

Laia Arnaus Gil

University of Wuppertal (Germany)
arnaus@uni-wuppertal.de

 <https://orcid.org/0000-0002-1023-6717>

Johanna Stahnke

University of Wuppertal (Germany)
stahnke@uni-wuppertal.de

 <https://orcid.org/0009-0001-4742-7533>

Isabel Silva Colaco

University of Wuppertal (Germany)
isabel.silva_colaco@uni-wuppertal.de

 <https://orcid.org/0000-0001-9357-430X>

Natascha Müller

University of Wuppertal (Germany)
nmueller@uni-wuppertal.de

HERITAGE LANGUAGES ARE NOT WEAK! HOW BILINGUALS BENEFIT FROM LANGUAGE DIVERSITY

ABSTRACT

Bilingual children's first two languages are often characterized as majority languages (ML) and heritage (HL) languages, since they can develop in a different pace: the HL becomes the “weak” language with increasing age, especially when time outside the family increases. Our study compares longitudinal data of seven French-German/Italian children (age range 1;4–5;4) who acquire French as an HL or ML with the respective groups of monolingual peers. Language competence was assessed via MLU. The main results are: Surprisingly, HL French develops similarly to ML French and monolingual French. By contrast, German and Italian as HLs develop less target-like than their monolingual peers and as ML languages. We explain these results on the basis of language diversity and variety of contacts.

KEYWORDS: heritage language, majority language, mean length of utterance, French, German, Italian

1. INTRODUCTION

Language acquisition studies distinguish between a multilingual child's heritage language (HL) and majority language (ML). This distinction is often made since the multilingual child is exposed to the HL to a lesser extent and s/he uses it with a smaller number of

native speakers if compared with the ML, especially when s/he starts attending educational institutions like kindergarten or school. The present article will show that HL and ML are “constructs” which are modulated by language use in the family and in the institution and by contextual factors. It has the potential to formulate recommendations for institutions which are places of negotiation of multilingual environments. In particular, our results show that it is possible to boost the HL at a level of language proficiency which is comparable with (bilingual and monolingual) speakers of the ML.

The next section will summarize some of the established findings of the previous literature on French as an HL. Section 3 presents the research questions and the study and summarizes the results. Section 4 concludes the article.

2. PREVIOUS RESEARCH ON FRENCH AS AN HL

An HL is defined as a language “spoken at home or otherwise readily available to young children, and crucially this language is not a dominant language of the larger (national) society” (Rothman 2009: 156); accordingly, a heritage speaker (HS) is an “early bilingual who grew up hearing (and speaking) the heritage language (L1) and the majority language (L2) either simultaneously or sequentially in early childhood” (Benmamoun et al. 2013: 133). Typically, the ML becomes the primary “stronger” or “dominant” language at some point during childhood and the HL the “weaker” language as a result of language shift (Kupisch et al. 2014 on French as an HL in adult speakers). HL acquisition is often located in between first and second language acquisition because the conditions of acquisition are like those in L1, but its outcomes may resemble L2 acquisition (Montrul 2010: 11–16).

A bilingual’s “weak” language has been described as the less frequently used one, and/or as the language which develops at a later MLU stage than the other one with respect to a specific grammatical phenomenon (e.g., Sivakumar et al. 2020). This relation between the languages may – but does not necessarily need to – cause delay. The role of dominance is in fact unclear across the literature (Van Dijk et al. 2021). Hager and Müller (2015: 295) show that if bilingual children are dominant in one language, this is likely to be the ML. At the same time, it is well established that HLs are not acquired in an incomplete fashion (Rothman 2009: 156f.; Montrul 2010: 4f., 2012: 5; Benmamoun et al. 2013: 166ff.; Polinsky and Scontras 2019: 5).¹ Rather, since the quantity and the quality of the input as well as the degree of literacy and formal education in the HL differ considerably among HSs, competence in the HL is subject to enormous variation (Montrul 2010, 2012, 2016; Polinsky and Scontras 2019).

