

**WHEN SEMANTICS MEETS MORPHO-SYNTAX. THE ROLE
OF COUNT/MASS FEATURE IN ACQUIRING HET AS
DEFINITE DETERMINER IN MONOLINGUAL AND
BILINGUAL DUTCH**

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*ABSTRACT: According to Sorace (2005, 2008), external interfaces between syntax and other cognitive systems and internal interfaces among connections between different components of the grammar are predominant loci of instability. Tsimpli and Sorace (2006) suggest that further distinctions should be made among different interface domains and among possible causes of interface instability. Monolingual and bilingual acquisition of the Dutch definite determiners *de* and *het* is a long-lasting process since monolingual children do not acquire a target grammar until the age of six and bilinguals show an overgeneralization of *de* to a higher extent than their monolingual controls. We will address the question whether the acquisition problems of the Dutch definite determiner *het* is related to interface properties. Roodenburg & Hulk (2008, to appear) suggest that in the early stages of acquisition, Dutch definite determiners are not gender markers (yet), but that the semantic property [\pm count] of the noun plays a role in the selection of the definite determiner. This paper tests this hypothesis in monolingual and Spanish-Dutch bilinguals. Crucially, this study shows that the selection of *het* both for the monolingual and bilingual children involves the interaction of semantic [\pm count] and morpho-syntactic [gender] features. The difficulties with the acquisition of *het* as determiner may be related to problems with such internal (semantics-morphosyntax) interface properties. We found that monolingual Dutch and Spanish-Dutch bilingual children do not differ in this respect.*

KEYWORDS: internal interface; Dutch definite determiners; monolingual child acquisition; bilingual child acquisition; gender; count

1. Introduction¹

According to Sorace (2005, 2008), external interfaces between syntax and other cognitive systems and internal interfaces among connections between different components of the grammar are predominant loci of instability. The findings in the literature show that interface domains cause problems in various domains such as monolingual acquisition, simultaneous bilingual acquisition, adult L2 acquisition, heritage languages and L1 attrition. Tsimpli and Sorace (2006) suggest that further distinctions should be made among different interface domains (for example between ‘internal’ and ‘external’ interfaces) and among possible causes of interface instability.

In this paper, we will address the question whether the problems with the monolingual and bilingual acquisition of the Dutch singular neuter definite determiner *het* are related to its interface properties.

Dutch makes a difference between neuter and common nouns, as illustrated in Figure 1 and (1). The lexical gender distinction is not reflected in the morphology of the noun².

	def. det. singular	def. det. plural	Indef det. singular	Indef det. plural
<i>neuter noun</i> boek ‘book’	het ‘the’	de ‘the’	<i>een</i> ‘a’	∅
<i>common noun</i> tafel ‘table’	de ‘the’	de ‘the’	<i>een</i> ‘a’	∅

Figure 1: the singular and plural definite determiners in Dutch

- (1) a. **het** *boek* ‘the book-neuter’ and **de** *tafel* ‘the table-common’
 b. *een* *boek/tafel* ‘a book/table’ and **∅/de** *boeken/tafels* ‘(the) books/tables’

Moreover, it is not possible to determine the gender of nouns with the help of indefinite determiners, because *een* is used for all indefinite singular nouns. In the plural, gender is never marked: *de* is used for all definite and ∅ for all indefinite plural nouns. Grammatical gender is, however, reflected in a number of agreeing elements accompanying the noun or referring to it. Definite determiners are a clear case: the singular definite determiners *de* and *het* vary morphologically according to the gender of the noun, that is: *de* marks common gender and *het* marks neuter gender.

¹ We would like to thank Sander Almekinders for correcting our English.

² With the exception of diminutive nouns, which take the suffix *-(t)je* and are always neuter.

It is well-known from the literature that Dutch monolingual children are slow in the acquisition of the neuter definite determiner; that is, until they are approximately 6 years of age, they use the common definite determiner *de* where *het* is required in agreement with the gender of the *neuter* noun (Van der Velde, 2004; Blom *et al.*, 2008; Hulk & Cornips, 2006a,b). Bilingual Dutch children, in general, have an even greater delay in the overgeneralization of the definite determiner *de* where neuter *het* is required (Blom *et al.*, 2008; Cornips & Hulk, 2008; Cornips *et al.*, 2006; Hulk & Cornips, 2006; Unsworth, 2007).

