pl. *kóning-en*.
g. sg. *kind* 'child', pl. *kind-er-en*.
h. sg. *st**a**d* 'city', pl. *st**e**d-en*. (Booij & Van Santen, 1998)

Scholars describing heritage varieties of Dutch have observed different developments of the plural suffixes. Giesbers (1997) reports interference from Indonesian on Dutch plural marking after numerals. Whereas Dutch uses a plural marker on the noun governed by numerals higher than one, Indonesian does not, which is reflected in the HL. Clyne (1977) also reports interference from the majority language, in this case English, on plural marking in the Dutch HL. The *-s*-plural is often used for Dutch nouns that are phonologically similar to English nouns, which can only be pluralized with an *-s*-plural. However, when inserting English nouns into Dutch phrases, some take *-en*-plurals (e.g. *fence-n* 'fences', *beach-en* 'beaches', *room-en* 'rooms' (Clyne, 1977), *road-en* 'roads', *farm-en* 'farms' (Van Marle & Smits, 1993)). These nouns clearly follow the Dutch trochaic rules for pluralizing, which are apparently still productive. Keijzer (2007, 2010) conducted a wug test eliciting plural inflection on 45 first generation Dutch migrants in Canada, and analysed their naturalistic speech. The wug test showed

that the Dutch Canadians' productive plural formation had attritted, but no deviating plurals were found in the spoken data. Smits (1996), who analysed plural inflection in two corpora of Iowa Dutch, observed in the older corpus from 1966 that the regular plural in *-en* is extended to irregular plurals as in (14g) and (14h), that the plural in *-s* is extended to nominalized adjectives and monosyllabic nouns, and that a plural marker *-es* had developed, which replaced some plurals in *-en*. In the 1989 corpus, more examples of regular *-en* extension are found, but they were also generalized to words ending in an unaccented syllable, which goes against the trochaic rules. Instances of the *-s*-plural in monosyllabic words and new plural suffixes *-es* and *-ens* were found as well. Finally, diminutives took the *-en*-plural, which, although it follows the pattern in (14d), is not present in NLD.

In the data of Dutch HSs in Paraná, 15 deviations from NLD pluralizing patterns were attested in the speech of 12 different participants. Instances of an *-s*-plural where NLD uses an *-en*-plural (*n* = 12), regularizations of irregular patterns (*n* = 2) and the *-en*-plural where NLD uses an *-s*-plural (*n* = 1) were found.

Five deviating *-s*-plurals and one deviating *-en*-plural can be explained by the extension of the trochaic rule to words that do not follow that rule in NLD. These words inlcude *júffrouw-s* 'teachers' (NLD *júffrouw-en*), *ánder-s* 'others' (NLD *ánder-en*), *stéékpènning-s* 'bribes' (*stéékpènning-en*), *beslíssing-s* 'decisions' (NLD *beslíssing-en*), *zóndag-s* 'Sundays' (NLD *zóndag-en*), *rèstauránten* 'restaurants' (NLD *rèstauránt-s*).

One other deviating plural is the exact same as Smits (1996) found in Iowa Dutch, namely the nominalized adjective *ándere-s* 'other' (NLD *ánder-en*), which like NLD does not follow the trochaic rule. This form can, however, also be analysed in a different way. Two other nominalized adjectives with deviating plurals were found in the data, namely *óúdste-s* 'oldest' (NLD *óúdste-n*) and *mééste-s* 'most' (NLD *mééste-n*). These forms may have been interpreted as the pattern in (14d), which could then be extended to nominalized adjectives with more syllables such as *andere*. Another possible explanation could be confusion of the NLD plural *andere-n* with the newly developed trochaic form *ander-s* described in the previous paragraph.

The two regularized forms of irregular plurals take the same suffix as in NLD, but differ in the stem vowel. In NLD, the stem vowel of *dak* 'roof' [dɑk] is lengthened to *daken* [ˈdaːkən] in the plural. In the data, however, the form *dakken* [ˈdɑkən] is found. Likewise, the stem vowel of *stad* 'city' [stɑt] is lengthened, and also raised, to *steden* [ˈsteːdən] in the plural. Participant C017 used the plural *statten* [ˈstɑtən] instead, which is also found in Iowa Dutch (Smits, 1996). This participant also interprets the phonetic [t], which is an allophone of /d/ and occurs at the end of the singular due to final devoicing, as a phonological /t/.

Finally, there are four instances of plurals that end in *-en* and follow the trochaic rule in NLD but receive an *-s*-plural which makes them non-trochaic. The plural *rivíér-s* 'river' (NLD *rivíér-en*) is attested twice in the speech of one participant. Another participant uses the *-s*-plural on the word *súpermàrkt-s* 'supermarket' (NLD *súpermàrkt-en*). Finally, the word *ópenìng-s* 'opening' (NLD ópenìng-en) has been found in the speech of one participant.

Other than in Iowa Dutch (Smits, 1996) and Australian Dutch (Clyne, 1977), the extension of *-s*-plurals by speakers of Paraná Dutch only occurs on polysyllabic words. This does not interfere with their claim that the occurrences of plurals in *-s* on monosyllabic nouns are due to interference from English.

The participants' origins may explain the use of some of the *-s*-plurals, namely those that occur after the suffix or ending *-ing*. These three plurals (*opening-s* 'openings', *steekpenning-s* 'bribes', *beslissing-s* 'decisions') were produced by two older participants (aged 74 and 83) of the first generation who

were born and raised in the same area of Northern Overijssel and Southern Drenthe, where dialects of Low Saxon are spoken. Both reported speaking a dialect. One indicated Twents and the other did not specify the name. In different dialects of Low Saxon, *-s*-plurals are used after the suffix *-ing* (Bloemhoff et al., 2008 for Gronings; Van der Vliet, 2003 (lemma *-ing*) for Twents). It is likely that these forms are not indications of attrition, but rather a retained dialect feature. Furthermore, the participant that used the form *juffrouw-s* is a first generation speaker from Frisia, who reports a high use of Frisian. The Frisian equivalent of *juffrouw* is similar, namely *juffer*, which uses a plural in *-s*.

Participants who applied the trochaic rule to forms that do not follow that rule in NLD (*zondag-s*, *restaurant-en*, *ander-s*) and those that used a plural in -s for the nominalized adjectives (*andere-s*, *oudste-s*, *meeste-s*) are all of the second generation or later and reported a low exposure to and usage of Dutch (mean = 22%). They were all highly educated, had bilingual primary education, and have lived for one to six years in a Portuguese-speaking environment outside of the Dutch communities, which indicates a quantitatively lower input of the HL. Those regularizing plurals in *-en* with irregular stems (*dakk-en*, *statt-en*) have similar profiles, although one has not spent time in a Portuguese-speaking environment. The participant that produced *rivier-s* also has a similar profile, but the participant that produced *supermarkt-s*, who is of the first generation and has finished secondary education in the Netherlands, does not. There may be some interference from English, as these words are very close to their English translations, but these participants do not report using English and have not lived in an Anglophone environment.

In conclusion, participants use the trochaic plurals productively, and extend them to plurals that do not follow this pattern and to plurals that have a changing stem vowel in NLD. This extension may be due to a reduced input. Characteristics of the regional languages may explain another part of the variation in plural markers.

5.1.5 Pronoun drop

Whereas omitting subject and object pronouns in Portuguese is allowed, speakers of NLD generally express all arguments of the verb. There is one very restricted exception to this rule, which is called topic drop. This can only occur in main clauses where the subject (15) or object (16) to be dropped is in the first position of the clause and if the content can be recovered on the basis of preceding discourse. Since Dutch is a V2 language (see section 4.1.1), object drop is still identifiable in the structure of the sentence (Ackema & Neeleman, 2007).

(15) Speaker A: *wat is er met Jan aan de hand?*
what is there with John on the hand
'What's the matter with John?'

Speaker B: *Ø moet morgen naar de tandarts*
must tomorrow to the dentist
'He has to go to the dentist tomorrow.'

(16) Speaker A: *ga je mee naar die nieuwe film met Alan Rickman?*
go you with to that new film with Alan Rickman
'Do you want to go to that new Alan Rickman movie?'

Speaker B: *Ø heb ik al gezien*
have I already seen
'I have already seen it.' (Ackema & Neeleman, 2007, p. 84)

Deletion of the object is reported in Dutch as a HL in Australia (17) due to interference of English, as these occur if the equivalent verb in English does not need a specified object (Clyne, 1977), and in Brazilian Zeeuws due to interference from Portuguese. Brazilian Portuguese allows null objects in any context, but are usually expressed if the antecedent is animate and specific due to semantic restrictions (Schaffel Bremenkamp et al., 2017). No studies on heritage Dutch have reported subject drop.

Australian Dutch (Clyne, 1977):

(17)	*ik*	*weet*	*niet*	cf. NLD	*ik*	*weet*	*het*	*niet*
	I	know	NEG		I	know	it	NEG

'I don't know'

Flores' (2012) study of second generation Portuguese returnees from Germany – Portuguese HSs that were born in Germany but migrated back to Portugal – showed that object expression in German was vulnerable to attrition due to reduced input.

In Paraná Dutch, there are 32 instances of subject drop that would be ungrammatical in NLD among 15 HSs (18), and 57 cases of object drop in the speech of 24 HSs (19). In the majority of the dropped subjects, it is the 3SG neuter pronoun *het* 'it' that is omitted (*n* = 27; 13 participants). In the other cases, the 1SG pronoun *ik* 'I' (*n* = 4; 2 participants) and the 2SG pronoun *je* 'you' (*n* = 1; 1 participant) are dropped. The majority of dropped objects also consisted of omissions of the 3SG neuter pronoun *het* 'it' (*n* = 40; 19 participants), followed by the 3SG/PL pronoun *er* which is used in combination with prepositions (*n* = 8; 7 participants), the reciprocal pronoun *elkaar* 'each other' (*n* = 3; 3 participants) and the 3PL pronoun *ze* 'them' (*n* = 2; 1 participant). In four cases, it is not certain which pronoun is omitted due to ambiguity.

Participant C006, referring to the town of Castrolanda:

(18)	*en*	*nou*	*is*	*Ø*	*echt*	*een*	*toerist-plaats*
	and	now	be.3SG		really	ART.INDEF	tourist-place

'And now, it (Castrolanda) is really a tourist place.' (NLD *het* 'it')

Participant B022, talking about speaking Dutch with her grandmother:

(19)	*ik*	*heb*	*Ø*	*met*	*haar*	*echt*	*ge-leer-d*
	I	have		with	her	really	PTC-learn-PTC

'I have really learned it (Dutch) with her.' (NLD: *het* 'it')

Paraná Dutch seems to show the same semantic restrictions for object drop as Portuguese, as all the cases where *het*, *er* and *ze* were omitted referred to inanimate antecedents. The cases of reciprocal object drop can also be explained by interference from Portuguese, as the verbs that were used (*ontmoeten* 'meet', *leren kennen* 'get to know, meet') do not require a reciprocal pronoun in Portuguese.

Subject drop in Paraná Dutch seems somewhat more limited than in Portuguese, probably due to the poor inflection system of Dutch verbs (see section 4.1.6). All cases of omitting the subject *het* were references to inanimate antecedents and dummy subjects. The 2SG pronoun drop would require an impersonal *je* in NLD. Three cases of omitting the 1SG *ik* were in the discourse marker *denk ik* 'I think', and in the other case the 1SG pronoun was expressed in the previous sentence.

All participants who dropped subjects were of the second generation or later. Those who omitted objects were as well, except for one who is a first generation migrant who came to Brazil in her twenties. Subject drop only occurred among participants who are 54 years old or younger (note that the overall mean age is 52.5 years), whereas object drop occurs across all age groups. Self-reported

usage of and exposure to Dutch is lower for those who dropped subjects (26%) than for those who dropped objects (32%). The mean usage and exposure for participants of the second generation and later is the same as that of participants that drop objects (32%).

In short, the omission of objects is widespread among the participants and follows Portuguese patterns. Subject omission on the other hand is more restricted than in Portuguese and occurs in the speech of participants with a reduced HL input.

5.1.6 Verb inflection in the present

Dutch does not have a very rich system of suffixes in the verbal domain. Inflection of regular verbs (such as *werken* 'work') in the present tense is limited to the suffixes *-t* for the 2/3SG.PRES, *-en* for the 1/2/3PL.PRES. The 1SG does not take a suffix. The 2SG only takes the suffix *-t* in SV environments, and does not take a suffix in VS environments. The paradigms of *zijn* 'be' and *hebben* 'have', as well as the modal verbs *mogen* 'be allowed', *kunnen* 'can', *willen* 'want', *zullen* 'will' have different paradigms, see Table 9.

