

## Article

# French as a Heritage Language in Germany

Johanna Stahnke \*, Laia Arnaus Gil  and Natascha Müller

Romance Linguistics, Bergische Universität Wuppertal, D-42119 Wuppertal, Germany; arnaus@uni-wuppertal.de (L.A.G.); nmueller@uni-wuppertal.de (N.M.)

\* Correspondence: stahnke@uni-wuppertal.de

**Abstract:** Research on child heritage speakers (HSs) has shown successful language acquisition, comparable to monolinguals, whereas research on adult HSs often claims incomplete acquisition. This seems to be an evident contradiction in the current state of research, which may be explained by a possible language shift during adolescence or adulthood, but which does not necessarily have to be equated with a lack of competence. In an overview of the existing studies on child and adult HSs of French in Germany, we show that HSs are not incomplete acquirers of French and we suggest theoretical and practical implications following these findings. Our aim is to show, first, that HSs of French in Germany are not unanimously disadvantaged compared with French speakers in countries where French is a majority language, and second, that complete acquisition is independent of language dominance, a notion that has received particular attention in studies on multilingual and HL acquisition.

**Keywords:** French as heritage language; child and adult heritage speakers; language separation and cross-linguistic influence



**Citation:** Stahnke, Johanna, Laia Arnaus Gil, and Natascha Müller. 2021. French as a Heritage Language in Germany. *Languages* 6: 122. <https://doi.org/10.3390/languages6030122>

Academic Editors: Tanja Kupisch, Juana M. Licerias and Raquel Fernández Fuertes

Received: 29 January 2021  
Accepted: 8 July 2021  
Published: 15 July 2021

**Publisher's Note:** MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



**Copyright:** © 2021 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

## 1. Introduction

Around 65% of migrants in Germany are from Europe and have roots in Turkey (13%), Poland (11%), and the Russian Federation (7%). Migrants of French origin only constitute 0.9%. They are typically above 25 years of age when arriving in Germany, are employed, and have had formal education. The main motive for migration from France to Germany is family formation or reunion (Destatis 2020). The historical relations between France and Germany have yielded a long-standing political cooperation, which has most recently been confirmed by the Franco-German Treaty of Aachen in 2019.<sup>1</sup> As a heritage language, French is highly prestigious in Germany and is taught at schools and universities. Germany has bilingual kindergartens and French schools (*lycée français*), and learners of French can improve their job prospects by standardized certificates such as the DELF (*Diplôme d'Études en Langue Française*).

Herein, we are concerned with French as a heritage language. We define a heritage language (HL) as a non-dominant or minority language acquired by children in a naturalistic way, and we describe heritage speakers (HSs) as multilingual native speakers (as opposed to L2 learners) who acquire or have acquired an HL accordingly (cf. Section 2 for more detailed definitions). Whereas studies on (privileged) child bilingualism, as conducted in Western Europe and Canada, are typically longitudinal and focus on language development, studies on (stigmatized) adult heritage speakers (HSs), as conducted in the United States, are mostly cross-sectional and interested in linguistic outcomes (Kupisch and Rothman 2018). Interestingly, research on child HSs has shown successful language acquisition (comparable to monolinguals), whereas research on adult HSs often claims “incomplete acquisition,” which is an evident contradiction in the current state of research and which may be explained by possible language shift during adolescence or adulthood, but which must, however, not be equated with lacking competence (cf. Sections 2 and 6).

In an overview of the existing studies on child and adult HSs of French in Germany, we show that HSs are not incomplete acquirers of French and we suggest theoretical and practical implications following these findings. Our aim is to show, first, that HSs of French in Germany are not unanimously disadvantaged to French speakers in countries where French is a majority language, and second, that these findings are independent of language dominance, a notion that has received particular attention in studies on multilingual and HL acquisition (cf. Section 6). Following [Arnaus Gil et al. \(2019, p. 240\)](#), language dominance refers to an unequal use of an individual's languages and is independent of linguistic competence.<sup>2</sup>

Departing from the acquisition of French by bilingual children in Germany, research starting in the 1980s explored whether, and confirmed that, children separate their languages from early on ([Meisel 1990, 1994](#)). Afterward, cross-linguistic influence was assessed in code-switching ([Müller et al. 2015](#)), and various grammatical domains such as the morphosyntax ([Müller et al. 2011](#)) and the lexicon of multilingual children ([Arnaus Gil et al. 2019](#)) were focused on spontaneous and elicited productions collected in longitudinal and cross-sectional studies. Research on adult HSs of French in Germany has only started in the past decade, investigating morphosyntax and phonology ([Kupisch et al. 2014b](#)). In contrast to studies on children, this line of research is mostly based on grammaticality judgment tasks or elicited data using cross-sectional designs.

The existing studies on French as an HL in Germany have in common that they are explicitly or implicitly anchored in the generative framework (mostly in the Principles and Parameters framework of [Chomsky 1981](#)), according to which individual native speakers' implicit linguistic knowledge is reflected in competence, whereas language use is defined as performance. The acquisition of linguistic competence is guided by Universal Grammar (UG), possibly restricted to a critical period during language development, and "language acquisition is interpreted as the process of fixing the parameters of the initial state in one of the permissible ways" ([Chomsky 1995, p. 6](#)). The principles of UG and the possible parameter settings are part of a human's genetic endowment. Traditionally, parameters have been conceived as grammatical options of a principle of UG that need to be set based on linguistic experience ([Chomsky 1981](#)). Different theoretical perspectives on HL acquisition, apart from formal linguistics, include cognitive and emergentist theories, sociolinguistics (as applied to Spanish as an HL in the U.S.; e.g., [Silva-Corvalán 1994](#)), and the processability theory (as applied to Turkish as an HL in Germany; e.g., [Bayram 2013](#)) cf. [Montrul \(2010, 2016, pp. 149–64\)](#).

This paper is structured as follows. In Section 2, we define HLs and HSs, showing in which way HL acquisition is commonly distinguished from both L1 and L2 acquisition and how HSs relate to child bilinguals. Section 3 reviews the existing studies of adult HSs of French in Germany. Studies on child HSs on language separation and cross-linguistic influence are presented in Sections 4 and 5, with a special focus on language dominance. Finally, Section 6 discusses the impact of the various studies on HSs of French in Germany with regard to our research objectives and concludes the findings.

## 2. Defining Heritage Languages

According to [Rothman \(2009, p. 156\)](#), 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" (cf. also [Aalberse et al. 2019, p. 1](#)). An HS is an:

[E]arly bilingual who grew up hearing (and speaking) the heritage language (L1) and the majority language (L2) either *simultaneously* or *sequentially* in early childhood [ . . . ], but for whom L2 became the primary language at some point during childhood [ . . . ]. As a result of language shift, by early adulthood a heritage speaker can be *strongly* dominant in the majority language, while the heritage language will now be the weaker language. ([Benmamoun et al. 2013, p. 133](#), emphasis original;

cf. also [Montrul 2012](#), p. 3, [2016](#), p. 16f.; [Aalberse et al. 2019](#), p. 4f.; [Polinsky and Scontras 2019](#), p. 5)

The term typically refers to second-generation immigrants ([Benmamoun et al. 2013](#)) and includes both children who have been described as simultaneous bilinguals ([Ronjat 1913](#)) and as sequential (or successive/consecutive) bilinguals ([Weinreich 1970](#); [Wei 2000](#), p. 7). HL is often equated with the terms “minority language,” “family language,” or “weaker language” in the literature.

Even though these definitions are widely accepted, the status of both the ML (majority language) and the HL are subject to considerable variation. Typically, most adult HSs have a strong command of their ML, but their command of their HL varies greatly. This variation is explained by differences in the quantity and quality of the HL’s input and by varying degrees of literacy and formal education in their HL. HSs have been reported to be competent in phonological domains. Their vocabulary is large but context-specific and can display gaps for infrequently used items. Most crucial deviances from monolingual speakers are found in inflectional morphology, e.g., erosion of case and agreement morphology, pronominal reference, and factors related to discourse–pragmatic knowledge. Other vulnerable syntactic domains include long-distance dependencies (e.g., reflexive pronouns) and complex structures (e.g., relative clauses; cf. [Montrul 2010, 2012, 2016](#); [Polinsky and Scontras 2019](#)). Following from these findings, competence in an HL is sometimes said to resemble incomplete acquisition or attrition ([Rothman 2009](#), p. 156f.; [Montrul 2010](#), p. 4f., [2012](#), p. 5; [Benmamoun et al. 2013](#), p. 166ff.; [Polinsky and Scontras 2019](#), p. 5).