Roodenburg & Hulk (2008, to appear) also examined the developmental path of the acquisition of grammatical gender in children's Dutch. They argue that the overgeneralization of *de* by monolingual Dutch children, and the fact that *de* is therefore seen as the default definite determiner, does not automatically mean that *de* is also the expression of default gender. They suggest that, when children start using determiners, these are not gender markers (yet), but that the semantic property [\pm count] of the noun plays a role in the children's choice of the definite determiner. The aim of this paper is to test their hypothesis by means of a production elicitation task with monolingual and bilingual (Spanish-Dutch) children acquiring Dutch (Reijers, 2008).

This paper is organized as follows. In section 2 we describe the monolingual and bilingual acquisition of grammatical gender in Dutch/Germanic and Spanish/Romance, as found in the literature. Section 3 is devoted to linguistic factors that might explain why the acquisition of grammatical gender is so problematic in Dutch. In section 4, we compare the results of monolingual Dutch children and bilingual Spanish-Dutch children in an experimental study eliciting Dutch definite determiners. The last section will be devoted to a conclusion.

2. Acquisition of grammatical gender

2.1. Monolinguals

Chierchia *et al.* (2001) investigated the acquisition of the definite determiner in Swedish, English, French and Italian. They propose that all language learners go through three developmental stages:

- (i) Pre-determiner phase (systematic use of bare nouns: nouns which are not preceded by a determiner);
- (ii) Free variation phase (optional use of determiners);
- (iii) Adult grammar (adult-like use of determiners).

In their study, Chierchia *et al.* (2001) show that there are significant differences between the gender acquisition patterns in Romance languages and Germanic languages. They found that children speaking a Germanic language stay in the pre-determiner phase (stage (i)) longer and, hence, reach the target grammar later than the children speaking a Romance language. They explain this finding by taking into consideration the effort the children speaking a Germanic language have to put in deciding which nouns can be bare and which cannot. Children speaking a Romance language don't face this challenge, because most singular nouns cannot be bare in Romance languages. It is therefore to be expected that the Dutch acquisition pattern of (definite) determiners shows a delay in comparison with that of Romance languages like French (Van der Velde, 2004; Clark, 1985) and Spanish (cf. Cain, Weber-Olsen & Smith, 1987; Lopez Ornat, 2003; Pérez-Pereira, 1991).

However, when we examine the acquisition patterns within the Germanic languages, it appears that Dutch also shows a delay in comparison with other Germanic languages, such as German and Swedish (Andersson, 1992). This delay sets Dutch apart within the Germanic languages: Until Dutch monolingual children are approximately six years of age, they use the definite determiner *de* where *het* is required in agreement with the gender of the neuter noun (Van der Velde, 2004; Blom *et al.*, 2008). One could argue that it makes sense (see also Hawkins & Franceschina, 2004) that gender in German is acquired faster than gender in Dutch because (i) German has a three gender system, and (ii) there are more (morphological) manifestations of gender in German when compared with Dutch (Mills, 1986). The Swedish gender system, like the Dutch gender system, distinguishes between two genders, namely common and neuter, but does not appear to present the same problems for the learners as the Dutch system when it comes to the acquisition of gender (Andersson, 1992).

The fact that the acquisition of grammatical gender in Dutch causes difficulties is discussed in various different studies. Van der Velde (2004) found that Dutch children, tested at age 3, 4 and 6 continue to omit the determiners long after the French children investigated in the same study have stopped doing this. When the children start using determiners, many more gender errors are observed in Dutch than in French: Dutch children massively overgeneralize the common definite determiner *de* in combination with the neuter noun. Van der Velde (2004) suggests that this shows that the determiner *de* can be considered as the default.

The stages in the acquisition of the Dutch determiners between age 2-3;5 (Zonneveld, 1992; De Houwer & Gillis, 1998; Van der Velde, 2003, 2004) correspond to the 'universal' scenario proposed by Chierchia *et al.* (2001 and references cited there):

- (i) bare nouns;
- (ii) optional schwa + noun (might be analyzed as article *een* or *de* + noun)
- (iii) massive overgeneralization *de*, a few *het*
- (iv) target gender determiner not before age 7

However, Roodenburg & Hulk (2008, to appear) argue that the overgeneralization of *de* by monolingual Dutch children does not automatically mean that *de* is also the expression of default gender. They suggest that, when children start using determiners, these are not gender markers (yet). They hypothesize that *de* just expresses the feature [+definite] (see also Cornips & Hulk 2008).

