Gender marking in L2 learners and Italian-German bilinguals with German as the weaker language *

Antje Stöhr, Deniz Akpinar, Giulia Bianchi & Tanja Kupisch

This paper explores mastery of grammatical gender in German as weaker and dominant language by Italian-German adult simultaneous bilingual speakers as well as highly proficient L2 learners of German with Italian as their L1. Data show that in both bilinguals and L2ers deviances from the target predominantly occur in gender assignment, whereas errors of agreement are infrequent in both groups, indicating that deficiency affects the lexical level rather than morpho-syntax. Ceiling performance of the bilingual speakers in German as dominant language suggests that native-like attainment is possible in simultaneous bilingual acquisition but only under the condition that early Age of Onset (AoO) coincides with sufficient input.

Keywords: bilingual acquisition; second language acquisition; attrition; incomplete acquisition; gender assignment; gender agreement; German.

1. Introduction

A growing number of studies comparing adult bilingual speakers (2L1ers) and second language learners (L2ers) in the last two decades has shown both similarities and differences among these two types of populations (e.g. Au, Knightly, Jun & Oh 2002, Håkansson 1995, Lipski 1993, Montrul 2008, Montrul, Foote & Perpiñán 2008). These have been shown to depend on

* These data were collected as part of the Research Project E11. The project was funded by the German Science Foundation (DFG) as part of the Research Centre on Multilingualism in Hamburg. The project is directed by Tanja Kupisch and it started in June 2009 with Dagmar Barton, Giulia Bianchi and Ilse Stangen as researchers. We wish to thanks two anonymous reviewers for the valuable comments on an earlier version of this paper.
several factors, such as level of proficiency of the target language (see Montrul 2005), amount and quality of input in adulthood and modality of acquisition (i.e. written vs. spoken, Montrul et al. 2008). Furthermore, different modules of the grammar seem to be affected to a different extent in bilingual and L2 acquisition. While phenomena at the syntax-discourse interface are subject to a high degree of instability in both modalities of acquisition, syntax proper seems to be more immune to language attrition (see Sorace (2011) for an overview).

Comparing bilingual speakers and L2 learners on grammatical gender allows us to investigate the two populations with respect to lexical and syntactic knowledge and determine the role of Age of Onset (AoO). Previous studies on gender marking have shown that both adult bilingual speakers and L2 learners deviate from the target (i.e. Rogers 1987, Dewaele & Véronique 2001, Franceschina 2001, 2005, Montrul et al. 2008) even if attaining native knowledge seems to be possible in L2 acquisition (White, Valenzuela, Kozlowska-Macgregor & Leung 2004). Under debate is still whether the source of the problem is lexical or syntactic (Carroll 1989, Franceschina 2005, Grüter, Lew-Williams & Fernald 2011) and whether AoO is the crucial factor to the achievement of native knowledge.

Our study will address the following questions:

1. Is early Age of Onset a sufficient condition to attain and maintain native-like competence?
2. What are the similarities and differences between simultaneous bilingual speakers in their weaker language and L2 learners?

3. Does attrition affect gender in the weaker language? If it does, are lexicon and morpho-syntax affected to the same extent?

4. What is the role of the other language (here, Italian) with respect to the speakers’ accuracy on gender in German?

2. Gender in German

2.1. Gender assignment in German

German has three genders: masculine (M), feminine (F) and neuter (N). According to Bauch (1971) 50% of German nouns are masculine, while 30% are feminine and 20% neuter. Gender assignment in German follows semantic, morphological and phonological rules. In most cases, the gender of animate nouns reflects the natural sex of its referent, as in the case of *die Frau* ‘the woman’ and *der Mann* ‘the man’ (Mills 1986: 23ff.), which are feminine and masculine, respectively. There are only a few exceptions to the natural gender rule, such as *das Mädchen* ‘the girl’, which is neuter although referring to a feminine entity. Beside the natural gender rule, there are 15 other semantic rules in German (Köpcke 1982: 71ff., Köpcke & Zubin 1983, 1984). For example, names of alcoholic beverages are generally masculine, e.g. *der Schnaps* ‘the schnaps’, and names of numbers are generally feminine, e.g. *die Sieben* ‘the seven’.
Gender assignment in German also follows morphological and phonological rules. For example, the derivational suffix -ung is associated with feminine gender, e.g. *die Bedeutung* ‘the meaning’, and nouns ending in -*chen* are typically neuter, e.g. *das Hühnchen* ‘the chicken’ (diminutive). Once phonological rules are taken into account, a correlation has been shown to exist between syllabicity and gender, as well as between gender and either the initial or the final sound of the word (Altman & Raetting 1973, Köpcke 1982). For example, words ending in [ɛt] are associated with neuter, e.g. *das Bett* ‘the bed’, bisyllabic nouns ending in [ə] are assigned feminine, e.g. *die Kerze* ‘the candle’, and words ending in [ts] are generally masculine, e.g. *der Pilz* ‘the mushroom’. Even if some regularities have been shown to exist for gender assignment in German, the picture is far from being clear, because (i) the number of rules is high, (ii) there are exceptions to these rules, and (iii) formal and semantic rules sometimes contradict one another.

