

Bare Singular Count Nouns in Dutch as a Heritage Language in Brazil¹

Nomes singulares nus em neerlandês como língua de herança

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Abstract: The aim of this research was to evaluate the distribution of DPs in generic sentences, in Dutch Heritage Language Speakers (HLS) in Holambra, Brazil, especially regarding the acceptability of Bare Singular Count Nouns (BS). The Distribution of BS is more restricted in Dutch than in Brazilian Portuguese, nonetheless, we raised the hypothesis that, due to the influence of Brazilian Portuguese, these HLS would accept BS in contexts similar to those of Brazilians. We applied an acceptability judgement test to 60 adult HLS from Holambra (experimental group), 30 Brazilian monolinguals and 30 native Dutch speakers (control groups 1 and 2). We presented to each participant in the experimental group 10 Dutch stimulus sentences and 20 filler sentences in order to verify their acceptability on a five-item Likert scale. The results showed that sentences with BS eliciting a generic reading received high acceptability rates from the Experimental Group of Holambra (72% acceptability rate). These responses were more aligned with the Brazilian Control (78% acceptability rate) than with the Dutch Control (96% unacceptability rate). The statistical Regression Analysis of the BS showed that the Dutch Control had a significant divergent behavior (p.value = <2-16) when compared to the Experimental Group. The results seem thus to support our hypothesis that a slightly different grammar has risen in the Dutch HLS of Holambra, suffering attrition due to the influence of Brazilian Portuguese, since they accept Bare Singulars, showing no significant difference with the Brazilian Control Group. We will follow Oosterhof's proposal (2008) on the distribution of empty determiners in Dutch and assume that the grammar of the Holambra speakers possesses a bundle of features allowing a 0[+R, +count, -p] combination: That is, a singular count noun DP with an empty determiner, rendering a generic reading.

¹ This paper is broady based on my MA research: Codina Bobia, 2017.

Keywords: language acquisition; heritage languages; bare singular count nouns; Dutch; Brazilian Portuguese.

Resumo: O objetivo desta pesquisa foi avaliar a distribuição de DPs em sentenças genéricas em falantes de neerlandês como língua de herança em Holambra, Brasil, especialmente em relação à aceitabilidade de nomes singulares nus (NNs). A distribuição de NNs é mais restrita em neerlandês do que no Português Brasileiro (PB), no entanto, levantamos a hipótese de que, devido à influência do PB os falantes de Holambra poderiam aceitar NNs em contextos semelhantes aos dos brasileiros. Aplicamos um teste de aceitabilidade em 60 HLS adultos de Holambra (grupo experimental), 30 monolíngues brasileiros e 30 falantes nativos de holandês (grupos de controle 1 e 2). Apresentamos a cada participante do grupo experimental 10 sentenças em neerlandês e 20 distratores, a fim de verificar sua aceitabilidade em uma escala Likert de cinco itens. Os resultados mostraram que sentenças genéricas com NNs receberam alta aceitação do Grupo Experimental de Holambra (72% de aceitabilidade). Essas respostas estão mais alinhadas com o Controle Brasileiro (78% de aceitabilidade) do que com o Controle Holandês (96% de inaceitabilidade). A análise de regressão estatística dos NNs mostrou que o Controle Holandês apresentou comportamento significativamente divergente (p. valor=<2-16) quando comparado com o Grupo Experimental. Os resultados parecem corroborar nossa hipótese de que uma gramática ligeiramente diferente surgiu nos falantes de holandês de Holambra, sofrendo atrito devido à influência do PB, uma vez que aceitam NNs, não mostrando diferença significativa com o Grupo de Controle Brasileiro. Seguiremos a proposta de Oosterhof (2008) sobre a distribuição de determinantes vazios em holandês, e propor que a gramática dos falantes de Holambra possui um conjunto de traços permitindo a combinação 0 [+R, + count, -pl]: isto é, um nome nu singular contável com uma leitura genérica.

Palavras-chave: aquisição de linguagem; línguas de herança; nomes singulares nus; neerlandês; português brasileiro.

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1 Introduction

Our research aimed at evaluating the distribution of Determiner Phrases in Dutch Heritage Language Speakers (HLS) in the municipality Holambra, São Paulo, Brazil. Our objective was to compare aspects of article use (and omission) in sentences with generic readings – especially Bare Singular Count Nouns (BS) – in the Dutch language spoken by the inhabitants of Holambra with that of Dutch and Brazilian speakers. Recently, Brazilian Portuguese (BP) has been one of the target languages of interest for studies on BS for allowing them with countable nouns in generic contexts, unlike other Romance (or Germanic) languages. Hence, Brazilian Portuguese allows:

(1) Cachorro caça gato.

which is inadmissible in other Romance languages:

- (2) b *Perro caza gato. (Spanish)
- (2) c *Chien chasse chat. (French)
- (2) d *Gos caça cat. (Catalan)
- (2) e *Cane persegue gatto. (Italian)

or Germanic:

- (2) f *Dog chases cat. (English)
- (2) g *Hond achtervolgt kat. (Dutch)
- (2) h *Hund jagt katze. (German)

Consequently, our main research question was: *Do Dutch Heritage Language Speakers (HLS) of Holambra accept Bare Singulars as licit Dutch constructions in contexts not accepted in Standard Dutch?* Considering studies regarding the influence of Majority Languages on the HL our prediction was that the HL speakers of Holambra would accept Bare Singulars in a similar way than Brazilian Portuguese speakers. To answer this question, we performed an Acceptability Judgement Test (AJT) with 60 subjects from this community. We also assessed whether these speakers followed patterns more aligned with BP than with Standard Dutch or *vice versa*, regarding the distribution of DPs in generic sentences.

The subjects of our experiment are descendants of the first Dutch migrants who arrived in Holambra in the mid-twentieth century. Holambra

is a small town located in the state of São Paulo, in the southeastern region of Brazil. The first Dutch immigrants arrived in 1948 in what later would be the independent municipality of Holambra. Dutch is the L1 of most inhabitants of Holambra from the firstborn generation. These speakers do not seem to diverge significantly from Standard Dutch and/or other dialects from Dutch speaking areas in Europe (during our contact with the community we observed *Limburgs* and *Brabants*, for example).² Groups of speakers like the inhabitants of Holambra are a representative example of HLS due to the peculiar character of the language acquisition process which they go through. Considering that typical language acquisition occurs within a family that speaks the same language as the language of the region or state in which the family lives, in the case of Heritage Languages we are faced with an atypical acquisition situation. According to Montrul (2012, p. 2), HLS are "the children of immigrants born in the host country or immigrant children who arrived in the host country some time in childhood". We find a similar definition in Valdés (2000) who describes heritage language speakers as individuals who grew up in families whose language is not that of the dominant community. This is an atypical acquisition from which various forms of bilingualism can emerge.