In what follows, we will be concerned with child HSs of French who are native speakers (Rothman and Treffers-Daller 2014; Kupisch and Rothman 2018) having acquired their L1(s) before the age of four (Meisel 2009).² The study of French-German bilingual

¹ It is important to clarify that adult HSs have been defined in numerous ways in the literature (cf. e.g., Rothman 2009, Kupisch et al. 2014), e.g., as adults who continue to use the HL they acquired during childhood or as adults whose L1 becomes their HL when they migrate to another country. Crucially, the age of exposure to the ML underlines that the adults’ ML may either be acquired as an L1 or as an L2.

² See Dewaele (2018), Hulstijn (2018) and Dewaele et al. (2021) for a critical discussion of the term “native”.

children has confirmed early language separation (Meisel 1990, 1994) and established cross-linguistic influence (Müller et al. 2015, 2023; Arnaus Gil et al. 2019). Child HSs of French show monolingual-like acquisition paths irrespective of the status of French as an HL or ML for various morphosyntactic phenomena (Meisel 1990, 1997 on subject-verb agreement and negation; Koehn 1994; Müller 1990, 1994 on gender), although HSs may converge later to the target system (Krumreihl 2016, 2019 on subject-verb agreement) or commit more errors than majority language speakers (MSs, Eichler et al. 2012; Hager 2014 on gender). Lexicons are also separated from early on (Jekat 1985), and language dominance and lexical competence do not seem to be interrelated (Sivakumar et al. 2020). Increased exposure to speakers of French and contexts in which French can be potentially used positively influence competence in the HL (Arnaus Gil et al. 2020). The possible role of the HL for (intrasentential) code-switching is yet unresolved (Patuto et al. 2014; Poeste et al. 2019). Studies on phonology in child HSs of French are scarce and indicate that HSs may be accelerated due to cross-linguistic influence from the ML (Stahnke 2022).

To sum up, we know from the existing literature on French as an HL in Germany that, first, child HSs of French are not necessarily less proficient in French than speakers with French as an ML. Second, language dominance is independent of the status of French as an HL or an ML (Stahnke et al. 2021). Family members but also people engaged in educational institutions want to know whether there are possibilities to compensate for possible disadvantages caused by the fact that HLs are less used than in the homeland countries. The present article will show that the use of the HL in the family and/or in the educational institution can act as such compensatory factors and brings fresh evidence to demonstrate the importance of input and context (Garraffa et al. 2023).

3. THE STUDY

3.1. PARTICIPANTS AND METHODOLOGY

The following tables 1 and 2 present the examined longitudinal data of the bilingual and the monolingual children, respectively. The focus of our study is on the bilinguals' French.³ For the sake of completeness, the bilinguals' other L1 (i.e., German or Italian) will be also analyzed. These will be compared to the corresponding monolingual groups (French, German, Italian). With one exception (cf. table 1 Am_df's family languages), the mothers and the fathers of the bilingual children raised their children monolingually, while they used one of their children's languages, their respective L1, in the interaction with their children. 6 of the 7 families used French as the family language, the language of interaction when all

³ The families were selected according to certain criteria to ensure that key variables, although not identical, were similar. The parents had a high level of education of at least A-levels or a university degree, they used a consistent family language policy, and they wanted their child to become a bilingual speaker. Common to all children is the amount of time they spent in various different language environments outside their home country or with various family members and friends of the heritage country, during holidays or regular visits from family members such as grandparents. The children had good relations with their grandmothers and grandfathers in the heritage country.

family members are present. All children except one attended a French institution, either in France or in Germany/Italy.