2.2. Gender agreement in German

While nouns have gender as an inherent property, elements other than nouns receive gender through agreement with the head. German marks gender on determiners and adjectives. Three different inflectional paradigms exist in German: weak, mixed, and strong. Here, we will focus on the weak
and the mixed paradigms\(^1\), which differ in type of determiner and morphology of the adjective.

In the weak (definite) paradigm, the article is marked for gender. The adjective does not indicate gender distinctions in nominative case:

\[
\begin{align*}
\text{(1) a. der schöne Mann} & \quad \text{(nominative case)} \\
\text{the-M handsome man-M} & \\
\text{b. die schöne Frau} & \quad \text{(nominative case)} \\
\text{the-F beautiful woman-F} & \\
\text{c. das schöne Mädchen} & \quad \text{(nominative case)} \\
\text{the-N beautiful girl-N}
\end{align*}
\]

In the accusative case, the adjective shows a different inflection only if the noun is masculine.

\[
\begin{align*}
\text{(2) a. den schönen Mann} & \quad \text{(accusative case)} \\
\text{the-M handsome man-M} & \\
\text{b. die schöne Frau} & \quad \text{(accusative case)} \\
\text{the-F beautiful woman-F} & \\
\text{c. das schöne Mädchen} & \quad \text{(accusative case)} \\
\text{the-N beautiful girl-N}
\end{align*}
\]

\(^1\) The strong paradigm is found when there is no preceding determiner – a condition we have not included in our study.
In the mixed paradigm, adjectives in the nominative and accusative cases change their endings depending on the gender of the noun (see 3). Only DPs in the masculine paradigm mark the distinction between nominative and accusative case. Unlike definite articles, indefinite neuter and masculine articles are homophonous in the nominative case.

(3) a. ein schöner Mann  (nominative case)  
   a-M beautiful man-M
b. einen schönen Mann   (accusative case) 
   a-M beautiful-M man-M
c. eine schöne Frau   (nominative and accusative case) 
   a-F beautiful woman-F
d. ein schönes Mädchen   (nominative and accusative case) 
   a-N beautiful girl-N

The examples in (3) illustrate the interaction between gender and case. In the nominative and accusative cases, all articles (except for nominative neuter and masculine) and all adjective endings are unambiguously marked for gender. By contrast, in both weak and mixed paradigms, adjectives in genitive and dative cases, as well as in the plural are inflected in –en (e.g. masculine des schönen Mannes/der schönen Frau ‘of a beautiful man/woman’, dem schönen Mann/der schönen Frau ‘to the beautiful man/woman’, der schönen Männer/der schönen Frauen ‘of the beautiful
men/women’, den schönen Männern/den schönen Frauen ‘to the beautiful man/woman’). In other words, the adjectives do not mark gender distinctions here.

To sum up, gender agreement in the German DP shows a complex interaction with definiteness and case.