In fact, HL acquisition is often considered to share characteristics with both L1 and L2 acquisition. According to [Montrul \(2010, pp. 11–16\)](#), the conditions of HL acquisition correspond to L1 acquisition (early exposure, abundant input in a naturalistic setting). By contrast, the outcomes of HL acquisition are mostly comparable to L2 acquisition (developmental and transfer errors, variable proficiency, incomplete acquisition, fossilization, role of motivation, and affective factors for language development). Incomplete acquisition, therefore, should theoretically pertain to those aspects of grammar that rely more heavily on input conditions and factors outside core grammar. Interestingly, HSs and L2 speakers show differences in spoken and written tasks in that the former perform more target-like on oral and comprehension tasks whereas the latter, mostly literate and instructed learners, outperform HSs in written tasks ([Montrul 2010, 2012, 2016](#); [Benmamoun et al. 2013](#)). In this context, a difference between competence and performance is clearly manifest, as well as the question of how these notions can be methodologically kept apart from one another in the study of HSs.

Despite the fact that HSs’ linguistic outcomes may differ from those of monolinguals, many researchers have lately taken the perspective that HLs represent true native languages, comparable to different acquisition outcomes of monolingual speakers or other types of bilinguals ([Kupisch and Rothman 2018](#)). [Rothman and Treffers-Daller \(2014\)](#) advocate that HSs are native speakers per definition because the acquisition conditions of HLs, as defined above, necessarily apply. They suggested that dominance is the crucial concept to distinguish HSs (as bilinguals) from monolingual speakers and to dispense with the comparison of HSs’ competence along monolingual baselines, which themselves exhibit variation that is, in turn, multiplied in bilingual speakers. In this vein, it is also important to consider adequate control groups. For example, instead of comparing HSs to monolingual speakers, it may be more adequate to use bilingual speakers with the same languages but inversed HL/ML as control speakers.

HL acquisition is a form of childhood bilingualism ([Rothman 2009](#); [Montrul 2010, 2012](#); [Kupisch and Rothman 2018](#)), but not all child bilinguals are HSs. Simultaneous bilinguals are also exposed to an ML (e.g., through mixed marriages using the “*one person, one language*” strategy), whereas sequential bilinguals are exposed to an ML only later in life (e.g., through movement to another country or through first exposure to an ML in educational institutions; [Montrul 2010](#), p. 10; cf. also [Montrul 2012](#), p. 2; [Polinsky and Scontras 2019](#), p. 4f.). The simultaneous presence of an ML in a child’s immediate environment may have a negative

impact on the development of an HL, which is acquired along with the ML, as opposed to sequential HSs, who have enjoyed sustained exposure only to an HL in early acquisition (Montrul 2010, p. 11).

### 3. Adult Heritage Speakers of French

Studies on French as an HL in Germany conducted with adult speakers are cross-sectional and mostly use grammaticality judgment and elicitation tasks for a range of morphosyntactic and phonological phenomena. They are grounded in the generative tradition. Bilingual speakers of French are grouped according to where they have grown up (in France or in Germany) before around the age of 19;0 (years;months; i.e., when finishing school). Language dominance is equated to language proficiency and is assessed by cloze tests in these studies, which seem to show that proficiency is clearly correlated with the language of the country of residence during childhood. In other words, adult HSs of French correspond to bilinguals who have grown up bilingually in Germany. Along with bilinguals having grown up in France, monolingual speakers of French and/or second-language (L2) learners of French, who have learned French at school from around the age of 11 onward, typically function as control groups.

#### 3.1. Morphosyntax

Kupisch et al. (2013) investigated gender assignment and gender agreement in 21 simultaneous adult French–German bilinguals ( $n = 10$  having grown up in France, mean age = 33.2 years;  $n = 11$  having grown up in Germany, mean age = 26.7 years) and in 19 adult speakers of French as an L2 ( $n = 11$  residing in France, mean age = 35.5 years;  $n = 8$  residing in Germany, mean age = 35.5 years). Two tasks were administered to the participants, an acceptability judgment task (AJT) and an elicited production task (EPT). The results of the AJT indicate that all four groups performed at ceiling with respect to gender agreement without any significant difference prevailing between the groups. Native-like gender assignment, however, was only found for the bilinguals having grown up in France. Furthermore, a significant difference existed between these speakers and the L2 learners residing in Germany, who achieved the lowest results. In the EPT, all groups achieved native-like competence (>95% accuracy) in both gender assignment and agreement without any significant differences among the groups. The authors concluded that the lexicon (gender assignment) is more vulnerable to input effects than morphosyntax, which is guided by UG (gender agreement). Gender agreement is thus successfully acquired even when French is an HL, i.e., it does not depend on input effects, contrary to gender assignment. This difference, however, is only established in the grammaticality judgment task and not found in elicited production.

Combining and elaborating upon the aforementioned study, Kupisch et al. (2014a) explored various morphosyntactic and phonological domains in adult French–German bilinguals, including adjective placement, gender marking, articles,<sup>3</sup> prepositions, foreign accent, and voice onset time (VOT). Twenty-one bilinguals (mean age = 30 years) having grown up in either France ( $n = 10$ ) or Germany ( $n = 11$ ) were tested in an AJT and in semi-structured interviews. The French-dominant bilinguals showed higher accuracy in gender assignment and agreement, but differences between the groups were not significant overall (97.9 vs. 90.1% of accuracy; cf. Kupisch et al. 2013). The same pertains to article and preposition use. The results on perceived foreign accents showed significant differences in the way that HSs of French are more frequently rated as foreign than French-dominant speakers. With respect to VOT, a statistically significant difference was established between monolinguals (control values were taken from the literature) and HSs of French for dorsals and coronals (but not among the other groups). Summing up, adult HSs of French generally perform like natives in various morphosyntactic domains. By contrast, the results on foreign accent showed differences between both groups of bilinguals.

### 3.2. Phonology

Turning to phonology, Kupisch et al. (2014a) investigated the perceived foreign accent in simultaneous adult French–German and Italian–German bilinguals, which was compared to native speakers and L2 learners. We focused on the French–German part of the study, including 20 bilingual speakers (10 with French and 10 with German as their ML), five monolingual speakers, and five L2 learners of French. The bilingual data were supplemented by self-reports on language preference, childhood, and current frequency of use of the HL; type of schooling in the HL; and length of residence in the heritage country before and after the age of 19;0. Speech samples of monolingual speakers, L2 learners, and bilinguals (with varying HLs) were presented to 23 monolingual raters. The results of the accent ratings generally showed that bilinguals tend to resemble monolinguals in their ML (without any statistically significant differences) and L2 learners in their HL (however, with a statistically significant difference). The lowest confidence ratings and the highest degree of revision of decision were found for bilinguals speaking their HL. Language preference, current frequency of use, and length of residence in the country during childhood and adolescence correlated with a native accent. In conclusion, adult HSs of French show variation in their perceived foreign accent, much like L2 learners, but differ from L2 learners, whose accent is rated more consistently as foreign.

In Lein et al.'s (2016) study, VOT of /k/ in the initial, prevocalic, and stressed positions and global foreign accent were analyzed in 14 French–German simultaneous adult bilinguals having grown up in France ( $n = 7$ ) or Germany ( $n = 7$ ) based on interviews. Data from five monolingual French and five monolingual German speakers served as controls. The authors explored whether a foreign accent is reflected in VOT. In general, the bilinguals' VOTs were shorter than the monolingual control values. Both groups of bilinguals produced VOTs that were indistinguishable from one another in French. However, when speaking German, the VOTs by the bilinguals who grew up in France were significantly shorter than those by the HSs, i.e., the HSs of French produced the difference in German more accurately. Importantly, these speakers had spent more time in France before the age of 19 than the bilinguals having grown up in France had spent in Germany. On the contrary, the bilinguals having grown up in France had spent more time in Germany after the age of 19 than the HSs of French had spent in France during adulthood. One possible explanation, then, is that the time spent in the heritage country during childhood is more beneficial than during adulthood. An analysis of individual speakers did not reveal a systematic relationship between VOT and foreign accent ratings, possibly because Lein et al.'s (2016) study was based on spontaneous data, whereas previous studies that found a relationship between VOT and foreign accent used more controlled data or because of language-internal differences.

What remains to be examined is whether and how adult HSs of French compare to child HSs of French, for whom some of the general results, as well as the used methods, differ substantially, as we show in the following sections. In doing so, we focus on children's acquisition outcomes rather than on individual developments in order to be able to compare both groups of speakers.