Table 1. Bilingual children⁴

Child	Languages	Country of birth/residence	Age	Language of the mother	Language of the father	Family language policy	Family language	Language policy of the institution
Al_df	German / French	Germany	2;2,6 ⁵ –5;2,21	French	German	OPOL ⁶	French	French
Am_df	German / French	Germany	1;6,12–5;0,16	French	German	OPOL	German and French	French
Ce_df	German / French	Germany	2;0,9–5;4,14	German	French	OPOL	French	German
Em_df	German / French	France	1;4,1–4;11,24	German	French	OPOL	French	French
Ma_df	German / French	France	1;9,19–5;1,23	German	French	OPOL	French	French
Ju_fi	Italian / French	France	1;8,16–4;11,16	French	French-Italian	OPOL	French	French
Si_fi	Italian / French	Italy	1;6,12–5;0,12	French	Italian	OPOL	Italian	French

As can be observed from table 1, four children acquire French as an HL since they reside in Germany or Italy, while the other three are raised in France, where French represents the ML. When taking into consideration the bilinguals' other L1, German/Italian is acquired as an HL in three cases (i.e., for the children living in France) whereas four have German/Italian as ML (i.e., they grow up in Germany/Italy). Monolingual children acquire their respective L1 as ML (cf. table 2 below).

⁴ The data of the bilingual children come from three projects funded by the German Research Foundation (DFG) on children's simultaneous bilingual language acquisition under the direction of Prof. Dr. Natascha Müller: "Frühkindliche Zweisprachigkeit: Italienisch/Deutsch und Französisch/Deutsch im Vergleich" (project number: 5483483); "Die Architektur der frühkindlichen bilingualen Sprachfähigkeit. Italienisch-Deutsch und Französisch-Deutsch in Italien, Deutschland und Frankreich im Vergleich" (project number: 5452914); „Code-Switching bei bilingual aufwachsenden Kindern in Deutschland, Italien, Frankreich und Spanien: italienisch-deutsch, französisch-deutsch, spanisch-deutsch, italienisch-französisch, italienisch-spanisch, französisch-spanisch“ (project number: 107909018).

⁵ years;months,days

⁶ OPOL = One Person – One Language.

Table 2. Monolingual children

Child	Language	Country of birth/residence	Age
Anae ⁷	French	France	1;10,17–5;10,30
Antoine			1;10,10–6;3,8
Madeleine			1;4,18–4;10,3
Théophile			1;06–2;06
Léonard			1;8,9–3;2,25
Philippe ⁸			2;1,9–3;3,12
Grégoire ⁹			1;9,18–2;5,27
Max ¹⁰			1;9,19–3;2,3
Chantal ¹¹	German	Germany	1;10,18–5;0,11
Kerstin ¹²			2;1,1–3;4,3
Simone			1;9,11–4;0,6
Leo ¹³			1;11,12–4;11,5
Pauline ¹⁴			1;11,6–5;0,1
Cosima			1;11,29–5;1,4
Martina ¹⁵	Italian	Italy	1;7,18–2;7,15
Raffaello			1;7,7–2;11,20
Rosa			1;7,13–3;3,23

3.2. RESEARCH QUESTIONS AND HYPOTHESES

Based on the research literature, we expect that children who speak French, German or Italian as an HL in France, Germany or Italy show lower MLU values than (i) monolingual French, German or Italian children and (ii) children who use these languages as MLs. The question arises if the disadvantages caused by the fact that HLs are less used by speakers in countries with another ML can be compensated. These compensatory

⁷ Anae, Antoine, Madeleine, Théophile and Léonard belong to the Paris Corpus (Morgenstern et al. 2009).

⁸ Leveillé Corpus (Suppes et al. 1973).

⁹ Champaud Corpus (Champaud 1994).

¹⁰ York Corpus (De Cat and Plunkett 2002).

¹¹ Cf. footnote 4.

¹² Kerstin and Simone belong to the Miller Corpus (Miller 1979).

¹³ Leo Corpus (Behrens 2006).

¹⁴ Pauline and Cosima belong to the Rigol Corpus (Lieven and Stoll 2013).

¹⁵ Martina, Raffaello and Rosa belong to the Calambrone Corpus (Cipriani et al. 1989).

factors should be communicated to families with bilingual children as recommendations for optimal language usage.