INF	*werken*	*zijn*	*hebben*	*mogen*	*kunnen*	*willen*	*zullen*
1SG	*werk*	*ben*	*heb*	*mag*	*kan*	*wil*	*zal*
2SG	*werk(-t)*	*ben(-t)*	*heb(-t)*	*mag*	*kun(-t) / kan*	*wil(-t)*	*zul(-t) / zal*
3SG	*werk-t*	*is*	*heeft*	*mag*	*kan*	*wil*	*zal*
1/2/3PL	*werk-en*	*zijn*	*hebb-en*	*mog-en*	*kunn-en*	*will-en*	*zull-en*

Table 9: *Inflection of Dutch regular, irregular and modal present verbs.*

Divergences from this system have been noted in Dutch in Indonesia (Giesbers, 1997), where the suffix *-t* was often omitted (as well as the final dental suffix of past participles), which may be either a phonological or morphological process. Other incongruences between the subject and finite verb, for instance by adding a *-t*-suffix to a 1SG verb, were found to a lesser extent. Smits (1996) found a lot of variation in Iowa Dutch verb inflection. In both the 1966 and the 1989 corpus, she found paradigmatic levelling of irregular verbs (3SG *heef-t* > *heb-t*, cf. INF *hebb-en* or 1SG *heb*), the addition of the suffix *-en* to monosyllabic infinitives and plurals, the generalization of the *-t*-suffix throughout the singular, the generalization of 1SG zero forms throughout the whole paradigm due to interference from English, and the generalization of the 3SG forms of *hebben* (*heeft*) and *zijn* (*is*) throughout the paradigm (i.a.). Schoenmakers-Klein Gunnewiek (1997) in her analysis of verbs in letters written by two HSs in Brazil found that 11% of the non-Standard Dutch variations were number incongruences. Folmer (1991) notices a widespread drop of the suffix *-t* in New Zealand Dutch, while the verbs with the *-t*-suffix were reanalysed as preterits.

In the Paraná Dutch data, 15 participants showed non-NLD variations[22] in the verbal suffixes (*n* = 30). These variations involved regular present verbs (*n* = 13), the verb *hebben* 'have' (*n* = 9), the verb *zijn* 'be' (*n* = 6), and modal verbs (*kunnen* 'can', *mogen* 'be allowed'; *n* = 2). In the regular present verbs, the suffix *-t* is added to 1SG (20; *n* = 5) and PL (21; *n* = 3) verbs, and omission of the suffix *-t* is observed (22; *n* = 4). For the verb *hebben*, the form *heeft* is used in the 1SG (*n* = 2), the 2SG (*n* = 3) and the PL (*n* = 2), while *hebben* (*n* = 1) and *hebt* (*n* = 1) are used for the 3SG. For the verb *zijn*, *is* is used for the 1SG (*n* = 1) and the PL (*n* = 2), while *bent* (*n* = 1) and *zijn* (*n* = 2) are used for the 3SG. For the modal verbs, we find 3SG *magt* 'is allowed' with the addition of the suffix *-t* to the 3SG *mag*, and the form *kan* used in the 3PL.

[22] This section mainly deals with non-NLD variation in verbal inflection, some of which may also be due to the influence of regional varieties. For variation in the verb *hebben* that is certainly of dialectal origin, the reader is referred to section 4.2.2.

Participant C017:

(20) *ik* *studeer-t* *engenheiro*$_{PT}$ *de*$_{PT}$ *produção*$_{PT}$
I study engineer of production
'I study for production engineer.' (NLD: *studeer*)

Participant B003:

(21) *er* *zitt-en* *boz-e* *geest-en* *die* *de* *mens-en* *naar* *binnen* *trek-t*
there sit-PL evil-PL spirit-PL REL.PL ART.PL people-PL to inside pull
'There are evil spirits there who pull people inside.' (NLD: *trekk-en*)

Participant B005:

(22) *iedereen* *kan* *zien* *als* *je* *geld* *pak-Ø*
everyone can see if you money take
'Everyone can see if you take money.' (NLD: *pak-t*)

Some of the variations in the verbal domain may be explained as an extension of the regular inflection pattern to irregular verbs. The development of paradigmatic levelling would explain 3SG *mag-t* for *mag* (cf. 1SG *mag*), 3SG *ben-t* for *is* (cf. 1SG *ben*), and 3SG *heb-t* for *heeft* (cf. 1SG *heb*). The latter may also be a dialectal remnant, see Figure 12 in section 4.2.2.

The generalization of the 3SG throughout the paradigms of the verbs *hebben* and *zijn*, similar to Iowa Dutch, would explain most of the variations in the paradigm of *hebben* (7 out of 9) and some of the paradigm of *zijn* (2 out of 6). Other processes present in Iowa Dutch such as the generalization of the bare form throughout the paradigm, or the spread of the suffix *-t* through the singular, do not seem to be present in Paraná Dutch. The bare form is only found in the singular and never in the plural, while the *-t*-suffix is present in the plural. It must be noted, however, that the use of the *-t*-suffix for plural verbs is very common in varieties of Low Saxon, a regional language spoken in the east of the Netherlands (Bloemhoff et al., 2008). The three instances of the suffix *-t* for plural forms may therefore be explained by the regional varieties. However, the use of *kan* in the plural suggests using singular forms in the plural may be a different development more similar to the spread of *heeft* throughout the paradigm, as this form is not found in the plural in Dutch dialects or regional languages.

Another reason why this presumption arises is the lack of the suffix *-t* for plural verbs in the speech of first-generation participants. All participants that show variation in verb inflection are of the second generation or later. They are of all ages and report a usage of and exposure to Dutch of 27%, which is slightly lower than average for the second generation and later (32%).

Forms like (22) where the suffix *-t* is omitted may have been present in the speech of the first generation, as the bare verb is used for the 3SG by NLD speakers throughout the country (Figure 10). However, none of the speakers that used these bare forms are of the first generation.

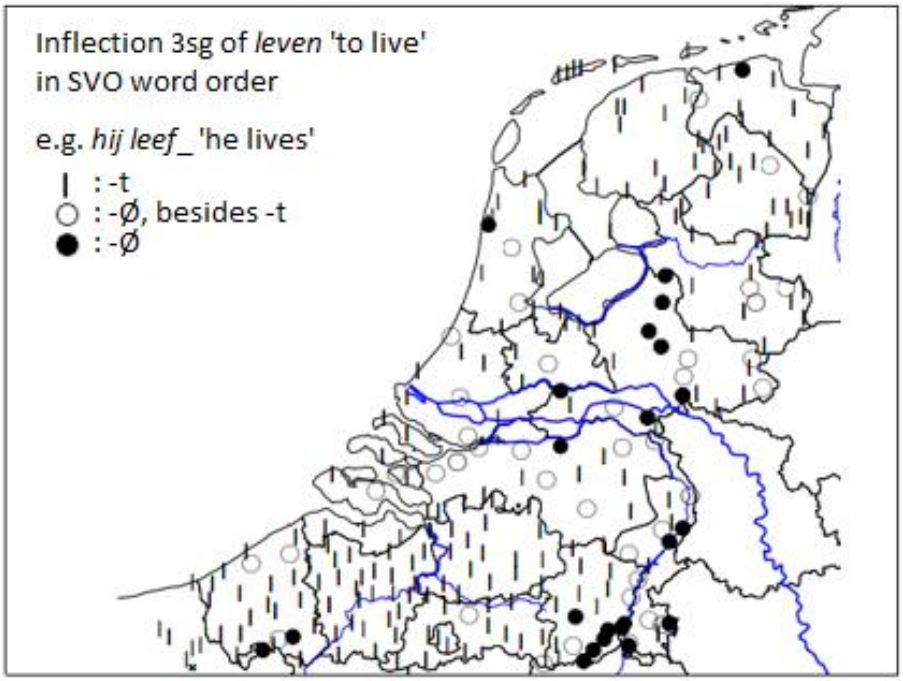


Figure 10: *Usage of the -t-suffix and bare form for the 3SG throughout the Dutch language area (adapted from De Vogelaer, 2006, p. 74).*

5.1.7 Other morphosyntactic divergences

Besides the deviations from NLD described in the first six sections of this chapter, there were variations that did not occur in the speech of ten or more participants. These phenomena will be summarized in this section.

Nine participants showed variation in the use of auxiliaries (*n* = 15), which is also found in previous studies of Dutch HSs (Clyne, 1977; Schoenmakers-Klein Gunnewiek, 1997). Except for one instance, the auxiliary *hebben* is used instead of NLD *zijn*. Most of the instances (*n* = 8) involve the main verb *gaan* 'to go' (23).

Participant B003:

(23)	*in*	*2008*	*heb*	*ik*	*naar*	*Nederland*	*ge-gaa-n*
	in	2008	have	I	to	Netherlands	PTC-go-PTC

'In 2008, I went to the Netherlands.' (NLD: *ben*)

In Dutch, there are two ways to form the past tense. The first one is to add the dental suffix *-te* or *-de* to the stem, and the other is to change the stem vowel (ablaut). There are also stems that change slightly even though a dental suffix is added. Synchronically, the formations with changing vowels or consonants are irregular. Regularization of these irregular stems (24; *n* = 10) was found in the speech of eight participants. Three participants used a dental suffix for participles that take the ending *-en* without changing stem vowels in NLD (*n* = 3).

Participant B032:

(24)	*dan*	*moest*	*je*	*nog*	*afwacht-en*	*als*	*de*	*persoon*	*het*	*ontvang-de*
	then	must.PST	you	still	await-INF	if	ART.C	person	it	receive-PST

'Then you still had to wait until the person received it.' (NLD: *ontving*)

Some interference from Portuguese was noticed in compounds (*n* = 5) in the Dutch of five participants (25). Whereas in Dutch, nominal compounds are formed with right-hand heads, left-hand heads are used in Portuguese.

Participant B013:

(25) *hier* *heb* *je* *weg-en* *van* *grond* *nog* *wel*
here have you road-PL of dirt still AFF
'Here you still have dirt roads.' (NLD: *grondwegen*, cf. PT *estrada de terra*)

Under certain circumstances, Dutch infinitives require to be preceded by the element *te*. In the speech of four participants, the element *te* was not present where it would be required in NLD (26; *n* = 7). In the speech of one participant, *te* appeared where NLD would not allow it.

Participant A029:

(26) *toen* *begon* *ze* *ook* *heel* *veel* *boek-en* *Ø* *lez-en* *né*
then begin.PST she also very many boek-PL read.INF TAG
'Then she began to read many books, isn't it?' (NLD: *te lezen*)

Finally, three participants seem to have developed a productive formation of plural demonyms, namely *Braziliaansen* 'Brazilians' (*n* = 6; cf. NLD SG *Braziliaan*, PL *Brazilianen*) and *Duitsen* 'Germans' (*n* = 1; cf. NLD SG *Duitser*, PL *Duitsers*). To create a demonym, these participants seem to have taken the adjective (*Braziliaans*, *Duits*) and added the plural suffix *-en* to it. This may be due to interference from Portuguese, which – like English in these cases – does not distinguish between the adjectival and nominal forms of the demonym (cf. PT SG *brasileiro*, PL *brasileiros* 'Brazilian'; SG *alemão*, PL *alemães* 'German').

5.2 Regional Dutch characteristics

In this section, the focus will not be on the development of new morphosyntactic properties, but rather on the development of features present in the dialects of Dutch and of the Dutch regional languages. Some of these features have been retained or possibly diffused in the Dutch of the heritage communities in Paraná. All NLD and dialectal elements that do not occur in the standard language have been listed in Table 10.

Feature	**Participants (*n*)**	**Instances (*n*)**
3SG.PRES *heb*	16	33
Bennen for *zijn*	3	3
Conjunction *als* after negative*	13	20
Conjunction *als* in comparisons*	9	15
Dativus ethicus	1	1
Dialectal diminutive	2	3
Dialectal pronouns	2	2
Do-support	4	4
Double complementizer	1	1
Double negation	1	1
Kommen for *komen*	1	1
Merger of *kennen* and *kunnen*	7	13
Mijnes for *de mijne*	1	1
Motten for *moeten*	2	2
Reflexive of possessive + *eigen*	2	4
Use of *hun* as subject or direct object*	9	24
Voor te for *om te*	3	4

Table 10: *Overview of non-SD and dialectal morphosyntactic elements in the data set. Non-standard features that are not associated with certain dialects or regional languages are indicated with an asterisk (*).*

5.2.1 Merger of 'kennen' and 'kunnen'

In varieties in the western and northern parts of the Netherlands, the verbs *kennen* 'to know' and *kunnen* 'can' have merged. The standard language makes a clear distinction between these verbs, with

kennen conjugated as a regular verb (with a dental suffix in the preterit), while *kunnen* is irregular (with ablaut of the stem vowel in the preterit). In many western and northern varieties, however, the forms of *kennen* are used for the present, whereas in the preterit, forms of *kunnen* are used. Figure 11 shows all the locations where the verbs have merged, and the different forms of the merged verb that have been attested.