The example of the Dutch community in our study illustrates this process well: children born in homes where a language is spoken that is not the dominant language of the macro-environment (broad community and neighboring cities, province, state, etc.), nor of the surrounding society and its representative bodies (schools, public authorities, television, radio, etc.). To Scontras *et al.* (2015), HLS offer a unique field to study language acquisition issues, since this process contrasts with traditional monolingual or simultaneous bilingual acquisition. In HLS, we can find aspects of atypical acquisition, language attrition, processes that lead to different mental grammars than those of monolingual speakers. Likewise, Valdés (2005) acknowledges the importance of the inclusion of Heritage Languages in the range of Language Acquisition studies and proposes the reconceptualization of the Second Language

² The only remarkable phenomenon, aside from some basic code-mixing, was that the youngest participant of our research seemed unable to pronounce the shibboleth [s\chi], pronouncing it instead as [sk]. Thus, the Dutch word "*school*", [s\chi02:4], sounded more like the English [sku:1].

Acquisition area, expanding it with the inclusion of several types of Language Acquisition, including the acquisition of dialects, standard language, specific registers and styles and written language. Similarly, it has to be mentioned that very little research has been undertaken on the influence of BP on Heritage Languages in Brazil, since there are no large communities of HLS in this country. This is due to the lack of great migratory flows in recent years.³ In effect, the peak of large migratory movements in Brazil – originating mainly from Italy, Central European Countries and Japan – occurred around the first decades of the twentieth century (FREITAS, 2003; MORALES, 2008) making it presently difficult to find communities with first- or second-generation HLS.⁴

We aimed, thus, at comparing the distribution of DPs in generic sentences and measuring whether there had been cases of language attrition – the erosion of the speakers' first grammar – in the HLS, attributable to the majority language regarding the acceptability of Bare Singular Count Nouns. The null hypothesis is that the acceptability of DPs in generic sentences in Dutch as a Heritage Language in Holambra is the same as in Standard Dutch.

1.1 Heritage Languages

A Heritage Language (HL) is, broadly speaking, a language spoken by people who grew up in families whose language is not the one of the dominant community (indigenous communities, migrants, etc.). Heritage Language Speakers (HLS) can be considered a type of bilinguals with the difference that their acquisition process of the nondominant language is interrupted at a given age, normally when entering school. It is often considered that HLS suffer from a "deviant" form of final acquisition state. This kind of acquisition, as bilingualism does, is a new and promising field broadening Language Acquisition studies due to its peculiar process involving a non-standard input situation.

³ This is a very different situation than the United States, that has many inhabitants from Spanish speaking countries, or Europe which received (and is still receiving) large contingents of people from different origins over the last years.

⁴ Nowadays, there are some new arrivals from Syrian and Haitian citizens, as well as from people from several African and South American countries. Nevertheless, as they are new communities, they have no adult HLS.

Historically, the term HL originated a few decades ago in the United States and Canada due to the increase of their migrants' population and the challenges they mean for the educational system. According to Acosta (2011, p. 132), in the USA, "El término 'herencia' se lleva manejando en los Estados Unidos desde los años 80 en política lingüística y desde los 90 en el campo de la educación y de la enseñanza de idiomas". HL are typically minority languages and are also called ethnic minority languages or community languages (MONTRUL, 2012), as, in many countries, HL can also refer to the languages spoken by indigenous communities.

A widely-accepted definition of HLS, only valid in Anglophone countries, of course, is found in Valdés: "a bilingual raised in a home where a non-English language is spoken, who speaks or merely understands the heritage language, and who is to some degree bilingual in English and the heritage language" (VALDÉS, 2000, p. 1). Montrul (2012, p. 2) defines HLS as: "[...] the children of immigrants born in the host country or immigrant children who arrived in the host country some time in childhood." Scontras *et al.* (2015, p. 2) refer to HLS as "unbalanced bilinguals [...] whose home language is much less present in their linguistic repertoire than the dominant language of their society". Benmamoun *et al.* (2013, p. 2) define heritage language speakers as "asymmetrical bilinguals who learned language X – the 'heritage language' – as an L1 in childhood, but who, as adults, are dominant in a different language".

Heritage Language Speakers are thus defined by the peculiar character of the language acquisition process they undergo. Indeed, if a typical acquisition takes place within a family (or community) speaking the same language as the one of the region or state in which they live, in the case of HLS we are dealing with an atypical language acquisition situation. To Scontras *et al.* (2015), this offers a unique testbed to study acquisition since in HL acquisition we find aspects of atypical acquisition and language attrition, processes which can lead to different mental grammars than those of monolinguals and bilinguals. According to Valdés (2005), the inclusion of HL in the field of language acquisition studies is also important and she proposes the reconceptualization of the SLA area, expanding it to include various types of language acquisition, including acquisition of dialects, standard languages, specific registers and styles, and written language. HL acquisition is hence characterized by exposure to a first language that is spoken only in limited contexts, followed by the acquisition of a second language, which is dominant in society. The moment of the growth of the second language largely depends on geographical, political, and other external circumstances. There is, however, consensus in the literature on the fact that the beginning of schooling is a turning point marking the transition between first and second language (see MONTRUL, 2012). Of course, this does not mean that the child has had no previous contact with the second language, neither that they should lose their first language when they begin attending school, but it is considered that the second language will take on an increasingly dominant character which may cause attrition with the first language (GUIJARRO-FUENTES; SCHMITZ, 2015).

As aforementioned, our research on language acquisition was conducted with Dutch HLS of a Brazilian municipality of the state of São Paulo. This community, Holambra, is a typical instance of an HL setting: children born in families where a language is spoken (Dutch) that is not the dominant language (Brazilian Portuguese) of the macroenvironment (wider community and neighboring towns, province, state, etc.), neither of society and its representative organisms (schools, government, television, radio, etc.).

As HL acquisition is an unusual process and its results are not the same as typical acquisition, bilingual or monolingual, it has led some theorists (BENMAMOUN *et al.* 2013; MONTRUL, 2008; POLINSKY; KAGAN, 2007) to assume a "incomplete acquisition". Conversely, this stance has been rebutted by other researchers stating that the outcome of HLS is not due to an incomplete acquisition but is "a contact variety which differs from the monolingual variety of origin due to language change" (GUIJARRO-FUENTES; SCHMITZ, 2015, p. 241).

Attrition is a much-mentioned condition in HLS. To Seliger (1996, p. 616), attrition is "the temporary or permanent loss of language ability as reflected in a speaker's performance or in his or her inability to make grammaticality judgments that would be consistent with native speaker monolinguals of the same age and stage of language development". Montrul (2008, p. 21) considers attrition as "the loss of a given property y of the language after property y was mastered with native-speaker level of accuracy and remained stable for a while, as in adults". The difference between incomplete acquisition and attrition is that the latter implies

that a full grammar is attained (as in L1 acquisition) and is posteriorly lost because the language in question is not used. Albeit the term was coined meant for the loss of linguistic capacities of L1 speakers, it also appears to be an occurring phenomenon in HLS since they use less the minority language.