3.3. RESULTS

In what follows, we will present the data of the bilingual French-German/Italian children, taking into consideration whether they acquire French in France or in Germany/Italy, i.e., as an ML or as an HL, respectively. Figure 1 shows the results for French.

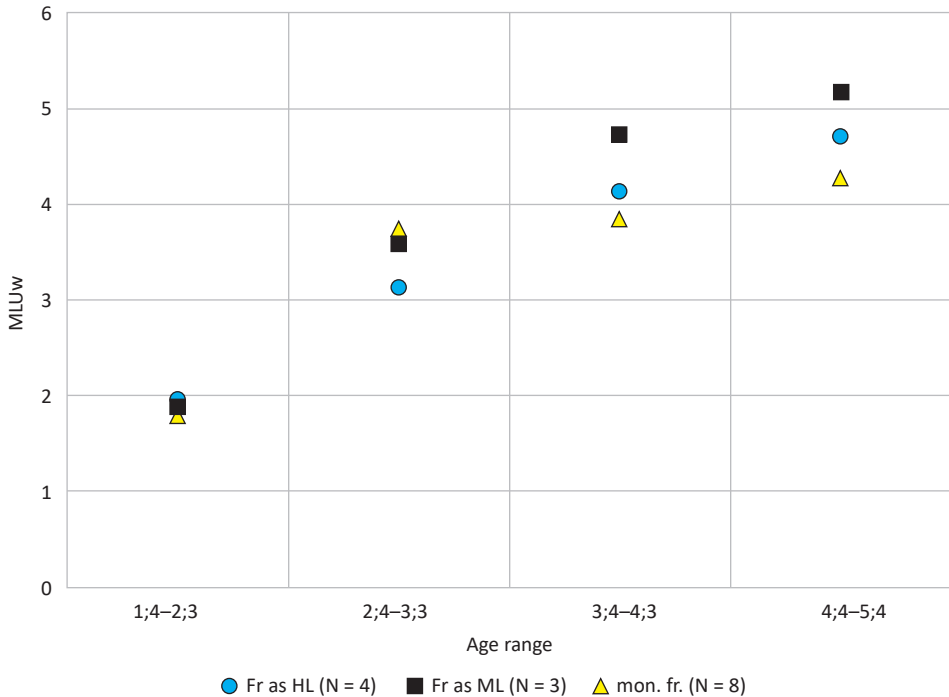


Figure 1. French MLU for the bilingual French-German/Italian children and the monolingual French children compared

We have divided the data into four age groups, each of which corresponds to 12 months. The y-axis illustrates the mean MLUw (Mean Length of Utterance in words) values for each group (French as an HL, French as an ML, monolingual French) per age range. The figure reveals the following: First, we observe a similar mean MLU value for all three groups in the first age range between 1;4–2;3. Second, all groups of children increase their MLU values with age, yet at a different pace: while the monolingual group and the bilinguals with French as an ML overlap in the second age range almost reaching an MLU of 4, the bilingual group acquiring French in Germany/Italy shows a lower mean MLU, namely around 3. Interestingly, in the two following ranges, starting at age 3;4, both bilingual groups exhibit a mean MLU between 4–5, whereas the corresponding mean MLU

values for the French monolingual children seem to stagnate and oscillate at a mean MLU of 4. We wanted to know whether there is a difference (i) between the bilingual HSs of French and the monolingual French children and (ii) between the bilingual MSs of French and monolingual French children. We calculated the difference between the mean MLU value of each bilingual group in relation to the monolingual group in each age range.¹⁶ The statistical analysis yielded no significant results in any of the age ranges ($t(6) = 0.35$, $p > .05$). As a result, both bilingual groups show no differences when compared to the monolinguals. What is more, the group of French HSs did not significantly differ from the other two groups at any age range.

Figure 2 illustrates the mean MLU values for the bilingual children's other language, German or Italian, in comparison with the respective monolingual children. Parallel to French in figure 1, some of the bilingual children speak German/Italian as an HL, some as an ML.