2.2. Bilinguals

Most of the recent studies on (elicited) production of Dutch gender in bilingual children have examined children living in ethnic minority communities where the other languages are Turkish, Moroccan Arabic, Berber or Sranan (see Cornips & Hulk, 2008 for an overview), and children in bilingual English-Dutch and French-Dutch children in expatriate families (Unsworth, 2007; Hulk & Van der Linden, 2007). Generally speaking, bilingual Dutch children of the minority communities show a greater delay in the acquisition of Dutch grammatical gender and they overgeneralize the definite determiner *de* longer than monolinguals (Cornips *et al.*, 2006; Hulk & Cornips, 2006). Even at an advanced age (11-13 years) many of these children are not yet target-like in their choice of the gender of the definite determiner (Brouwer *et al.*, 2008). The same holds for English-Dutch bilingual children studied by Unsworth (2007), and for French-Dutch bilingual children attending the French lyceum in The Hague studied by Hulk (2006). Several factors, such as quantity and quality of input, age of onset of acquisition and length of exposure may explain the differences between monolingual and bilingual children, and within the groups of bilingual children (see Cornips & Hulk, 2008 for a discussion of these factors).

Hulk & Van der Linden (2007) studied spontaneous production data from several young French-Dutch children (under age four) growing up bilingually from birth. Interestingly, these children are within the rates of monolingual Dutch children with respect to the use of gender on definite determiners. They also studied spontaneous production data from an Italian-Dutch 2L1 child who in the early use of *het* seem to be more advanced than her monolingual peers. Until recently, no other studies have focused on the acquisition of Dutch grammatical gender in Spanish-Dutch bilingual children. In previous studies, it has however been shown that Spanish monolinguals and Spanish-German bilinguals acquired gender agreement in Spanish at a very early age (before age 4) (Hawkins & Franceschina, 2004; Kuchen-

brandt, 2005). Spanish, which is the 2L1 language of the children tested here (see §4.2), has no bare nouns and has two genders: masculine and feminine. Masculine nouns take the definite determiner *el* ‘the’ and *un* ‘a’, and feminine nouns take the definite determiner *la* ‘the’ and *una* ‘a’. Unlike in Dutch, in Spanish, in most cases, a transparent relation exists between the morpho-phonological form of the noun and its gender. Generally speaking, masculine nouns end in *-o* and feminine nouns usually end in *-a* (cf. examples in (2)); this might facilitate the recognition of the gender of a noun:

- (2) a. *el libro* ‘the book-masculine’, *el vaso* ‘the glass-masculine’ and
el perro ‘the dog-masculine’
 b. *la cama* ‘the bed-feminine’, *la casa* ‘the house-feminine’ and
la luna ‘the moon-feminine’

The present study examines the acquisition of grammatical gender on definite determiners by Dutch monolingual children and Spanish-Dutch bilingual children of the same age.

3. Linguistic factors

Since both monolingual and bilingual children from ethnic minority communities and (some) expatriate families show problems acquiring the definite determiner *het*, it cannot just be external factors, such as the quantity and the quality of the input, that explain these difficulties. We assume that also internal, linguistic factors play a role. The acquisition of the Dutch determiners and their gender involves interface domains e.g. connections between several components of grammar, namely lexicon, morphology and syntax. What is needed for their acquisition is (i) the presence of the syntactic position D, (ii) the lexical and grammatical features of the noun, (iii) agreement between D and N, and (iv) the features and morphology of the determiner. Thus, the acquisition of grammatical gender involves more than only lexical learning.

One of the factors playing a role is that there is not much evidence for grammatical gender in Dutch. First, grammatical gender is only visible on single definite articles and demonstratives. Second, there is no paradigmatic link between definite and indefinite articles concerning grammatical gender since there is no gender morphologically expressed on the indefinite determiner (cf. figure 1). Third, there is no gender visible on plural definite articles (cf. figure 1). Fourth, according to a dictionary-based estimate, roughly 75% of Dutch nouns are common and only 25% are neuter. Van Berkum (1996) found that in running texts the relative distribution of *de-* and *het-*words is roughly 2:1, respectively. Finally, unlike Spanish (see (2)) and other Romance languages, there are hardly any phonological cues for the

different gender forms of the definite determiner with the exception of the diminutives, left outside the scope of this paper.

So, the question arises what other features may play a role in the selection of *de* and *het*. What ‘cues’ other than gender for selecting *de* or *het* are present in the input? Here we will investigate whether the semantic feature [-count] is such a cue and plays a role in selecting the determiner *het*, as suggested by Roodenburg & Hulk (2008, to appear).