1.2 Dutch Determiner Phrases

As in other languages, in Dutch the NP "denotes the set of entities that have the properties of being a car and being blue" whereas the definite Determiner "expresses that the denotation set of the NP *blauwe auto* 'blue car' contains exactly one entity and that it is this entity that the speaker refers to" (BROEKHUIS; KEIZER, 2012, p. 676). The structure of the Dutch DP is as follows:⁵

(3) a. de blauwe auto

the blue car

b. [DP [D de] [NP blauwe auto]]

Noun phrases are generally used to refer to sets of entities in the D domain. Another possible use of noun phrases is the denotation of genericity. The examples in (4)a, b and c "express a general rule that is assumed to be true in the speaker's conception of reality" (BROEKHUIS; KEIZER, 2012, p. 692). So, these sentences affirm that, broadly speaking, all zebras are striped.

- (4) a. De zebra is gestreept.⁶ the zebra is striped
 - b. Een zebra is gestreept.a zebra is striped
 - c. Zebras zijn gestreept. zebras are striped

⁵ In this work, we will not discuss the position of adjectives in the DP, as it out of the scope of our research. We refer the reader to Menuzzi (1994) for a crosslinguistic study on the architecture of DPs in Dutch and Brazilian Portuguese.

⁶ This example and the next ones are from Broekhuis and Keizer, 2012.

Genericity is a property of the entire sentence, not only of the noun phrase, and has, consequently, some distinctive properties – like a preferential use of the present tense. We will, nevertheless, mainly focus on the noun phrase's properties, discussing genericity and limiting our boundaries to the realm of count nouns. As seen in (4), Dutch count nouns can express genericity in three contexts: with a singular noun, preceded by a definite or indefinite article, and with bare plural nouns.⁷ Genericity in singular definite noun phrases depends highly on their pragmatic content. (5), for example, does not have a generic reading as it would not be probable that the characteristics of being caged could apply to all the specimens of the Zebra class.

(5) De zebra zit in een KOOI. [specific] the zebra sits in a cage

In (6), on the other hand, it is possible to give the NP either a specific or generic reading. The property of having stripes can apply to a particular zebra since it is part of the set of the members of the species, as for example the caged zebra of (5), or to the entire class of zebras. According to Broekhuis and Keizer (2012), an element enabling the speaker to perceive differences will be the locus of the accent. Referential readings of the noun phrase will have a main accent on the adjective, while the generic reading will have its main accent on the noun phrase:

(6) De ZEbra is gestreept. [generic] the zebra is striped

Still according to Broekhuis and Keizer (2012), context is not the only element determining a generic reading of a singular definite noun phrase. The examples in (7) could theoretically be read with a generic meaning but, due to an unclear reason they are only accepted with a referential reading, while their plural counterparts in (7') are perfectly sound as generic utterances.

⁷ Although Oosterhof (2008) reports on some Dutch varieties accepting plural count nouns anteceded by the definite article with a generic interpretation, as we already mentioned above.

- (7) a. #Het meisje is intelligent. 'the girl is intelligent'
 - b. #Het boek is duur. 'the book is expensive'
 - c. #De braadpan is zwaar. 'the frying pan is heavy'
- (7') a. Meisjes zijn intelligent. 'girls are intelligent'
 - b. Boeken zijn duur. 'books are expensive'
 - c. Braadpannen zijn zwaar. 'frying pans are heavy'

To Broekhuis and Keizer (2012, p. 695), it could be argued that in these cases

Whereas the noun vrouw 'woman' or zebra easily evokes a prototype, nouns like *meisje* 'girl', *boek* 'book' or *braadpan* 'frying pan' do not. Perhaps this suggestion can be supported by the fact that a prototypical reading can be evoked provided that the context provides sufficient clues that such a reading is intended.⁸

This can be seen through the sentences in (8) in which generic readings are possible since the syntactic context allows comparison of the involved NPs (BROEKHUIS; KEIZER, 2012). Nonetheless, these authors state that most speakers prefer using plural indefinite noun phrases (8') instead of singular definites.

- (8) a. Het meisje is op die leeftijd volwassener dan de jongen. the girl is at that age more mature than the boy
 - b. Het meisje uit de polder is volwassener dan het meisje uit de stad. the girl from the polder is more mature than the girl from the city
- (8') a. Meisjes zijn op die leeftijd volwassener dan jongens. girls are at that age more mature than boys
 - b. Meisjes uit de polder zijn volwassener dan meisjes uit de stad. girls from the polder are more mature than girls from the city

⁸ Although some authors assume that generic sentences are only possible with "wellestablished species", as we will see below.

Visibly, the use of modifiers – AdvP in (8a) and PP in (8b) – plays a part in these interpretations creating an appropriate context for generic readings. This is also the case in (9) as the modifier *gebonden* seems to facilitate a prototypical reading (BROEKHUIS; KEIZER, 2012, p. 696).

(9) a. *?Het boek is tegenwoordig onbetaalbaar.

the book is nowadays unaffordable

A book is unaffordable nowadays

b. Het gebonden boek is tegenwoordig onbetaalbaar.the bound book is nowadays unaffordableA bound book is unaffordable nowadays

As it had already been pointed for other languages by Carlson (1977) and Krifka *et al.* (1995), among others, sentences with definite singulars referring to more general classes like "the mammal" sound less natural than definite singulars used with well-established species, like "the zebra". Thus, generic readings of definite noun phrases in Dutch would also be related to the level of the class: higher classes tend not to be expressed using a definite article in the utterance, as can be seen by the examples in (10) in which the definite article is less preferred to express genericity than the other possibilities.

(10) a. %Het zoogdier is warmbloedig.

the mammal is warm.blooded

- b. Een zoogdier is warmbloedig. a mammal is warm.blooded
- c. Zoogdieren zijn warmbloedig. mammals are warm.blooded

In sum, it appears that the choice between referential reading and generic readings in singular definite noun phrases is not purely syntactic, but regards the speakers' interpretation, also influenced by extra-linguistic factors. According to Broekhuis and Keizer (2012), Standard Dutch does not allow generic readings in sentences like (11a). Although we have already mentioned that some varieties accept these readings.⁹

(11) a. #De zebra's zijn gestreept.

the zebras are striped

b. De grote katten zijn gevaarlijke roofdieren. the big cats are dangerous predators

(11b), on the other hand, is acceptable because "[...] the NP grote kat 'big cat' may be used as the name of the superset containing the subsets of cats denoted by the nouns *leeuw* 'lion', *tijger* 'tiger', etc. In other words, the noun phrase de grote katten does not refer to one, but to several species of animals, hence its plural form" (BROEKHUIS; KEIZER, 2012, p. 697). In sum, it seems that plural definite noun phrases can only be used as generics if they denote a set of entities which can be divided into other subclasses or species.¹⁰ Generic and non-generic indefinite noun phrases differ in that there are normally no indefinite DPs headed by indefinite articles in subject position, while generic DPs must absolutely hold this syntactic position, as can be seen in (12).

Buiten de paartijd leven de ijsberen solitair.

outside the mating season live the polar bears solitary

Outside the mating season, polar bears live a solitary life.