## 4. Language Separation in Child Heritage Speakers of French

Early research on bilingual children was interested in whether these children separate their languages. Volterra and Taeschner (1978) initiated a debate on the organization of two languages and determined the focus of many studies that discussed the issue of early language separation with respect to lexicon and grammar, with the final goal of questioning the harmful effect of early child bilingualism in terms of "semilingualism." According to Volterra and Taeschner's (1978) model, the bilingual child passes through a stage of fusion of the two lexicons and the two grammatical systems. This initial stage, which gave rise to the concept of linguistic confusion in pedagogical studies and large parts of society, is replaced by a stage during which the lexicons are separated and co-exist with a still

fused grammatical system. In the final step, the bilingual child is able to separate the two grammatical systems.

The question of whether the bilingual child's task is language separation served as the basis for the first research project in Germany with a generative orientation focusing on the simultaneous acquisition of German and French, the DUFDE project (*Deutsch und Französisch—Doppelter Erstspracherwerb*, "German and French—Simultaneous First Language Acquisition"; Meisel 1990, 1994). All children were raised in Germany and had French as their HL. Their spontaneous productions were studied in longitudinal settings and compared to monolingual peers. For the intended research goals, grammatical domains that differ in French and German were preferably chosen.

#### 4.1. Lexicon

French–German bilingual children are able to separate their two lexicons from their very first one-word utterances onward and develop their two grammatical systems separately from their first two-word utterances. Jekat (1985) analyzed the acquisition of the lexicon in two child HSs of French against the idea of an initially fused lexicon (Volterra and Taeschner 1978; Taeschner 1983). A fused lexicon implies that bilingual children do not have translation equivalents in the two languages (Jekat 1985, p. 92, cf. also Jekat and Dutoit n.d.) and thus mix the two languages constantly. Jekat's (1985) first result was that child HSs do have translation equivalents from very early on and that the words are used in a target-like way. For example, in one child's lexicon, French *chausson* (1;4,29<sup>4</sup>) functions as the translation equivalent of the German word *schuh* (1;4,29) from its first usage onward, both meaning "shoe," despite some differences in frequency until 1;11,4.<sup>5</sup> Since overall word usage is language-appropriate even for unbalanced children (Veh 1990, pp. 59, 83; Meisel 1994, p. 427), we can exclude constant code-mixing.<sup>6</sup> With respect to specific communicative functions of early words, Jekat (1985, p. 104) found words in the very early lexicon of both children that are not language-specific, e.g., German *ja* ("yes"), which is used as early as the French equivalent *oui*. *Ja* is combined with French questions asking for information, introduced by *que, quoi* ("what"), and *où* ("where"), a function that is described as maintaining communication (in both languages).

#### 4.2. Grammar

##### 4.2.1. Subjects, Subject–Verb Agreement, and Word Order

Under an initially fused grammatical system, children's syntax should be compatible with either the German or the French grammar only, which differ with respect to the use of subjects, subject–verb agreement, and word order (Meisel 1989, 1990). French exhibits syntactic subject clitics, and the subject is mostly expressed as a (nominative) clitic pronoun. Within linguistic theory, subject clitics are argued as the carrier of finiteness, and are thus obligatory, and of subject–verb agreement since most finite verbs in spoken French do not exhibit audible person and number markings on verbs;<sup>7</sup> these features are marked on subject (nominative) clitics (Roberge 1990; Kaiser 1992, pp. 88–103; Auger 1995; Bibis and Roberge 2004). With respect to word order, French is an SV(O) language like other Romance languages. In contrast to French, German lacks syntactic clitics, allows subjects (and other constituents) in the first position (adjacent to the finite verb) of declarative main clauses to remain unexpressed (topic-drop property), and expresses subject–verb agreement via inflectional morphology on finite verbs. Furthermore, German is a V2 language in main clauses and requires verb-final structures in subordinate clauses. Meisel's (1990, p. 270) analysis of three child HSs of French showed that grammatical features emerge simultaneously in the two languages, i.e., there is no step-by-step learning visible in the child data. Furthermore, he observed target-like use of subject–verb agreement and subject use from early on (cf. also Kaiser 1994, p. 147). The data were compared to those from monolingual French (Heinen and Kadow 1990) and German children (Collings 1990) and indicated that bilingual children do not differ from monolinguals (cf. also Meisel 1997 for finite verbs in relation to the negative adverbs *pas* and *nicht* ("not")). The same result was

achieved for French and German word order, which child HSs acquire with ease (cf. also Parodi 1990, p. 177). Meisel (1989, p. 27), and less variability was observed with respect to word-order patterns in his child HSs as compared to monolingual children of the same age.

#### 4.2.2. Tense and Aspect

Other grammatical domains that differ in the French and German grammars also show separate developmental paths in child HSs and similar developmental patterns when compared to monolingual children. Among these range the expression of tense and aspect. According to Schlyter (1990, p. 115), change of state is expressed early in the two languages. In French, past participles of verbs are used, whereas in German, verb particles such as *weg* (“away”) and *ab* (“off”) express this function. Moreover, frequency differences are attested early in children: Auxiliary verbs in combination with past participles occur only in French, whereas in German, the most frequent combination is modal verbs in combination with infinitives (Schlyter 1990, p. 114).

#### 4.2.3. Gender and Number

The gender and number systems of French and German noun phrases also diverge from one another: Whereas the number marking is audible in German and plural is expressed by different plural allomorphs on nouns, most French nouns do not have an audible number marking.<sup>8</sup> With respect to gender, the difference between French and German not only relates to the number of genders (two in French and three in German), but also to the fact that French, again, does not systematically mark gender on nouns or adjectives,<sup>9</sup> in contrast to German. Both grammatical features, number and gender, are unambiguously<sup>10</sup> marked on determiners in adult French; in German, nouns and adjectives range among the categories that show clear and frequent gender markings. Although these differences exist, bilingual children acquire gender and number with comparable ease and show difficulties that are also observed in monolingual children (Koehn 1994; Müller 1990, 1994). Bilingual children’s development is language-specific from the very beginning: Number is marked on articles in French at the same time that number is marked on nouns in German (Koehn 1994, p. 48).

#### 4.2.4. Prepositions and Case Marking

The grammatical domains that exhibit differences between the target languages are complemented by domains where the two languages do not differ, but for which bilingual children follow different paths. A case in question is the acquisition of (especially) locative prepositions (Klinge 1990). Locative relations are expressed early (by the age of 2) by prepositions in both languages. However, Klinge (1990, p. 130) noticed that they are more frequently omitted at later ages in German compared to in French. This is also true with errors of commission, e.g., the use of *in* (“in”) + *da* (“there”) for *darein* (“therein”). The analysis of such domains is complicated by the fact that not all bilingual children are alike. Stenzel (1994, p. 201), who analyzed case marking in two German–French children, found differences in the expression of morphological case. One child was argued to have an “all or nothing” strategy; this child “waits until everything is in place before Case is brought to bear in her grammar,” i.e., before morphological case is expressed in a differentiated, not necessarily target-like way. The other child was argued to be a “structure builder,” “who adopts a piecemeal [ . . . ] approach by putting together the grammar step by step.” The expression of morphological case was observed to coincide with the universal unfolding of the basic case distinctions in the second child—first the distinction between nominative and accusative and later the one between accusative and dative.

### 5. Cross-Linguistic Influence in Child Heritage Speakers of French

Despite successful language separation, cross-linguistic influence occurs in multilingual children. Importantly, though, it has been shown that an HL does not necessarily correspond to a lower degree of language dominance, which is defined in terms of various linguistic dimensions, e.g., bilingual children’s differences in language proficiency as measured by their

languages' respective MLUs (Schmeißer et al. 2016),<sup>11</sup> and which has been distinguished according to domains and dimensions (as first suggested by Birdsong 2014; cf. Chomsky 2007 for a possible perspective on language dominance in the generative framework). Similar to the studies on adult HSs and on language separation in child HSs (cf. Sections 3 and 4), this line of research also follows the generative framework.

### 5.1. Lexicon

Sivakumar et al. (2020a) longitudinally assessed the vocabulary size (measured via percentage of verb size) in a trilingual child raised simultaneously with French, an ML, and two HLs (Spanish and Italian). The authors examined, among other things, the child's language dominance in the course of development during the first years (2;8,10-4;9,22). Even though French was not an HL in this case, the results of the study are relevant as they indicate that the HL Italian developed faster than either the child's HL (Spanish) or ML (French), and, therefore, an HL can be considered the child's dominant language (although French reaches similar verb-type values by the end of the investigated period, i.e., 4;2,8). Considering verb tokens, a comparable development can be found for French and Italian.