3. Gender in Italian

3.1. Gender assignment in Italian

In contrast to German, Italian has only two genders: masculine and feminine. Similar to German, gender assignment in Italian follows both semantic and morpho-phonological rules (Chini 1995). In Italian, more than 70% of all singular nouns end in [a] or [o], e.g. *casa* ‘house’ and *libro* ‘book’. Those ending in -a are feminine and those ending in -o are masculine. There is a third relatively large group of nouns ending in [e], which can be either feminine or masculine (e.g. *neve* ‘snow’ is feminine but *mare* ‘sea’ is masculine). However, some of them exhibit morpho-phonological cues that are associated with gender. For example, words ending in –one (e.g. *pallone* ‘ball’) are usually associated with masculine and those ending in –trice (lavatrice ‘washing machine’) are generally feminine. As in German, the natural gender rule also applies. Furthermore, certain semantic classes are associated with one particular gender. For example, names of fruit are typically feminine (e.g. *mela* ‘apple’) and those of trees are generally masculine (e.g. *melo* ‘apple tree’). In general, in comparison to German, the gender of most Italian nouns is easily predictable.
based on a few unambiguous formal cues, even though exceptions are attested for Italian as well.

3.2. Gender agreement in Italian

In Italian, determiners and adjectives agree in gender with the head noun they are associated with. In contrast to German, gender agreement within the Italian DP does not vary depending on the definiteness of the noun phrase. Furthermore, gender agreement is not a function of case in Italian, since morphological case shows neither on determiners nor on adjectives in this language. Examples of gender agreement with masculine and feminine nouns with definite and indefinite determiners are provided in (4a) through (4d):

(4) a. il ragazzo bello
    the-M boy  handsome

b. un ragazzo bello
    a-M boy-M handsome

c. la ragazza bella
    the-N beautiful girl-N

d. una ragazza bella
    a-N beautiful girl-N
4. **Previous research on the acquisition of gender in monolingual and bilingual acquisition**

It has been commonly observed that monolingual children acquire gender relatively early in German and Italian. Children are sensitive to formal and semantic regularities in gender assignment, taking them as cues for assignment. For L2 learners, by contrast, it has often been argued that the inherent gender feature of the noun category cannot be acquired (if the L1 lacks it), although L2ers may attain native-like performance through metalinguistic knowledge and explicit learning (e.g. Carroll 1989).

While some researchers have postulated that semantic rules take precedence over formal rules in gender assignment (e.g. Corbett 1991), others have recently claimed that it depends on the language and the strength of individual cues which type of rule is prominent (Rodina & Westergaard forthcoming). Many acquisition studies have reported that phonological cues are prevalent during the early stages of acquisition (e.g. Karmiloff-Smith 1979 for French, Levy 1983 for Hebrew, Szagun Stumper, Sondag & Franik 2007 for German, Chini 1995 for Italian, Rodina & Westergaard, forthcoming, for Russian). However, some studies suggest that in languages where formal and semantic rules are equally prominent for gender assignment, the two may be acquired simultaneously (Mills 1986, Müller 1990). Rodina & Westergaard (forthcoming) have convincingly shown for Russian that children are highly sensitive to fine distinctions in syntax and morphol-
ogy and use detailed input information to make inferences about nominal
gender rather than using particular cues regardless of the noun class.

Mills (1986) investigated longitudinal data from three German-
speaking children, showing sporadic use of gender marked articles from
around 2;0 and regular use from age 2;4 with indefinite articles being used
more frequently than definite ones. Error rates drop below 10% by age 3;0.
Definite articles tend to be unproblematic, although overuse of the feminine
definite article die has occasionally been reported. Mills also observed that
nouns ending in [a] were always used with the correct gender, even when
requiring masculine gender (e.g. der Hase ‘the hare’, der Löwe ‘the lion’),
indicating that overgeneralization of phonological cues is not necessarily
found with very frequent items.

Szagun et al. (2007) investigated 21 monolingual children acquiring
German, making similar observations: Error rates drop well below 10% by
age 3;0 and children made more errors with nouns that do not conform to
phonological rules than with nouns that do. Bilingual children have also
been shown to acquire gender by age three, and they are sensitive to phono-
logical and semantic rules (e.g. Müller 1990 for children acquiring German
simultaneously with a Romance language).

For our study, these findings imply that if we find incomplete mastery
of gender in 2L1ers, it is more likely due to attrition than incomplete acquisi-
tion because gender is acquired very early and because our subjects had
exposure to both languages from birth.
5. Our study

We investigated knowledge of gender assignment and gender agreement in 20 Italian-German bilinguals, with German as their weaker or stronger language and compared them with 19 Italian advanced L2 learners of German. Our participants performed an Acceptability Judgment Task (henceforth AJT) and an Elicited Production Task (henceforth EPT).