In the corpus, seven participants produced 13 instances of the merged verb in the present tense (*n* = 7) (27) and in the preterit (*n* = 5) (28). Six participants live in Carambeí, are of the first (*n* = 1) and second (*n* = 5) generations, and have their origins in South-Holland (*n* = 4), Frisia (*n* = 1) and Groningen (*n* = 2). The other participant lives in Arapoti. Except for the Arapotian participant, the origin regions of the participants match the regions where *kennen* and *kunnen* merged into *kennen* or *kinnen*. In general, the origins of the participants from Carambeí are almost exclusively areas where the merger has happened (cf. Appendices E3 and F3), whereas Arapoti has a substantial influence from regions without the merger (Appendices E2 and F2), and participants from Castrolanda in general have their origins in regions where the merger did not take place (Appendices E4 and F4).

Participant B021:

(27) *Die ei-eren van die vogel <u>ken</u> je et-en*
those egg-PL of that bird can you eat-INF
'You can eat those eggs of that bird.' (SD: *kun*, INF *kunnen*)

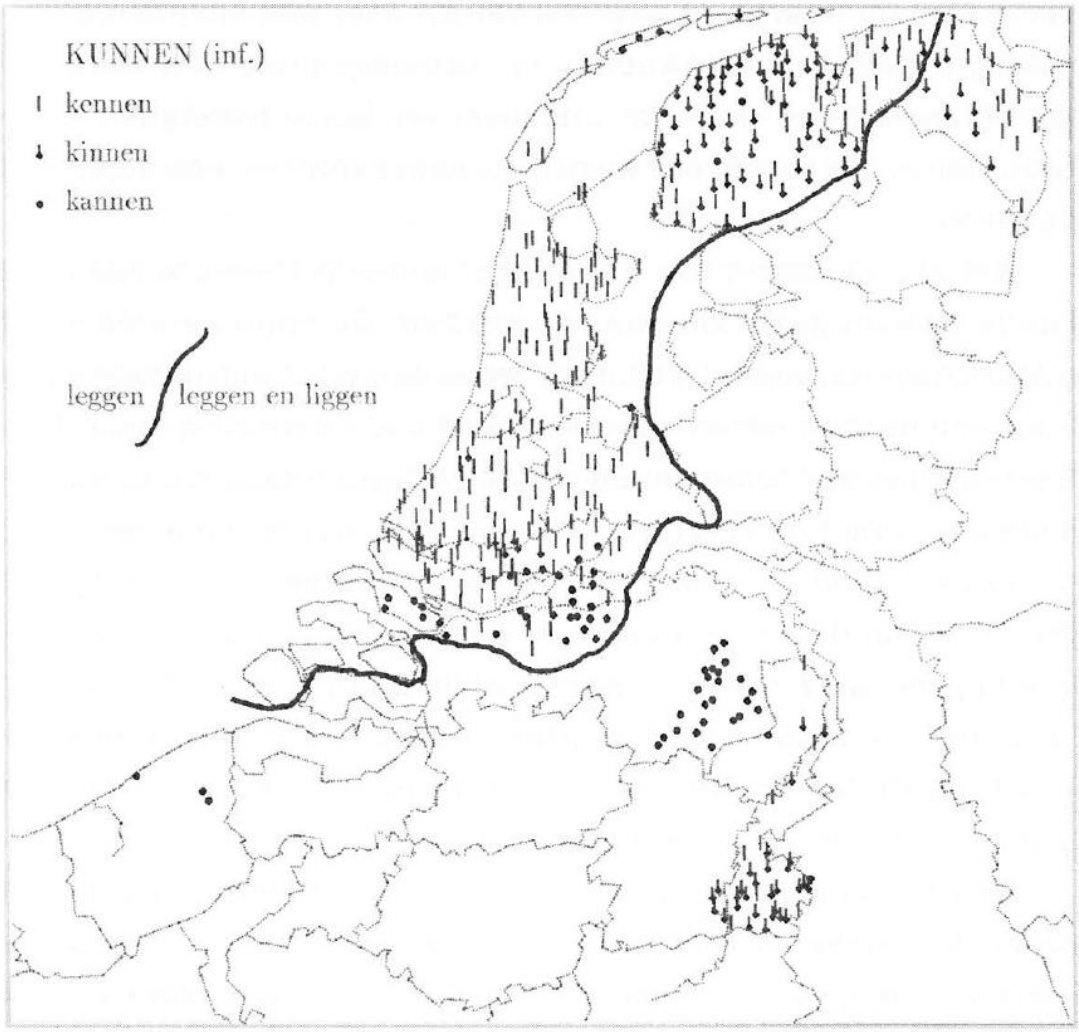


Figure 11: *Merging of the verbs kennen 'know' and kunnen 'can' (Stroop, 2010, p. 169, via (Kruijsen & Van der Sijs, 2016, Kaart 27622).*

Participant B016:

(28) *Die* *<u>kon-den</u>* *me* *helemaal* *niet* *né*
those know.PRET-3PL me at.all NEG TAG
'Those (people) didn't know me at all, did they?' (SD: *kenden*, INF *kennen*)

5.2.2 3SG.PRES 'heb'

Although the standard 3SG.PRES of the verb *hebben* 'to have' is *heeft*, there is a lot of regional variation in the Dutch language area, as can be seen in Figure 12. Western varieties tend to use a form ending in /b/, eastern varieties a form ending in /f/, and northern varieties a form ending in /t/.

In the data, no forms ending in /f/ or /t/ were found. However, 33 instances of a 3SG.PRES *heb* (29) were produced by 16 different participants of the first (*n* = 4), second (*n* = 10) and third (*n* = 2) generation, most of whom are from Carambeí (*n* = 14). The other two are from Arapoti. The majority is from or has an ancestor from South-Holland (*n* = 10). The participants that do not have an ancestor from South-Holland have ancestors from Groningen (*n* = 4), Frisia (*n* = 2), Indonesia (*n* = 1), and unknown (*n* = 1), all of whom live in Carambeí.

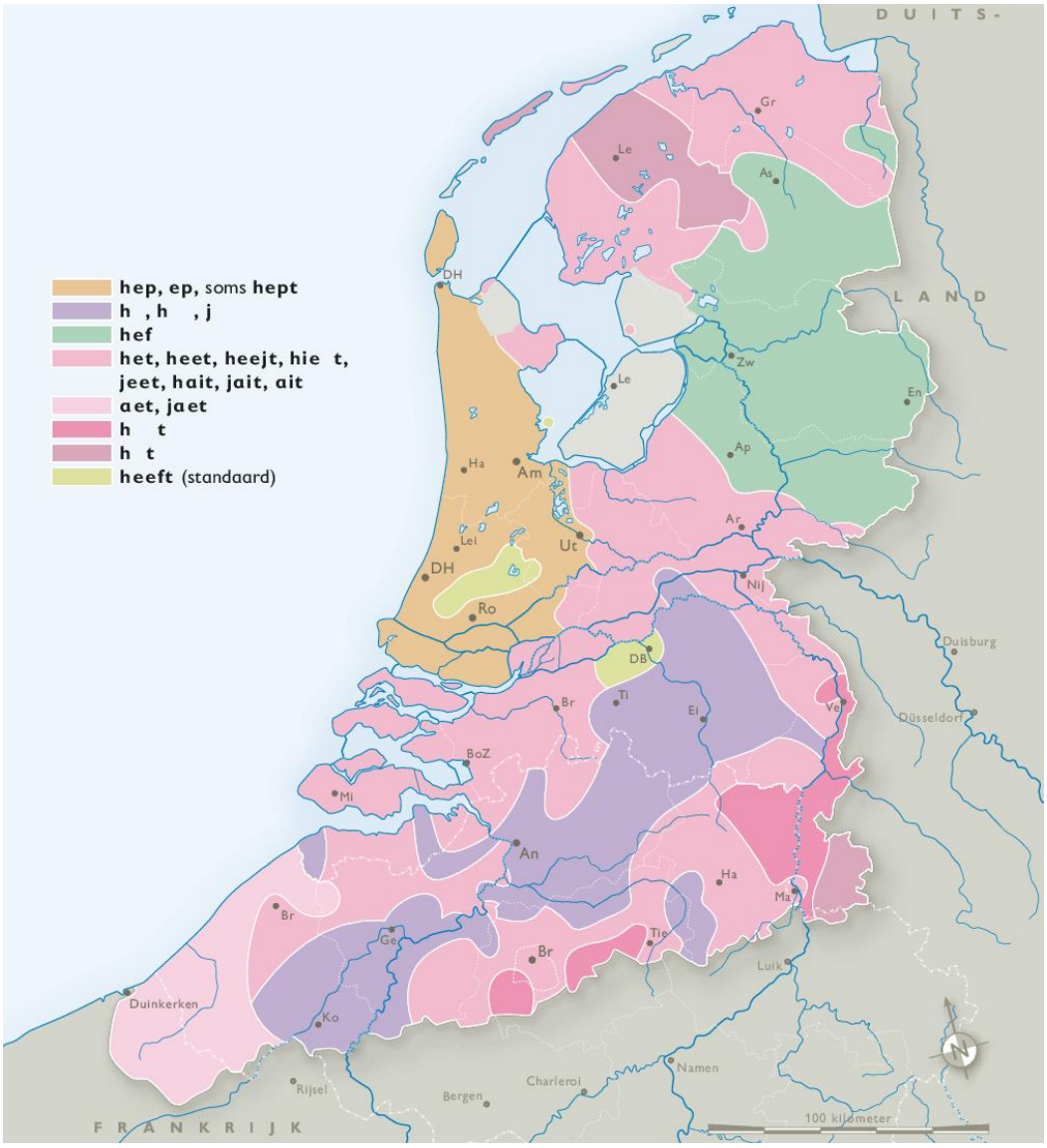


Figure 12: *Variations of the 3SG.PRES form of the verb hebben 'have'. The area where heb is found is indicated with orange (Van der Sijs, 2011, p. 222, via Kruijsen & Van der Sijs, 2016, Kaart 28301).*

Participant B016:

(29) *Een* *van* *de* *groot-ste* *bedrijv-en* *van* *koei-en* *in* *Nederland* *heb*
one of ART.DEF.PL big-SUPL company-PL of cow-PL in Netherlands have.3SG.PRES

ge-koop-t *de* *groot-ste* *bedrijf* *van* *energie* *in* *Brasil*
PTC-buy-PTC ART.DEF.C big.SUPL company of energy in Brazil

'One of the biggest cow companies in the Netherlands has bought the biggest energy company in Brazil' (SD: *heeft*)

The participants that have their origins in South-Holland may be expected to produce these forms, but participants without ancestors from the western part of the country are not, and the reason for their production of forms ending in /b/ must be explained in another way. As all of these participants live in Carambeí, the community with the largest share of participants of western origin, it is likely that the feature spread within the community from HSs speaking western varieties to HSs speaking other varieties.

5.2.3 Periphrastic use of 'doen'

In regional varieties of Dutch, the verb *doen* 'to do' is used a light verb, either to avoid morphological complexity (Barbiers, 2013), or as a habitual (at least in Heerlen Dutch, cf. Cornips, 1994). The use of periphrastic *doen* is stigmatized and not present in the standard language. But as Figure 13 shows, the use of this light verb, especially in declaratives (30), is widespread. The only provinces where it is not present are the northern provinces of Frisia, Drenthe and Groningen. The use of periphrastic *doen* with a perfective is mostly limited to the north eastern provinces of Groningen, Drenthe and Overijssel (Figure 14).