Sivakumar et al.'s (2020b) cross-sectional study examined the early (receptive) lexicon development of 126 bi-, tri-, and multilingual children (i.e., more than three L1s) being raised in Germany or in a bilingual Spanish-Catalan region in Spain, 71 of whom acquired French as an HL. Lexical competence was assessed with the aid of the standardized receptive vocabulary test *Échelle de Vocabulaire en Images Peabody* (EVIP; Dunn et al. 1993) using age-matched values (i.e., IQ scores). The child HSs of French were mostly classified with a low (45%) or average (44%) lexical competence, irrespective of the number of L1s they had acquired or whether German or Spanish was their ML. The authors could not assert a relationship between language dominance and lexical competence. Concentrating instead on the actual (raw) scores obtained in the EVIP, Sivakumar et al. (2020b, p. 24f.) showed that not only was the mean score for child HSs of French similar, but it also did not make a difference whether they had been exposed to French simultaneously or sequentially (i.e., by the age of 3;0).

In a subset of 25 child HSs of French in Germany ( $n = 7$ ) and in Spain ( $n = 18$ ), Arnaus Gil et al. (2020c) investigated which input factors influence active multilingualism, defined on the basis of the average IQ values of the EVIP in all L1s (Arnaus Gil et al. 2020c, p. 7). Input quantity factors, such as amount of input, language strategies, and language constellation (i.e., family language policies), were analyzed; as for input quality factors, direct instruction in an HL in (pre-)school, cultural contact, parents' L2 knowledge of said HL, and the interactional potential<sup>12</sup> were evaluated. Active multilingualism was shown to significantly improve with increased exposure to speakers of French and contexts in which the HL can be potentially used, especially when the HL was acquired at home as opposed to the institution only (Arnaus Gil et al. 2020c, pp. 10, 13).

### 5.2. Code-Switching

In a longitudinal and a cross-sectional study with 19 and 46 bilingual children acquiring German and a Romance language (i.e., French, Spanish, or Italian) simultaneously, Patuto et al. (2014) explored the factors that favor the presence of intra- and intersentential CS, e.g., language dominance and HL/ML status. In the longitudinal study, including seven French-German/Italian children, three were raised in France and four had acquired French as their HL. All children produced less than 7% intrasentential CS, which is unrelated to language dominance. For example, one strongly German-dominant child had extremely low intrasentential CS rates in French (under 1%; Patuto et al. 2014, p. 198f.). Regarding the relationship between intrasentential CS and the ML/HL, the authors found a correlation in the sense that intrasentential CS was significantly higher in the HL compared to the ML (Patuto et al. 2014, p. 202).

Since Patuto et al. (2014) focused on intrasentential CS, Schmeißer et al. (2016) investigated both intrasentential and intersentential CS in two children with French as their HL

and in two children with French as their ML. One (German-dominant) HS exhibited a high percentage of intersentential CS in French (but not in German).<sup>13</sup> The other (balanced) HS showed almost no intersentential CS, and intrasentential CS was observed in both settings (more frequent in French). In the children raised in France (French-dominant and balanced), CS in French was almost non-existent, but higher rates were observed in German, which could be analyzed as turn-specific CS in the French-dominant child, whereas the balanced child showed more instances of intrasentential CS. The study showed that both types of CS seem to fulfill different functions in early bilingualism: Whereas intrasentential CS is employed by balanced bilinguals, intersentential (and turn-specific) CS reflects a child's strategy not to accommodate to the contextually desired language.

Following up on these findings, Seifert (2017) explored the use of CS in a trilingual child with French as his ML (cf. Section 5.1). Overall, he used French in 88.6% of the desired cases. Intersentential CS was slightly higher than intrasentential CS, although both CS types were very rare (1.1% and 0.67%, respectively). The same pertained to his HLs, Spanish and Italian (around 0.5% of intersentential CS each), i.e., CS was infrequent in both the ML and in the HL (cf. Schmeißer et al. 2016; Sivakumar et al. 2020a). With increasing age, intersentential CS was used more frequently, whereas the amount of intrasentential CS declined (cf. Hoffmann and Stavans 2007).

Finally, Poeste et al. (2019) focused on CS in children in a cross-sectional study (cf. Sivakumar et al. 2020b) and confirmed low mixing rates in general (up to 7% only). In fact, only 45 out of 122 French-speaking children (37%) produced CS (Poeste et al. 2019, p. 477). Intersentential CS was more frequent than intrasentential CS (cf. Schmeißer et al. 2016). However, Poeste et al. (2019) failed to find any statistical difference between the use of intersentential CS and language dominance, which may be due to differences in the children's ages and methodology (Poeste et al. 2019, p. 482). Since intrasentential CS was distributed similarly across the different language-dominance groups, the authors concluded that intrasentential CS and dominance are not related to one another, either.

### 5.3. Grammar

#### 5.3.1. Morphosyntactic Phenomena and Two Weak Languages

Analyzing language dominance from yet another perspective, Müller and Pillunat (2008) longitudinally studied a child HS of French in Germany with two weak languages. When comparing her language development with other child HSs, however, she was classified as a balanced child (Müller and Pillunat 2008, p. 270). The authors used a German-dominant child HS's and a balanced child HS's longitudinal data to compare the linguistic development of the acquisition of determiners, subjects, and objects. They detected similar developmental paths for subject omissions and realizations in French in the child with two weak languages and the German-dominant child, which were slower than in the balanced child. By contrast, in terms of MLU, the child with two weak languages matched the patterns observed by the other two children in both languages. Similar observations were made for object omissions (Müller and Pillunat 2008, p. 283f.). The acquisition of German determiners has been observed to exhibit acceleration effects in early German–French bilingualism, even for children whose weak language is French (Kupisch 2006). The age-matched analysis displayed a convergence of both the German-dominant and the balanced children to the target systems in this respect, but the child with two weak languages did not reach this point until the end of the investigated period (i.e., by the age of 3;6).

#### 5.3.2. Adjectives

Rizzi et al. (2013) analyzed the longitudinal data from 15 bilingual children (five of whom were French–German and two French–Italian) with respect to adjective placement. Four French–German children and one French–Italian child acquired French as an HL. Respecting input frequencies, the children showed a token preference from 70% (French–Italian) to 90% (French–German) toward prenominal placement. The adjectives placed in a target-deviant position contained, for example, those of size, color, and state (Rizzi et al. 2013,

p. 137). Interestingly, overuse of prenominal placement was found across all children, which is unattested in monolingual children. Neither language combination, cross-linguistic influence (from German), language dominance, nor language status (HL/ML) explains these findings (Rizzi et al. 2013, p. 144; cf. also Geveler et al. 2018, p. 154; Heinze 2017 for input in French as an ML).<sup>14</sup>

Finally, Arnaus Gil et al. (2020b) conducted a cross-sectional study on adjective placement with 74 bi-, tri-, and multilingual children (mean age = 4;8) who had acquired French as an HL in Germany or Spain (cf. Sivakumar et al. 2020b). All children performed at ceiling in an elicitation task, independently of the number of L1s acquired, language combination, language proficiency, or language dominance, in line with the results of previous longitudinal studies.

### 5.3.3. Gender and Mixed DPs

Eichler et al. (2012b) investigated the acquisition of grammatical gender in DPs in 17 bilingual longitudinal children with various language combinations (1;6–5;0), including six French–German and two French–Italian children who had acquired French as their HL or ML. Different patterns were identified for German, French, Spanish, and Italian, which reflect, from less to more, how transparency and reliable gender cues affect gender acquisition (also in monolinguals). Despite less accuracy in French as a weak language, Eichler et al. (2012b) and Hager (2014, p. 245) observed that by an MLU of 4.0–4.99, all children had reached more than 90% accuracy.<sup>15</sup> Gender errors in French were more frequently attested if it was acquired as an HL. The acquisition of (masculine or feminine) gender forms varied among children, and the rate of gender errors was higher with indefinite articles (Hager 2014, p. 251ff.).

Eichler (2011, 2015) and Eichler et al. (2012a) analyzed gender markings in the spontaneous data of French–German/Italian children in code-switched DPs. For gender markings of the noun produced in the non-desired language, the authors examined whether the gender information comes from the switched or the equivalent noun. N-switching was principally observed in the dominant language (96%), whereas in the weak language, both D- and N-switches occurred (31% and 69%, respectively; Eichler et al. 2012a, p. 244). However, when considering the language of the finite verb's utterance rather than the language required by the context, these switches had less to do with D-switching than with N-switching, because the language of D coincides with that of the finite verb. In this respect, these cases can be characterized as lexical switching (Eichler et al. 2012a, p. 248f.). An analysis of mixed DPs in adult L2 French came to the same conclusions (Eichler and Müller 2012).

