Determiner use in Italian Swedish and Italian German children: Do Swedish and German represent the same parameter setting?

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Determiner use in Italian-Swedish and Italian-German children: Do Swedish and German represent the same parameter setting?*

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Abstract:

In this article we compare the acquisition of determiners in bilingual children acquiring Italian simultaneously with German or Swedish. We are concerned with cross-linguistic differences in the rate of acquisition and we discuss in particular the Nominal Mapping Parameter, a model according to which the syntax-semantics interface is crucial in acquisition and which predicts similar developmental patterns for children acquiring a Germanic language. We show that Swedish determiners are acquired more easily than German determiners, which implies that predictions for developmental patterns should not be based on syntactic factors alone, but must make reference to typological differences in morphology and phonology. Furthermore, we show that the acquisition of Italian determiners is affected positively by the simultaneous acquisition of Swedish but that no such effect arises when Italian is acquired simultaneously with German.

1 Introduction

During the past few years, there have been many studies on the acquisition of articles and determiners more generally.[1] There is broad consensus that children acquiring a language with articles pass through a phase during which they omit articles in contexts where they should be used, producing so-called *bare nouns*. However, there are cross-linguistic differences regarding the quantity of bare nouns and the length of the bare noun period. Many authors have reported that children acquiring a Germanic language start to use determiners later and omit them more extensively than children acquiring a Romance language (Chierchia, Guasti & Gualmini 1999; Lleó & Demuth 1999; Guasti & Gavarró 2003; Guasti, De Lange, Gavarró & Caprin 2004).

Chierchia et al. (1999) explain these differences in terms of the *Nominal Mapping Parameter* (Chierchia 1998). Accordingly, languages

* We would like to thank two anonymous reviewers, the audiences of the Acquisition Workshop at SCL 2006 and of the workshop on determiners at ISB6 for commenting on earlier versions of this paper. We are especially grateful to Merete Anderssen, Ute Bohnacker, Andrea Gualmini and Neal Snape for an extensive discussion of this topic.

[1] In this paper we will use the term *determiner acquisition* rather than *article acquisition*. Although articles are the elements that most frequently occupy the D-position, when measuring the amount of D-omissions in child language one cannot be sure whether an article or another type of determiner was omitted.

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are associated with one of three possible article-parameter settings, which determine the syntax-semantics mapping. In languages pertaining to the "Chinese-like" parameter, nouns come out of the lexicon as arguments and can be directly mapped onto syntax without any article. The "Chinese" setting is opposed to the "Romance" one, where nouns come out of the lexicon as predicates and need to be combined with determiners, which turn them into arguments. Languages under the "Germanic" setting have nouns of both types, predicates and arguments, depending on whether the noun is mass or count. (Moreover, all languages allow for nouns to be type-shifted between predicates and arguments).

There are three stages in article acquisition: (i) the bare noun stage (articles are absent), (ii) the variation stage (articles are used inconsistently), (iii) the target stage (articles are used whenever required). Stage I is associated with the "Chinese" setting, while Stage II is associated with the "Germanic" setting. Children go trough these stages in a predetermined order. Children acquiring a Romance language pass through the Chinese and Germanic settings before using articles target-like. At first sight, this seems to imply that Germanic children reach the target earlier, but according to Chierchia et al. (1999), it is "Romance" children who reach the target earlier because they merely have to discover that all nouns in the target language are predicates and need a determiner when mapped onto syntax, while "Germanic" children have to decide for each individual item whether it is mass or count, which is a time-consuming task, and they sometimes misclassify count nouns as mass, which results in non target-like omissions.

In this contribution, we shall not discuss the NMP from a theoretical point of view. Rather, we would like to make an empirical point, arguing that *Germanic* and *Romance* should not be treated as homogeneous classes with respect to determiner acquisition, and that not only syntactic factors must be taken into account when predicting cross-linguistic variation. We do so by comparing data from two bilingual children acquiring Italian. One child acquires Italian simultaneously with German, the other child acquires Italian simultaneously with Swedish (we will be referring to the two Germanic languages as German/Swedish in contexts where what we are saying applies to both languages), and both children develop faster in their Germanic language. In addition, we use control data by German and Italian monolingual children.

Our study has the advantage that we can make several comparisons at the same time:

- The acquisition of determiners in a Romance language and a Germanic one.

- The acquisition of determiners in two Germanic languages, Swedish and German.
- The development of Italian determiners under different circumstances: when Italian is acquired simultaneously with Swedish, and when it is acquired simultaneously with German.

The latter point is interesting because recent studies in the field of bilingualism have shown that the two languages of a bilingual child may influence each other (see further below). According to some authors, in cases of unbalanced bilingualism, the stronger language is more likely to influence the weaker one (Bernardini & Schlyter 2004, Yip & Matthews 2000). If these assumptions are correct, the following is expected:

- Since the children's stronger languages are the Germanic ones, their Italian is expected to undergo influence.
- Provided that German and Swedish pertain to the same parameter setting, Italian determiners should be affected in a similar way.

