

# THE VULNERABILITY OF GENDER ON DETERMINERS IN L1, 2L1 AND L2 ACQUISITION

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**Abstract:** The acquisition of gender has been reported to be problematic for some groups of learners acquiring Germanic or Romance languages. It has been shown that L1 learners do better in gender acquisition than others, like bilingual children, child L2 learners and adult L2 learners. The reason for these differences is however not always clear. In this paper, we study the acquisition of gender on determiners by different groups of learners. We concentrate on the acquisition of French, Italian, Spanish and Dutch. The picture from a literature survey shows that contradictory results have been found. We suggest that the ‘vulnerability’ of this particular domain of grammar has to do with interacting factors in the acquisition. Among them are the specific characteristics of the language or languages involved, like the semantic and morphophonological characteristics of the nouns in each language, but also the quantity and quality of input, and the cross-linguistic influence exercised by one language on the other in a 2L1 or L2 setting. Instruction also seems to play a role.

**Keywords:** gender, determiners, L1 acquisition, 2L1 acquisition, L2 acquisition

## 1. Introduction

For adult L2 acquisition of Romance and Germanic languages, most studies report problems and errors in the acquisition of gender. These problems and errors show up in the use of determiners of the wrong gender before nouns. Contradictory findings are reported however with respect to target-like ultimate attainment in gender acquisition. While some studies claim that acquisition of the target-like norm is impossible, especially for learners whose L1 does not have gender on the noun (e.g. Hawkins and Franceschina 2004 for L1-English L2-Spanish learners) others claim that target-like attainment is not excluded (cf. Bruhn de Garavito and White 2002, for the same language pair). All authors however agree that the acquisition of gender in L2 is difficult (cf. Carrol, 1999).

This finding is in contrast with the acquisition of gender in L1, which for most languages is unproblematic, at least in Romance languages. The acquisition of grammatical gender on some Germanic languages determiners has been found to be more problematic. In Dutch L1, for example, children become target like at gender acquisition only around the age of 6 years old. Until then, they generalize the common gender determiner *de* instead of the neuter gender determiner *het*. As such, the acquisition of gender can be considered to be a “vulnerable” domain, where we define “vulnerable” as sensitivity to (external) influences, possibly leading to delayed / deviant development.

For the simultaneous acquisition of two gender systems in bilingual (2L1) children, findings are contradictory. In some cases, these children seem to acquire gender at the same rate as monolingual children, in some cases there seems to be delay or, on the contrary, acceleration in one of the languages.

In this paper, we discuss the acquisition of gender on determiners and its vulnerability in the L1, and L2 acquisition of Dutch, Spanish, Italian and French and in the bilingual (2L1) acquisition of the Romance-Germanic language pairs concerned. After a description of the determiner system in the four languages concerned, we will describe what is known from the literature and present some of our own recent work in this domain, which will lead us to a

series of conclusions. We will show that the differences between these different learning contexts are, at least for gender acquisition, smaller than often assumed.

## 2. Determiners and gender in French, Italian, Spanish, Dutch

All the languages concerned in our study have prenominal determiners which are free morphemes. All languages have a two way gender system. In the Romance languages it consists of masculine and feminine, in Dutch it consists of common gender (collapsing the former masculine and feminine gender) and neuter gender. While the acquisition of the gender of nouns is generally considered to be a form of lexical acquisition (one has to learn for each specific noun which gender it has), expressing gender on the determiner presupposes an interaction between lexical, morphological and syntactic knowledge: the learner has to know the gender of the noun (lexical), (s)he has to know that the language concerned requires the presence of a determiner (syntactic) and that the determiner has to agree in gender with the noun (syntactic), finally (s)he has to know the correct form of the determiner (morphologic)<sup>1</sup>.