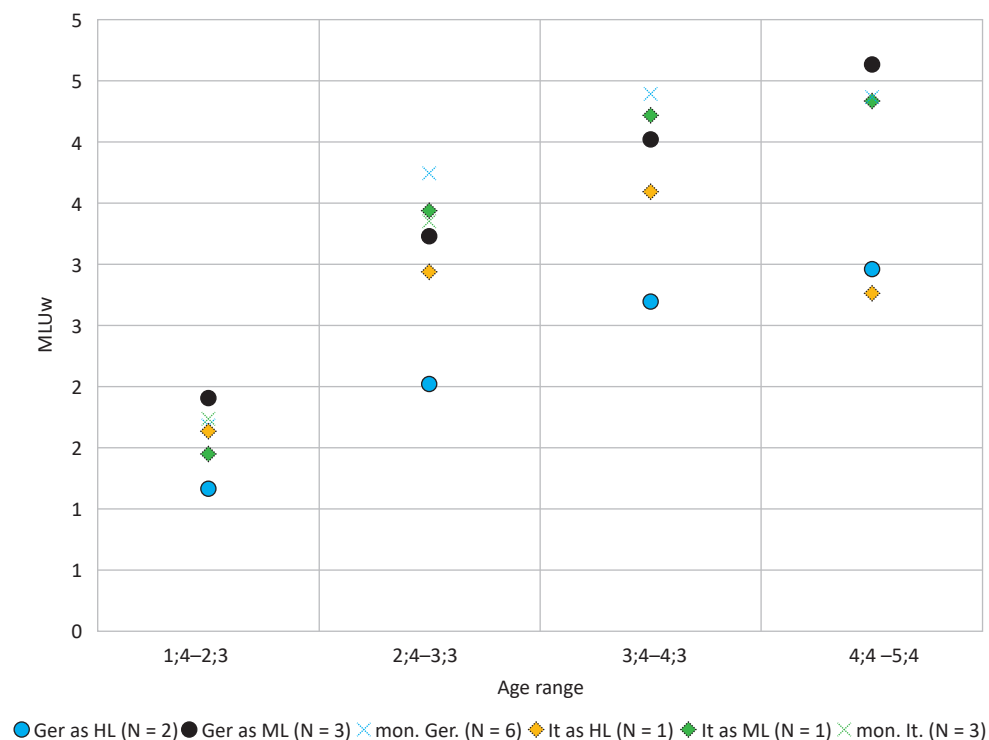


Figure 2. German/Italian MLU for the bilingual French-German/Italian children and the monolingual German and Italian children compared

¹⁶ For instance, the mean MLU value for the bilingual MSs of French within the age range of 1;4-2;3, which is 1.86, was subtracted from the mean MLU value in that same age range from the monolingual French group, which corresponds to 1.76. The difference results in -0.10 .

We observe a large difference between the mean MLU values of the children who speak German as an HL or as an ML in each age range. The bilingual group acquiring German as an ML is close to the monolingual German group in all available age ranges and differs from the group of children who acquire German as an HL. As for the French data, we wanted to explore the size of variation of each of the bilingual groups with respect to the monolingual German group for each age range.¹⁷ Interestingly, the statistical analysis yielded significant results (Ger as HL*Ger as ML: $t(5) = 3.55$, $p < .05$). In other words, the children with German as an HL significantly differ from the children with German as an ML when comparing subtracted MLU values of each bilingual group with the German monolingual peers. We have further run several t-tests comparing two age ranges each (i.e., the first with the second, the second with the third, and the third with the fourth) in order to determine in which age range this difference arises. As a result, both bilingual groups show differences with respect to the German monolinguals between the second and the third stage ($t(1) = 17.34$, $p = 0.035$). What is more, the group of German HSs has attained significantly lower MLU values than the other two groups at age range 3;4–4;3.