### 5.3.4. Subject–Verb Agreement

Krumreihn (2016, 2019) analyzed the acquisition of subject–verb agreement and the use of elsewhere forms<sup>16</sup> (i.e., default forms) of four bilingual French–German children with different dominance relations; three of these children were HSs of French. The analysis of more than 8000 occurrences of subject–verb agreement in French showed similar rates of target-deviant elsewhere forms for three children (10–16%). The French-dominant child converged to the adult system with an MLU of 3, followed by the balanced child (MLU of 4.5), and the German-dominant child approached the target system with an MLU of 5. Language dominance thus seems to influence the acquisition of French subject–verb agreement in early bilingualism.

### 5.3.5. French (Null) Subjects

Arnaus Gil and Müller (2018) investigated the acquisition of the subject position in French as an HL in a cross-sectional study (cf. Poeste et al. 2019; Arnaus Gil et al. 2019; Sivakumar et al. 2020b). A grammatical task was designed to elicit French subjects with simple (in)transitive structures. All multilinguals showed acceleration effects in that they did not produce postverbal subjects (cf. Jansen 2015), in contrast to their monolingual peers

(Déprez and Pierce 1993) and irrespective of the number of L1s, language combination, and language dominance.

With the same group of participants, Arnaus Gil et al. (2020a) explored the acquisition of subject realizations, taking into consideration the status of French as a simultaneous HL or “sequential HL” (i.e., acquired in a bilingual institution after the age of 3;0). Neither language combination nor age of onset significantly affected the use of null subjects. Only those children who scored very low in the EVIP had an age equivalent between 1;10 and 3;3 (Arnaus Gil et al. 2020a, p. 35), corresponding to previous findings (De Cat 2002; Jansen 2015). Overall, utterances composed only by a verb (12.7%) appeared most frequently at early ages (around 2;0), and (proto-)clitics (42.2%) and indefinite DPs (29.5%) increased at ages 3;0 and 4;0, respectively (Arnaus Gil et al. 2020a, p. 28).

Finally, Scalise et al. (2021) analyzed subject acquisition in French as an ML in a trilingual child, confirming Jansen’s (2015) and Arnaus Gil et al.’s (2020a) findings. Specifically, an acceleration effect was observed in French, indicating that there was no cross-linguistic influence from the two (null-subject) HLs. The child produced SV structures in 99.3% of the cases, which sustained language separation from early on (i.e., at age 2;8,24, MLU 3.07). A qualitative analysis of target-deviant empty subjects revealed that they were distributed between the first- and third-person singular.

## 6. Discussion and Conclusions

The aims of this paper were twofold. First, we wanted to show how HSs of French in Germany are not disadvantaged in their HL. Second, we argued for an independent status of language dominance from language competence. The overview in the previous sections showed that adult HSs of French in Germany clearly do not acquire French in an incomplete way when compared to other speaker groups of French, e.g., those who acquire French as a majority language: HSs of French show complete acquisition of morphosyntax, contrary to what has been established in the literature. The acquisition of the lexicon, however, seems to depend on input conditions. With respect to phonology, the results are more inconclusive, which may have to do with developmental and/or methodological reasons. Studies on child HSs of French in Germany convincingly show that differentiated lexical and grammatical development exists from early on, and high proficiency is attestable in both of the children’s languages, even if one of them develops at a slower pace in comparison to the other and to monolingual children (Bonnesen 2009).

Comparing adult and child HSs of French in Germany, the results of the existing studies show some interesting parallels (even though the methods used are sometimes difficult to compare to one another): Lexical competence seems to rely more on input quantity in adult HSs, but is comparable in child HSs even if French is acquired as a “late” HL (however, French acquired at home seems to support lexical acquisition best, so there may be an effect of input also in children). Various morphosyntactic domains are acquired in a target-like way by both groups of HSs, showing no evidence of alleged incomplete acquisition. Schooling and consistent input in the HL may explain these results in adult HSs (Montrul 2016, p. 209ff.). One possible exception is phonology in adult HSs who differ from bilinguals with French as their ML, but who are significantly more proficient than L2 speakers.

At the same time, the two groups of HSs are hardly comparable to one another in terms of methodology. First, studies with adult HSs are principally cross-sectional and use grammaticality judgment or elicitation tasks, whereas studies with child HSs are either longitudinal or cross-sectional and based on spontaneous or elicited data. Semi-spontaneously elicited data, as analyzed by Kupisch et al. (2014a), possibly allow for a more adequate comparison, but naturalistic data of adult HSs of French in Germany are virtually absent. What is more, even within the same group of HSs, different task types may yield different results (cf. Kupisch et al. 2013). When comparing different groups of HSs with one another, it therefore seems to be essential to use similar methods.

A further important methodological difference between studies on adult and child HSs is the concept of language dominance, which leads us to our second research goal. Studies conducted with adult HSs define dominance as language proficiency and have shown that there are clear parallels between language dominance and the language of the country of residence during childhood. In other words, adult HSs of French in Germany are generally not dominant in French. On the contrary, studies of child HSs show that language dominance may be independent of the language of the country of residence. Longitudinal and cross-sectional studies with multilingual children have uncovered that language dominance is not necessarily linked to the ML, but that the HL can also be the more proficient language in terms of lexical and grammatical competence in child HSs of French. In fact, there may be French-dominant HSs of French in Germany. Dominance in these studies is typically measured by MLU, focusing on relative language proficiency in language development, whereas research conducted with adults assesses proficiency in tests reflecting the outcomes of acquisition (e.g., cloze tests as a standard proficiency measure). Applying MLU as a criterion to determine language dominance in adult bilinguals is admittedly controversial, because adults' MLU is not indicative of progressive development (as opposed to children) and may vary considerably. Nevertheless, a criterion measuring fluency in words per minute has been analyzed in adult HSs of Spanish and Italian (cf. [Schmitz and Scherger 2017](#); [Diaubalick et al. 2020](#)).

The problem with defining and measuring language dominance lies in its impact for conclusions that are drawn with regards to linguistic competence. Crucially, as the numerous studies in multilingual children show, dominance is unrelated to linguistic competence (cf. [Arnaus Gil et al. 2019](#)), e.g., when lexical and morphosyntactic competence or code-switching are considered (cf. Section 5). In other words, even though a language may be acquired as a weak language by a multilingual, competence can still be achieved in this language. The fact that the HL may turn into the weaker language after a critical period in language acquisition underlines that dominance is by no means a matter of linguistic competence within the generative framework ([Chomsky 1981](#)). Instead, linguistic competence is built up during early acquisition by access to Universal Grammar and observable via performance data. We assume that when children achieve native-like competence, this will also be reflected in adults. Since multilingual children clearly separate their languages from early on in a native-like way (cf. Sections 4 and 5), the results obtained by the presented research on children should be interpreted as competence-based, whereas any divergences in adults must be considered performance-based. In this sense, the differences between HSs and monolinguals or other groups of bilinguals indeed reside in dominance (cf. [Rothman and Treffers-Daller 2014](#)).

How can research on adult and child HSs be reconciled? Obviously, the results obtained from studies on child and adults HSs of French in Germany are not directly comparable to one another with respect to the concepts of language dominance and linguistic competence and performance, but both adult and child HL research can benefit from one another by compensating for research gaps for which the other branch offers solutions: Research on adult HSs could measure language dominance differently (i.e., in terms of linguistic measures such as words per minute) and use designs with more spontaneous data rather than capturing only a single (and arbitrary) point in time of linguistic production. A further shortcoming in research on adult HSs of French is that the acquisition of the lexicon and CS are understudied. Another unresolved issue in adult HSs is why they perform better in controlled than in uncontrolled tasks, contrary to research based on other HLs.

Even though research on adult HSs has so far only analyzed foreign accent and VOT in French phonology, these results provide a promising start for phonological HL acquisition, which should be supplemented by suitable studies conducted with child HSs where phonology is largely unstudied for French. For a more clear-cut picture differentiating child bilinguals from early child L2 learners and, in the long run, from adult speakers, studies could be extended to older children. With respect to language dominance, we may further

pursue the question of how weak a language (or several languages; cf. Section 5.3.1) may be in order to still allow for monolingual-like competence. If a threshold can be defined in this context, the results could be implemented practically in language teaching, language promotion, and textbooks. The acquisition of further morphosyntactic domains, including omissions of obligatory elements, auxiliary selection, number, prepositions, and the clitic pronouns *y* and *en*, has not been studied thoroughly in either adult or in child HSs. The grammatical domains that have been studied more systematically need to be analyzed in more speakers, as well as in those with other language combinations. Most studies (especially on child HSs with a longitudinal design) only include a small number of participants.