The paper is structured as follows. Section 2 summarizes previous studies on determiner acquisition, language influence in bilingual acquisition, and the relation between language influence and language dominance. Section 3 compares the target systems. Section 4 presents our data, and Section 5 concludes with a discussion of our results.

2 Background

2.1 Previous studies on determiner omission

The acquisition of determiners has been studied in previous work. Studies on Italian have shown that monolingual Italian children start to produce their first article-like fillers between the ages of 1;6 and 1;8 and use articles productively before the age of two years (Pizzuto & Caselli 1992, Bottari, Cipriani & Chilosi 1993/1994, Antelmi 1997).

In German, by contrast, only few children start to produce article-like fillers before the age of 2;0, while others do not use any articles or other determiners before 2;0 (Penner & Weissenborn 1996; Lleó 1997; Eisenbeiss 2000, 2002; Kupisch 2000; Kupisch, Anderssen, Bohnacker & Snape 2007).

Studies investigating monolingual Swedish data have shown that Swedish children start producing articles before the age of 2;0, i.e. similar to children acquiring a Romance language (Svartholm 1978, Plunkett & Strömqvist 1992, Bohnacker 1997, 2004, 2007). Kupisch et al. (2007) provide a direct comparison of German, English, Norwegian and Swedish, showing that the rate of article omission in the two Scandinavian languages

drops at an earlier age than in German and English.[2] The latter is unexpected according to the NMP, which predicts that children acquiring different Germanic languages exhibit strong similarities with regard to article use and omission.

2.2 Language separation and influence despite separation

There is large consensus in research on bilingual acquisition that simultaneously bilingual children, i.e. children who have been exposed to two languages from birth, start out with one separate language system for each of their languages (Genesee 1989, Meisel 1989, Genesee, Nicoladis & Paradis 1995, *inter alia*). More recently, researchers have argued that this does not exclude the possibility that these languages are in contact and influence each other (Gawlitzek-Maiwaldt & Tracy 1996, Hulk & Van der Linden 1996, Hulk & Müller 2000, Müller & Hulk 2001, *inter alia*). These views may be tested with respect to determiner acquisition because there is a developmental asynchrony in their appearance across languages. More specifically, a bilingual child acquiring one language in which determiners are known to appear early (in the speech of monolinguals) simultaneously with a language in which determiners are known to appear late (in the speech of monolinguals), should mirror these differences, if the languages influence each other.

There have been previous studies on determiners in children acquiring a Romance language and a Germanic one simultaneously. Some authors have argued that there is no language influence (Paradis & Genesee 1996 for English-French data, Serratrice 2000 for English-Italian data). Granfeldt (2003) studied determiners in Swedish-French bilinguals but he did not explicitly deal with the issue of language influence. Schlyter (1995) proposed that there is prosodic influence in bilingual Swedish/French children's use of determiners. Bernardini (2004) showed that unbalanced children use functional categories from the stronger language when speaking their weaker language; as e.g. in (1) (the bold printed part of the utterance is Italian).

(1) den andra **macchin**-en
the other car- the

[2] The cross-linguistic differences outlined here appear to be mirrored by studies on children with serious language impairment (SLI) in Italian, German, and Swedish (e.g. Clahsen 1989, Hansson, Nettelbladt & Leonard 2003, Bottari, Cipriani & Chilosi 1998, Cipriani, Chilosi, Bottari, Pfanner, Poli & Sarno 1991). However, SLI-data has to be considered with some caution because the inclusionary criteria for SLI-subjects differ enormously across studies and, therefore, comparability cannot be ensured.

Hulk (2004) showed that Anouk, a Dutch-French bilingual, acquired French determiners late due to a delaying influence of Dutch, which has fewer contexts of obligatory determiner use than French. Kupisch (2007) argued in favour of quantitative syntactic influence in German-Italian children, which leads to acceleration in the acquisition of German determiners. We thus proceed from the assumption that language influence (despite separate language systems) might occur if a child acquires two languages with articles simultaneously.

2.3 Influence and dominance

A bilingual child who is dominant in one language shows a faster development in that language as compared to the other language. According to some authors, language dominance can be the reason for transfer phenomena such as mixed language utterances and cross-linguistic influence in monolingual utterances (Petersen 1988, Genesee et al. 1995, Bernardini & Schlyter 2004, Yip & Matthews 2000). More specifically, language influence occurs when one language is dominant, and it is unidirectional: it is always the weaker language that is subject to influence from the stronger language. Müller & Hulk (2001) argued against this view, showing that cross-linguistic influence also occurs in cases of balanced bilingual development. Hence, the view that language influence is *restricted* to cases of unbalanced development is not tenable. However, their position raises the question why cross-linguistic influence may sometimes be absent, as many studies have argued.