¹⁰ There are some exceptions upon which we will not focus, such as, for example, the use of restrictive *alleen* (only):

(ii) Er zijn vele soorten wilde paarden, maar alleen de zebra's zijn gestreept. there are many kinds of wild horses but only the zebras are striped

or the addition of a PP-modifier:

 (iii) Katten hebben een slechte reputatie, maar cats have a bad reputation but de katten met witte voetjes brengen geluk. the cats with white paws bring luck

⁹ And, we are not talking here about Dutch sentences in which adjuncts allow these kind of generic readings:

- (12) a. Er zwemt een vis in het water. [non-generic] there swims a fish_[SG] in the water
 - a'. Er zwemmen vissen in het water. [non-generic] there swim fish_{IPLI} in the water
 - b. Een vis zwemt in het water. [generic] a fish_{se} swims in the water
 - b'. Vissen zwemmen in het water. [generic] fish_{pl} swim in the water

Nonetheless, Broekhuis and Keizer (2012) show constructions as (13) which do have a generic reading but seem to behave differently from the examples above.

- (13) a. Een goed mes is onmisbaar voor dit (soort) werk.a good knife is indispensable for this kind.of work
 - b. Goede messen zijn onmisbaar voor dit (soort) werk. good knives are indispensable for this kind.of work

This would be due to the kind of statement conveyed in this type of sentences which do not proclaim a categorical quality of the NP, in this case *goed mes*, good knife, but a generic activity of the NP *dit soort werk*, this kind of work. Consequently, to categorize (13) as non-generic it should be stated that indefinite noun phrases introduced by *een* or \emptyset can only occupy the canonic subject position in generic clauses (BROEKHUIS; KEIZER, 2012). As for the differences between singular and plural generic indefinite noun phrases, according to Broekhuis and Keizer (2012) they would not be synonymous. As they show with the primed sentences in (14), it seems there is an implicational unevenness, since implications are always valid in (14a) but not always in (14b).

(14) a. Een zebra is gestreept	\Rightarrow a'. Zebra's zijn gestreept
a zebra is striped	zebras are striped
b. Musicals zijn populair	\Rightarrow /b'. Een musical is populair
musicals are popular	a musical is popular

Thus, it would seem that generic sentences with an indefinite singular noun phrase denote an inherent property of the members of that class while the ones with indefinite plural noun phrases "a more incidental or transitory property to the class" (BROEKHUIS; KEIZER, 2012, p. 701). This can be seen below as (15a) accepts an AdvP but (15b) does not.¹¹

(15) a. Musicals zijn tegenwoordig populair.

musicals are nowadays popular

b. *Een musical is tegenwoordig populair. a musical is nowadays popular

1.3 Bare Singular Count Nouns in Brazilian Portuguese

It is an undebatable fact that BP presents a wide range of possibilities to express genericity, as shown by Schmitt and Munn (1999, 2002) and many others (PIRES DE OLIVEIRA; ROTHSTEIN, 2011; MÜLLER, 2002; LOPES, 2006). We will not discuss the behavior of Bare Singular Nouns in BP, as there are no controversies about the fact that they are used in generic sentences, but just present some proposals regarding their nature in Brazilian Portuguese.¹² Schmitt and Munn (1999) posit that BS are DPs without Num. Lopes (2006) partially agrees with the former for BS in generic sentences, however BS in existential sentences would in fact be number neutral indefinites. Thirdly, we have Pires de Oliveira and Rothstein's theory (2011), arguing that BS are mass nouns. Finally, Müller (2002), defends that BS are only NPs, lacking a DP projection, that they cannot bear an existential reading and function as topical predicates in the left periphery of the sentence.

¹¹ On the other hand, one could imagine a situation in which (15)b could be accepted. If a film producer, for example, would like to remake a classical movie and should ask which one is best: "Citizen Kane" or "Singing in the Rain", (15)b would then be a possible answer (MENUZZI, 2017).

¹² There are several other works on the issue of Bare Singulars in Brazilian Portuguese: Menuzzi *et al.* (2015), Taveira da Cruz (2008), Cyrino and Espinal (2015), among others.

1.4 Conclusion

In Section 1, we have seen that, in Dutch, three types of DPs can be used in generic contexts (16)a-c, a fourth is partially accepted depending on dialectical variation (16)d, and a fifth is ungrammatical (16)e,¹³ the same does not apply to BP, since all five options can express genericity (examples (17)a-e).

(16) a. Definite singular: $\sqrt{De \ kolibrie \ is \ een \ vogel}$.

- b. Indefinite singular: $\sqrt{Een \ kolibrie}$ is een vogel.
- c. Bare plural: $\sqrt{Kolibries zijn vogels}$.
- d. Definite plural: % De Kolibries zijn vogels.
- e. Bare singular: * Kolibrie is een vogel.
- (17) a. Definite singular: \sqrt{O} beija-flor é uma ave.
 - b. Indefinite singular: $\sqrt{Um beija flor \acute{e} uma ave}$.
 - c. Bare plural: $\sqrt{Beija-flores \ sao \ aves}$.
 - d. Definite plural: $\sqrt{Os \text{ beija-flores são aves.}}$
 - e. Bare singular: $\sqrt{Beija-flor \ e}$ ave.

2 Methods

Our experiment consisted of a multifactorial analysis with 1 dependent variable and 5 independent ones. The dependent variable was the Acceptability Rate (from 1 to 5) given by the research's participants. The 4 independent variables were: Subset (3); Group (2); DP type (5); Sentence (40).

The Variable "Subset" contained the 3 groups of participants of our research population (n=120): the experimental group from the Dutch HLS, inhabitants of Holambra (n=60); the Dutch control group (n=30); and the Brazilian control group (n=30).

The variable "Group" was created by dividing the research population (n=120) into two minor groups: group A and group B (n=60, each), in order to present different sentences to each group and gain predictability power.

¹³ Examples adapted from Ionin *et al.* (2011).

The variable "DP type" was composed of the 5 DPs: Definite Singular, Indefinite Singular, Indefinite Plural, Definite Plural, and Bare Singular.

The 10 sentences tested, illustrated in (18) and (19) for Dutch and BP, respectively, were assigned to two counterbalanced lists, combined with 20 other filler items, resulting in two 30-item lists.

- (18) De natuur is perfect, nadat ze de bloemen bestuiven maken bijen honing.
- (19) A natureza é perfeita: depois de polinizar as flores, abelhas produzem mel.

'Nature is perfect, after pollinating the flowers, bees produce honey'.

2.1 Participants

The subjects of our experimental group of Dutch Heritage Language Speakers of Holambra¹⁴ (N = 60) were selected based on the following inclusion criteria: living in the community of Holambra and being from the first generation of immigrants born in Brazil (subjects between approximately 45 and 65 years old). The exclusion criteria were having received formal education in Dutch and having lived more than one year in the Netherlands after coming to Brazil. The Control group 1 (N = 30) was formed with native Dutch speakers. The inclusion criterion for the control group was being a native Dutch speaker and the exclusion criterion having been exposed to Brazilian Portuguese in their early years. The second control group consisted of 30 speakers of Brazilian Portuguese who were required to be native Brazilian Portuguese speakers. The exclusion criterion was having been exposed to Dutch in their early years.

¹⁴ Our research was authorized by the UNICAMP Ethics Committee under CAAE number 56577816.6.0000.5404.