Within the generative (minimalist) approach, the theoretical discussion around (the fine-tuning of) parameter setting has recently regained importance (Picallo 2014; cf. Section 1) and should be implemented usefully with the phenomenon of cross-linguistic influence in multilingual HSs. For example, recent work on parametrization (Biberauer et al. 2014) has established different types of (hierarchically ordered) parameters, e.g., at the macro- and the micro-parametric levels (i.e., parameters that define typologically distinct sorts of languages (Baker 2008, p. 355) and parameters that define small-scale differences that even closely related dialects might differ in (Kayne 2005, p. 7)). The acquisition of several L1s may include differences even at the nano-parametric level (i.e., at the level of the particular lexical item, cf. the item *casa* in Longobardi 2001, p. 280ff.). These fine-grained differentiations within parameter theory lead to relevant research questions in the study of HSs that have not been addressed so far: Which (parts of) parameters reflect which precise linguistic properties that have been described in the studies on adult and child HSs? Which (parts of) parameters are acquired in an accelerated or delayed fashion compared to monolinguals? Can the theoretical development and refinement of the parameter model capture language acquisition in multilingual individuals, and if so, in which way (for an example, cf. Scalise et al. 2021)? Theoretical issues of this kind may help us to further understand the relationship and the distinction between parametrizations as a part of language competence and language dominance as a part of language performance in acquisition. Methodologically speaking, comparative work on the syntax of (also closely related) languages “can be thought of as a new research tool,” where multilingual children are “excellent participants in crosslinguistic research because each child is his or her own ‘matched pair,’ thereby reducing interparticipant variation due to cognitive or situational differences” (Paradis and Genesee 1997, p. 99): “If it were possible to experiment on languages, a syntactician would construct an experiment of the following type: take a language, alter a single one of its observable syntactic properties, examine the result to see what, if any, other property has changed as a consequence” (Kayne 2000, p. 5).

In this article, we focused on HSs’ linguistic outcomes of language acquisition to allow for comparison between adults and children. Another theoretical problem in relation to parameters is that the acquisition path may also vary among multilingual children because parameters may be set erroneously (Müller 1993). These children, then, need to acquire the relevant phenomenon in a much less economical item-by-item procedure in order to achieve competence. Even though this aspect was beyond the scope of our research objective, developmental issues have important implications for second-language learning from a generative perspective.

A further implication that arises from the empirical studies on HSs is how different approaches to HL acquisition (cf. Section 1) could fruitfully complement one another instead of being considered mutually exclusive. In fact, other (e.g., sociolinguistic) theories could be applied to the existing data and integrate both the formal and sociolinguistic dimensions of language acquisition, which may result in the development of new theoretical perspectives (e.g., Hoff 2003, 2006). If sociolinguistic variables, for instance, play a role in the acquisition of a particular grammatical phenomenon in language A, this effect should also be noticeable in language B (and C, etc.) and, possibly, also in the acquisition of other linguistic domains. The investigation of HSs’ data therefore provides an excellent

testing ground for evaluating these kinds of hypotheses and for exploring promising and innovative directions in HL acquisition.

As a political consequence of language separation established in bilingual children (cf. Section 4), bilingualism was increasingly promoted at German schools and is no longer seen as inevitably leading into semilingualism later in life (Romaine 1995, pp. 261–73). The present overview also has practical relevance in that L2 teaching and didactics can take advantage of the positive results obtained for French as an HL. The fact that multilingual children are competent in their HL across the board should encourage foreign-language learners and teachers of French to conceive multilingualism in general as a valuable resource and potential in the various settings of foreign-language instruction, where a range of other native (and non-native) languages are present. These effects, in turn, could eventually lead to enhanced recognition and appreciation of HLs by society in general and to active language use and/or awareness by HSs in particular.

Finally, since social prestige can positively influence multilingual language acquisition (Quay 2001), the results obtained for (child and adult) HSs of French as an “atypical” HL in Germany could be transferred to other, less prestigious but traditionally important HLs, such as Turkish or other Romance languages. Regrettably, and in contrast to French, the status of these HLs tends to be socially undervalued because of economic or other reasons, which, in turn, has linguistic consequences. For example, French HSs perform more successfully than Italian HSs in Germany, which may be explained by the degree of formal education and literacy, which positively influences the development of an HL (Müller and Schmitz 2020, p. 216; Kupisch and Rothman 2018) and which is typically promoted by parents and related to the immigration history of the populations. From a generative perspective in a broad sense (e.g., Pinker and Jackendoff 2005), all children successfully acquire a native language (including an HL), and if this is possible for French, then it should be for any other language as well.

**Author Contributions:** Conceptualization, all authors; writing—original draft preparation, all authors; writing—review and editing, all authors; supervision, all authors; All authors have read and agreed to the published version of the manuscript.

**Funding:** This research received no external funding.

**Institutional Review Board Statement:** Not applicable.

**Informed Consent Statement:** Not applicable.

**Data Availability Statement:** Not applicable.

**Conflicts of Interest:** The authors declare no conflict of interest.

## Notes

- 1 <https://www.diplomatie.gouv.fr/de/frankreichs-beziehungen-zu-deutschland-osterreich-und-der-schweiz/bilaterale-beziehungen-zu-deutschland/der-deutsch-franzosische-kooperationsvertrag-von-aachen/> (accessed on 8 March 2021).
- 2 Similarly, Montrul (2016, p. 42) stated that “[a]lthough language proficiency often correlates with dominance, it cannot be entirely equated with it.”
- 3 On the acquisition of generic NPs by French–German adults, cf. Barton (2016).
- 4 Years; months, days.
- 5 cf. Berkele (1983) for a list of nouns and NPs in the appendix for this child.
- 6 The studies by Köppe (1997, chp. 4) and Schlyter (1987, p. 35) found much more code-mixing in the same and in other children of the DUFDE project. Notice, however, that these studies included intersentential mixing for which researchers have advanced doubts as to their status as code-mixed utterances (cf. Section 5.2).
- 7 Marty (2001) observed, in a corpus of 6390 French verbs, that only 9.6% exhibit an audible distinction between the third-person singular and the third-person plural forms.
- 8 Only 1.54% of French nouns and adjectives have an audible plural marking (Marty 2001, p. 217).
- 9 A total of 65.26% of French nouns and adjectives have the same oral form in the masculine and the feminine (Marty 2001, p. 218).

- 10 Examples such as *l'église* ("the church") with an elided definite article and *cet ami/cette amie* ("this friend (boy)"/"this friend (girl)") are exceptions.
- 11 Importantly, though, it has been shown that an HL does not necessarily correspond to the weak language. First of all, a weak language can be defined as a language that is weaker than the other language with respect to different linguistic dimensions within one bilingual individual when it comes to the pace and degree of a comparative qualitative criterion in acquisition. Another interpretation of the term is that a weak language corresponds to a language that develops later and less proficiently in bilinguals as compared to monolingual peers (Cantone et al. 2008, p. 312f.). One central problem in research is that this notion is not used unequivocally. In some studies, the weak language is equated with less competence (e.g., Bernardini and Schlyter 2004), whereas in others, the two concepts are unrelated (e.g., Cantone et al. 2008).
- 12 The interactional potential can be defined as "the child's possibility to speak the respective language(s) depending on the number of people and the number of different contexts" (Arnaus Gil et al. 2020c, p. 8).
- 13 In fact, what this child seems to do in French is to systematically respond in German. In this respect, one could argue that her German utterances in the French recordings cannot be considered examples of intersentential CS, but rather cases of turn-specific CS (cf. Sivakumar et al. 2020a).
- 14 In mixed DPs, adjective placement appears to be influenced by the language of the noun (German nouns only occur with prenominal French adjectives; French nouns are accompanied by German pre- or postnominal adjectives) in all (also unbalanced) children (Arnaus Gil et al. 2012).
- 15 The accuracy rate for French as an ML in a trilingual child reached 97.1% (Hüppop 2019, p. 179f.).
- 16 Elsewhere forms are forms that take the third-person singular form yet are used in child acquisition with other French clitic subjects apart from the third-person singular clitic subjects (cf. Ferdinand 1996).