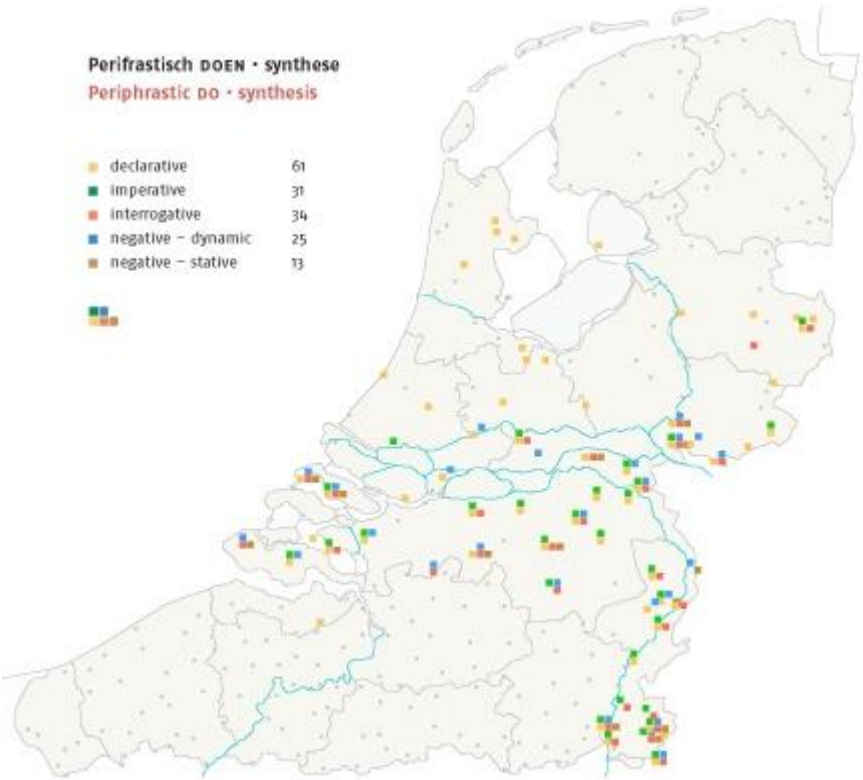


Figure 13: *Adapted from Barbiers et al. (2008, p. 43b), via Kruijsen & Van der Sijs (2016, Kaart 15419).*

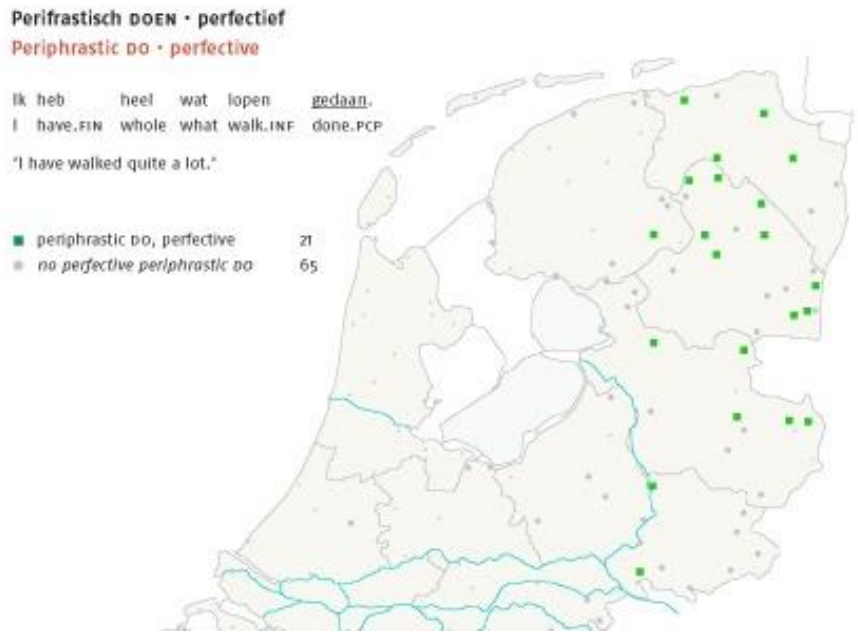


Figure 14: *Adapted from Barbiers et al. (2008, p. 44a), via Kruijsen & Van der Sijs (2016, Kaart 15418).*

Periphrastic *doen* in a declarative (adapted from Barbiers et al., 2008, p. 41b):

(30) *ik* *doe* *wel* *even* *de* *kop-je-s* *af-wass-en*
I do.1SG AFF just the cup-DIM-PL off-wash-INF
'I will do the washing up (of the cups).' (SD: *ik was de kopjes wel even af*)

HSs' use of periphrastic constructions has often been attested in code-switching, when inserting verbs from one language into the other (cf. Muysken, 2000), but seems to be less common in unilingual speech. Studies of heritage Russian have found that the use of certain light verbs has been extended to new contexts (Polinsky, 2008; Zemskaja & Glovinskaja, 2001, as cited in Pereltsvaig, 2008). In Brazilian Zeeuws, the use of the verb *doen* as a light verb is likely to be a new feature that was not present in the original dialects spoken by the migrants from Zeeland. Instead, it is argued to have developed as a result of language contact. Brazilian Pomeranian, the adstrate language, has also developed this feature, although its use is more restricted. In Brazilian Zeeuws, the periphrastic construction can occur in main and embedded clauses, while it only occurs in main clauses in Brazilian Pomeranian (Schaffel Bremenkamp et al., 2017).

The use of periphrastic *doen* occurs in the speech of four participants (*n* = 4). One is of the first generation, one of the second and two of the third generation. Two of the instances of periphrastic *doen* have a habitual meaning (31), whereas the other two do not (32). The light verb is used both in main clauses as well as in embedded clauses, just like Brazilian Zeeuws does. The participants have their origins in the provinces of Overijssel and South-Holland. In both areas, the light verb *doen* has been attested.

Participant A002:

(31) *hier* *bij* *onz-e* *school* *is* *nog* *maar* *een* *klein* *groep-je*
here at our-C school be.3SG still just ART.INDEF small.N group-DIM

die *het* *Hollands* *ler-en* *doe-t*
REL ART.DEF.N Dutch learn-INF do-3SG
'Here at our school is just a small group left that learns Dutch.' (SD: *leert* 'learns')

Participant A019:

(32) *je* *moest* *betal-en* *als* *je* *je* *handdoek* *deed* *verliez-en*
you must.PST pay-INF if you your towel do.PST lose-INF

van *de* *hotel*
of ART.DEF.C hotel.N
'You had to pay if you lost your towel of the hotel.' (SD: *verloor* 'lost')

Although periphrastic *doen* is not very common, it is likely that it has been introduced in the communities through the speech of the first generation. The first generation is probably aware of the stigmatization of the construction and may have avoided it as much as possible. The situation of language contact may have favoured the preservation of this light verb in the speech of a few participants in the same way that it favoured the development (or preservation, if it was present in the speech of the first generation there) of the light verb in Brazilian Zeeuws.

5.2.4 Other regional characteristics

The non-standard use of the pronoun *hun* for the 3PL subject (*n* = 24) has been found in the speech of nine participants from Arapoti and Carambeí. The use of *als* in comparisons instead of Standard Dutch *dan* is found in the speech of nine participants from the three communities. These two phenomena, although widespread in colloquial NLD, are not accepted by prescriptivist grammars.

Other morphosyntactic characteristics of Dutch dialects and regional languages only occurred in the speech of first generation participants. Participant C006 is the only exception to this, as he uses the form *bennen* 'be' for the 3PL.PRES (NLD: *zijn*) and the diminutive marker *-ie* on the word *beet-ie* 'a bit' (NLD: *beet-je*). This last form may, however, be a lexicalized form and not a productive diminutive suffix. C006 is one of the three second generation participants that indicated speaking the Drents dialect (see Table 2).

6 Conclusion

The main aim of this study was to describe morphosyntactic divergences from NLD and maintenance of dialectal features in Paraná Dutch, compare them to findings of studies on Dutch as a HL in areas with other dominant languages, and relate the findings to extralinguistic features. Table 11 provides an overview of the findings of this study.

Besides that, two models for language vitality assessment (UNESCO, EGIDS) were used to describe the endangerment of Paraná Dutch. According to the models, the heritage variety is definitively endangered (UNESCO), and threatened or shifting (EGIDS).

Morphosyntactic divergences from NLD in Paraná Dutch were due to interference from the majority language Portuguese (determiner omission, pronoun drop), or due to internal development of HL features that often lack transparency (overgeneralization of the common gender, overgeneralized trochaic patterns in plural nouns, variation in verb inflection). The overgeneralization of the SVO word order can be argued to be due to interference from Portuguese, due to internal development towards one standard word order, or due to a combination of these factors.

Relatively few morphosyntactic variations from the Dutch dialects or regional languages were found in the speech of participants of the second generation or later (the merger of *kennen* 'know' and *kunnen* 'can', use of *heb* for the 3SG.PRES of *hebben* 'have', periphrastic use of *doen* 'do'). Some of the divergent verbal and nominal inflection may also be explained as retentions of dialectal features.

All newly developed divergences from NLD have been found in different heritage varieties of Dutch. The overgeneralization of the SVO word order has been found in Dutch as a HL in Anglophone countries, where it may also be due to interference, internal change, or multiple causation. Determiner omission in judgement data from Holambra was due to interference from Portuguese. Whereas the overgeneralization of the common gender may be argued to be due to a combination of interference and internal change in Indonesia and the Anglophone countries, it can only be due to internal change in Brazil. Variation in nominal plural markers was due to interference in Indonesia and Australia, but due to both interference as well as internal development in the US. Variation in verbal inflection was an internal development in Anglophone countries and Brazil, but can be also due to either phonological interference in Indonesia.

Participants whose speech contained morphosyntactic divergences from NLD tend to be of the second generation or later and have a lower usage of and exposure to Dutch than average. Age did not seem to be an important factor in most cases, except for determiner and subject omission, which were used by younger participants. Variation in gender assignment was found across all generations, which means that the speech of participants of the first generation has attritted.

In short, Paraná Dutch seems to have lost the morphosyntactic dialectal features present in the speech of the first-generation participants, but has developed divergences from NLD due to interference from Portuguese, or in order to create more transparency. The objective of this thesis was to describe and analyse these features in order to open doors for further linguistic research into this endangered heritage variety.

Variation	**Participant characteristics**	**Development**	**Other HL varieties**
SVO order	- Generation 2+ - Low usage/exposure	Due to interference, internal development or multiple causation	- Australia (Clyne, 1977; De Bot & Clyne, 1994) - New Zealand (Folmer, 1991)
Determiner omission	- Generation 2+ - Aged <35 - Low usage/exposure	Due to interference (or internal development)	- Holambra (Brazil) (Codina Bobia, 2017; 2019)
Grammatical gender		Due to internal development	- Indonesia (Giesbers, 1997) - Australia (Clyne, 1977) - New Zealand (Folmer, 1991)
Nominal plural marker	- Generation 2+ - Low usage/exposure	Due to internal development	- Indonesia (Giesbers, 1997) - Australia (Clyne, 1977) - United States (Smits, 1996) - New Zealand (Folmer, 1991)
Pronoun drop	- Generation 2+ - Aged <54 (only for subject drop)	Due to interference	- Australia (Clyne, 1977) - Espírito Santo (Schaffel Bremenkamp et al., 2017)
Present verb inflection	- Generation 2+	Due to internal development	- Indonesia (Giesbers, 1997) - United States (Smits, 1996) - Holambra (Schoenmakers-Klein Gunnewiek, 1997) - New Zealand (Folmer, 1991)
Merger of *kennen* and *kunnen*	- Carambeí	Retained in second generation	
3SG.PRES *heb*	- Carambeí	Spread throughout the community	
Periphrastic *doen*		Retained in second generation	- Espírito Santo (Schaffel Bremenkamp et al., 2017)

Table 11: *Overview of the findings.*

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Appendices

Appendix A: Consent forms

A1: *Consent form in Dutch*

Participant nr.: …….

Universiteit Leiden
Geesteswetenschappen

Toestemmingsformulier voor deelnemers aan het onderzoek naar het Nederlands in Paraná

Naam onderzoeker: Ivo Boers
E-mail: i.h.g.boers@umail.leidenuniv.nl / ivohgboers@gmail.com

Hartelijk dank voor uw deelname aan het onderzoek naar het Nederlands in Paraná. Ethische procedures voor academisch onderzoek vereisen dat geïnterviewde participanten de onderzoeker expliciet toestemming geven om informatie uit het interview te gebruiken. Dit toestemmingsformulier is noodzakelijk om vast te stellen dat u het doel van uw deelname begrijpt en het eens bent met de voorwaarden van uw deelname.

- De onderzoeker heeft mij naar tevredenheid geïnformeerd over het onderzoek waaraan ik heb deelgenomen.
- Ik begrijp dat mijn deelname vrijwillig is, dat ik het recht heb tot onttrekking aan het onderzoek op ieder moment en dat mijn recht op anonimiteit en privacy zullen worden gerespecteerd.
- Ik begrijp dat de opname van het interview en de transcriptie daarvan aan de onderzoeker, zijn begeleiders en, indien noodzakelijk, zijn naaste collega's beschikbaar worden gesteld.
- Hierbij geef ik mijn toestemming voor het gebruik van alle informatie, die uit de getranscribeerde interviews blijkt en die ik op de onderzoeksvragenlijst ingevuld heb, voor andere onderzoeks- en/of lesdoelen inclusief onderzoekspublicaties en/of rapporten, alleen wanneer mijn anonimiteit strikt in acht genomen wordt.
- Ik begrijp dat mijn woorden geanonimiseerd geciteerd kunnen worden.
- Hierbij geef ik mijn toestemming voor volledige toegang tot deze gegevens aan de onderzoeker op voorwaarde dat hij zich houdt aan de relevante code van ethiek. Ik begrijp ook dat, wanneer ik dit formulier onderteken, ik de hierboven genoemde onderzoeker toestemming geef om fragmenten van deze gegevens als gedeelte van zijn werk in geschreven en/of gesproken vorm te presenteren zonder verdere toestemming.
- Hierbij geef ik het auteursrecht van mijn deelname aan bovengenoemde onderzoeker.

Naam deelnemer: ……

Handtekening: Datum: …… / …… / …… Plaats: ……

Wilt u dat er contact met u wordt opgenomen voor eventueel verder onderzoek? Dan kunt u hier uw e-mailadres invullen: ……

Dit formulier wordt in tweevoud opgemaakt. Eén kopie is bestemd voor de deelnemer, de ander voor de onderzoeker.

A2: *Consent form in Portuguese*

Participant nr.: …….