5.1. Participants

Three groups of subjects participated in our study: a. early German-Italian bilinguals (2L1) who grew up in Italy, b. early German-Italian bilinguals (2L1) who grew up in Germany, c. Italian L2 learners of German.

For the 2L1ers, language dominance was assessed based on three criteria: a. country of residence during childhood, b. self-assessment, c. proficiency in a cloze test. For the 2L1ers who grew up in Germany, German was the stronger language, for the 2L1ers who grew up in Italy, German was the weaker language even if some of them lived in Germany when we tested them. Italian remained the stronger language of the 2Lers, even if some of them had been living in Germany for a long time. All bilinguals were raised in bi-national families and their parents followed the one person–one language strategy. The preconditions for the L2ers to participate were that their first contact with the L2 was after age 11 and that their level of German was advanced. Participants were recruited in Italy and in Germany, for both
2L1ers and L2s, and they were between 18 and 45 years old. Table 1 provides an overview of the three groups of participants.

Table 1: *Overview of subjects*

<table>
<thead>
<tr>
<th>2L1ers (German weak)</th>
<th>2L1ers (German strong)</th>
<th>L2-German</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>AoO (mean AoO)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Age range</td>
<td>18-45</td>
<td>18-45</td>
</tr>
<tr>
<td>Mean age</td>
<td>27</td>
<td>29.2</td>
</tr>
<tr>
<td>Cloze test Italian</td>
<td>84%</td>
<td>64%</td>
</tr>
<tr>
<td>Cloze test German</td>
<td>58%</td>
<td>80%</td>
</tr>
</tbody>
</table>

5.2. *Acceptability Judgment Task (AJT)*

The AJT contained a total of 36 items containing nouns selected according to semantic, morphological\(^2\), and phonological assignment rules as well as exceptions to these rules. Stimuli were evenly distributed among these assignment rules and roughly among the three genders and controlled for transfer from Italian. Half of the items were grammatical and half of them ungrammatical. Items were presented in a different random order at each run. An overview of the items is provided in Table 2 below.\(^3\)

---

\(^2\) Note that we also tested assignment in compound nouns. Assignment in compounds follows morphological rules, but we will present them separately in the results section.

\(^3\) The AJT also tested other phenomena than gender, but these will not be reported here.
Participants had to judge sentences that included definite DPs testing for gender assignment and agreement. More precisely, they were instructed to read as well as to listen to each sentence and repeat the sentence if they found it sounded correct or make changes if they found it sounded incorrect. Participants were given three times the length of the stimulus to repeat or correct it. Stimuli were presented both visually and auditorily because it had been argued previously that bilinguals in their weaker language may have disadvantages in written tasks (see Montrul et al. 2008: 506f. for difference between heritage and L2 learners in written and spoken tasks).

5.3. Elicited Production Task (EPT)

The EPT elicited gender assignment and agreement in the weak and mixed paradigm within the German DP. It elicited eighteen DPs. The nouns were balanced across the three genders, and the distribution of stimuli with
respect to assignment regularities was similar to the AJT except that no exceptions were included. Some fillers testing memory capacity of our participants were inserted.

In the EPT, the participants were first presented with two objects (e.g. two pianos) that differed in one feature (e.g. their color) and were asked to describe each of them using a word that describes “how the object is”. An example of question and answer is provided in (5).

(5) a. Was siehst du?
‘What do you see?’

b. ein\textsubscript{N} schwarzes\_N Klavier\textsubscript{F} und ein\textsubscript{N} braunes\_N Klavier\textsubscript{N}
‘a black piano and a brown piano’

In the case participants were uncertain about a noun or did not use the target noun (e.g. 
\textit{Keybord} instead of \textit{Klavier}), the experimenter provided the target noun without revealing the gender (e.g. \textit{What you see is called “Klavier”}). After seeing the two objects for the first time, the participants were presented with only one of the two objects they had previously seen and were asked to indicate what is missing. An example of question and answer is provided in (6).