## References

- Aalberse, Suzanne, Ad Backus, and Peter Muysken. 2019. *Heritage Languages. A Language Contact Approach*. Amsterdam: Benjamins.
- Arnaus Gil, Laia, and Natascha Müller. 2018. French postverbal subjects: A comparison of monolingual, bilingual, trilingual and multilingual French. *Languages* 3: 29. [CrossRef]
- Arnaus Gil, Laia, Nadine Eichler, Veronika Jansen, Marisa Patuto, and Natascha Müller. 2012. The syntax of mixed DPs containing an adjective. Evidence from bilingual German-Romance (French, Italian, Spanish) children. In *Proceedings from the Hispanic Linguistics Symposium 2010*. Edited by Kimberly L. Geeslin and Manuel Díaz-Campos. Somerville: Cascadilla Press, pp. 242–57.
- Arnaus Gil, Laia, Natascha Müller, Marina Hüppop, Meike Poeste, Elena Scalise, Nadine Sette, Abira Sivakumar, Mabel Tirado Espinosa, and Katharina Sonja Zimmermann. 2019. *Frühkindlicher Trilinguismus: Französisch, Spanisch, Deutsch*. Tübingen: Narr.
- Arnaus Gil, Laia, Johanna Stahnke, and Natascha Müller. 2020a. On the acquisition of French (null) subjects and (in)definiteness: Simultaneous and early sequential bi-, tri- and multilinguals. *Probus*. [CrossRef]
- Arnaus Gil, Laia, Katharina Sonja Zimmermann, Mabel Tirado Espinosa, and Natascha Müller. 2020b. The acquisition of French adjective placement in monolingual, bilingual, trilingual and multilingual children: A robust syntactic domain. Submitted.
- Arnaus Gil, Laia, Natascha Müller, Nadine Sette, and Marina Hüppop. 2020c. Active bi- and trilingualism and its influencing factors. *International Multilingual Research Journal* 15: 1–22. [CrossRef]
- Auger, Julie. 1995. Les clitiqes pronominaux en français parlé informel: Une approche morphologique. *Revue québécoise de linguistique* 24: 21–60. [CrossRef]
- Baker, Mark. 2008. The macroparameter in a microparametric world. In *The Limits of Syntactic Variation*. Edited by Theresa Biberauer. Amsterdam: Benjamins, pp. 351–73.
- Barton, Dagmar. 2016. Generische Nominalphrasen bei deutsch-französischer Zweisprachigkeit. Zur Verwendung des Definitartikels bei erwachsenen Herkunftssprechern. Ph.D. dissertation, Universität Hamburg, Hamburg, Germany.
- Bayram, Fatih. 2013. Acquisition of Turkish by Heritage Speakers: A Processability Approach. Ph.D. dissertation, University of Newcastle, Newcastle upon Tyne, UK. Unpublished work.
- Benmamoun, Elabbas, Silvina Montrul, and Maria Polinsky. 2013. Heritage languages and their speakers: Opportunities and challenges for linguistics. *Theoretical Linguistics* 39: 129–81. [CrossRef]
- Berkele, Gisela. 1983. Die Entwicklung des Ausdrucks von Objektreferenz am Beispiel der Determinanten. Eine empirische Untersuchung zum Spracherwerb bilingualer Kinder (Französisch/Deutsch). Staatsexamensarbeit, Universität Hamburg, Hamburg, Germany. Unpublished work.
- Bernardini, Petra, and Suzanne Schlyter. 2004. Growing syntactic structure and code-mixing in the weaker language: The Ivy Hypothesis. *Bilingualism: Language and Cognition* 7: 49–69. [CrossRef]
- Biberauer, Theresa, Anders Holmberg, Ian Roberts, and Michelle Sheehan. 2014. Complexity in comparative syntax: The view from modern parametric theory. In *Measuring Grammatical Complexity*. Edited by Frederik J. Newmeyer and Laurel B. Preston. Oxford: Oxford University Press, pp. 103–27.
- Bibis, Nick, and Yves Roberge. 2004. Marginal clitics. *Lingua* 114: 1015–34. [CrossRef]
- Birdsong, David. 2014. Dominance in bilingualism: Foundations of measurement, with insights from the study of handedness. In *Language Dominance in Bilinguals: Issues of Operationalization and Measurement*. Edited by Carmen Silva-Corvalán and Janine Treffers-Daller. Cambridge: Cambridge University Press, pp. 85–105.

- Bonnesen, Matthias. 2009. The status of the “weaker” language in unbalanced French/German bilingual language acquisition. *Bilingualism: Language and Cognition* 12: 177–92. [CrossRef]
- Cantone, Katja F., Tanja Kupisch, Natascha Müller, and Katrin Schmitz. 2008. Rethinking language dominance. *Linguistische Berichte* 215: 307–43.
- Chomsky, Noam. 1981. *Lectures on Government and Binding. The Pisa Lectures*. Dordrecht: Foris.
- Chomsky, Noam. 1995. *The Minimalist Program*. Cambridge: MIT Press.
- Chomsky, Noam. 2007. Three factors in language design. *Linguistic Inquiry* 36: 1–22. [CrossRef]
- Collings, Andreas. 1990. The acquisition of morphology and syntax in German child language. In *Two First Languages. Early Grammatical Development in Bilingual Children*. Edited by Jürgen M. Meisel. Dordrecht: Foris, pp. 23–45.
- De Cat, Cecile. 2002. *French Dislocations*. Oxford: Oxford University Press.
- Déprez, Viviane, and Amy Pierce. 1993. Negation and functional projections in early grammar. *Linguistic Inquiry* 24: 25–67.
- Destatis. 2020. Bevölkerung und Migrationshintergrund—Ergebnisse des Mikrozensus 2019. Fachserie 1, Reihe 2.2. Available online: [https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Bevoelkerung/Migration-Integration/Publikationen/\\_publikationen-innen-migrationshintergrund.html;jsessionid=58BC3ACE665E83A7746BAECAB1B36684.internet8712](https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Bevoelkerung/Migration-Integration/Publikationen/_publikationen-innen-migrationshintergrund.html;jsessionid=58BC3ACE665E83A7746BAECAB1B36684.internet8712) (accessed on 13 July 2021).
- Diabalick, Tim, Pedro Guijarro-Fuentes, and Katrin Schmitz. 2020. Tense and aspect in Spanish heritage speakers living in Germany. In *New Trends in Language Acquisition Within the Generative Perspective, Studies in Theoretical Psycholinguistics*. Edited by Pedro Guijarro-Fuentes and Cristina Suárez-Gómez. Dordrecht: Springer, pp. 49–70. [CrossRef]
- Dunn, Lloyd M., Claudia M. Thériault-Whalen, and Leota M. Dunn. 1993. *Échelle de Vocabulaire en Images Peabody*. Toronto: Pearson.
- Eichler, Nadine. 2011. *Code-Switching bei Bilingual aufwachsenden Kindern: Eine Analyse der Gemischtsprachlichen Nominalphrasen unter Besonderer Berücksichtigung des Genus*. Tübingen: Narr.
- Eichler, Nadine. 2015. Code-Switching und Psycholinguistik. In *Code-Switching: Spanisch, Italienisch, Französisch. Eine Einführung*. Edited by Natascha Müller, Laia Arnaus Gil, Nadine Eichler, Jasmin Geveler, Malin Hager, Veronika Jansen, Marisa Patuto, Valentina Repetto and Anika Schmeißer. Tübingen: Narr, pp. 319–49.
- Eichler, Nadine, and Natascha Müller. 2012. The derivation of mixed DPs: Mixing of functional categories in bilingual children and in second language learners. In *Comparative Perspectives to Language Acquisition: A tribute to Clive Perdue*. Edited by Marzena Watorek, Sandra Benazzo and Maya Hickmann. Bristol: Multilingual Matters, pp. 263–81.
- Eichler, Nadine, Malin Hager, and Natascha Müller. 2012a. Code-switching within the DP and gender assignment in bilingual children: French, Italian, Spanish and German. *Zeitschrift für französische Sprache und Literatur* 122: 227–58.
- Eichler, Nadine, Veronika Jansen, and Natascha Müller. 2012b. Gender in French-German, Italian-German, Spanish-German and Italian-French children. *International Journal of Bilingualism* 17: 550–72. [CrossRef]
- Ferdinand, R. Astrid. 1996. *The Development of Functional Categories. The Acquisition of the Subject in French*. The Hague: Holland Academic Graphics.
- Geveler, Jasmin, Laia Arnaus Gil, and Natascha Müller. 2018. The acquisition of variation: Romance adjective placement in bilingual children. In *Romance Languages and Linguistic Theory 13: Selected Papers from ‘Going Romance’ 29, Nijmegen*. Edited by Janine Berns, Haike Jacobs and Dominique Nouveau. Amsterdam: Benjamins, pp. 143–57.
- Hager, Malin. 2014. *Der Genuserwerb bei Mehrsprachig Aufwachsenden Kindern—Eine Longitudinale Untersuchung Bilingualer und Trilingualer Kinder der Sprachenkombinationen Deutsch-Französisch/Italienisch/Spanisch, Französisch-Italienisch/Spanisch und Deutsch-Spanisch-Katalanisch*; Wuppertal: Bergische Universität Wuppertal. Available online: <http://elpub.bib.uni-wuppertal.de/edocs/dokumente/fba/romanistik/diss2014/hager/da1401.pdf> (accessed on 13 July 2021).
- Heinen, K. Sabine, and Helga Kadow. 1990. The acquisition of French by monolingual children: A review of the literature. In *Two First Languages. Early Grammatical Development in Bilingual Children*. Edited by Jürgen M. Meisel. Dordrecht: Foris, pp. 47–71.
- Heinze, Yasmin. 2017. Die Stellung von französischen Adjektiven im Input bilingual deutsch-französischer Kinder. Bachelor’s thesis, Bergische Universität Wuppertal, Wuppertal, Germany. Unpublished work.
- Hoff, Erika. 2003. The specificity of environmental influence: Socioeconomic status affects early vocabulary development via maternal speech. *Child Development* 74: 1368–78. [CrossRef]
- Hoff, Erika. 2006. How social contexts support and shape language development. *Developmental Review* 26: 55–88. [CrossRef]
- Hoffmann, Charlotte, and Anat Stavans. 2007. The evolution of trilingual codeswitching from infancy to school age: The shaping of trilingual competence through dynamic language dominance. *International Journal of Bilingualism* 11: 55–72. [CrossRef]
- Hüppop, Marina. 2019. Erwerb der französischen Genusmarkierung bei einem trilingualen Kind. In *Trilinguismus. Eine Einführung mit den Sprachen Deutsch, Französisch, Katalanisch und Spanisch*. Edited by Laia Arnaus Gil, Natascha Müller, Marina Hüppop, Meike Poeste, Elena Scalise, Nadine Sette, Abira Sivakumar, Mabel Tirado Espinosa and Katharina Sonja Zimmermann. Tübingen: Narr, pp. 177–84.
- Jansen, Veronika. 2015. *Dislokation im bilingualen Erstspracherwerb. Eine Untersuchung am Beispiel deutsch-französischer Kinder*. Berlin: De Gruyter.
- Jekat, Susanne. 1985. Die Entwicklung des Wortschatzes bei bilingualen Kindern (Französisch/Deutsch) in den ersten vier Lebensjahren. Master’s thesis, Universität Hamburg, Hamburg, Germany. Unpublished work.
- Jekat, Susanne, and Lilian Dutoit. n.d. *Vocabulary Development in Bilingual Children*. Winterthur: ZHAW Zurich University of Applied Sciences at Winterthur, Manuscript to Appear.