3.1. Count/mass distinctions in nouns and determiners: hypotheses put forward

According to Chierchia *et al.* (2001)’s Nominal Mapping Parameter, Dutch is a [+arg, +pred] language. As such, it allows singular nouns to be bare if they are [-count]. Moreover only singular [+count] nouns take the indefinite article *een* ‘a’, and only count nouns can be pluralized in Dutch:

- | | | | | |
|-----|----|----------------------------|--------------------------|-----------------|
| (3) | a. | ∅ melk * <i>een</i> melk | *melk-s _{plu.} | ‘milk’ [mass] |
| | b. | ∅ water * <i>een</i> water | *water-s _{plu.} | ‘water’ [mass] |
| (4) | a. | *∅ tafel <i>een</i> tafel | tafel-s _{plu.} | ‘table’ [count] |
| | b. | *∅ boek <i>een</i> boek | ‘boek-en _{plu.} | ‘book’ [count] |

This implies that there is clear evidence in the input to children for a classification of Dutch nouns in *count* versus *mass*, more so than for *neuter* versus *common*. The literature does not tell us much about the acquisition of this classification, although there is evidence that monolingual Dutch children have acquired plural formation around age 3 (van Wijk, 2007). It could therefore be the case that Dutch children initially use this classification to select *de* and *het*, and make the following hypotheses:

(i) childrens’ *de*-hypothesis: nouns that can be pluralized and combined with *een* in the singular select *de*, i.e. nouns with the semantic feature [+count] take *de*;

(ii) childrens’ *het*-hypothesis: nouns that cannot be pluralized and do not take *een* in the singular, select *het*, i.e. nouns with the semantic feature [count] take *het*

These hypotheses predict that children will initially use *het* only with [count] nouns, such as *water*, and not with [+count] nouns such as *boek*(*book*).

4. Methodology

In order to examine whether monolingual and bilingual i.e. Spanish-Dutch children combine the determiner *het* initially most often with [-count] nouns and only later with [+count] and/or [+neuter] nouns, we selected 21 monolingual and 17 bilingual children (total of 38) in two age groups varying between 3;6-4;11 and 5;1-6;7 years old. The linguistic background of the Spanish-Dutch children is more diverse than the background of the monolinguals, but all the bilingual children have Dutch as one of their home languages. The monolingual children attend two different schools in Amsterdam. The bilingual children all attend the *Escuela Hispana de Amsterdam* on Saturdays. This Hispanic school in Amsterdam is the only school in the Netherlands where it is possible for Spanish speaking children to be taught in Spanish about the Spanish language and culture. Children allowed to attend this school must have at least one parent whose first language is Spanish and raises the child in Spanish. Since these bilingual children can only attend this school on Saturdays, they attend a (regular) Dutch primary school on weekdays.

We designed one (picture) completion task experiment on the basis of Zuckermann (2001) (cf. Hulk & Cornips, 2005/2006; Brugman, 2008) that enables us to investigate the use of definite determiners with respect to common [\pm count] and neuter [\pm count] test items. For each phenomenon, the subjects were asked to use 22 nouns, divided into 12 [+count, singular] nouns (6 common and 6 neuter nouns) and 10 [-count] nouns (6 neuter and 4 common nouns). We also investigated 12 plural [+count] nouns in the condition [neuter] ($n=6$) and [common] ($n=6$).

The test chosen is a sentence completion test, describing 34 picture-pairs (cf. Zuckerman, 2001). Two pictures are shown, each showing a different object. The investigator (I) introduces the two pictures consecutively and asks the child (C) to complete the sentence relating to the object shown in the second picture. The test format requires the child to complete the sentence with a [+count] or [-count/mass] noun preceded by a definite determiner, as illustrated in (5) and (6), respectively:

(5) **Investigator:**

'Dit is een konijn en dit is een schaap. Dus dit is het meisje met het konijn en dit is het meisje met...?'

'This is a rabbit and this is a sheep. So, this is the girl with the rabbit and this is the girl with...?'

Child (expected answer):

'het schaap'

'the sheep.'

- (6) **Investigator:**
'Dit is een bed en dit is zand. Dus dit is het meisje in het bed en dit is het meisje in...?'
 'This is a bed and this is sand. So, this is the girl in the bed and this is the girl in...?'
Child (expected answer):
'het zand.'
 'the sand.'

Let us now turn to the results, but keep in mind that this is only one study with low numbers of children, so we have to be cautious in generalizing the results.