(6) a. Was fehlt jetzt?
‘What is missing now?’

b. das\textsubscript{N} schwarze\textsubscript{N} Klavier\textsubscript{N}
5.4. Data analysis

In analyzing the data, we included in the counts of assignment (either correct or incorrect) only those items that were consistently assigned the same gender. Such a case is exemplified in (7), where the neuter noun Klavier ‘piano’ was assigned masculine gender in both the indefinite and the definite condition. In case of non-consistent assignment, e.g. if the noun was assigned a different gender in the definite and the indefinite condition, as in (8), we excluded the items from the assignment counts (see Montrul et al. (2008) and Meisel (2009) for similar procedures). Normally, the article was taken as an indicator of the assigned gender. In the indefinite condition, where masculine and neuter articles are homophonous, we also took the adjective into account. An anonymous reviewer notes that taking the endings of adjectives into consideration (with regard to gender assignment) goes beyond gender assignment—which is what is being analyzed here—and enters the realm of gender agreement. S/he is concerned whether it is methodologically licit to count adjective agreement as if it were gender assignment. We agree with the reviewer that we cannot be sure whether the adjective reflects agreement or assignment. However, the same point could be raised with respect to the article. Like the adjective, the article receives gender through agreement with the noun. Although it has been more common in the literature to take the article as an indicator of assignment, it is
We also excluded from the counts nouns whose final sound or sounds were mispronounced, e.g. *Gurkel instead of *Gurke ‘cucumber’. As for gender agreement, we counted as errors all items in which either the article or the adjective did show correct agreement, as shown in (9).

(9)  a.  *ein runde Pfanne

   a-M/N round-F pan-F

   b.  *das gefülltes Brötchen

   the-N filled-M/N roll-N
6. Results

6.1. Gender assignment

The overall results for assignment in the two experiments combined show that gender assignment was affected similarly in the groups of the 2L1 speakers in their weaker language and the L2ers, with mean values of 88.1% for the former group and 80.9% for the latter. By contrast, 2L1ers with German as their stronger language performed at ceiling (97.4%).

A closer look at the AJT and the EPT separately (see Figure 1) reveals that accuracy of the three groups of speakers on gender assignment differed in the two experiments.

![Figure 1 Accuracy in (%) in gender assignment in the AJT and the EPT](image)

Repeated-measures ANOVAs showed that both the bilingual speakers in their weaker language and the L2ers were more accurate in the EPT than in the AJT ($F(1, 18)=19.395, p<0.001$ for L2ers; $F(1, 7)=9.281, p=0.019$ for the 2L1ers). Opposed to this trend, accuracy in the bilingual group with German as the
stronger language is significantly higher in the AJT than in the EPT, $F(1, 10)=6.962, p=0.025$.

We suspect that our 2L1ers with German as their weaker language and the L2ers had more problems with gender assignment in the AJT than in the EPT because the EPT elicited no nouns exhibiting exceptions to assignment rules (and such nouns turned out to provide most difficulties; cf. Figure 2).

A one-way ANOVA finds a significant effect for semantically determined assignment (in the joint results of the AJT and EPT) between the three groups, $F(2, 35)= 12.459, p<0.001$. Bonferroni ($p= 0.011$) and Tuckey ($p<0.001$) post-hoc tests show that 2L1ers with German as their stronger language were significantly better than the other two groups. The same effect holds for morphological rule assignment. The 2L1ers with German as the stronger language outperformed the other two groups, $F(2, 35)= 16.431, p<0.001$. Bonferroni and Tuckey post-hoc tests (both $p<0.001$) confirm this. The L2 group was also significantly less accurate with phonologically-based assignment than the other two groups, $F(2, 35)= 15.374, p<0.001$, as confirmed by Bonferroni and Tuckey post-hoc tests ($p<0.005$). Results for rule exceptions show the clearest difference between groups. The 2L1ers with German as stronger language outperform the other two groups, $F(2, 35)=32.829, p<0.001$, as confirmed by Bonferroni and Tuckey post-hoc tests ($p<0.001$).
Interestingly, phonological items are those where all groups are most accurate. Recall that phonological rules are also among the first to be acquired in L1 German (Mills 1986, Szagun et al. 2007).