According to Kupisch (2007), when predicting cross-linguistic influence one has to consider both language dominance (a language-external factor) *and* the properties of the grammatical domain to be acquired (a language-internal factor). As for language-internal factors, a grammatical domain may have properties that promote early acquisition or properties that slow down acquisition. For example, in the case of Italian determiners, the harmony between noun-final vowels and vowels in the determiners (e.g. l**a** ragazz**a** 'the girl') could be a language-internal factor that accelerates determiner acquisition. The following predictions were formulated:

- If a language is stronger and has grammatical properties promoting early acquisition, influence from stronger to weaker language occurs.
- If a language is stronger but *does not promote early acquisition*, language influence does not occur.

In the following, we will test these assumptions.

3 The target systems

We now provide an overview of determiners and their properties in the target-languages, pointing at some factors that may facilitate acquisition or create difficulties. The focus will be on the article, which is the most frequent type of determiner.

German, Italian and Swedish all have definite and indefinite articles. While German and Italian articles are used prenominally and constitute free morphemes, Swedish has both prenominal free standing (indefinite) articles and postnominal enclitic (definite) articles. Unlike Italian, German and Swedish do not have indefinite plural articles, which are optionally used in Italian.

Table 1: Definite and indefinite articles in German, Italian and Swedish

	German	Italian	Swedish
definite sg.	der Ball	la palla	boll-en
definite pl.	die Bälle	le palle	bollar-na
indefinite sg.	ein Ball	una palla	en boll
indefinite pl.	Ø Bälle	delle palle	Ø bollar

3.1 Morphology

Determiners in all three languages encode number and gender. Swedish and Italian have two different genders which are marked by the choice of the respective article form, while German articles encode three different genders. In addition, they are case-marked in the singular.

Table 2: Morphological features on articles in German, Italian and Swedish

	German	Italian	Swedish
Number	yes	yes	yes
Gender	yes (three-way)	yes (two-way)	yes (two-way)
Case	yes	-	-

The higher number of different article types due to more morphological features in German may provide a challenge in acquisition.

It may also play a role whether morphology is bound or free. According to Dressler (2005: 9)

> "[...] bound morphology, especially productive (bound) morphology tends to develop faster than free morphemes (function words), cf. Dressler, Kilani-Schoch & Klampfer 2003, Peters 1997: 180)."

Taken together, in terms of morphological properties, Swedish seems to be the language that most favours the early acquisition of determiners, while

the morphological properties of German determiners may be expected to delay acquisition.

3.2 Phono-prosodic properties

One aspect that distinguishes Italian articles from those in the other two languages is that the vocalic endings in the majority of cases harmonize with the noun ending (e.g. ***la*** *ragazz****a****,* ***le*** *ragazz****e****,* ***i*** *ragazz****i*** 'the girl, the girls, the boys'). This does not hold to the same extent for German and Swedish. It is likely that this property facilitates the acquisition of Italian determiners, making Italian-learning children pay attention to the element in prenominal position from an early age.

As for metric patterns, articles in these languages differ in terms of whether they constitute clitics or feet. Italian articles and the indefinite article in Swedish are proclitic to the noun,[3] while the postnominal definite article in Swedish forms a Trochee with the noun, if the latter is monosyllabic (as many Swedish nouns are). German articles may be reduced or unreduced. Non-reduced articles have been analyzed as phonological words on their own, i.e., they form separate feet, while reduced articles may be enclitic (*auf****m*** *Tisch* 'on-the table') or proclitic (*'****n*** *Ball will ich* 'a Ball I want') (Wiese 1996, *p.c.*). Juscyk, Cutler & Redanz (1993) have shown that children show a preference for Trochaic patterns at very early ages. Hence, the metric pattern of Swedish definite marked nominals might accelerate the acquisition of Swedish determiners.

As mentioned above, German articles have reduced forms in spoken speech and may cliticize onto preceding words rather than forming a prosodic unit with the noun, as in (2). Hence, there are mismatches between prosody and syntax, which may cause a delay in acquisition.

(2) Ich will'**n** **Auto** mieten.
I want-a car rent
'I want to rent a car.'

In terms of prosody, Italian and Swedish articles both have (different) properties making them amenable to early acquisition. This does not hold for German determiners.

[3] Exceptions are disyllabic articles, such as Italian *una* (feminine, singular, indefinite article), which form a separate foot.

3.3 Syntactic contexts of determiner use

Looking at determiners from a syntactic perspective, we may note that although all three languages require them with the majority of nouns, they all also have contexts in which nouns can or even must be bare.

Generally, all three languages require determiners with singular count nouns (and in all languages there are exceptions to this). In Swedish and German, plural and mass nouns must be bare if they have a non-specific reading.[4] In Italian, generic nouns require a determiner, while mass and plural nouns may be bare if they have a non-specific reading.

Hence, in all three languages, one has to make reference to semantic factors when determining where determiners must be used. None of the languages shows a one-to-one correlation between syntax and semantics, and semantic knowledge is indispensable for the correct use of articles.

However, the token-frequency of contexts in which determiners are absent differs across languages. Based on an analysis of child-directed speech, Kupisch (2006) counted the token-frequency of bare nouns as opposed to nouns with determiners, finding that 12% of all Italian nominals and 18% of all German nominals were bare.[5] Bohnacker (2007) conducted a similar analysis based on child-directed speech in Swedish, observing that 22% of all nominals were bare (see Table 3).