4.1. Results of the monolingual children and discussion

The hypotheses we adopted above predict that when Dutch children use *het* they use it (most) with [-count] nouns:

- (7) a *het water* _{NEUT/MASS} 'water' but also
 b *het sneeuw* _{COMM/MASS} 'snow', but not (yet)
 c *het paard* _{NEUT/+COUNT} 'horse'

In contrast, overgeneralization with *de* is then restricted to [+count] nouns:

- (8) a *de boek* _{NEUT/+COUNT} 'book' and
 b *de paard* _{NEUT/+COUNT} 'horse' but not:
 c *de water* _{NEUT/MASS} 'water'

The results of the monolingual children regarding the use of the definite determiners *de* and *het* for the [+count] and [-count] nouns are presented in Table 1 and Table 2, respectively³.

<i>L1</i>	[+count, neuter, +singular]				[+count, common, + singular]			
	<i>de</i>	<i>het</i>	<i>een</i>	<i>bare</i>	<i>de</i>	<i>het</i>	<i>een</i>	<i>bare</i>
<i>age</i> 4;2-4;11 n=9	33.3% 18/54	14.8% 8/54	13% 7/54	29.6% 16/54	61.1% 33/54	0% 0/54	14.8% 8/54	22.2% 12/54
<i>age</i> 5;1-5;11 n=12	27.8% 20/72	34.7% 25/72	11.1% 8/72	22.2% 16/72	66.7% 48/72	4.2% 3/72	9.7% 7/72	16.7% 12/72
	<i>het boek</i> 'the book'				<i>de bal</i> 'the ball'			

Table 1: Monolingual results for the (in)definite determiner with [+count] nouns with respect to the conditions neuter and common. The shaded part presents the production of the definite determiner *de*.

³ Although a category 'other', that is to say, answers other than *de*, *het*, *een* and *bare* nouns have been calculated, it is not presented in the tables.

<i>L1</i>	[-count, neuter]				[-count, common]			
	<i>de</i>	<i>het</i>	<i>een</i>	<i>bare</i>	<i>de</i>	<i>het</i>	<i>een</i>	<i>bare</i>
age 4;2-4;11 n=9	25.9% 14/54	24.1% 13/54	1.9% 1/54	31.5% 17/54	66.7% 24/36	0% 0/36	0% 0/36	25.0% 9/36
5;1-5;11 n=12	8.3% 6/72	55.6% 40/72	0% 0/72	34.7% 25/72	89.6% 43/48	0% 0/48	0% 0/48	6.3% 3/48
	<i>het gras</i> ‘the grass’				<i>de sneeuw</i> ‘the snow’			

Table 2: Monolingual results for the (in)definite determiner with [-count] nouns with respect to the conditions neuter and common. The shaded part presents the production of *het*.

First, the results show that, in general, the children produce much more correct *de* (63% for all common nouns between 4;2-4;11, 76% between 5;1-5;11) than *het* (19% for all neuter nouns between 4;2-4;11, 45% between 5;1-5;11). Second, the results show that the children use *de* and *het* both with [+count] and [-count] nouns. We did not expect them to use *de* with a [count] noun such as *sneeuw* ‘snow’ but they did. We also did not expect them to use *het* with a [+count] noun such as *boek* ‘book’ but they did. Therefore, these results do not support the hypotheses proposed above, i.e. that children would (initially) use *het* with [-count] nouns and *de* with [+count] nouns.

Nevertheless, within the group of neuter nouns, both the four-and-five-year-olds use *het* significantly more with [-count] nouns such as *gras* ‘grass’ than with [+count] nouns, such as *boek* ‘book’. This suggests that the cue [count] does play a role in the selection of *het*, but that it operates in interaction with the grammatical gender feature of the noun. It is therefore that we tested by Fisher’s Exact Test whether the distribution for *het* with [-count] nouns significantly differs from that of *het* with [+count] and from *de* with [\pm count] nouns. These interactions are indeed significant for both the four-and-five-year-old children (Fisher’s Exact Test $p < .0001$).

What’s more, although we aimed to elicit *definite* determiners, some children produced *indefinites*. Interestingly, they use indefinites only with [+count] nouns, not with [-count] nouns (only 1 out of 210) and never with plurals (not shown here). This suggests that both the four and the five year olds know the difference between [+count] and [-count] nouns⁴. This knowledge is a prerequisite for the possible use of the cue [-count] for other purposes, such as the selection of *het* as definite determiner.

⁴ Moreover, the children never produced *het* with plurals.

4.2. Bilingual children

Tables 3 and 4 present the results of the bilingual Spanish-Dutch children for the [+count] and [-count] nouns, respectively.