**Fig. 2** Accuracy (in %) in gender assignment in the five types of words (AJT and EPT)

Since Italian is also a gendered language, we investigated the role of language influence in gender assignment, i.e. the question whether our subjects were more likely to choose the correct gender for a German noun if its translation equivalent in Italian had the same gender. Data on accuracy with respect to lexical transfer are provided in Figure 3.
Fig. 3 Gender assignment and lexical transfer

Multiple repeated-measures ANOVAs show a significant effect among the groups with respect to language transfer. One repeated-measures ANOVA found that participants in the L2 group assigned gender more accurately to nouns with matching gender in German and Italian than to nouns with different genders in the two languages, $F(1, 18)=6.987$, $p=0.017$. The opposite effect holds for the 2L1ers with German as the stronger language, $F(1, 10)=6.404$, $p=0.03$. Unlike in the other two groups, no effect for transfer was found in the 2L1ers with German as weaker language, $F(1, 7)=1.822$, $p=0.219$. Summarizing, the L2ers were significantly better in gender assignment when the German and Italian noun equivalents matched in gender, while this did not hold for the 2L1ers. It should be noted though, that even with nouns that have different genders in German and Italian, all subjects perform well above chance. Therefore, success in gender assignment cannot be attributed to language influence alone.
6.3. *Gender agreement*

All groups performed 100% accurately with respect to gender agreement in the AJT, in which only definite DPs (i.e. those representing the weak paradigm) were tested. They were less accurate in the EPT, where they were faced with the weak and mixed paradigm. Figure 4 compares the results for agreement across tests and conditions.

![Gender agreement across conditions](image)

**Fig. 4** Gender agreement across conditions

The L2 group was significantly more accurate with definite than with indefinite DPs in the EPT, $F(1, 18)=8.733, p=0.008$. For the 2L1ers with German as the stronger language a repeated-measures ANOVA failed to find a significant effect between definite and indefinite DPs, $F(1, 9)=0.248, p=0.630$. For the 2L1ers with German as the weaker language, no significant difference between the two conditions could be found either, $F(1, 7)=0.180, p=0.684$. 
The question arises as to what makes the mixed, indefinite paradigm more difficult for L2 learners. Possibly, they have problems retrieving the correct morphological form of the adjective. The most frequent type of error is represented by cases like *einM/N singendeF? SpatzM ‘a singing sparrow’, einM giftigeF? PilzM ‘a poisonous mushroom’, einM/N männlicheF? StinktierN ‘a male skunk’, where the adjective looks as if it had been marked for feminine gender, while, at the same time, having the morphological shape required by most adjectives in the weak paradigm in nominative and accusative cases. It therefore appears more plausible to assume that this form represents some kind of default. In fact, with feminine nouns less adjective errors were found; it was more typical that an inappropriate article had been chosen (e.g. *einM/N quadratischeF BratpfanneF ‘a rectangular pan’). The facts suggest that agreement in the weak paradigm is most vulnerable in L2 acquisition. This does not imply that agreement per se is problematic. Rather, L2ers may have problems retrieving the correct form in production choosing a default form instead. The default form occurs in both the weak and mixed paradigm and has a relatively high token-frequency.

Comparing agreement and assignment (Figure 5), there are no differences for the bilinguals with German as their stronger language, as they perform target-like across the board. The 2L1ers with German as their weaker language and the L2ers were more successful in agreement than in assignment. Moreover, their data witness problems in the same domains, albeit with different quantities.
Our study addressed four questions. The first was whether early age of onset is sufficient to attain and maintain native-like competence. Our data provided evidence that this is not the case, as only bilingual speakers with German as their stronger language (who grew up in Germany) showed ceiling effects across the board, while bilingual speakers with German as their weaker language (who grew up in Italy) did not. Note, however, that among both the L2ers and the 2L1ers with German as weaker language, there were noticeable individual differences with some participants showing ceiling performance, while others seem to have acquired the systems (or lexicons, as we propose further below) incompletely.

Our second question concerned similarities and differences between bilingual speakers in their weaker language and L2ers. For assignment, we found that bilinguals with German as their weaker language and L2ers had
problems with the same type of items, specifically those that do not follow assignment rules. Moreover, they performed best when assignment rules were phonologically driven. This could be taken to indicate that the acquisition of phonologically driven assignment rules (and assignment rules more generally) is not subject to differences in the age of onset. In agreement too, the data from L2ers and 2L1ers with German as the weaker language witness problems in the same domain, namely in the mixed paradigm tested in the EPT (although the differences between weak and mixed paradigm were not significant for the bilinguals). To sum up, the study has demonstrated qualitative similarities between 2L1ers in their weaker language and L2ers of German (i.e. the same error-pattern), while showing quantitative differences (i.e. in the amount of errors).