Table 3: Bare nouns and nouns with determiners in child-directed speech

	Italian	German	Swedish
Bare nouns	88%	82%	78%
Nouns with determiners	12%	18%	22%

If the token frequency were crucial for the rate of acquisition, one would expect Italian children to master determiners earlier than German and

[4] We understand a noun phrase to be specific when a particular object or person is referred to and non-specific when no particular object or person is referred to.

[5] An anonymous reviewer remarks that the rate of bare nouns indicated here appears to be fairly high in Italian. This is unexpected since Italian is treated as a [+pred] language under the NMP, hence, a language in which D is always projected. Still, as the input analysis in Kupisch (2006) showed, there are several contexts in which nouns may be bare. Syntactically, the majority occurred in prepositional phrases (*senza visiera* 'without visor', *andare a scuola* 'go to school', *andare in treno* 'go by train'), or postverbally (*comprare pane e acqua* 'buy bread and water'). Semantically, they were mostly abstract nouns (*avere paura* 'be afraid', *portare fortuna* 'bring luck'). The analysis included idiomatic expressions, but no proper names and imitations of child utterances. The adults whose speech was analyzed were native speakers of Italian. We refer to Korzen (1996) for a comprehensive overview of bare Italian noun phrases.

Swedish children, and German children should be faster than Swedish children.

Overall, the syntax-semantics mapping does not yield noticeable differences between the languages, except that Italian has more contexts of obligatory determiner use.

4 Our study

4.1 Data and coding

Our analysis of determiner omission is based on two longitudinal studies of bilingual children. The German-Italian corpus, Jan, was collected in the project *Bilingualism in Early Childhood*, directed by Natascha Müller (Müller, Cantone, Kupisch & Schmitz 2002). Jan grew up in Hamburg, Germany, as the second born child of an Italian mother and a German father. The Swedish-Italian corpus, Lukas, was collected by Petra Bernardini (Bernardini 2004). Lukas was born in Sweden. His mother is Italian, and his father Swedish. In both families, each parent spoke his/her native language with the child. Jan did not attend a kindergarten during the period we investigated, while Lukas attended a Swedish-speaking kindergarten from the age 0;11. The children were recorded in naturalistic play situations at their homes with native speakers. The analysis covers the age span between 2;0 and 3;6 (22 recordings) for Jan, and 2;0 and 3;7 (15 recordings) for Lukas.

We compared the bilingual data to monolingual data from German and Italian children studied with respect to determiner omission in previous work. The monolingual German and Italian data have been analyzed in Kupisch (2000, 2007) and Kupisch et al. (2007). The German data mainly stem from the Szagun-corpus (Szagun 2001). The Italian data represent Gregorio and Marco from the Tonelli-corpus, Martina from the Calambrone-corpus and Camilla from Antelmi (1997). All corpora are available at CHILDES (MacWhinney & Snow 1990). We did not analyze monolingual Swedish data, but we will compare our results to the detailed studies in Bohnacker (1997, 2004, 2007).

In the following, we first compare the children's development in each of their languages in terms of mean length of utterances (MLU), the absolute number of utterances (UTT) and upper bound (UB), i.e., criteria which are commonly used to determine language dominance and/or preference in bilingual children (Genesee et al. 1995, Paradis et al. 2003, Bernardini 2004, Kupisch 2006). We then compare the rate of determiner omission in the children's two languages. The rate of omission represents

the percentage of determiner omissions from the total of contexts in which a determiner should have been used. For example, a context like *vedo macchina* 'I saw car' instead of *vedo la/una/questa macchina* 'I saw the/a/this car' was counted as an instance of omission. By contrast, a context like *compro pane* 'I buy bread' was excluded because Italian allows determiner omission with mass nouns. We do not present percentages which are based on less than 5 codable noun tokens.

4.2 Language dominance

Figures 1 through 6 compare Jan's and Lukas' language development in terms of MLU, UTT and UB in their two languages. Only monolingual utterances have been included for these measures. That is, Swedish/German utterances and mixed utterances have not been considered when calculating these values in Italian, and Italian utterances and mixed utterances have not been considered when calculating them in Swedish/German respectively. To represent the number of utterances (Figures 3 and 4), we calculated mean values for two-month periods.