2L1	[+count, neuter , +singular]				[+count, common , + singular]			
age	<i>De</i>	<i>het</i>	<i>een</i>	<i>bare</i>	<i>de</i>	<i>het</i>	<i>een</i>	<i>bare</i>
3;6-4;8 n=7	23.8% 10/42	7.1% 3/42	11.9% 5/42	40.5% 17/42	33.3% 14/42	0% 0/42	11.9% 5/42	2.4% 1/42
5;1-6;7 n=10	28.3% 17/60	23.3% 14/60	16.7% 10/60	25% 15/60	66.7% 40/60	5.0% 3/60	13.3% 8/60	6.7% 4/60
	<i>het boek</i> ‘the book’				<i>de bal</i> ‘the ball’			

Table 3: Bilingual results for the (in)definite determiner with [+count] nouns with respect to the conditions neuter and common. The shaded part presents the production of *het*.

2L1	[-count, neuter]				[-count, common]			
age	<i>de</i>	<i>het</i>	<i>een</i>	<i>bare</i>	<i>de</i>	<i>het</i>	<i>een</i>	<i>bare</i>
3;6-4;8 n=7	14.3% 6/42	16.7% 7/42	0% 0/42	42.9% 18/42	35.7% 10/28	0% 0/28	0% 0/28	17.9% 5/28
5;1-6;7 n=10	18.3% 11/60	50.0% 30/60	0% 0/60	23.3% 14/60	80.0% 32/40	2.5% 1/40	0% 0/40	15.0% 6/40
	<i>het gras</i> ‘the grass’				<i>de sneeuw</i> ‘the snow’			

Table 4: Bilingual results for the (in)definite determiner with [-count] nouns with respect to the conditions neuter and common. The shaded part presents the production of the definite determiner *het*.

Again, the results show that, in general, the bilingual children produce much more correct *de* (34% for all common nouns between 4;2-4;11, 72% between 5;1-5;11) than *het* (24% for all neuter nouns between 4;2-4;11, 37% between 5;1-5;11) too. The bilingual children are also similar to the monolingual children in that they use *de* and *het* both with [+count] and [-count] nouns. This similarly contradicts the hypotheses proposed above. However, just like their monolingual peers, all bilingual children use *het* more often with [-count, +neuter] nouns such as *gras* ‘grass’ than with [+count, +neuter] nouns such as *boek* ‘book’ (Fisher Exact Test, age 3;6-4;8 $p < .0001$, age 5;1-6;7 $p < .0014$). This is clear evidence that at these ages the bilingual children also use the feature [-count] in their selection of *het*.

Just like the monolingual children, the bilingual children sometimes produce the indefinite determiner *een* instead of the definite one. Interestingly, they do so only with [+count] nouns and never with [-count], showing

that they indeed know the difference between [+count] and [-count] nouns, just as their monolingual peers.

When we compare the monolingual and the bilingual children in a more general way, we see that in the age range between 3;6-4;8 the bilingual children use less determiners and more bare nouns and give more “other” answers than the monolingual children. This suggests that they may possibly still be in the optional determiner stage and show a (slight) delay in this respect compared to the monolingual children. However, in the age range between 5;1-6;7 the bilingual children show some kind of acceleration and approach the results of their monolingual peers in the (correct) production of determiners. In future research it would be interesting to examine the quantity of the Dutch input to these children and its role in the acquisition of Dutch *het*, since it could be the case that from age 4 onwards, when the children receive their education in Dutch, the input they get in Dutch becomes more important. This may (partly) explain the acceleration we see in the acquisition of *het* between age 5 and 6 in the bilingual children studied here.

These Spanish-Dutch bilingual children seem to be more successful than the children from ethnic minority communities in the Netherlands, and also more successful than most of the expatriate English-Dutch bilinguals studied by Unsworth (2007). It may be the case that the Spanish-Dutch children we studied are more similar to the French-Dutch 2L1 children studied by Hulk & Van der Linden (2007) and that it is their knowledge of grammatical gender in their other language, Spanish, that positively influences their acquisition of gender in Dutch. It would indeed have been interesting to also take into account the childrens’ knowledge of Spanish and to compare it to their knowledge of grammatical gender in Dutch. However, this falls outside the scope of this paper.

Summarizing, we have seen that these bilingual Spanish-Dutch children show a similar acquisition pattern as their monolingual peers, and use both the gender and the [±count] features of the noun in their use of definite determiners.