Universiteit Leiden
Geesteswetenschappen

Formulário de consentimento para participantes da pesquisa no Holandês no Paraná

Nome do pesquisador: Ivo Boers
E-mail: i.h.g.boers@umail.leidenuniv.nl / ivohgboers@gmail.com

Obrigadíssimo por sua participação na pesquisa holandesa no Paraná. Procedimentos éticos para pesquisa acadêmica exigem que os participantes entrevistados autorizem explicitamente o pesquisador a usar as informações da entrevista. Este formulário de consentimento é necessário para estabelecer que você entende o objetivo de sua participação e concorda com os termos de sua participação.

- O pesquisador me informou satisfatoriamente sobre a pesquisa em que participei.
- Eu entendo que minha participação é voluntária, que tenho o direito de desistir da pesquisa a qualquer momento e que meu direito ao anonimato e à privacidade será respeitado.
- Eu entendo que a gravação da entrevista e sua transcrição são disponibilizados para o pesquisador, seus supervisores e, se necessário, seus colegas próximos.
- Eu permito que o pesquisador use todas as informações que aparecem nas entrevistas transcritas e que eu completei no questionário de pesquisa, para outros objetivos de pesquisa e/ou aula, incluindo publicações de pesquisa e/ou relatórios, somente se meu anonimato for estritamente observado.
- Eu entendo que minhas palavras podem ser citadas anonimamente.
- Por meio deste, dou minha permissão para acesso total a esses dados ao pesquisador, desde que ele adote o código de ética relevante. Também entendo que, ao assinar este formulário, autorizo o pesquisador mencionado acima a apresentar fragmentos desses dados como parte de seu trabalho na forma escrita e/ou falada sem mais permissão.
- Eu dou os direitos autorais da minha participação ao pesquisador mencionado acima.

Nome do participante: ……

Assinatura: Data: …… / …… / …… Lugar: ……..

Gostaria de ser contatado para participar em mais pesquisas? Então você pode escrever seu endereço de e-mail aqui: ……

Este formulário é composto em duplicado. Uma cópia é destinada ao participante e a outra ao pesquisador.

Appendix B: Questionnaires

B1: *Questionnaire in Dutch for first generation HSs of Dutch.*

Participant nr.: …….

G1

Achtergrondvragenlijst voor sprekers van het Nederlands in Paraná

Hartelijk dank voor uw deelname aan het onderzoek naar het Nederlands in Paraná. Door middel van deze enquête wordt achtergrondinformatie van deelnemers aan het onderzoek verzameld. De informatie wordt anoniem verwerkt en vertrouwelijk bewaard.

1. Geslacht: …….

2. Leeftijd: …….

3. Geboorteplaats: …….

4. Beroep: …….

5. Woonplaatsen door de tijd heen: *Geeft u alstublieft op welke plaatsen u voor langere tijd gewoond heeft, gevolgd door de jaren waarin u daar gewoond hebt, zoals in onderstaand voorbeeld.*

Voorbeeld:	Plaats: *Utrecht, Nederland*	Data: *1950 – 1975*
	Plaats: *Rio de Janeiro, Brazilië*	Data: *1975 – 1990*
	Plaats: *Amsterdam, Nederland*	Data: *1990 – heden*

Plaats: …… Data: ……

Plaats: …… Data: ……

Plaats: …… Data: ……

Plaats: …… Data: ……

Plaats: …… Data: ……

Plaats: …… Data: ……

6. Met wie bent u naar Brazilië geëmigreerd?

☐ Alleen

☐ Met partner

☐ Met partner en kinderen

☐ Met ouders

☐ Anders, namelijk: ……

7. Hoe vaak bezoekt u Nederland?

☐ Nooit

☐ Minder dan één keer per vijf jaar

☐ Eén of enkele keren per vijf jaar

☐ Eén of meerdere keren per jaar

8. Wat is het hoogste onderwijsdiploma dat u behaald heeft?

☐ Geen diploma ☐ Middelbaar onderwijs

☐ Basisonderwijs ☐ Hoger / Universitair onderwijs

9. In welke talen waren de lessen op uw scholen? *(Meerdere antwoorden mogelijk)*

Basisschool	☐ Nederlands	☐ Portugees	☐ Anders, namelijk: ……
Middelbare school	☐ Nederlands	☐ Portugees	☐ Anders, namelijk: ……
Hoger onderwijs	☐ Nederlands	☐ Portugees	☐ Anders, namelijk: ……

10. Hoeveel broers en zussen heeft u?

Ik heb …… oudere broer(s), …… jongere broer(s), …… oudere zus(sen), …… jongere zus(sen).

11. Spreekt u een regionale taal of een dialect uit Nederland? *(Bijv. Twents, Limburgs, Fries, Zeeuws)*

☐ Nee ☐ Ja, namelijk: ……..

12. Welke talen spreekt/sprak u met uw familieleden? *(Antwoord in percentages, bijv. 25% Nederlands, 75% Portugees)*

Vader	☐ Nederlands	☐ Portugees	☐ Anders, namelijk: ……
Moeder	☐ Nederlands	☐ Portugees	☐ Anders, namelijk: ……
Partner	☐ Nederlands	☐ Portugees	☐ Anders, namelijk: ……
Grootouders	☐ Nederlands	☐ Portugees	☐ Anders, namelijk: ……
Broers/zussen	☐ Nederlands	☐ Portugees	☐ Anders, namelijk: ……
Kinderen	☐ Nederlands	☐ Portugees	☐ Anders, namelijk: ……
Kleinkinderen	☐ Nederlands	☐ Portugees	☐ Anders, namelijk: ……

13. Welke talen spreekt u met mensen in uw omgeving? *(Antwoord in percentages, bijv. 25% Nederlands, 75% Portugees)*

Vrienden	☐ Nederlands	☐ Portugees	☐ Anders, namelijk: ……
Buren	☐ Nederlands	☐ Portugees	☐ Anders, namelijk: ……
Collega's	☐ Nederlands	☐ Portugees	☐ Anders, namelijk: ……
Kerk	☐ Nederlands	☐ Portugees	☐ Anders, namelijk: ……

14. Hoe vaak komt u in aanraking met het Nederlands?

	Altijd	Vaak	Soms	Zelden	Nooit
Ik lees kranten, boeken en tijdschriften in het Nederlands.					
Ik lees online nieuws in het Nederlands.					
Ik luister/kijk naar Nederlandse radio en televisie.					
Ik luister naar Nederlandse muziek.					
Ik gebruik Nederlands op sociale media.					
Ik bel/skype naar Nederland.					

B2: *Questionnaire in Portuguese for first generation HSs of Dutch.*

Participant nr.: …….

Universiteit Leiden
Geesteswetenschappen

G1

Questionário para falantes de Holandês no Paraná

Obrigado por sua participação na pesquisa holandesa no Paraná. Por meio desta pesquisa, as informações básicas dos participantes do estudo são coletadas. As informações são processadas de forma anônima e mantidas confidenciais.

1. Sexo: …….

2. Idade: ……..

3. Lugar de nascimento: ……

4. Profissão: .....

5. Lugares de residência ao longo do tempo: *Por favor, indique em quais lugares você morou, seguido pelos anos em que você morou lá, como no exemplo abaixo.*

Exemplo:	Lugar: *Utrecht, Holanda*	Data: *1950 – 1975*
	Lugar: *Rio de Janeiro, Brasil*	Data: *1975 – 1990*
	Lugar: *Amsterdã, Holanda*	Data: *1990 – agora*
Lugar: …….		Data: …….
Lugar: …….		Data: …….
Lugar: …….		Data: …….
Lugar: …….		Data: …….
Lugar: …….		Data: …….
Lugar: …….		Data: …….

6. Com quem você emigrou para o Brasil?

☐ Sozinho

☐ Com esposo/-a

☐ Com esposo/-a e filhos

☐ Com pais

☐ Outro, a saber: ……

7. Com que frequência você visita a Holanda?

☐ Nunca

☐ Menos de uma vez a cada cinco anos

☐ Uma vez ou mais a cada cinco anos

☐ Uma vez ou mais a cada ano

8. Qual é o diploma de ensino mais alto que você ganhou?

☐ Sem diploma ☐ Ensino secundário

☐ Ensino primário ☐ Ensino superior / Universidade

9. Em quais idiomas foram as aulas de suas escolas? *(Várias respostas possíveis)*

Ensino primário	☐ Holandês	☐ Português	☐ Outro, a saber: ……
Ensino secundário	☐ Holandês	☐ Português	☐ Outro, a saber: ……
Ensino superior	☐ Holandês	☐ Português	☐ Outro, a saber: ……

10. Quantos/-as irmã(o)s você tem?

Tenho …… irmão(s) mais velho(s), …… irmão(s) mais novo(s), …… irmã(s) mais velha(s), …… irmã(s) mais nova(s).

11. Você fala uma língua regional ou um dialeto da Holanda? *(P. ex., Twents, Limburgs, Fries, Zeeuws)*

☐ Não ☐ Sim, a saber: ……..

12. Quais idiomas você fala/falou com seus parentes? *(Resposta em porcentagens, p. ex. 25% Holandês, 75% Português)*

Pai	☐ Holandês	☐ Português	☐ Outro, a saber: ……
Mãe	☐ Holandês	☐ Português	☐ Outro, a saber: ……
Esposo/-a	☐ Holandês	☐ Português	☐ Outro, a saber: ……
Avós	☐ Holandês	☐ Português	☐ Outro, a saber: ……
Irmã(o)s	☐ Holandês	☐ Português	☐ Outro, a saber: ……
Filhos	☐ Holandês	☐ Português	☐ Outro, a saber: ……
Netos	☐ Holandês	☐ Português	☐ Outro, a saber: ……

13. Quais idiomas você fala para as pessoas nos seus arredores? *(Resposta em porcentagens, p. ex. 25% Holandês, 75% Português)*

Amigos/-as	☐ Holandês	☐ Português	☐ Outro, a saber: ……
Vizinhos/-as	☐ Holandês	☐ Português	☐ Outro, a saber: ……
Colegas	☐ Holandês	☐ Português	☐ Outro, a saber: ……
Igreja	☐ Holandês	☐ Português	☐ Outro, a saber: ……

14. Com que frequência você entra em contato com o holandês?

	Sempre	Frequente-mente	Às vezes	Rara-mente	Nunca
Leio jornais, livros e revistas em holandês.					
Leio notícias online em holandês.					
Escuto/assisto rádio e televisão em holandês.					
Ouço música holandesa.					
Uso o holandês nas mídias sociais.					
Eu telefono (de Skype) para a Holanda.					

B3: *Question 6 in the Dutch questionnaire for later generation HSs of Dutch.*

6. Wie van uw voorouders is naar Brazilië geëmigreerd, in welk jaar en vanuit welke plaats?

☐ Vader	☐ Moeder	Jaar: …….	Plaats: ……
☐ Grootvader	☐ Grootmoeder	Jaar: …….	Plaats: ……
☐ Overgrootvader	☐ Overgrootmoeder	Jaar: …….	Plaats: ……
☐ Betovergrootvader	☐ Betovergrootmoeder	Jaar: …….	Plaats: ……
☐ Anders, namelijk ……		Jaar: …….	Plaats: ……

B4: *Question 6 in the Portuguese questionnaire for later generation HSs of Dutch.*