Figure 1: MLU, Lukas

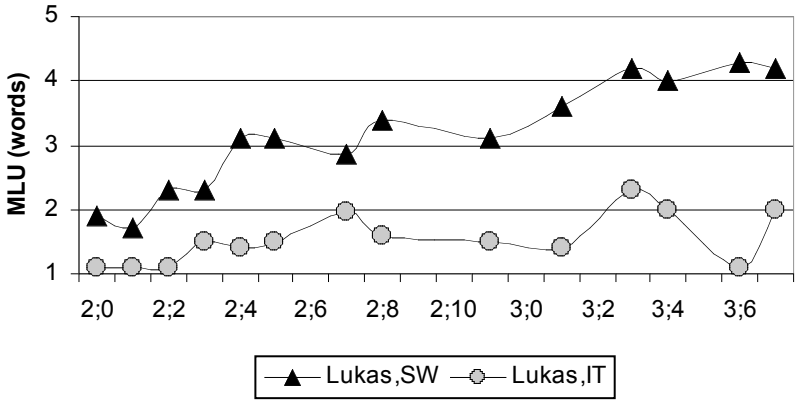


Figure 2: MLU, Jan

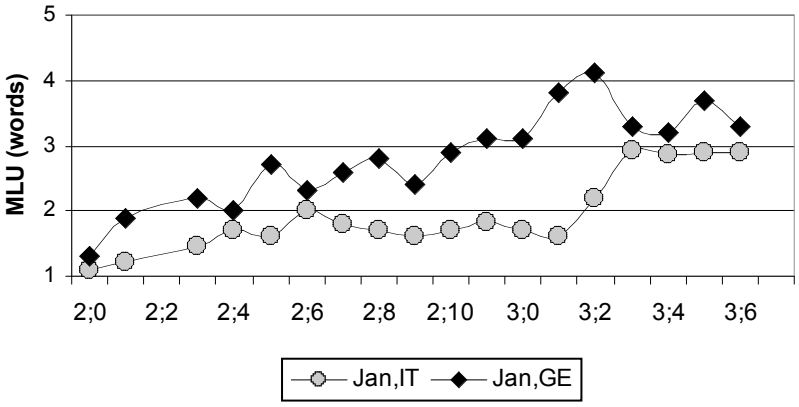


Figure 3: number of utterances, Lukas

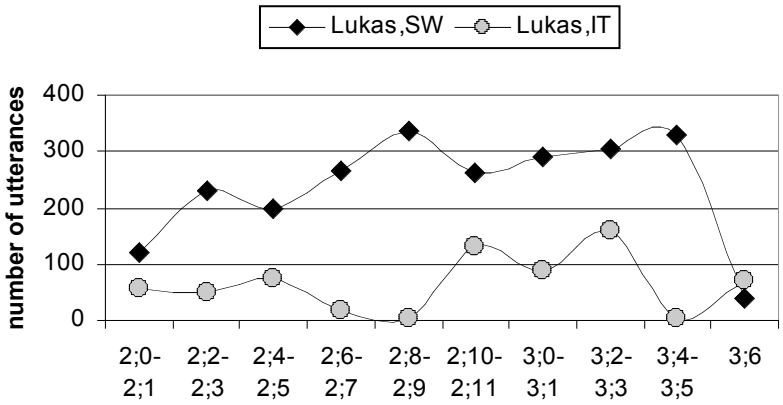


Figure 4: number of utterances, Jan

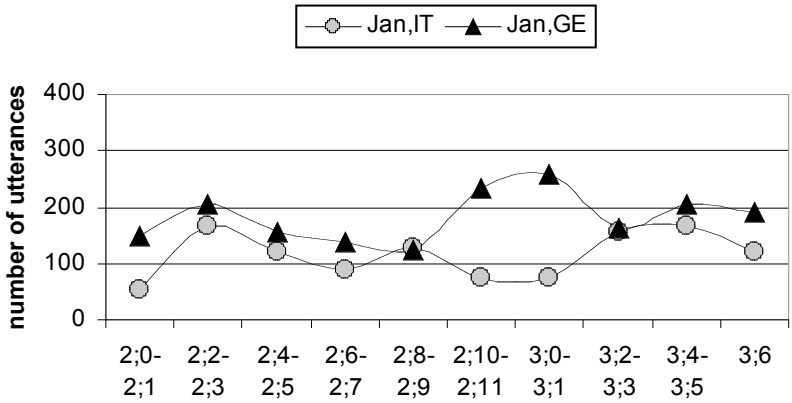


Figure 5: upper bound, Lukas

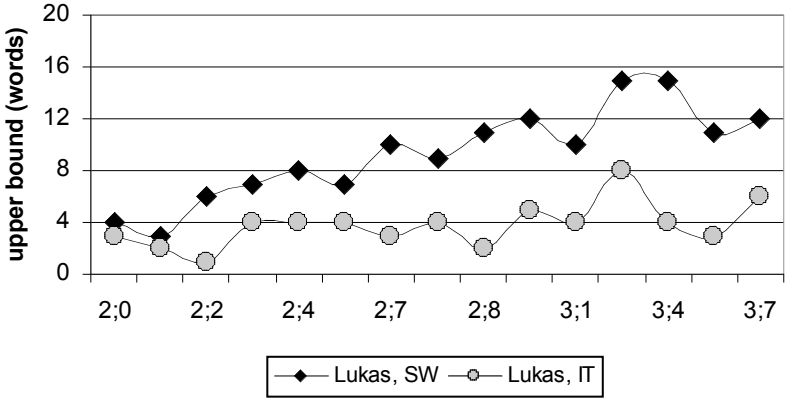
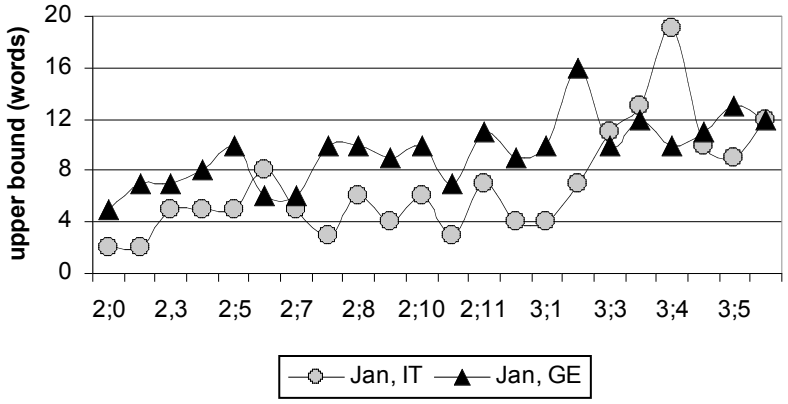


Figure 6: upper bound, Jan



It is immediately clear that, at one and the same age, both Jan and Lukas reach higher MLU and UB values in their Germanic language than in their Italian. This suggests that the linguistic development proceeds faster in their German/Swedish. Similarly, both children produce more utterances in their Germanic language, which may be taken to imply that they prefer to speak their dominant language.[6] It is worth noting that with respect to all

[6] An anonymous reviewer wonders whether the children might have been influenced by the person they talked to. We can exclude this on the grounds that the children's interlocutors consistently used one language with them. Since the Italian interlocutors were living in a German/Swedish-speaking environment, the children were probably aware of the fact that they understood German/Swedish. However, they did not encourage the children do speak these languages. They never used the Germanic languages with the children and pretended not to understand them, e.g., they asked for clarification when the child spoke German/Swedish in the Italian part of the recording.