5. Conclusion

The selection of the grammatical gender of definite determiners is an interface phenomenon involving several components of grammar, namely lexicon, morphology and syntax. What is needed for its acquisition is (i) the presence of the syntactic position D, (ii) the lexical and grammatical features of the noun, (iii) agreement between D and N, and (iv) the features and morphology of the determiner. Monolingual acquisition of the Dutch definite determiners is a long-lasting process in the sense that children do not acquire a target grammar until the age of six; that is, they overgeneralize the definite determiner *de* where *het* is required. From the literature, it is clear that most bilingual children show an overgeneralization of *de* to a higher extent than

their monolingual controls. Roodenburg & Hulk (2008, to appear) suggest that, when children start using determiners, these are not gender markers (yet) but that the semantic property [\pm count] plays a role in the choice of the definite determiner. More specifically, they hypothesize that when children start using the definite determiner *het*, they consider this determiner to be an element that agrees with the [-count] characteristics of a noun. The aim of this paper was to test this hypothesis in young monolingual Dutch and Spanish-Dutch bilingual children. The results of an elicited production experiment do not support the adopted hypothesis, i.e. that children would start to use *het* with [-count] nouns and *de* with [+count] nouns. Nevertheless, within the group of neuter nouns, both the 4 and 5 year old monolinguals and bilinguals use *het* significantly more with [-count] nouns such as *gras* 'grass' than with [+count] nouns, such as *boek* 'book', suggesting that the feature [count] does play a role in the selection of *het*, in interaction with the (neuter) gender feature.

Crucially, this study has shown that the selection of *het* for both these monolingual and bilingual children involves the interaction of semantic [\pm count] and the morpho-syntactic [gender] features. The difficulties with the acquisition of *het* as determiner may therefore be related to problems with such (internal) interface properties, and, as then expected, monolingual and bilingual children do not differ in this respect.

References

- Andersson, A-B. (1992). *Second Language Learners' Acquisition of Grammatical Gender in Swedish*. Göteborg: University of Göteborg.
- Berkum, J.J.A. van. (1996). *The Psycholinguistics of Grammatical Gender: Studies in Language Comprehension and Production*. Doctoral Dissertation, Nijmegen: Max Planck Institute for Psycholinguistics.
- Blom, E., D. Polisenká & F. Weerman (2008). Articles, Adjectives and Age of Onset: The Acquisition of Dutch Grammatical Gender. *Second Language Research* 24 (3), pp. 297-332.
- Brouwer, S., L. Cornips & A. Hulk (2008). Misrepresentation of Dutch Neuter Gender in Older Bilingual Children?. In B. Hazdenar & E. Gavrusseva (eds.) *Current Trends in Child Second Language Acquisition. A Generative Perspective*. Amsterdam/Philadelphia: John Benjamins, pp. 83-96.
- Brugman, M. (2008). *Een Onderzoek naar de Verwerving van Grammaticaal Geslacht en Telbaarheid bij Eentalige en Meertalige Kinderen van Vier, Vijf en Zes jaar*. MA Dissertation, University of Utrecht.
- Chierchia, G., T. Guasti & A. Gualmini (2001). *Nouns and Articles in Child Grammar: A Syntax/Semantics Map*. Milano: University of Milano-Bicocca.
- Clark, E. (1985). The Acquisition of Romance with Special Reference to French. In D. Slobin (ed.) *The Crosslinguistic Study of Language Acquisition* Vol.1. Hillsdale: Erlbaum, pp. 687-782.