2.2 Proceedings

In the first part of the data collection, the participants of the experimental group were briefly interviewed in Dutch in order to establish a link with the researcher and raise their sociodemographic profile as to guarantee the inclusion and exclusion criteria. These interviews, of approximately five minutes, were recorded and analyzed with the intention of observing whether there were occurrences of Article Omission in the spontaneous speech production of Dutch. No occurrences of Bare Singular Nouns were found in these interviews. The second part of the test was an Acceptability Judgement Task. 10 sentences, among which there were Bare Singulars, were presented to the participants who ought to judge their acceptability on a 1 to 5 Likert scale, ranging from 5 (Totally acceptable) to 1 (Totally unacceptable)

These sentences in Dutch were recorded by a Dutch speaking person to avoid bias in the presentation of the stimuli and thus achieve a uniform reading. Each participant of the experimental group listened to 10 stimulus sentences alternating with 20 filler sentences in Dutch. The control groups (Standard Dutch and Brazilian Portuguese speakers) were not interviewed but the same 30 elements were tested: 10 stimulus sentences and 20 distractors. The tests with the Brazilian control group were conducted personally and the ones with the Dutch control group through the Qualtrics online survey tool (www.gualtrics.com). In both cases, the participants received a form with the written sentences and instructions as how to answer it. The experimental group was further divided in two smaller groups (N30 each) to obtain a stronger predictability and avoid item related bias. Each participant listened to a short, contextualized, sentence so as to elicit a generic reading. In Figure 1 we have an example with a bare noun (complete lists of the sentences can be found in the appendices).

FIGURE 1 - Model of the experimental sentences' presentation

The recording the participant heard:

Het is moeilijk om sommige vogels te fotograferen want ze vliegen te snel *adelaar, bijvoorbeeld, vliegt erg snel.

It is difficult to photograph some birds because they fly too quickly, ***eagle**, for example, flies very fast.

The data was then recorded, transcribed and underwent statistical analysis. The obtained data was statistically analyzed with Linear Regression Analysis in order to guarantee a high analysis efficiency. We also applied the Shapiro-Wilk normality test as to assess the results' distribution.

3 Results

The overall results show that, basically, we can conclude that the Brazilian and Holambra speakers group together, and not only with respect to Bare Singulars. The behavior for Definite Singulars is similar for the 3 groups tested, with acceptability rates of 84%, 88% and 90%.¹⁵ Indefinite Singulars are better accepted by the Holambra group (84%). followed by the Dutch control group (72%) and, finally the Brazilian control group (61%), showing that there is a different behavior between both Dutch speaking groups one the one hand, and the Brazilian control group on the other.¹⁶ Bare plurals are well accepted by the Brazilian control (80%) and the experimental Holambra group (81%), but not so by the Dutch control group (51%). Definite plurals reach a higher acceptability rate in the Holambra group (90%), followed by the Brazilian control group (86%) and the Dutch (62%). Lastly, Bare singulars were not accepted by the Dutch control group, as was expected, with a 96% unacceptability rate, while both the Brazilian control group and the experimental group of Holambra rated them similarly: 78% and 72% respectively.

The distribution of Definite Singulars' acceptability was similar for the three groups (Figure 2), who considered them acceptable in 57% of the cases for the Brazilian Control, 63% for the Dutch Control and 66% for the Holambra Group, respectively.

¹⁵ For ease of exposition, here we have joined the results of the totally and partially acceptable responses.

¹⁶ we will present the statistical analyses below in the sections correspondent to each DP type tested.

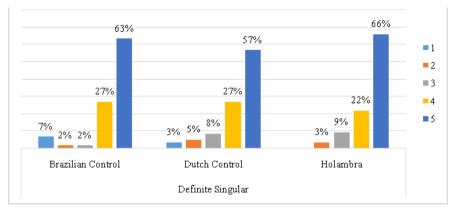
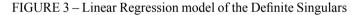
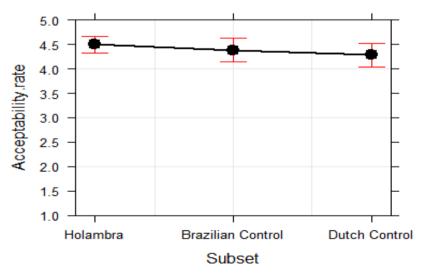


FIGURE 2 – Acceptability rate of Definite Singulars

The overall Linear Regression results of the Definite singulars (Figure 3) showed that the two subsets (Brazilian and Dutch Control) are not significantly different than the Holambra group (p-value = 0.434 and 0.147, respectively). The Standard Error of both Control Groups was 0.1490, indicating that data dispersion is low, reinforcing the robustness of the test.





The sentences with Indefinite Singulars were basically all well accepted by the participants. Figure 4 shows their acceptability rate in the experimental group from Holambra and both control groups. Respondents who accepted these sentences amounted to 56% in the experimental group, 47% in the Dutch control group, and 38% in the Brazilian control. The group in which we found a higher negative acceptability was the Brazilian Control, where 7% of the participants gave a Totally Unacceptable score.

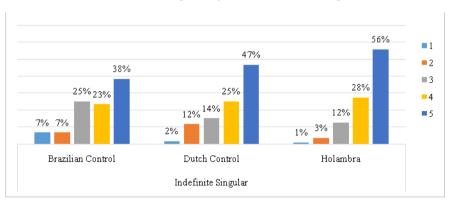


FIGURE 4 - Acceptability rate of Indefinite Singulars

The Regression Analysis of this DPs subset showed that there was a significant difference between the Experimental Group and the Brazilian Control Group (p.value = 0.00109) but not between the Experimental group and the Dutch Control Group (p.value = 0.06110). The Standard Error of the Linear Regression also showed that the data dispersion of both Control Groups was 0.1639, thus a low-level dispersion.

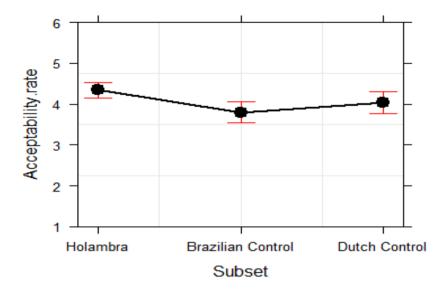


FIGURE 5 - Linear Regression model of the Indefinite Singulars

Bare Plurals also showed slightly unexpected results, particularly in the Dutch Control group (Figure 6). Indeed, only 18% of this group accepted these sentences, compared to 57% of the Brazilian control and 49% of the experimental group. However, summing the 18% Totally Acceptable to the 33% Partially Acceptable responses for the Dutch control group the figure amounts to 51% of positive ratings.