criteria, the contrast between the languages is more pronounced in the case of Lukas, the Swedish-Italian bilingual child.

4.3 Determiner omission

Figures 7 and 8 compare the rate of determiner omission in Jan's German and Italian and in Lukas' Swedish and Italian. Because of the relatively low frequency of noun phrases in the Italian corpora, we calculated the percentages for periods of two months. The figures show that both children use determiners in obligatory contexts at higher rates in their Germanic language.

These findings are unexpected under the assumption that bilinguals mirror the situation found with monolinguals. If Jan and Lukas behaved like monolingual children in each of their languages, one would expect the rate of omission in Swedish and Italian to be more similar in the case of Lukas, while Jan should show higher rates of omission in German as compared to Italian. Rather, the developmental patterns are in harmony with language dominance. More particularly, determiners are acquired faster in the dominant language, irrespective of the developmental asynchrony found with monolinguals.

Figure 7: Rate of determiner omission, Jan (German and Italian)

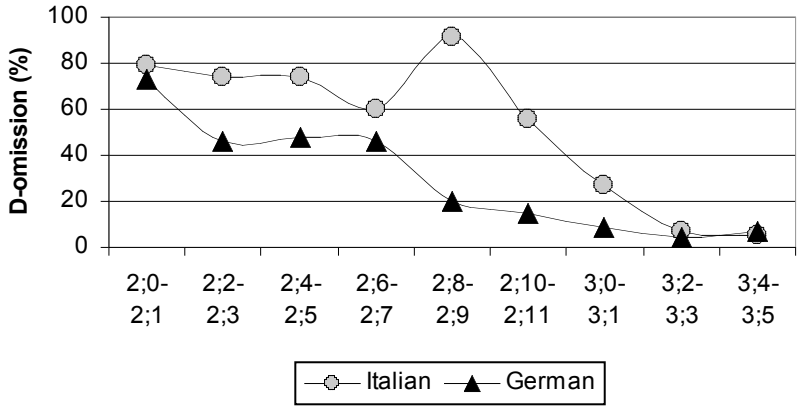
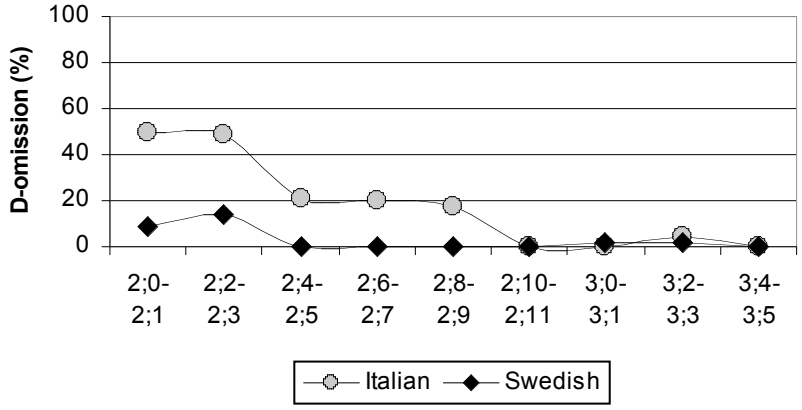