6. Quem dos seus antepassados emigrou para o Brasil, em que ano e de onde?

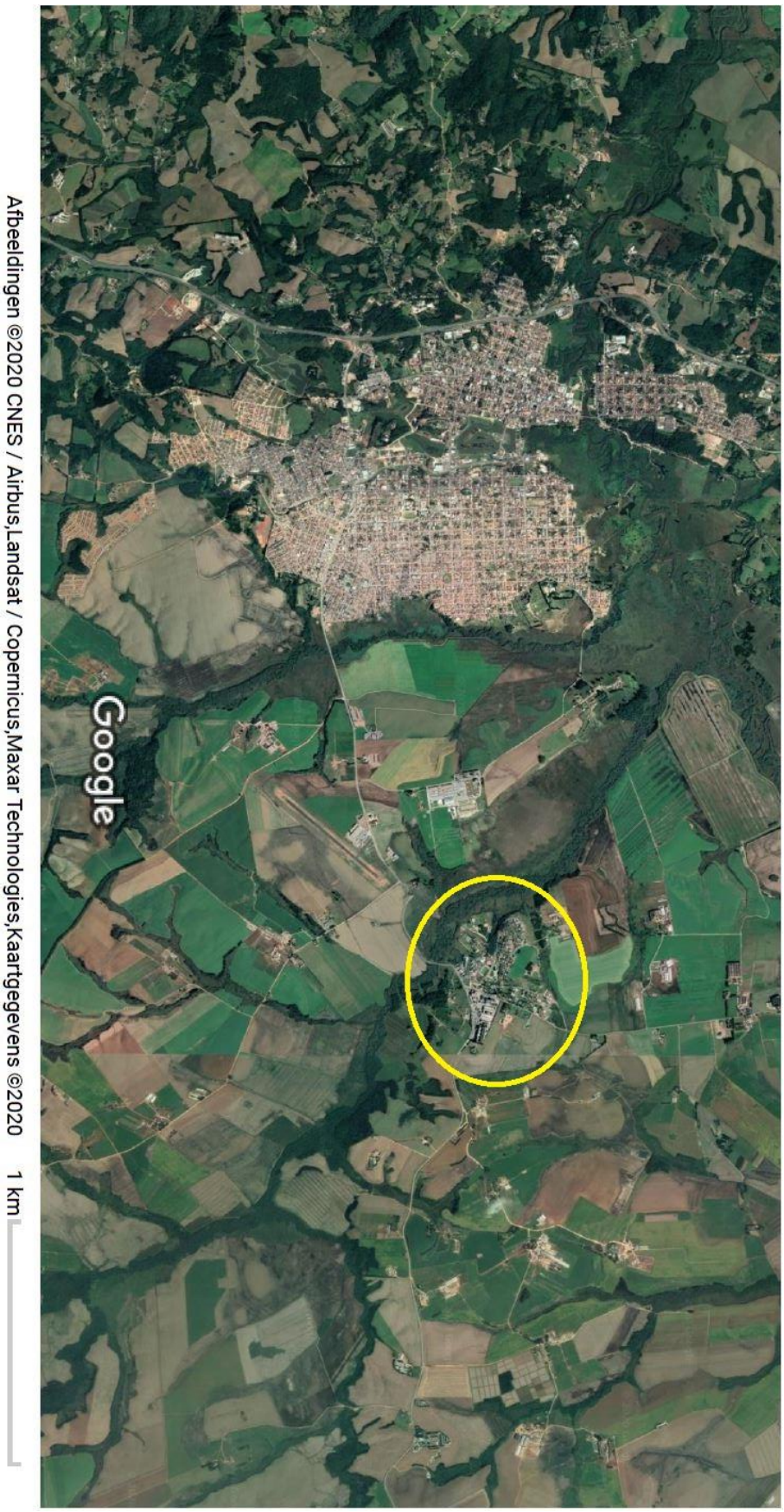
☐ Pai	☐ Mãe	Ano:	Lugar: ……
☐ Avô	☐ Avó	Ano:	Lugar: ……
☐ Bisavô	☐ Bisavó	Ano:	Lugar: ……
☐ Tataravô	☐ Tataravó	Ano:	Lugar: ……
☐ Outro/-a, a saber ……		Ano:	Lugar: ……

Appendix C: Overview of the recordings

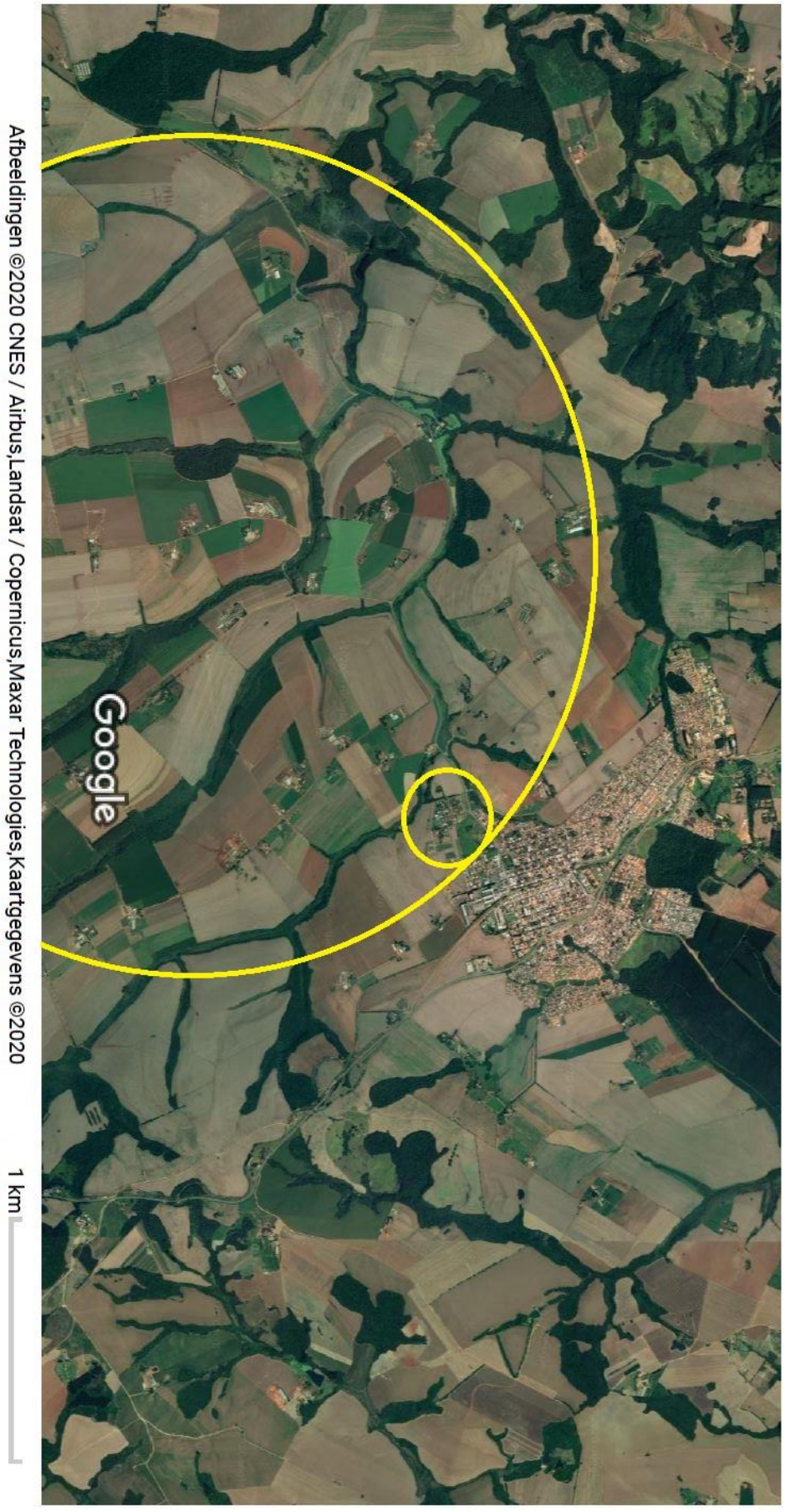
Recording	Participants	Date	Length
1	A001, A002	17/11/18	01:21:21
2	A003, A004, A005	19/11/18	01:48:37
3	A006, A007	20/11/18	00:38:28
4	A008, A009, A010, A011, A012	22/11/18	00:43:09
5	A013, A014, A015, A016	25/11/18	00:31:08
6	A017, A018	28/11/18	00:41:31
7	A019	28/11/18	01:15:06
8	A020, A021, A022	30/11/18	00:22:16
9	A023	01/12/18	00:32:55
10	A024, A025	02/12/18	00:19:56
11	A026, A027, A028	02/12/18	00:29:06
12	A029, A030	04/12/18	00:49:16
13	A031, A032	04/12/18	00:44:43
14	C001, C002	10/12/18	00:29:06
15	C003, C004	12/12/18	00:33:34
16	C005, C006	18/12/18	00:26:29
17	C007, C008, C009	20/12/18	01:01:47
18	C010	20/12/18	00:33:39
19	C011, C012	21/12/18	00:21:45
20	C013, C014, C015, C016, C017, C018	23/12/18	01:04:33
21	B001, B002	02/01/19	00:54:48
22	B003, B004, B005	03/01/19	00:54:30
23	B006, B007, B008	04/01/19	00:21:33
24	B009, B010, B011	05/01/19	00:28:20
25	B012, B013, B014, B015	05/01/19	00:30:25
26	B016, B017	07/01/19	00:36:59
27	B018, B019, B020	07/01/19	00:42:44
28	B021, B022	08/01/19	00:26:37
29	B023, B024	08/01/19	00:42:28
30	B025, B026	09/01/19	00:40:01
31	B027, B028, B029, B030	11/01/19	00:21:58
32	B031, B032	12/01/19	00:34:28

Appendix D: Maps of the communities

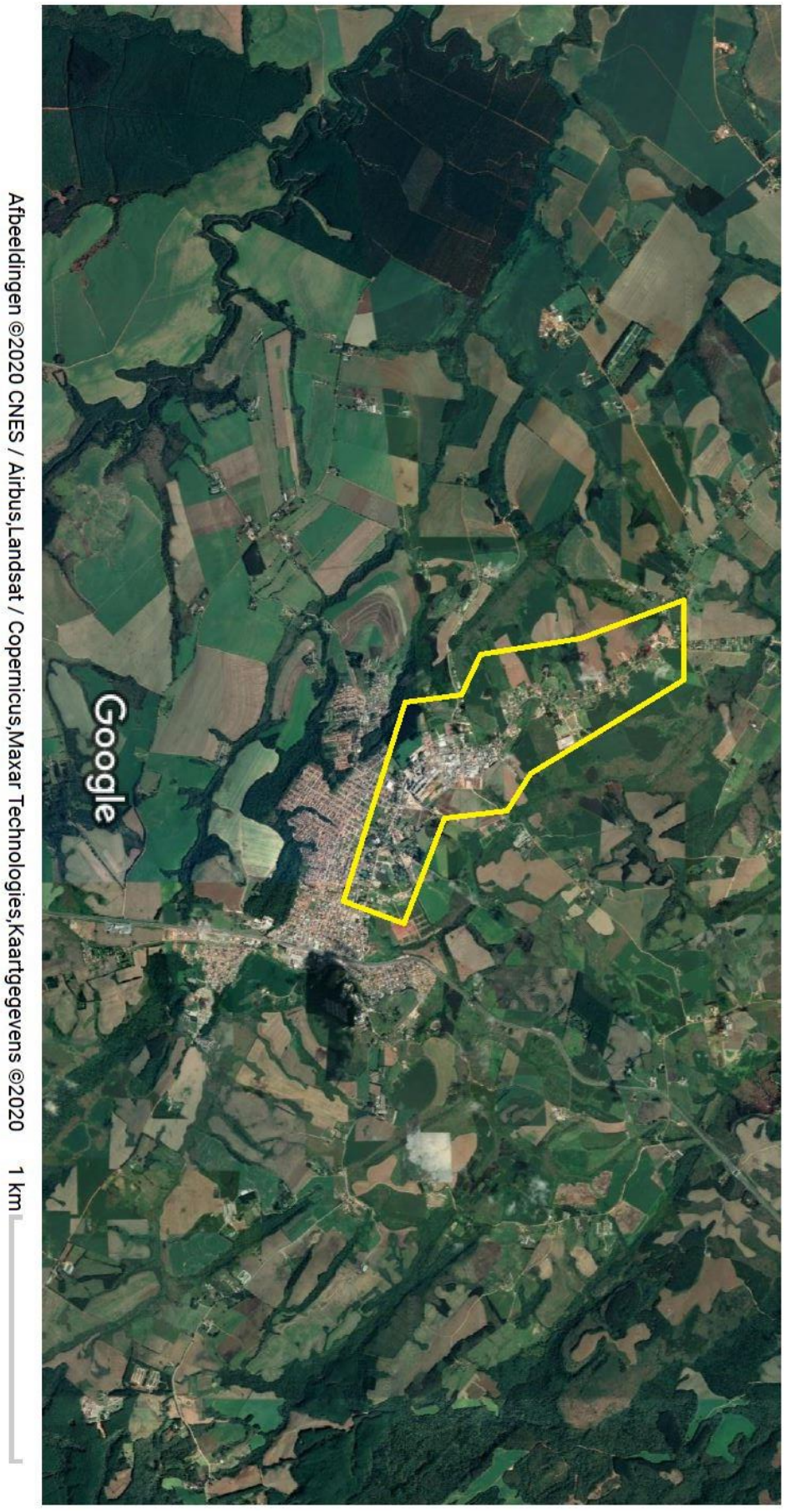
Appendix D1: *Map of Castro. The yellow circle indicates Castrolanda.*



Appendix D2: *Map of Arapoti. The small circle contains the community centre, the large one the farmhouses.*