Gender on the noun is not equally easy to acquire in the languages of this study. Notwithstanding the lexical nature of this acquisition, extra-lexical factors seem to be helpful. Firstly, in all four languages, natural gender corresponds generally to syntactic gender. Words indicating male beings are of masculine gender, words indicating feminine beings are of feminine gender. Also, all four languages have suffixes which are reliable cues to determine the gender of the noun. For example, Italian *-tà*, Spanish *-ad*, French *-té* all indicate feminine gender; the Dutch suffix *-um* always points to neuter gender. Finally and most importantly, non-suffixed nouns contain phonological cues as to their gender. Spanish and Italian have many nouns ending in *-o* or *-a*, which in their overwhelming majority are a sign that these nouns are masculine or feminine. According to de Mulder (2006), these nouns form 70% of the nouns in Italian; we presume that the same number holds for Spanish. So for Spanish and Italian, there is a strong phonological aid to the acquisition of gender. In French, this is less the case. In *oral* French, many nouns ending in vowels are masculine, many nouns ending in consonants are feminine. But in *written* French it is often the other way round: words ending in the vowel *-e* are in their majority feminine, words ending in consonants are in their majority masculine (see also Lyster 2006). As for Dutch, phonological help is virtually absent, the learner can rely only on suffixes. Even natural gender is no reliable cue in Dutch, since many animate beings are indicated by neuter gender (for example: *het schaap* ‘the sheep’, *het paard* ‘the horse’). There is one important reliable morphophonological cue for neuter gender, namely the diminutive suffix *-je*, which always indicates neuter gender. In all four languages, one of the important cues in the input is the determiner accompanying the noun itself. In a way, this is a circular process: to acquire gender on the noun one often needs to look at the determiners accompanying this noun and at the same time, producing the correct determiner is an indication that the gender on the noun has been acquired. Here again, the languages differ in the degree to which they offer clues to the learners, by the number of determiners present in the input. In French, for example, determiners are virtually always present in front of a noun. In Italian and Spanish, omission is somewhat more frequent. In Dutch, on the other hand, determiners are often absent, because before indefinite plural nouns no determiner is used and the same holds for indefinite mass nouns. As a consequence, Dutch

<sup>1</sup> We will not discuss the acquisition of the pragmatic knowledge of the choice between definite or indefinite forms of the determiner.

offers less information about gender than the Romance languages, French offers most. In table 1, we give the forms of the determiners in these languages.

	FR				SP				IT				DU		
	def		indef		def		indef		def		indef		def		indef
	m.	f.	m.	f.	m.	f.	m.	f.	m.	f.	m.	f.	c.	n.	
sg.	<i>le,</i> <i>l'</i>	<i>la,</i> <i>l'</i>	<i>un</i>	<i>une</i>	<i>el</i>	<i>la</i>	<i>un</i>	<i>una</i>	<i>il, lo,</i> <i>l'</i>	<i>la,</i> <i>l'</i>	<i>un</i>	<i>una</i>	<i>de</i>	<i>het</i>	<i>een</i>
Pl.	<i>les</i>		<i>des</i>		<i>los</i>	<i>las</i>	<i>(unos)</i>	<i>(unas)</i>	<i>i/gli</i>	<i>le</i>	<i>dei</i>	<i>delle</i>	<i>de</i>		-

Table 1: forms of the determiners in French, Spanish, Italian and Dutch (def = definite, indef = indefinite, m.= masculine, f. = feminine, c. = common, n.= neuter)

As can be seen from table 1, in the Romance languages Spanish and Italian, grammatical gender is expressed both on definite and indefinite determiners, both in singular and plural, while in French, gender is expressed only in the singular forms of both definite and indefinite determiners. French and Italian both have an elided form *l'* in the masculine / feminine singular before a noun beginning with a vowel, as in French *l'aile* 'the wing, sg. f.', *l'ange* 'the angel, sg. m.', or in Italian *l'ala* 'the wing, sg. f.', *l'angelo* 'the angel, sg. m.'