The third question we raised was whether lexicon and morpho-syntax are vulnerable to the same extent. It was shown that assignment was error-prone, while there were only occasional errors in agreement. This leads us to conclude that morpho-syntax is not vulnerable to incomplete acquisition or attrition, unlike the lexicon. Interestingly, the same held true for L2 learners (in line with Grüter et al. 2011).

Finally, we investigated the role of transfer from Italian with respect to the speakers’ accuracy on gender marking in German. Only the L2ers were significantly better in gender assignment when the German and Italian noun equivalents matched in gender than when they did not. However, even the L2ers performed well above chance with nouns having different genders in
German and Italian. Therefore, these results suggest that successful acquisition of gender assignment cannot be attributed to lexical transfer alone.

References


Appendix

I. Items in the Acceptability Judgment Task

a. Grammatical Items

Die alte Kiefer im Garten meiner Eltern ist fast fünf Meter hoch.

Die heiße Kürbissuppe schmeckt heute besonders gut.

Die köstliche Pfifferlingsoße ist selbstgemacht.

Die schlimme Herzkrankheit meiner Tante muss von einem Arzt behandelt werden.

Die schmutzige Ratte ist aus der Kanalisation gekommen.

Die starke Abneigung gegen Spinnen macht mich ganz verrückt.

Die strahlende Sonne ist das Zentrum unseres Planetensystems.

Die ständige Gier der Menschen gehört zu den 7 Todsünden.

Der enorme Reichtum meiner Eltern ermöglicht mir ein gutes Leben.

Der kommerzielle Uranabbau ist sehr umstritten.

Der leckere Pfifferling ist in meinem Garten gewachsen.

Der mittelmäßige Sprung des Sportlers reichte nicht für eine Medaille.

Der trockene Wein aus Italien schmeckte gut zum Essen.

Der wachsende Kommerz ist das Ziel vieler Geschäftsleute.

Das ausgeliehene Anatomiebuch ist verschwunden.

Das knarrende Scharnier muss gefettet werden.

Das leckere Törtchen kostet zwei Euro.

Das radioaktive Uran wird für die Atomkraft genutzt.
b. Ungrammatical Items

Das diesjährige Meisterschaft im Tennis findet in Hamburg statt.

Das hohe Reling verhindert, dass jemand ins Wasser fällt.

Das neue Törtchenform ist sehr praktisch beim Backen.

Der letzte Pflaume ist für dich.

Der menschliche Anatomie wird seit der Antike erforscht.

Der traditionelle Weinprobe hat mir sehr gut gefallen.

Das gelbe Schwefel stinkt wie verdorbene Eier.

Das hübse Bierdeckel ist für die Sammlung meines Opas.

Das lässtige Schädling muss aus meinem Haus verschwinden.

Die gewonnene Meisterschaftspokal steht im Clubhaus.

Die lange Satz ist schwer zu verstehen.

Die leckere Käse ist heute im Angebot.

Die riesige Kürbis im Garten ist die perfekt für Halloween.

Die ständige Regen geht mir auf die Nerven.

Der gesunde Herz schlägt ungefähr 70 mal pro Minute.

Der helle Grün steht dir wirklich gut.

Der verbreitete Christentum ist die größte Weltreligion.

Die amerikanische Bier aus Chicago schmeckt wie Wasser.

II. Items in the Elicited Production Task

eine verdorbene Banane/die verdorbene Banane

eine runde Pfanne/die runde Pfanne

eine günstige(re) Zeitung/die günstige(re) Zeitung

eine krumme Gurke/die krumme Gurke
eine kleine Tanne/die kleine Tanne

eine warme Heizung/die warme Heizung

ein lilaner Schmetterling/der lila(ne) Schmetterling

ein spanischer Sekt/der spanische Sekt

ein schlafender Mond/der schlafende Mond

ein rennender Frischling/der rennende Frischling

ein singender Spatz/der singende Spatz

ein giftiger Pilz/der giftige Pilz

ein belegtes Brötchen/das belegte Brötchen

ein schwarzes Bett/das schwarze Bett

ein braunes Meerschweinchen/das braune Meerschweinchen

ein menschliches Skelett/das menschliche Skelett

ein braunes Klavier/das braune Klavier

ein weibliches Stinktier/das weibliche Stinktier