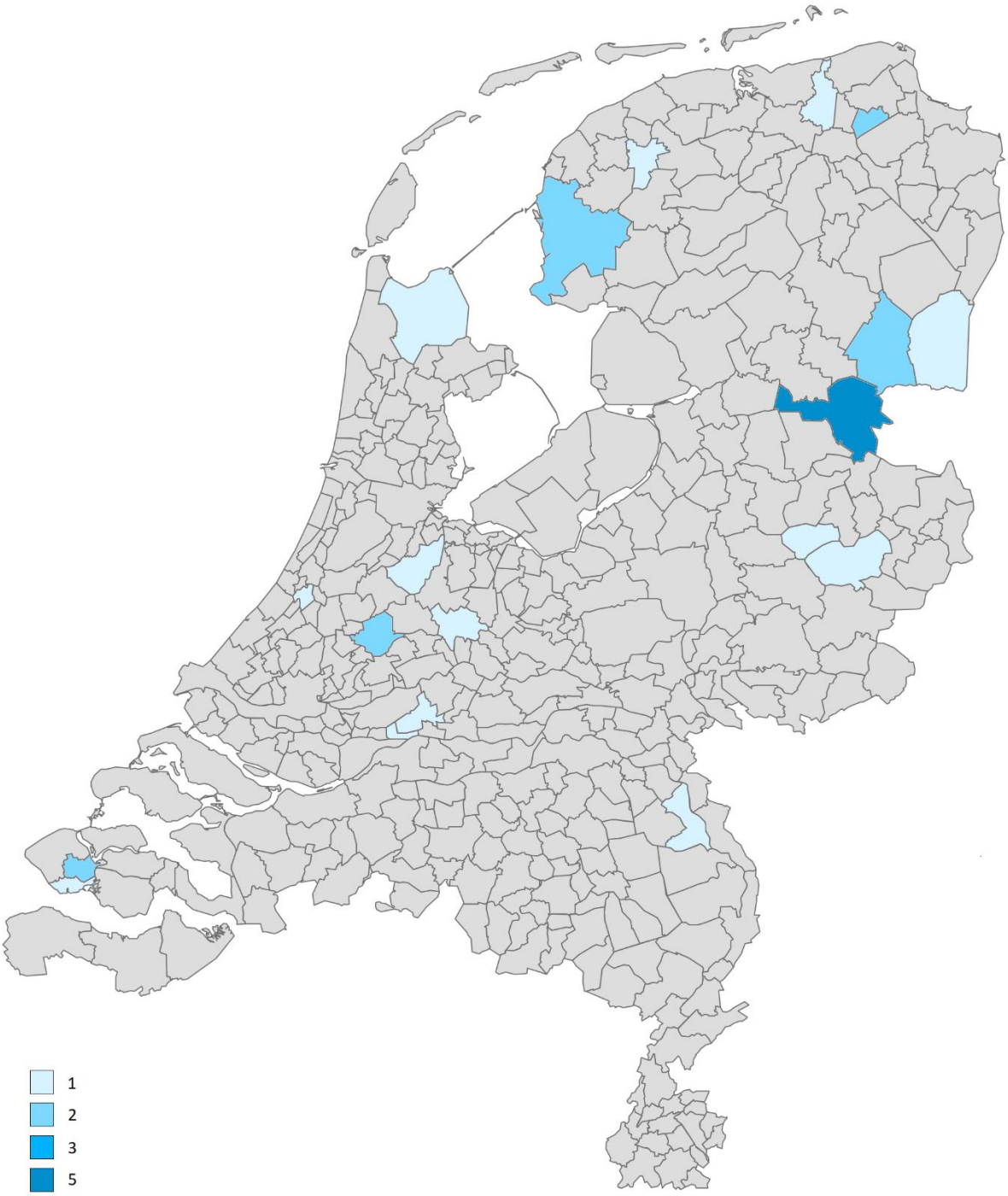
Appendix D3: *Map of Carambeí. The yellow shape indicates the Avenida dos Pioneiros.*



Appendix E: Origin maps (first generation)

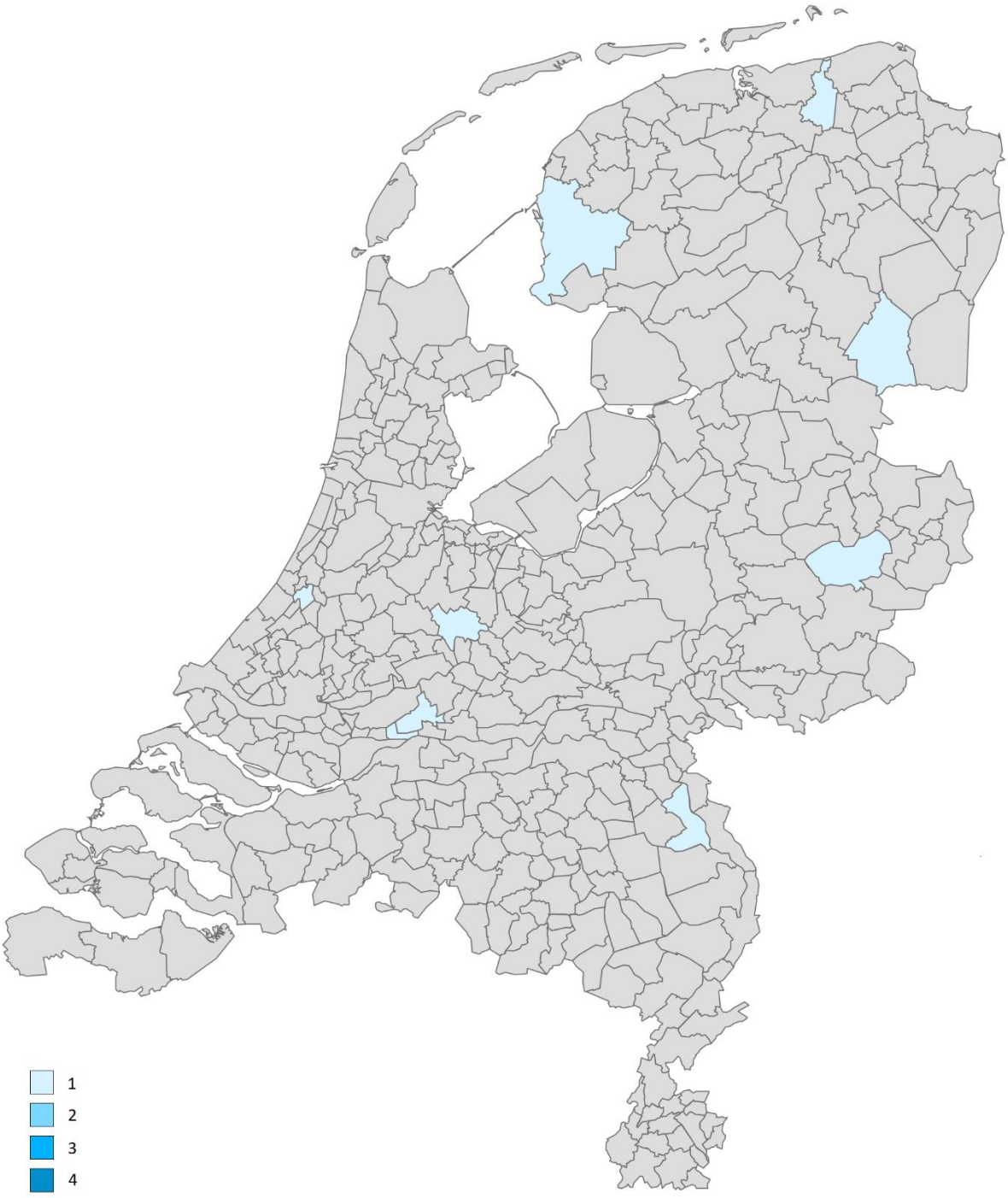
Maps of Dutch municipalities of birth of first generation participants.

E1: *Participants from all communities (n = 28).*



E2: *Participants from Arapoti.*

E3: *Participants from Carambeí.*

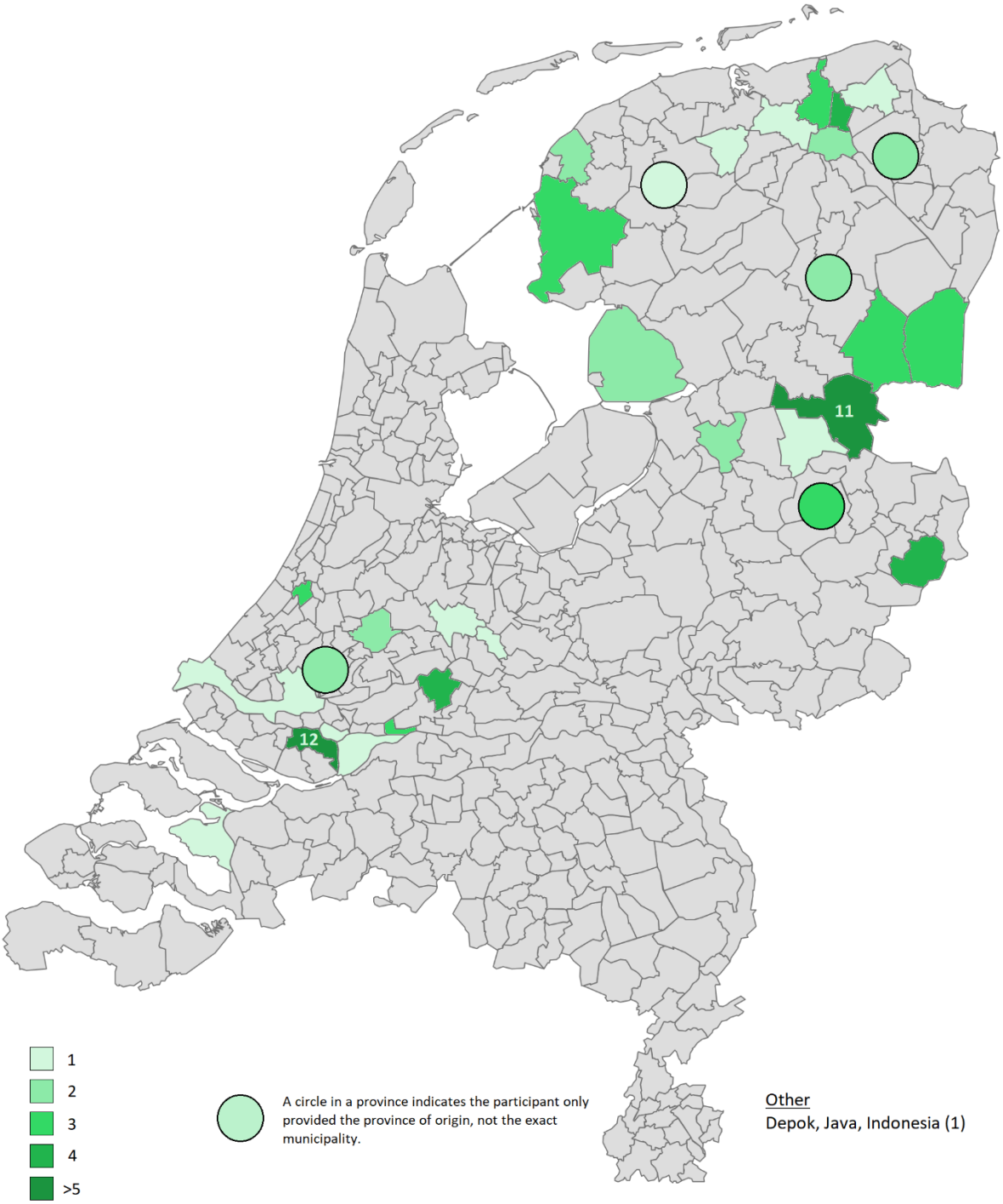


E4: *Participants from Castrolanda.*

Appendix F: Origin maps (second generation and later)

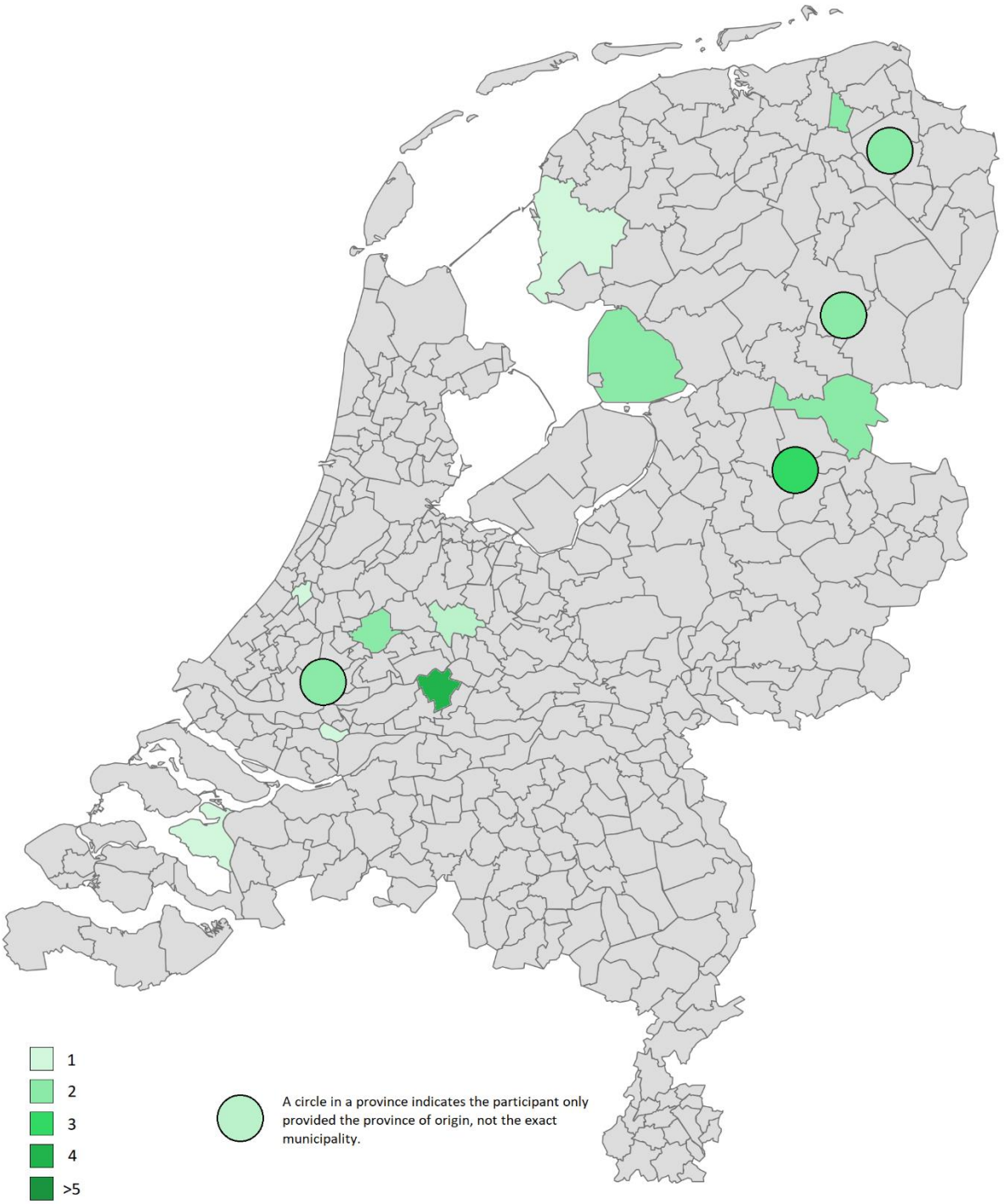
Maps of Dutch municipalities according to the number of Brazilian-born participants that reported having one or more ancestors from there[23].