Both French and Italian have forms where a preposition is conflated with a determiner form. In French, these combinations are limited to *de* and *à* with determiners, in Italian there are more prepositions involved in these combinations. Moreover, Italian has special forms of the determiner for masculine words beginning with two consonants of which the first is an *s*-, like in *lo sciopero*, *gli scioperi* 'the strike(s) and for plural masculine words beginning with a vowel, like *gli amici* 'the friends'. In Dutch, the number of forms is very small and gender is visible only on the singular definite determiner, which is *de* for common nouns and *het* for neuter nouns. There is no gender distinction on the (singular) indefinite article (*een*) nor on the plural definite article which is always *de*. There is no plural indefinite article.

The syntactic position of D is not acquired at the same rate in the languages concerned. Acquisition of the D-position has received a lot of attention in the literature and many (Guasti et al. 2004), but not all (Kupisch et al. forthcoming) researchers found support for Chierchia et al. (1999) who claim there is a typological difference between Romance and Germanic languages in this respect. Romance children are found to be earlier and faster in acquiring the presence of the syntactic category D than Germanic children. Within Germanic languages, however, the acquisition of D has been shown to be more differentiated. Swedish children are very fast in acquiring D (the definite article being a post-nominal suffix), as shown by Bernardini (2004), German children have been shown to be somewhat slower (Mills 1986 and others), Dutch children have been shown to be much slower in this acquisition.

When a learner does produce a determiner before a noun but chooses the incorrect gender form, one generally concludes that this is caused by lack of knowledge of the gender of the noun. Other factors like the use of a default form or performance problems may however also play a role. In the following paragraphs, we will discuss what is known about gender acquisition in L1, 2L1 and L2 and present some recent findings on 2L1 Spanish-Dutch and French-Dutch.

### 3. Gender acquisition in L1, 2L1 and L2

It has been claimed that in Romance, gender on nouns and determiners is acquired early and fast and without many errors by monolingual children. At age 3 at the latest, Romance

children show target-like knowledge of grammatical gender on nouns and determiners. This holds both for French, Spanish and Italian. The acquisition of grammatical gender on Dutch determiners on the other hand has been found to be more problematic, in L1 as well as in child SLI, child L2 and adult L2 (Sabourin 2003, Hulk and Cornips 2006, Blom et al. 2008, Hulk and van der Linden 2009, Orgassa 2009). L1 children generalize the common gender determiner *de* instead of the neuter gender determiner *het* until the age of 6 or 7, child L2 learners of Dutch may take even longer, until 11 or 12 years. Some adult L2 learners of Dutch simply never acquire the correct gender forms of the determiner at a near-native level (Sabourin 2003). For most language pairs, little is known until now about the acquisition of gender in bilingual children.

The contrast between L1 and L2 acquisition of gender led to a theoretical debate around the question of critical age in the acquisition of gender. Hawkins and Chan (1997) formulated the Failed Functional Features Hypothesis (FFFH). According to this hypothesis, L2 learners do still have access to principles of UG but they are no longer able to reset parameterized options after a critical age. As a consequence, features and feature values that are not present in their L1 cannot be accessed anymore in their L2. Concretely, this means that English L2-learners of Spanish will not be able to acquire gender in Spanish up to a near-native level. White (2003), on the other hand formulated the No Impairment Hypothesis (NOH) which claims that it remains possible to reset parameters beyond the critical period, so that (near-) native competence can be achieved in grammatical domains like gender. She showed that indeed, a certain number of subjects in her research acquired gender in Spanish to a (near-) native level. For other grammatical domains like aspect and topicalization in Spanish L2 by English learners, it has been shown that the FFFH is not supported either, see for example Montrul and Slabakova (2002) for the acquisition of aspect, Valenzuela (2006) for topicalized constructions. In an interesting comparison between different groups of learners, Granfeldt et al. (2007) showed that for the language pair Swedish-French, L1 acquisition of gender in monolingual children was fast and almost errorless, while for all the other groups of learners in their research (bilingual children, child L2 and adult L2 learners), the acquisition of gender was problematic.