Figure 8: Rate of determiner omission, Lukas (Swedish and Italian)



It should be noted that a comparison in terms of MLU yields a slightly different picture. For this comparison, we grouped all recordings according to their MLUs and calculated the percentage of determiner drop on the basis of the total number of DPs and illicit bare nouns in each MLU-phase (see Table 4). As in the age-based comparison, Lukas acquires determiners faster in Swedish than in Italian. Jan, however, exhibits slightly lower rates of omission in Italian than in German. Hence, if MLU can be considered an indicator of a child's linguistic development, Jan's use of determiners is not delayed with respect to his general linguistic development but only with respect to age. (As an anonymous reviewer noted, this aspect of our study is consistent with the NMP; it indicates that Jan goes through the same acquisition stages as Italian children, albeit more slowly).

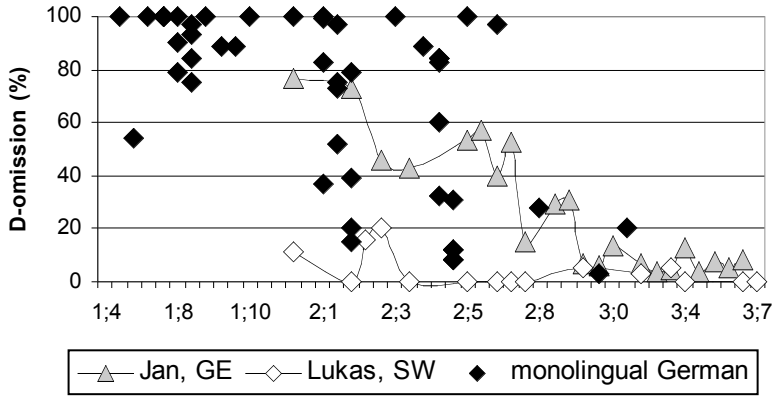
Table 4: Rate of D-omission according to MLU-stages

	Lukas, SW	Lukas, IT	Jan, GE	Jan, IT
1-1.49		42%	77%	76%
1.5-1.99	10%	33%	73%	65%
2.0-2.49	12%	4%	44%	31%
2.5-2.99	0%		24%	6%
3.0-3.49	7%		6%	
3.5-3.99	0%		6%	
4.0-4.49	1%		4%	

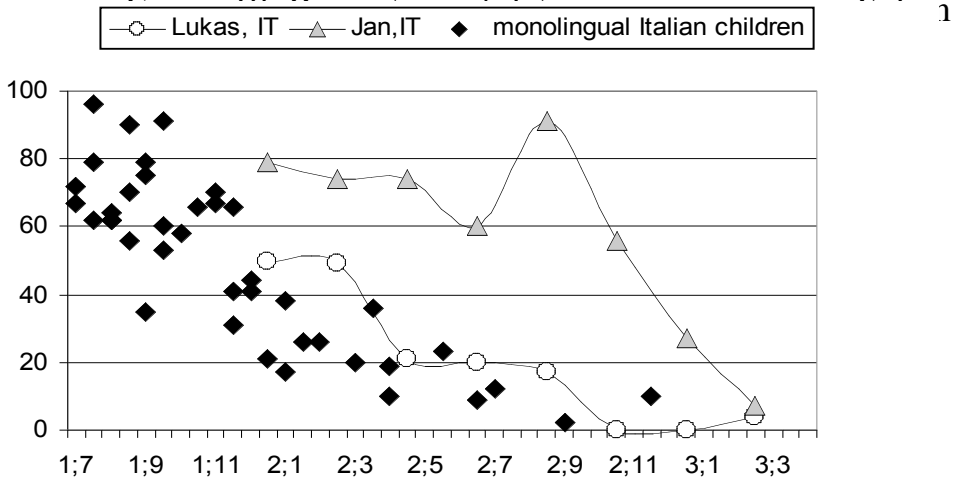
Let us now compare the bilingual data to monolingual data. A comparison of the children's Germanic languages to each other and to monolingual German data (Figure 9) shows that the Swedish-Italian bilingual omits noticeably fewer determiners than the children acquiring German, which indicates that Swedish determiners are acquired more easily than German determiners. (A positive influence from Italian can be excluded; first,

because Italian constitutes the children's weaker language, second, because it should not only affect Lukas but also Jan).

Figure 9: Percentage of determiner omission in German/Swedish



This finding is supported from the point of view of MLU. The rate of D-omission for the two Swedish children studied by Bohnacker (1997, 2004, 2007) yields the following percentages: MLU 1-1.49: 71%, MLU 1.5-1.99: 26%, MLU 2-2.49: 24%, MLU 2.5-4: less than 10%. As shown in Table 4, Lukas' values are even lower in Swedish. The percentages of the German-learning children in the present study are noticeably higher (MLU 1-1.49: 91%, MLU 1.5-1.99: 77%, MLU 2-2.49: 42%, MLU 2.5-2.99: 19%).