- Cornips, L., M. van der Hoek & R. Verwer (2006). The Acquisition of Grammatical Gender in Bilingual Child Acquisition of Dutch. The Definite Determiner, Attributive Adjective and Relative Pronoun. In J. van de Weijer & B. Los (eds.) *Linguistics in The Netherlands*. Amsterdam/Philadelphia: John Benjamins, pp. 40-51.
- Cornips, L. & A. Hulk (2008). Factors of Success and Failure in the Acquisition of Grammatical Gender in Dutch. *Second Language Research* 24 (3), pp. 267-296.
- Cornips, L. & A. Hulk (2006). External and Internal Factors in Bilingual and Bidialectal Language Development: Grammatical Gender of the Dutch Definite Determiner. In C. Lefebvre, L. White & J. Christine (eds.) *L2 Acquisition and Creole Genesis. Dialogues*. Amsterdam/Philadelphia: John Benjamins, pp. 355-378.
- Hawkins, R. & F. Franceschina (2004). Explaining the Acquisition and Non-Acquisition of Determiner-Noun Gender Concord in French and Spanish. In P. Prévost & J. Paradis (eds.) *The Acquisition of French in Different Contexts*. Amsterdam/Philadelphia: John Benjamins, pp. 175-205.
- Hulk, A. (2007). Deviance in Early Child Bilingualism. In J. Camacho, N. Flores-Ferrán, L. Sánchez, V. Déprez & M.J. Cabrera (eds.) *Romance Linguistics 2006*. Amsterdam/Philadelphia: John Benjamins, pp. 183-205.
- Hulk, A. & L. Cornips (2006a). Neuter Gender and Interface Vulnerability in Child L2/L1 Dutch. In S. Unsworth, T. Parodi, A. Sorace & M. Young-Scholten (eds.) *Paths of Development in L1 and L2 Acquisition: In Honor of Bonnie D. Schwartz*. Amsterdam/Philadelphia: John Benjamins, pp. 107-134.
- Hulk, A. & L. Cornips (2006b). Between 2L1- and child L2 acquisition: an experimental study of bilingual Dutch. In: C. Lleó (ed.) *Interfaces in multilingualism*. Amsterdam/Philadelphia: John Benjamins, pp. 115-138. (Hamburg Studies on Multilingualism)
- Hulk, A. & L. Cornips (2005). Differences and similarities between L2 and (2)L1: DO-support in Child Dutch. In L. Dekydtspotter *et al.* (ed.) *Proceedings of the 7th Generative Approaches to Second language Acquisition Conference (GASLA 2004)*. Somerville, MA: Cascadilla Proceedings Project, pp. 163-177.
- Hulk, A. & E. van der Linden (2007). The Acquisition of Gender in Romance-Germanic Bilingual Children: The Role of the Other Language. Presentation at ISB6, Hamburg, June.
- Kuchenbrandt, I. (2005). Gender Acquisition in Bilingual Spanish. In J. Cohen, K.T. McAlister, K. Rolstad & J. MacSwan (eds.) *Proceedings of the 4th International Symposium on Bilingualism*. Somerville, MA: Cascadilla Press, pp. 1252-1263.
- López-Ornat, S. (2003). Learning Earliest Grammar: Evidence of Grammar Variations in Speech before 22 Months. In S. Montrul & F. Ordoñez (eds.) *Linguistic Theory ad Language Development in Hispanic Languages*, Somerville, MA: Cascadilla Press, pp. 254-274.
- Mills, A. E. (1986). *The Acquisition of Gender. A Study of English and German*. Berlin-Heidelberg: Springer-Verlag.

- Pérez-Pereira, M. (1991). The Acquisition of Gender: What Spanish Children Tell us'. *Journal of Child Language* 18, pp. 571-590.
- Reijers, C. (2008). The Acquisition of Grammatical Gender in Dutch. A Comparison between Dutch Monolingual Children and Spanish-Dutch Bilingual Children. MA Dissertation, University of Leiden/Meertens Institute.
- Roodenburg, J. & A. Hulk (2008). Puzzles on Grammatical Gender. *Lingue e Linguaggio* 1, pp. 67-92.
- Roodenburg, J. & A. Hulk (to appear). Gender puzzels. *Taal en Tongval*.
- Sorace, A. (2005). Selective optionality in language development. In L. Cornips & K. P. Corrigan (eds.) *Syntax and Variation. Reconciling the Biological with the Social*. Amsterdam/Philadelphia: John Benjamins, pp. 55-80.
- Tsimpli, I.-M. & A. Sorace (2006). Differentiating Interfaces: L2 Performance in Syntax-Semantics and Syntax-Discourse Phenomena. In D. Bamman, T. Magnitskaia & C. Zaller (eds.) *Proceedings of the 30th Annual Boston University Conference on Language Development*. Somerville, MA: Cascadilla Press, pp. 653-664.
- Unsworth, S. (2007). Age and Input in Early Child Bilingualism: The Acquisition of Grammatical Gender in Dutch. In A. Belikova, L. Meroni & M. Umeda (eds.) *Proceedings of the 2nd Conference on GALANA*. Somerville, MA: Cascadilla Proceedings Project, pp. 448-458.
- Velde, M. van der (2004). L'Acquisition des Déterminants en L1: une Étude Comparative entre le Français et le Néerlandais. *Acquisition et Interaction en Langue étrangère*, 21, pp. 9-46.
- Zuckerman, S. (2001). *The Acquisition of "Optional" Movement*. Doctoral Dissertation, Groningen University.