In the next subsections, we will discuss these different acquisition processes in more detail.

### 3.1 Gender in L1

As noted above, in Romance languages, gender on nouns and determiners is acquired early and fast and without many errors by monolingual children. Clark (1985) was one of the first to mention this as a general observation. More recently, both Kupisch et al. (2002) who studied longitudinal spontaneous production data in Italian and French and van der Velde (2004), who did an elicitation experiment with French children, mentioned no or a very low percentage of errors with gender in their young Romance children. The same results were found by Karmiloff-Smith (1979), for French, and Cain et al. (1987), for Spanish, who in their experimental work asked children to assign gender to pseudo-words. All these authors noted the importance of phonological cues in the forms of nouns for the acquisition of gender. Summarizing, we can say that at age 3 at the latest, Romance children show target-like knowledge of grammatical gender on nouns and determiners. This holds for French, Italian and Spanish.

We already saw that there is variation in the acquisition of the D-position in Germanic languages, Swedish being faster than German which in turn is faster than Dutch. There is also

more variation in the L1 acquisition of gender in Germanic languages than in Romance ones. This is probably related to properties of the specific languages such as the number of different forms due to a two-way or three-way gender system (cf. Dutch versus German) or due to the presence of case (as in German) or the position of the determiner (mostly a preposed, free morpheme, but a postposed suffix in Swedish) etc. In this paper, we concentrate on the acquisition of gender in Dutch. Dutch monolingual children are late in acquiring the target-like use of gender on definite determiners (remember that on indefinite determiners, gender is not visible, there is only the singular form *een* and no plural indefinite form). It takes them until 6 or 7 years of age, or even later, to become target like, as shown in the elicitation experiments carried out by van de Velde (2004) and Blom et al. (2008), who mention high percentages of errors with gender. These Dutch children massively generalize in one direction, producing the common definite determiner *de* not only with common nouns, but also with singular neuter nouns which should take *het*. They hardly ever incorrectly use *het* instead of *de* with common nouns.

The differences between the acquisition of gender on determiners in L1 Dutch, on the one hand, and in Romance languages, on the other, makes it important to look at the acquisition pattern of Dutch-Romance bilingual children and to see what it can tell us about the “vulnerability” of grammatical gender.

### 3.2 Gender in 2L1

The research into the bilingual acquisition of gender is limited to a few studies. Montrul (2004) describes a previous study of the acquisition of gender in Spanish among two groups of monolingual Spanish and bilingual Spanish-English children in Los Angeles. These authors found that the oldest children in their study, at the age of 3, were not yet target like. The monolingual as well as the bilingual children acquired masculine gender before feminine. They also found that the 2 year old bilingual children which were dominant in Spanish did better than the monolingual Spanish children of the same age. Kuchenbrandt (2005) studied the acquisition of gender in Spanish by three Spanish-German bilingual children. She found that these bilingual children produced articles later than the three monolingual children of her study but when they did produce articles, the degree of gender correctness was the same as in the monolinguals. The bilingual children did not show a bias towards a default form, like Sanchez Sadek et. al., (1975) had found. For Italian and French, Kupisch et al. (2002) found that gender was acquired faster in Italian by the Italian-German bilingual children than gender in French by the French-German bilingual child studied. This study compared however only two bilingual Italian-German children with one bilingual French-German child, so it is difficult to disentangle systematic and individual factors in the results. Granfeldt et al. (2007) compared L1, 2L1, child L2 and adult L2 acquisition of several grammatical domains for the language pair French-Swedish. They conclude that the acquisition of gender is problematic in bilingual children: notwithstanding the fact that these children generally behave like monolinguals, for gender they have problems and they behave more like adult L2 learners. In 2L1 Italian Dutch (spontaneous data of one child), Hulk and van der Linden (2007) found that gender is acquired faster in Dutch than in Dutch L1. In 2L1 French-Dutch (spontaneous data of three children), Hulk and van der Linden (2007) found that gender is acquired later in French than in L1 French by two out of three children while gender in Dutch is acquired somewhat faster by all three children.