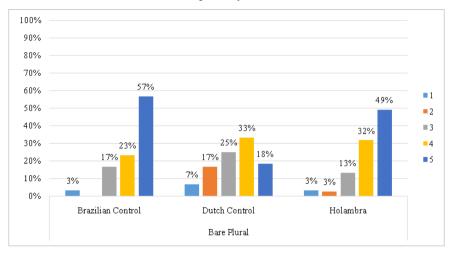
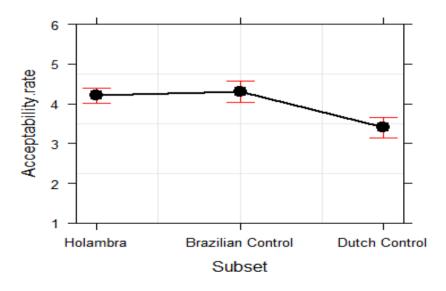


FIGURE 6 - Acceptability rate of Bare Plurals

This distribution variance was also reinforced by the Bare Plurals Regression analysis, showing that there is a significant difference between the Experimental Group and the Dutch Control (p.value = 1.5^{-6}). The Standard Error of the two subsets was 0.16394.

FIGURE 7 - Linear Regression model of the Bare Plurals



It is noteworthy that this time the sentences also received very low ratings from the other groups. 33% of the Brazilian control group considered it as being Totally Acceptable and 27% Partially Acceptable, while all the other participants (40%) gave it a level 3 rating (Doubtful). Also 13% of the experimental group thought it was Totally Unacceptable. There was no significant difference in the Regression Analysis either between the variables for this sentence (p.value < 0.05). Overall, these results show an acceptability rate which is lower than the expected one according to the literature on this type of DP. We have not reached a decisive conclusion on this issue and can, therefore, only advocate for the need of more research.

Definite Plurals were well accepted by most of the participants of the experimental group, who had a similar response pattern as the Brazilian Control (Figure 8). This is an interesting result, as Standard Dutch, just like English, does not allow a generic reading with Definite Plurals. We could account for the acceptability of these constructions in two ways: 1) the influence of BP; 2) the Dutch dialect of the participants' family which could allow this sentence. On the other hand, a rather high number of the Dutch control group also accepted these sentences: 35% Totally Acceptable and 27% Partially Acceptable responses. This number is relatively high and, in this case, as they did not receive influence from Brazilian Portuguese, one might suppose that most of the respondents accept Definite Plurals with generic readings due to their regional dialectic variation.

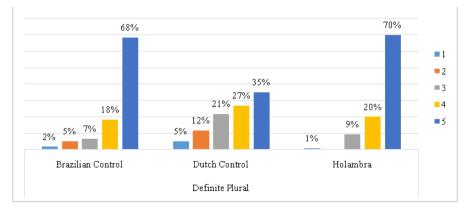
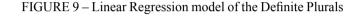
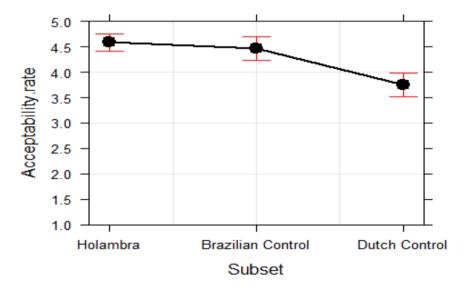


FIGURE 8 - Acceptability rate of Definite Plurals

Regression Analysis of this subset (Figure 9) again showed that the Dutch Control Group behaved in a significantly different way than the Holambra Experimental Group (p.value = 3.23^{-8}). This is an expected result due to the nature of the Definite Plural acceptability in Dutch, as we have seen above. The Brazilian Control Group was not significantly different than the Experimental Group (p.value = 0.424). The Standard Error was 0,14574 for both Control Groups, thus sustaining the wellness of the data distribution.





Bare Singular Nouns were rejected by the participants of the Dutch control group, as expected, but received a far lesser penalty from the experimental group of Dutch HL speakers, as shown below in Figure 10. As with the other stimuli, sentences with Bare Singulars eliciting a generic reading were presented for evaluation, and in this case a strong negative response was expected in the Dutch Control group. This prediction fulfilled itself, with 63% Totally Unacceptable and 33% Partially Unacceptable ratings.

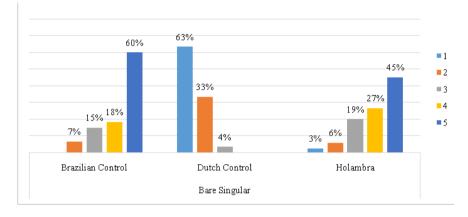


FIGURE 10 - Acceptability rate of Bare Singulars

These results contrast sharply with the experimental group of Holambra whose response pattern was of 45% Totally Acceptable, 27% Partially Acceptable, 20% Doubtful, and only 6% and 3% Partially and Totally Unacceptable ratings respectively. These results were more aligned with the Brazilian Control Group: 60% Totally Acceptable, 18% Partially Acceptable and 7% doubtful ratings. The statistical Regression Analysis of the Bare Singulars subset shows this also as the Dutch Control has a significant divergent behavior (p.value = $<2^{-16}$) when compared to the Experimental Group (Figure 11, below). The Standard Error for both Control Groups is 0.1474, guarantying a good confidence level of the sample.

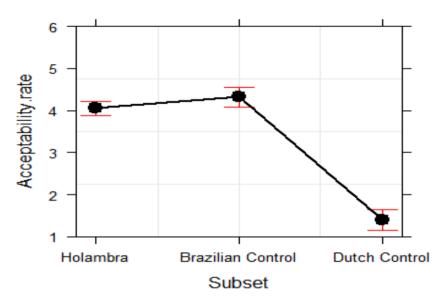


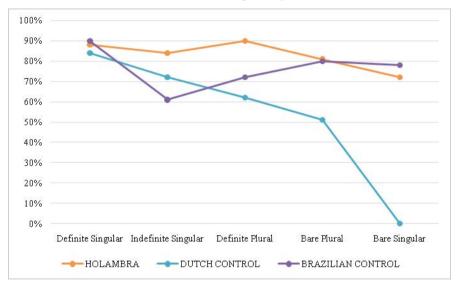
FIGURE 11 - Linear Regression model of the Bare Singulars

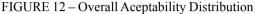
4 Discussion

The results of our AJT seem to show that there are some DP types which are preferential for generic readings in subject position across the different groups tested (Figure 12).¹⁷ Summarizing, overall, the heritage language speakers behave like Brazilian Portuguese speakers except with indefinite singulars, with which they group with Dutch speakers. Definite Singulars are well accepted by all groups tested. Indefinite Singulars are well accepted by the Holambra group, less by the Dutch, and receives the lowest ratings in the Brazilian control group. Bare plurals are, again, well accepted by the Holambra group, but behave the opposite way among the other two: Brazilians rate them high but the Dutch Control group, very low. Same results can be seen for Definite plurals and, finally, that Bare Singulars are well accepted by both the Brazilian and the Holambra Group while receiving severe unacceptability judgements from the Dutch control group, as we expected.

¹⁷ Here again we will sum the results of the partially and totally responses to facilitate our exposition.

It is noteworthy that a pattern emerged in Dutch.¹⁸ Our results show an acceptability gradient going from Definite Singulars > Indefinite Singulars > Definite Plurals > Bare Plurals > Bare Singulars (Figure 12). These data could be an interesting starting point for a next level in the studies on DPs in Dutch.