The picture obtained from the comparison of the children's Italian is consistent with these assumptions. Since Lukas appears to acquire determiners more easily than Jan and omits determiners to an extent almost similar to monolingual children, we may assume that the simultaneous exposure of Swedish has a positive effect on the acquisition of determiners

in his weaker language Italian. By contrast, Jan's simultaneous exposure to German does not seem to have such an effect on his acquisition of Italian determiners.

In summary, we have shown that Jan and Lukas acquire determiners faster in their dominant, Germanic language. However, there is an additional contrast between German and Swedish. More specifically, Swedish determiners are acquired faster by Lukas than German determiners by Jan (and monolingual German children). Moreover, Lukas acquires Italian determiners faster than Jan, although in terms of his general linguistic development, Lukas' Italian develops more slowly than Jan's Italian (Figures 1 through 6).

5 Discussion and conclusion

This study compared the omission of articles in two bilingual children acquiring Italian simultaneously with German/Swedish. Both children develop their Germanic language, i.e. the language spoken in their community, faster than their Italian. We have pointed out that previous studies noted an asymmetry in the rate of determiner acquisition: Children acquiring a Romance language develop articles faster than children acquiring a Germanic language. This asymmetry is not borne out with respect to Swedish. Swedish is a Germanic language, which patterns with languages like German and English as far as the syntax-semantics mapping is concerned. That is, determiners are obligatory with singular count nouns and absent with mass and plural nouns having non-specific or generic readings. Swedish thus exhibits the properties which are typical of the "Germanic" parameter setting in the NMP (Chierchia 1998). Nevertheless, previous studies on the acquisition of Swedish articles seem to indicate that Swedish does not pattern with other Germanic languages (e.g. Dutch, English, and German) because Swedish determiners are used from an earlier age. Our empirical investigation supports these findings. The bilingual child Lukas omitted noticeably fewer determiners in Swedish than German-learning children of comparable age and MLU. These differences cannot be attributed to language dominance because Swedish was Lukas' dominant language, and the dominant language develops like a first language in monolinguals (Schlyter 1993, 1994). Moreover, German was also the dominant language of Jan, and nevertheless Jan omitted more

determiners than Lukas. Hence, Swedish determiners are acquired faster than German determiners.[7]

We argued furthermore that the same conclusion may be reached through a comparison of the children's Italian. We proceeded from the view that the two languages of a bilingual child may influence each other. In fact, in comparing the children's development of Italian determiners, we found that Lukas' rate of determiner omission was similar to that of (the slowest) monolingual Italian children, although Italian was his weaker language. By contrast, Jan omitted noticeably more determiners in obligatory contexts. We would like to suggest that the relatively fast development of determiners in Lukas' Italian is due to a positive influence of Lukas' Swedish. As for Jan, it appears that the acquisition of German does not have such an effect on the acquisition of Italian determiners. This, again, supports the assumption that Swedish has properties which are favourable to determiner acquisition, while German does not. Hence, the children's development of Italian indirectly mirrors the contrast between German and Swedish.

Our results are in line with previous studies on Swedish determiners by Svartholm (1978), Plunkett & Strömqvist (1992), Bohnacker (1997, 2004, 2007), and they provide a challenge to the Nominal Mapping Parameter. The question, of course, is what properties make this language so favourable to determiner acquisition. In comparing the target-systems, we have pointed out that the token frequency of bare nouns cannot play a decisive role, as Swedish (compared to German and Italian) has a higher amount of contexts in which nouns occur without a determiner (Bohnacker 2007). The syntax-semantics mapping cannot be decisive either. If it were, Swedish should be similar to German and different from Italian where determiners are more widespread with non-specific nouns. We assume that what makes Swedish determiners favourable to acquisition is the fact that Swedish definite articles constitute bound morphemes, and, prosodically, form trochaic structures with the nouns they accompany.[8]

Concluding on the basis of our results, we wish to emphasize that several linguistic levels have to be taken into account in order to make

[7] Acquisition data from Norwegian (Anderssen 2005) indicates that Norwegian patterns with Swedish, which supports the view that the Germanic languages should not be treated as a homogeneous group.

[8] The assumption that Swedish definite articles rather than articles in general are the driving force in determiners acquisition is confirmed by the fact that Swedish-learning children use far more definite articles than indefinite ones (Bohnacker 2007, Kupisch et al. 2007). Hence, it is reasonable to assume that definite articles have a positive, accelerating effect on the acquisition of determiners more generally.

predictions for the acquisition path with respect to specific grammatical phenomena in different languages. We agree with Dressler (2005: 9) that juxtaposing acquisition studies of each single language or comparing the languages only according to one contrastive variable each time (e.g. syntax) bears the potential danger of leading to typological simplification. More generally, our study has also shown that bilingual data may strengthen findings that have been reached in monolingual studies, if language dominance, language influence and the language combination are taken into account.

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