In a recent study at the University of Amsterdam, Ter Avest and Mulder (2009) investigated the acquisition of gender by 9 Dutch-Spanish and 7 Dutch-French bilingual

children between 3 and 5 years of age. In an elicitation task resembling closely the one used by Blom et al. (2008), they elicited utterances with indefinite and definite determiners in both Dutch and the Romance language of the children. Their results show that both groups of children do better in Dutch than the monolingual Dutch children studied by Blom et al. (2008). The Dutch monolingual children investigated by Blom et al. (2008) massively generalize the common gender form *de* before neuter words. A comparison of the two groups of children in table 2 shows clearly that the percentages correct use of neuter ‘het’ are much higher in the bilingual children, especially in the younger ones. The data in table 2 represent the percentages correct *het* in the child utterances which did contain a determiner; invalid responses are not taken into account.

2L1 Dutch (Ter Avest and Mulder 2009)	<i>het</i> -correct	L1 Dutch (Blom et al. 2008)	<i>het</i> -correct
3 yr	43%	3 yr	12%
4 yr	67%	4 yr	44%
5 yr	64%	5 yr	69%

Table 2: correct gender assignment to neuter words in Dutch in bilingual and monolingual children

The results obtained by Ter Avest and Mulder (2009) for French and Spanish are given in tables 3 and 4.

target	number of correct (in bold) and wrong gender		omission	invalid	total
m. indef	<b>47</b>	3	-	6	56
m. def	<b>24</b>	2	2	28	56
f. indef	5	<b>36</b>	-	15	56
f. def	1	<b>30</b>	2	23	56

Table 3: results French by the Dutch-French children in absolute numbers

target	number of correct (in bold) and wrong gender		omission	invalid	total
m. indef	<b>22</b>	3	22	9	56
m. def	<b>17</b>	7	10	22	56
f. indef	10	<b>13</b>	16	17	56
f. def	3	<b>19</b>	12	22	56

Table 4: results Spanish by the 5 year old Spanish-Dutch children in absolute numbers

In these tables, the invalid responses include the cases where an indefinite was chosen instead of a definite. For the Spanish-Dutch children, the choice of indefinite determiners instead of definites was 24 out of 44 invalid responses. In 7 out of these 24 cases, the masculine was chosen where the feminine was required, so a tendency to use masculine as the default seemed to exist. For the definite forms, however, no default could be detected. The French-Dutch children also used indefinite instead of definite determiners (37 cases) but they all had correct gender except for 2 cases where the feminine was chosen instead of the masculine. Apart from the special case of the Spanish indefinites, there is no indication of



overgeneralization of a default form in the Romance languages. The results have to be interpreted with caution however, due to the fact that the number of invalid data (non-responses, determiners-less responses and the like) was considerable.

The results obtained by Ter Avest and Mulder (2009) also show that the French-Dutch children do better in French (at age 4, their responses are more than 90% correct) than the Spanish-Dutch children do in Spanish (at age 5, their responses are only 75% correct). This result is somewhat surprising, because gender assignment is supposedly more transparent in Spanish than in French. The authors suggest that this may be caused by the different quantity of input, the French-Dutch children going to a French school 5 days a week, the Spanish-Dutch children going to a Dutch school on weekdays and to a Spanish school only on Saturdays.

The somewhat contradictory results of the studies described suggest that gender acquisition is not a unitary phenomenon across languages and that several factors may play a role in its development. In the first place, the language pair involved in bilingual acquisition could play a role. All the languages studied here do have gender. A language pair in which one of the languages does have gender while the other does not, could lead to another development than found by us. The degree of transparency of (one of) the language systems and the interaction between the two systems could also influence the rate of acquisition. Next, the methodology of the study could influence the results. Studies of elicitation data generally report later acquisition than studies of spontaneous data, for example. Finally, the quantity of input per language could be an important factor.