F1: *Participants from all communities.*

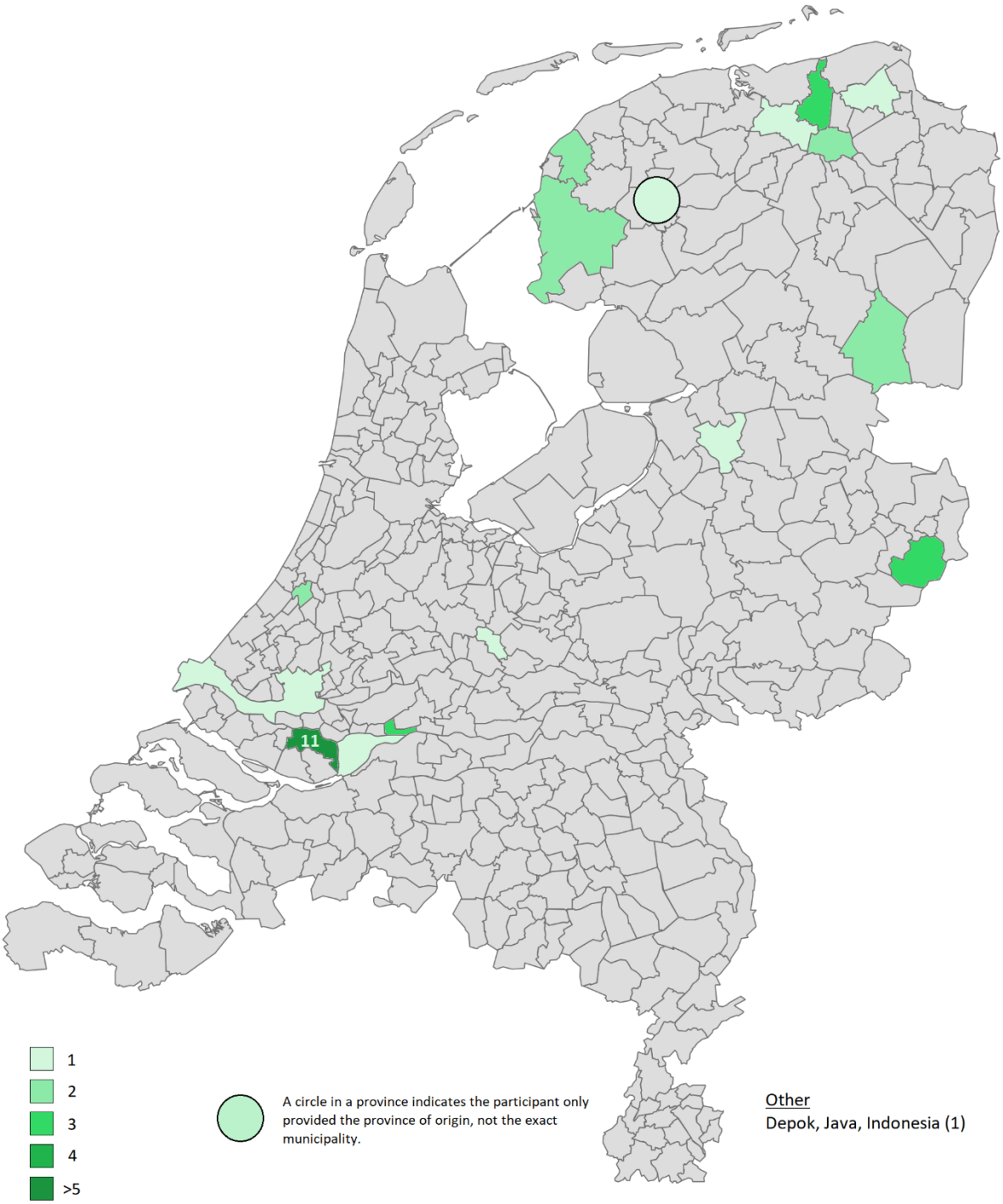


[23] Ten participants listed at least one Dutch ancestor of whom they did not know the town or province of origin.

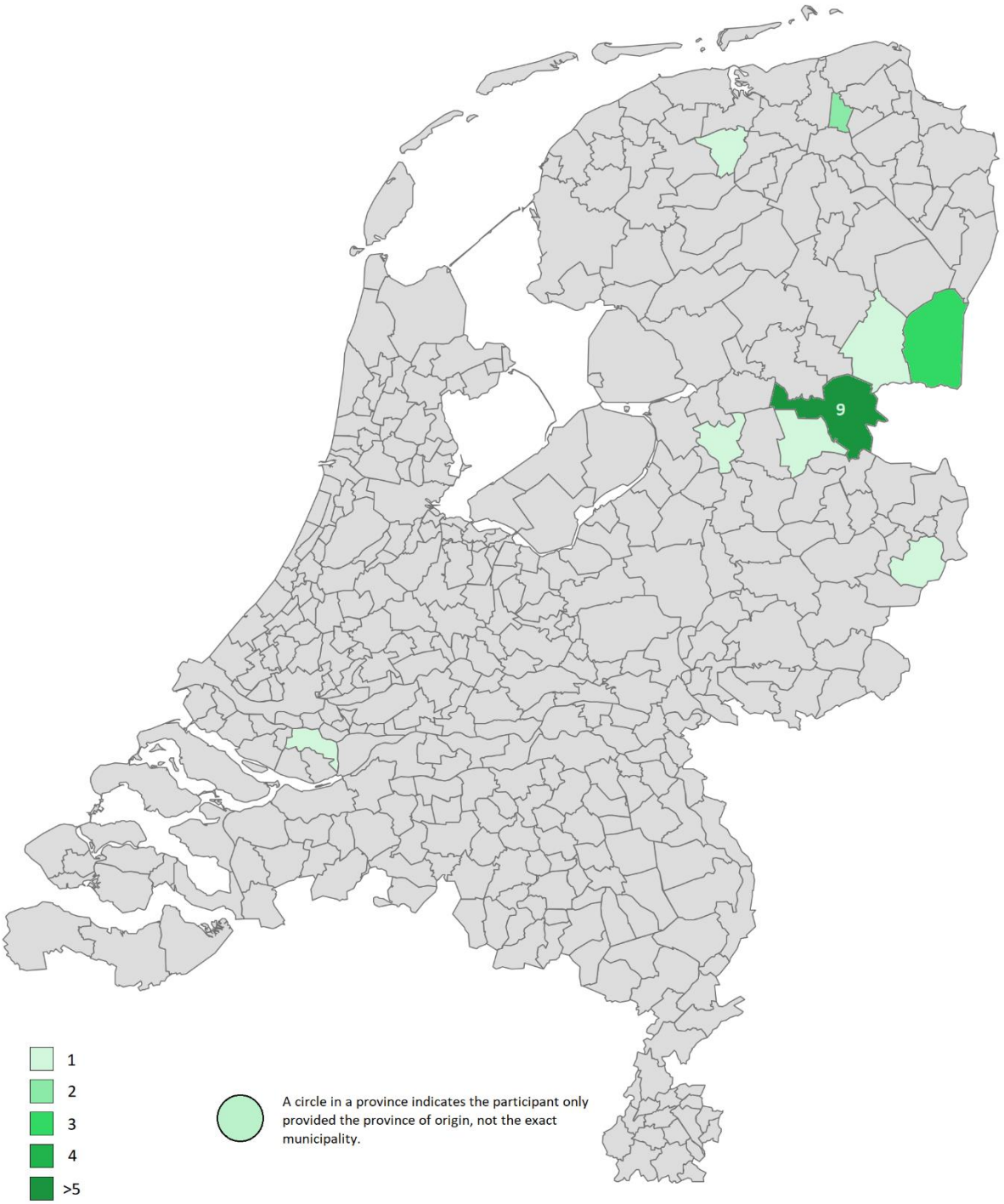
F2: *Participants from Arapoti.*



F3: *Participants from Carambeí.*



F4: *Participants from Castrolanda.*



Appendix G: Lists of nouns used with a deviating gender

G1: *Neuter nouns agreeing with common gender elements*

Noun	English translation	Number of instances	Number of participants
accent	accent	2	2
afval	garbage	1	1
asphalt	asphalt	1	1
bankstel	sofa	1	1
bedrijf	company	10	6
beeld	image	1	1
begin	start	2	2
bestuur	board	2	2
boek	book	3	2
boek-je	book-DIM	1	1
bos	forest	1	1
brood	bread	1	1
centrum	centre	5	4
complex	compound	1	1
contact	contact	2	2
dak	roof	2	1
deeg	dough	1	1
ding	thing	2	2
dorp	village	2	1
eind	end	1	1
Engels	English language	1	1
eten	food	4	4
figuur	figure	1	1
gebouw	building	1	1
gedoe	hassle	1	1
gehucht-je	hamlet-DIM	1	1
gevoel	feeling	1	1
haar	hair	2	2
hok	shed	1	1
hotel	hotel	1	1
huis	house	3	2
internet	internet	3	3
jaar	year	17	10
kantoor	office	3	1
karwei	chore	1	1
koor	choir	2	1
koor-tje	choir-DIM	1	1
kruispunt	intersection	1	1
kussen	pillow	1	1
land	country	2	2
licht	light	1	1
loon	salary	1	1
lot	lottery ticket	1	1
mais	maize	1	1
meervoud	plural	1	1
meisje	girl	2	2
merk	brand	2	2
model	model	1	1

museum	museum	4	4
Nederlands	Dutch language	4	3
niveau	level	2	1
onderhoud	maintenance	1	1
onderwijs	education	1	1
onderzoek	research	1	1
paard	horse	3	2
pad	path	4	1
paleis	palace	1	1
papier	paper	1	1
park	park	3	2
percentage	percentage	1	1
Ponta Grossa	Ponta Grossa (city)	1	1
probleem	problem	4	3
product	product	1	1
punt	point	1	1
restaurant	restaurant	2	2
soort	type	1	1
spoor	track	2	2
stijg-en	ascend-GER	1	1
strand	beach	3	1
stuk	part	2	2
systeem	system	1	1
tent-je	tent-DIM	2	1
terrein	terrain	1	1
thema	theme	1	1
transport	transport	1	1
vak	subject	1	1
vee	cattle	2	1
veld	field	2	2
verhaal	story	3	2
verschil	difference	2	2
vlees	meat	3	2
vliegtuig	airplane	1	1
volk	people	3	2
water	water	3	3
weekend	weekend	3	2
werk	work	4	4
wiel	wheel	1	1
woord	word	4	3
zaad	seed	1	1
ziekenhuis	hospital	4	4

G2: *Common gender nouns agreeing with neuter elements*

Noun	English translation	Number of instances	Number of participants
cursus	course	1	1
enigste	(the) only person	1	1
grond	ground	3	2
handdoek	towel	1	1
interesse	interest	1	1

kamp	camp	1	1
kanarie	canary	1	1
keer	time	1	1
kolonie	colony	3	3
meester	teacher	1	1
natuur	nature	1	1
opname	recording	1	1
persoon	person	1	1
pret	fun	1	1
stad	city	1	1
streek	area	1	1
tentoonstelling	exhibition	1	1
tijd	time	2	2
universiteit	university	2	2