In figure 2, we also present the mean MLU values for Italian as an HL (in France) or as an ML. As can be seen, both bilingual groups start out with similar mean MLU values as their monolingual peers. In the following age range, the two bilingual groups move apart, although we can notice an increase in the mean MLU values for both groups until the HSs' MLU value declines in the last age range. Here, the HSs' MLU value for Italian is comparable to the HSs' MLU value for German. Unfortunately, we can only provide mean MLU values for the Italian monolingual group for the first two age ranges. Assessment by statistical analysis has been deliberately abandoned.

4. SUMMARY AND CONCLUSION

The two main results of our study are: The bilingual children who speak French as an HL exhibited similar mean MLU values as the children who use French as their ML and as monolingual French children. In contrast, German (and Italian) of the bilingual children showed the expected result from previous empirical studies: bilingual children with German (or Italian) as an HL reached significantly lower mean MLU values than children with German (or Italian) as their ML and monolingual children. Our results are surprising for French and expected for German (and Italian). Evidently, our small-scale study has shown that an HL can become 'indiscernible' from monolingual children at similar ages or bilingual children who speak the language as an ML (French, in our case), if mean MLU values are compared. What factors could be thought of that compensate for the disadvantages caused by the fact that French is not a vernacular language in Germany and Italy?

¹⁷ Again, we calculated the difference between the mean MLU value for the bilingual group acquiring German as an ML at the first age range (1.90) and the mean MLU value for the corresponding monolingual German group (1.66). The difference amounts to -0.23 . We proceeded in a similar way for the bilingual children acquiring German as an HL and for all age ranges.

As becomes clear from table 1, the majority of bilingual children was raised with French as the family language. In addition, the educational institutions in Germany and Italy which the children attended had a “French only” policy. The same is not true for German and Italian as HLs in France. It is therefore possible that the children were more exposed to their HL French than the children reported in the literature and, more importantly, than to German or Italian in an HL context. Despite the fact that this is true, Carroll (2017) clearly states that exposure is not enough. Although not possible with respect to our small-scale study, future research could encounter the possibility that variety of contacts¹⁸ might play a compensatory role in order to show that the results of our study are not coincidental. Also, possible differences between families’ and institutions’ language policies should be addressed more systematically. Contextual factors have been studied, albeit not in large-scale studies, in trilingualism research (Chevalier 2015; Arnaus Gil et al. 2019 for an overview). Acknowledging that 20% of daily input is enough for active trilingualism (Quay 2008), variety of contacts has been suggested to compensate for the fact that daily input has to be divided by three (Barnes 2011: 60; Dewaele 2000, 2007; Hoffmann 1985: 493; Maneva 2004: 116; Quay 2011: 163). Our results rely on a small-scale investigation of longitudinal data and should be put to test in large-scale experimental studies.

To conclude, we would like to bring up another aspect that could complement our results for French. Of the four French HSs, three families indicated to have chosen French, the HL, as the language used when all family members are present (cf. section 3.1, table 1). One family chose French in addition to German as family language. The decision to use French as the family language can be closely associated with the fact that the German/Italian parent has some degree of language competence in the child’s HL French. In fact, previous studies have pointed out that keeping the ML “low” within the family nucleus would add to the multilingual’s active use of the HL (de Houwer 2004, 2007). The bilingual child would thus have another HL-interlocutor at home which, in turn, would increase the possibility of HL-communication in the family nucleus. (Larger) variety of contacts within and across the family borders could add to the prestigious image of the HL, from the child’s perspective, but also from the perspective of society. Clearly, the support of HLs has a social impact, in that these languages do not (primarily) represent an individual or societal problem but rather a chance for society at various levels. This potential linked to the study of HLs has been under-researched in linguistics to date.

¹⁸ With the term “variety of contacts” we mean that the child has contact with a variety of different HSs and thus, chances are increased that the level of familiarity with a particular register variety is higher than in a child whose contacts are reduced. Masullo et al. (2023) have observed that familiarity with register variety has a positive influence on the ability to detect morphosyntactic errors. It should be noted that the term ‘variety of contacts’ does not refer to the frequency of linguistic forms.

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