### 3.3 Gender in L2

As described above, it has been claimed that second language learners have a fairly hard time when acquiring gender in their second language. According to the FFFH (Hawkins and Chan, 1997), L2 learners are no longer able to reset parametrized options after a critical age. As a consequence, if their first language does not have gender, like in the case of English learners of Spanish, they will not be able to acquire gender in Spanish up to a near-native level. This position has been challenged by others like Bruhn de Gavarito and White (2002) and White (2003), who showed that in their study there were subjects who acquired gender in Spanish to a near-native level. Keating (2009) reports the results of an eye-tracking experiment that investigated the effects of violations of Spanish gender agreement during online sentence comprehension. Native Spanish speakers and English learners of L2 Spanish read sentences that contained nouns which were correctly or incorrectly modified by postnominal adjectives. The results indicated that gender agreement is acquirable in adulthood. Other authors have studied other language pairs. Granfeldt (2003), for example, in a study of spontaneous data of Swedish non instructed adult L2 learners of French, found that these learners produced many gender errors. Bartning (2001), on the other hand, in a study of spontaneous data of Swedish advanced instructed learners of L2 French, found very few errors. Mainly, these were overgeneralizations of the masculine gender. The same results (a small number of errors) were found by van der Linden (forthcoming) for Dutch advanced instructed learners of L2 French. In a recent small study on the use of determiners in L2 Romanian narratives by low-intermediate instructed learners, we found very few errors (3%), all of them consisting of the overgeneralization of the masculine indefinite *un* instead of the feminine determiner *o*.

For the acquisition of gender in Germanic languages, there are just a small number of studies. In a replication of Levine (1999), who studied gender assignment in nonsense words

by native and (English) non-native speakers of German, Flagner and Avram (2005) showed that the assignment of gender in L2 German by their Romanian intermediate adult instructed learners is not as good as that of natives, but it is much better than Levine's English subjects. It has to be noted that Romanian, like German, has case and gender, which are expressed on nouns and determiners. Spinner and Juffs (2006) reported on the longitudinal production data in L2 German of two uninstructed learners, one L1-Italian and one L1-Turkish learner. Note that Turkish does not have gender and does not require the presence of determiners, contrary to Italian. Nevertheless, the Italian learner did not seem to have an advantage in the production of gender. The errors made by these two learners were comparable: both seemed to prefer the use of feminine forms and both made a considerable number of errors. The authors conclude that the large number of errors made by these learners may be due to the complex system of German, where gender marking is conflated with case and number on determiners, adjectives and pronouns. Some studies have reported on the acquisition of gender in Dutch L2. We already pointed out that the acquisition of gender is problematic even for Dutch L1 children, so it may be expected that L2 learners also have problems in acquiring gender in Dutch. Cornips et al. (2007) indeed showed that adolescents from an immigrant background still make many mistakes in gender assignment. Stadt and Heuff (2006) found that very advanced non instructed French learners of L2 Dutch still made between 5 and 10% errors in gender assignment in Dutch. On the other hand, Sabourin (2003) found that the degree of correctness of gender assignment in Dutch L2 in instructed learners is strongly related to their L1: English learners do worse than French ones, who in turn do worse than German ones. The German learners are almost native like. These results suggest that for the acquisition of L2, the quantity of input is not the only factor determining successfulness in acquiring gender. Apart from input, instruction seems to play a role (instructed learners generally do better than non-instructed ones) and also, the L1 plays a role. The closer the L1 resembles the L2, the more successful gender acquisition will be in L2.