Basically, all groups rated sentences with Definite Singulars with a high acceptability level. This is an expected outcome according to the literature regarding its distribution in both languages. As mentioned above, Indefinite Singulars are better accepted by the Holambra group (84%), followed by the Dutch control group (72%) and, finally the Brazilian control group (61%), showing that there is a different behavior between both Dutch speaking groups one the one hand, and the Brazilian control group on the other. This seems to indicate that Brazilians disprefer Indefinite Singulars in subject position, as was pointed out by Müller (2002). It also shows that, in this case, the behavior of the Holambra HLS is more aligned with the Dutch speakers than with the Brazilian ones. Bare plurals were well accepted by the experimental group of HLS and

¹⁸ As pointed by Menuzzi (personal communication).

by the Brazilian control group, but not by the Dutch control group – with only 53% acceptable responses.

This was an unforeseen result since Bare Plurals – as Indefinite Singulars – were not supposed to suffer infelicity restrictions regarding generic readings (see DAYAL, 2004; and BROEKHUIS; KEIZER, 2012, for Dutch) and should receive higher acceptability rates. On the other hand, according To Diesing's Mapping Hypothesis (1992, *apud* CARLSON, 2003) Bare Plurals are interpreted existentially if they appear within the VP while they elicit a generic reading if they are in the IP (as in his example, in (20) below).

(20) Sharks are visible. (ambiguous)

- a. [IP Sharks [VP e are visible]]
- b. [IP [VP Sharks are visible]]

Where in (20)a some sharks are visible at the moment of the utterance, and in (19)b sharks are visible entities. The fact that bare plurals used in characterizing sentences are ambiguous – as they can elicit two different logical representations – is also mentioned by Oosterhof (2008, p. 161): "on the one hand, kind-selecting predicates can take bare plurals, which suggests that bare plurals refer to kinds. On the other hand, there are speakers of Dutch who consider such sentences unacceptable". Consequently, it could be that many of the Dutch participants interpreted the test sentences as above with an existential reading. Nevertheless, the sentences of our test were designed to raise generic reading, thus, further studies on the subject are needed.

Definite plurals were well accepted by the experimental group (90%), and the Brazilian control group (86%). In the Dutch control group, on the other hand, 62% of the responses were rated as acceptable. Even so, this is very high if we consider Standard Dutch (BROEKHUIS; KEIZER, 2012). Nonetheless, as Oosterhof (2008) shows, there are interspeaker variations regarding this DP type in generic readings. Thus, as it is a dialectic variation, these results are not completely as surprising as they may seem at a first glance. This variation does not occur in the Dutch HLS since they rank as the Brazilian speakers, hence seemingly showing the role of attrition in the HL – as will also be confirmed by the results of the last item: Bare Singulars. Indeed, the sentences with Bare Singulars were well accepted by the Brazilian control group and the experimental

group, but not so by the Dutch control group, as was expected, since this language does not allow them (BROEKHUIS; KEIZER, 2012). To explain the acceptance of Bare Singulars in the grammars of the Holambra speakers, we will adopt the stance – following Adger (2003) – that Dutch allows a series of bundle features which can also encompass, in this case, the inclusion of Bare singulars in their system. To Oosterhof (2008), there are 3 types of empty determiners in Dutch (Figure 13).

0[+R]	(kind-)referential interpretation
0[-R]	variable-introducing/indefinite interpretation
0[-R, 1]	definite/specific interpretation

FIGURE 13 – Types of empty determiners in Dutch

Source: Oosterhof (2008, p. 233).

Where 0 is the empty phonological realization of the Determiner¹⁹ and [+R] or [-R] are related to referential interpretations and quantificational interpretations, respectively (as in LONGOBARDI, 2001).²⁰ In order to express the relation of these features with plural and singular mass nouns, and singular and plural count nouns, Oosterhof adds the features [±count], [±pl] and presents the following combinations for standard Dutch (Figure 14).

FIGURE 14 - Possible combinations of features on empty determiners

	[-count, -pl]	[+count, -pl]	[+count, -pl]
[+R]	[+R, -count, -pl]	[+R, +count, -pl]	[+R, +count, +pl]
[-R]	[-R, -count, -pl]	[-R, +count, -pl]	[-R, +count, +pl]
[-R, l]	[-R, ı, -count, -pl]	[-R, ı, +count, -pl]	[-R, ı, +count, +pl]

Source: Oosterhof (2008, p. 234).

¹⁹To Adger (2003, p. 261), empty Determiners are the ones in which "the spellout rules for particular feature bundles result in a null phonology".

 $^{^{20}}$ DPs with the [+R] value refer to an entity (i.e., an object or a kind), and DPs with the [-R] value do not directly refer to an entity but give information on the quantity of objects (or kinds, when the DP has a taxonomic interpretation (Oosterhof, 2008).

(21) %De Kolibries zijn vogels.'The hummingbirds are birds' Hummingbirds are birds.

To Oosterhof (2008), the variation in (21) can be described by assuming that there are two varieties of Standard Dutch: one variety does not have a definite article with the feature bundle [+R, +count, +pl]. Another variety does have a definite article with the same bundle of features, [+R, +count, +pl]".²¹ Also, as sentences with bare singular count nouns are not accepted in standard Dutch, this language would lack a bundle of features englobing these type of constructions (as in 22).

(22) *Zebra is gestreept.'Zebra is striped'A zebra is striped.

Following Oosterhof's proposal (2008) on the distribution of empty determiners in Dutch, and the findings our research, we will assume that the grammar of the Holambra speakers possesses a bundle of features allowing a 0[+R, +count, -pl] combination: That is, a singular count noun DP with an empty determiner, rendering a generic reading.

5 Conclusion

It seems thus that our results support our research hypothesis, namely that language attrition has influenced the Dutch Heritage Language Speakers of Holambra that a slightly different grammar has risen in the Dutch HL speakers of Holambra, insofar as the options to express genericity with DP/NP are concerned. Indeed, the distribution of Bare Singulars has shown significant differences, being accepted with a high rating score by most participants of the experimental group. As the results of the experimental group show acceptance of Bare Singulars, this could mean that they have developed a grammar with a combination of features allowing bare singular count nouns, as in the case of Brazilian Portuguese.

²¹ That would be the variety that accepts generic sentences with Definite Plurals.