#### 4. Discussion

When we compare the results of the studies described above about gender acquisition in different language learning situations like L1, 2L1 and L2 and for different language pairs, we have to conclude that no unitary picture emerges. The L1 acquisition of gender varies across languages. In the Romance languages it is fast and almost errorless, in the Germanic languages it is slower (except for definite determiners in Swedish), with Dutch as the most time-consuming language. For 2L1 acquisition, we saw that generally speaking it is claimed that gender acquisition is fast in the Romance languages. In our own research however, we found that of the three French-Dutch children we studied (Hulk and van der Linden 2007, 2009) two were delayed in their acquisition of gender in French. The same holds for the acquisition of gender in Spanish by the Spanish-Dutch children studied by Ter Avest and Mulder (2009), but not for the French-Dutch children studied by them. On the other hand, all these bilingual children seem to learn gender faster in Dutch than monolingual Dutch children, which suggests that the simultaneous learning of this language with a Romance one accelerates the acquisition of gender in Dutch. The Spanish results found by Ter Avest and Mulder (2009) for their Spanish-Dutch children differ from what has been found in the literature with respect to the acquisition of grammatical gender in Romance in 2L1 Romance-Germanic children. Their results are more similar to what has been found in early successive bilingual children. Both Möhring (2001), who studies German children starting to acquire



French around age 4, and Granfeldt et al. (2007), who study Swedish children acquiring French, find that many of these children have problems producing correct gender in French, until an advanced age. One of the explanations that have been proposed for these problems is the (lower) quantity of input these children get in French. In that perspective, their situation seems to be similar to the situation of our Spanish-Dutch children, for whom the quantity of input in Spanish is perhaps (too) low, while Dutch does not offer any help in acquiring gender either. This could then be an indication that gender in Romance can also be “vulnerable”. This (lack of) input could also explain part of the differences between the different groups of L2 learners described above. But apart from input, instruction and the distance between L1 and L2 play an equally important role for these learners.

When it comes to the acquisition of gender in Dutch, we have seen that it is slow in L1 children and also in adult L2 learners. For bilingual children, we have seen that the results do not all point in the same direction. While bilingual children from an immigrant background are very slow in acquiring gender in Dutch, the bilingual children studied by Ter Avest and Mulder (2009), who are growing up in a one parent one language situation with Dutch and a Romance language, do better in Dutch than monolingual children. This same result has been found by ourselves in earlier research for an Italian-Dutch bilingual child (spontaneous data) (Hulk and van der Linden 2007). The three French-Dutch children of that same study however were hardly faster in Dutch than their monolingual peers. Other experimental work on gender in bilingual Dutch, including Cornips and Hulk (2008) and references cited there, also shows that gender is highly sensitive to the quantity and quality of the input in Dutch. The other languages of the immigrant bilingual children in those studies did not enhance their awareness of gender marking in the way we saw this in the Romance-Dutch bilingual children: with respect to grammatical gender, no positive cross-linguistic influence from their other language onto Dutch was found in those children. In the adult L2 learners of Dutch, we saw the same slow development found in most other learning contexts. Here again, quantity of input, instruction and language pair seemed to play a role in the rate of acquisition.

Taken together, the studies reported here suggest that a series of factors are involved in gender acquisition. In the first place, in all learning contexts the quantity of input plays a crucial role. It explains that generally, acquisition in monolingual L1 is faster than in other learning contexts. Also, the fact that in Romance languages, determiners are obligatorily present in more contexts than in Germanic, ensures a higher input frequency for determiners and enhances gender acquisition in these languages. Secondly, transparency of the language system plays an important role in all learning contexts. This is another factor explaining why in Romance languages, gender acquisition is faster than in Germanic ones. Thirdly, for 2L1 and L2 acquisition, the language pair involved in the acquisition plays a role. A language pair in which one of the languages does not have gender leads to slower development. This accounts for the overall slow acquisition of gender by English learners in Romance as well as in Dutch. In the 2L1 and L2 learning situations, typological closeness of the languages concerned also plays a role. That explains why German learners of Dutch are faster in acquiring Dutch gender than French learners. Finally, we saw that for L2 learners, instruction plays a facilitating role in acquiring gender: instructed learners generally do better in gender assignment than non instructed learners.

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