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APPENDICES

APPENDIX A: Dutch Test Sentences for Group A

- 1. Het is algemeen geweten dat **de ooievaar** grote vleugels heeft. (DP type: Definite Singular) (It is well know that the **stork** has large wings)
- Waarom heb je geen kippenfarm gestart? Omdat ik liever aan veeteelt doe want koe geeft melk. (DP type: Bare Singular) (Why didn't you start a chicken farm? Because I prefer to work with cattle because cow gives milk)
- Waarom denk je dat die geen vlees eet? Je weet toch dat leeuwen graag vlees lusten. (DP type: Indefinite Plural) (Why do you think that this one doesn't eat meat? You know that lions like meat)
- Het is moeilijk om sommige vogels te fotograferen want ze vliegen te snel, de adelaar, bijvoorbeeld, vliegt erg snel. (DP type: Definite Singular) (It is difficult to photograph some birds because they fly too fast, the eagle, for example, flies very fast)
- Nee, niet alle zoogdieren zijn insecteneters: een eekhoorn eet bessen en noten. (DP type: Indefinite Singular) (No, not all mammals are insectivores: a squirrel eats berries and nuts)
- 6. Niet op de zuidpool: **de ijsberen** leven op de noordpool. (DP type: Definite Plural) (Not on the south pole: **the polar bears** lives on the north pole)
- Zoogdieren kunnen in de zee leven, de walvissen zijn daar een voorbeeld van. (DP type: Definite Plural) (Mammals can live in the sea; the whales are an example of this)
- 8. Nee hoor, het is niet hetzelfde: een **kat** ziet in het donker. (DP type: Indefinite Singular) (No, it's not the same: a **cat** can see in the dark)
- Het dierlijk instinct is zeer sterk. Iedereen weet dat hond op katten jaagt. (DP type: Bare Singular) (The animal instinct is very strong. Everyone knows that dog chases cats)
- 10. De natuur is perfect, nadat ze de bloemen bestuiven maken bijen honing. (DP type: Indefinite Plural)(Nature is perfect, after pollinating the flowers, bees produce honey)

APPENDIX B: Brazilian Portuguese Test Sentences for Group A

- 1. É bem sabido que **a cegonha** tem asas grandes. (DP type: Definite Singular) (It is well know that **the stork** has large wings)
- Por que você não se dedica à criação de frangos? Prefiro criar gado porque vaca dá leite. (DP type: Bare Singular) (Why didn't you start a chicken farm? Because I prefer to work with cattle because cow gives milk)
- Por que acha que esse não come carne? Você sabe que leões gostam de comer carne. (DP type: Indefinite Plural)
 (Why do vou think that this one doesn't eat meat? You know that lions like meat)
- É difícil fotografar alguns pássaros porque voam muito rápido, o falcão, por exemplo, voa muito rápido. (DP type: Definite Singular)
 (It is difficult to photograph some birds because they fly too fast, the eagle, for example, flies very fast)
- Nem todos os mamíferos são insetívoros: um esquilo come frutas e nozes. (DP type: Indefinite Singular) (No, not all mammals are insectivores: a squirrel eats berries and nuts)
- 6. Não é no Polo Sul: os ursos polares vivem no Polo Norte. (DP type: Definite Plural) (Not on the south pole: the polar bears lives on the north pole)
- Há mamíferos que vivem no mar, as baleias são um exemplo disso. (DP type: Definite Plural)
 (Mammala can live in the cae: the wholes are an example of this).

(Mammals can live in the sea; **the whales** are an example of this)

- Não, não é a mesma coisa: um gato vê no escuro. (DP type: Indefinite Singular) (No, it's not the same: a cat can see in the dark)
- O instinto animal é muito forte. Todo mundo sabe que cachorro persegue gatos. (DP type: Bare Singular) (The animal instinct is very strong. Everyone knows that dog chases cats)
- 10. A natureza é perfeita: depois de polinizar as flores, abelhas produzem mel. (DP type: Indefinite Plural)(Nature is perfect, after pollinating the flowers, bees produce honey)

APPENDIX C: Dutch Test Sentences for Group B

- Het is algemeen geweten dat de ooievaars grote vleugels hebben. (DP type: Definite Plural) (It is well know that the storks have large wings)
- Waarom heb je geen kippenfarm gestart? Omdat ik liever aan veeteelt doe want koeien geven melk. (DP type: Bare Plural) (Why didn't you start a chicken farm? Because I prefer to work with cattle because cows produce milk)
- Waarom denk je dat die geen vlees eet? Je weet toch dat een leeuw graag vlees lusten. (DP type: Indefinite Singular)
 (Why do you think that this one doesn't eat meat? You know that a lion likes meat)
- 4. Het is moeilijk om sommige vogels te fotograferen want ze vliegen te snel, adelaar, bijvoorbeeld, vliegt erg snel. (DP type: Bare Singular) (It is difficult to photograph some birds because they fly too fast, eagle, for example, flies very fast)
- Nee, niet alle zoogdieren zijn insecteneters: de eekhoorn eet bessen en noten. (DP type: Definite Singular) (No, not all mammals are insectivores: the squirrel eats berries and nuts)
- 6. Niet op de zuidpool: **ijsberen** leven op de noordpool. (DP type: Bare Plural) (Not on the south pole: **polar bears** lives on the north pole)
- Zoogdieren kunnen in de zee leven, de walvis is daar een voorbeeld van. (DP type: Definite Singular) (Mammals can live in the sea; the whale is an example of this)
- 8. Nee hoor, het is niet hetzelfde: **kat** ziet in het donker. (DP type: Bare Singular) (No, it's not the same: **cat** can see in the dark)
- Het dierlijk instinct is zeer sterk. Iedereen weet dat een hond op katten jaagt. (DP type: Indefinite Singular) (The animal instinct is very strong. Everyone knows that a dog chases cats)
- 10. De natuur is perfect, nadat ze de bloemen bestuiven maken de bijen honing. (DP type: Definite Plural) (Nature is perfect, after pollinating the flowers, the bees produce honey)

APPENDIX D: Brazilian Portuguese Test Sentences for Group B

- 1. É bem sabido que **as cegonhas** têm asas grandes. (DP type: Definite Plural) (It is well know that **the storks** have large wings)
- Por que você não se dedica à criação de frangos? Prefiro criar gado porque vacas dão leite. (DP type: Indefinite Plural) (Why didn't you start a chicken farm? Because I prefer to work with cattle because cows give milk)
- Por que acha que esse não come carne? Você sabe que um leão gosta de comer carne. (DP type: Indefinite Singular)
 (Why do you think that this one doesn't eat meat? You know that a lion likes meat)
- 4. É difícil fotografar alguns pássaros porque voam muito rápido, falcão, por exemplo, voa muito rápido. (DP type: Bare Singular)
 (It is difficult to photograph some birds because they fly too fast, eagle, for example, flies very fast)
- Nem todos os mamíferos são insetívoros: o esquilo come frutas e nozes. (DP type: Definite Singular) (No, not all mammals are insectivores: the squirrel eats berries and nuts)
- 6. Não é no Polo Sul: **ursos polares** vivem no Polo Norte. (DP type: Indefinite Plural) (Not on the south pole: **polar bears** lives on the north pole)
- Há mamíferos que vivem no mar, a baleia é um exemplo disso. (DP type: Definite Singular) (Mammals can live in the sea; the whale is an example of this)
- 8. Não, não é a mesma coisa: **gato** vê no escuro. (DP type: Bare Singular) (No, it's not the same: **cat** can see in the dark)
- O instinto animal é muito forte. Todo mundo sabe que um cachorro persegue gatos. (DP type: Indefinite Singular) (The animal instinct is very strong. Everyone knows that a dog chases cats)
- 10. A natureza é perfeita: depois de polinizar as flores, as abelhas produzem mel. (DP type: Definite Plural)(Nature is perfect, after pollinating the flowers, the bees produce honey)