- Kaiser, Georg. 1992. *Die klitischen Personalpronomina im Französischen und Portugiesischen. Eine synchronische und diachronische Analyse*. Vervuert: Frankfurt.
- Kaiser, Georg. 1994. More about INFL-lection: The acquisition of personal pronouns in French. In *Bilingual First Language Acquisition. French and German Grammatical Development*. Edited by Jürgen M. Meisel. Amsterdam: Benjamins, pp. 131–59.
- Kayne, Richard S. 2000. *Parameters and Universals*. New York: Oxford University Press.
- Kayne, Richard S. 2005. Some notes on comparative syntax, with special reference to English and French. In *The Oxford Handbook of Comparative Syntax*. Edited by Guglielmo Cinque and Richard S. Kayne. New York: Oxford University Press, pp. 3–69.
- Klinge, Swantja. 1990. Prepositions in bilingual language acquisition. In *Two First Languages. Early Grammatical Development in Bilingual Children*. Edited by Jürgen M. Meisel. Dordrecht: Foris, pp. 123–54.
- Koehn, C. 1994. The acquisition of gender and number morphology within NP. In *Bilingual First Language Acquisition. French and German Grammatical Development*. Edited by Jürgen M. Meisel. Amsterdam: Benjamins, pp. 29–51.
- Köppe, Regina. 1997. *Sprachentrennung im frühen bilingualen Erstspracherwerb Französisch/Deutsch*. Tübingen: Narr.
- Krumreihn, Jana. 2016. Erwerb der Subjekt-Verb-Kongruenz im Französischen eines bilingualen Kindes. Bachelor's thesis, Bergische Universität Wuppertal, Wuppertal, Germany. Unpublished work.
- Krumreihn, Jana. 2019. Erwerb der Subjekt-Verb Kongruenz bei mehrsprachigen Kindern mit Französisch als Erstsprache. Master's thesis, Bergische Universität Wuppertal, Wuppertal, Germany. Unpublished work.
- Kupisch, Tanja. 2006. *The Acquisition of Determiners in Bilingual German-Italian and German/French Children*. München: Lincom Europa.
- Kupisch, Tanja, and Jason Rothman. 2018. Terminology matters! Why difference is not incompleteness and how early child bilinguals are heritage speakers. *International Journal of Bilingualism* 22: 564–82. [[CrossRef](#)]
- Kupisch, Tanja, Deniz Akpınar, and Antje Stöhr. 2013. Gender assignment and gender agreement in adult bilinguals and second language learners of French. *Linguistic Approaches to Bilingualism* 3: 150–79. [[CrossRef](#)]
- Kupisch, Tanja, Dagmar Barton, Katja Hailer, Ewgenia Klaschik, Ilse Stangen, Tatjana Lein, and Joost van de Weijer. 2014a. Foreign accent in adult simultaneous bilinguals. *Heritage Language Journal* 11: 123–50. [[CrossRef](#)]
- Kupisch, Tanja, Tatjana Lein, Dagmar Barton, Dawn Judith Schröder, Ilse Stangen, and Antje Stöhr. 2014b. Acquisition outcomes across domains in adult simultaneous bilinguals with French as weaker and stronger language. *Journal of French Language Studies* 24: 347–76. [[CrossRef](#)]
- Lein, Tatjana, Tanja Kupisch, and Joost van de Weijer. 2016. Voice onset time and global foreign accent in German-French simultaneous bilinguals during adulthood. *International Journal of Bilingualism* 20: 732–49. [[CrossRef](#)]
- Longobardi, Giuseppe. 2001. Formal syntax, diachronic minimalism, and etymology: The history of French *chez*. *Linguistic Inquiry* 32: 275–302. [[CrossRef](#)]
- Marty, Fernand. 2001. Les signaux morphologiques du français parlé. *Le Français Moderne* LXIX: 211–40.
- Meisel, Jürgen M. 1989. Early differentiation of languages in bilingual children. In *Bilingualism Across the Lifespan: Aspects of Acquisition, Maturity, and Loss*. Edited by Kenneth Hyltenstam and Lorraine Obler. Cambridge: Cambridge University Press, pp. 13–40.
- Meisel, Jürgen M. 1990. INFL-lection: Subjects and subject-verb agreement. In *Two First Languages. Early Grammatical Development in Bilingual Children*. Edited by Jürgen M. Meisel. Dordrecht: Foris, pp. 237–98.
- Meisel, Jürgen M. 1994. Getting FAT: Finiteness, agreement and tense in early grammars. In *Bilingual First Language Acquisition. French and German Grammatical Development*. Edited by Jürgen M. Meisel. Amsterdam: Benjamins, pp. 89–129.
- Meisel, Jürgen M. 1997. The acquisition of the syntax of negation in French and German: Contrasting first and second language development. *Second Language Research* 13: 227–63. [[CrossRef](#)]
- Montrul, Silvina. 2010. Current issues in heritage language acquisition. *Annual Review of Applied Linguistics* 30: 3–23. [[CrossRef](#)]
- Montrul, Silvina. 2012. Is the heritage language like a second language? *EUROSLA Yearbook* 12: 1–29. [[CrossRef](#)]
- Montrul, Silvina. 2016. *The Acquisition of Heritage Languages*. Cambridge: Cambridge University Press.
- Müller, Natascha. 1990. Developing two gender assignment systems simultaneously. In *Two First Languages. Early Grammatical Development in Bilingual Children*. Edited by Jürgen M. Meisel. Dordrecht: Foris, pp. 193–234.
- Müller, Natascha. 1993. *Komplexe Sätze. Der Erwerb von COMP und von Wortstellungsmustern bei Bilingualen Kindern (Französisch/Deutsch)*. Tübingen: Narr.
- Müller, Natascha. 1994. Gender and number agreement within DP. In *Bilingual First Language Acquisition. French and German Grammatical Development*. Edited by Jürgen M. Meisel. Amsterdam: Benjamins, pp. 53–88.
- Müller, Natascha, and Antje Pillunat. 2008. Balanced bilingual children with two weak languages: A French-German case study. In *First Language Acquisition of Morphology and Syntax: Perspectives across Languages and Learners*. Edited by Pedro Guijarro-Fuentes, María Pilar Larrañaga and John Clibbens. Amsterdam: Benjamins, pp. 269–94.
- Müller, Natascha, and Katrin Schmitz. 2020. Mehrsprachigkeit von Geburt an: Vorteile, Schwierigkeiten und Wege. In *Frühe Kindheit*. Edited by Rita Braches-Chyrek, Charlotte Röhrer, Heinz Sünker and Michaela Hopf. Leverkusen: Budrich, pp. 215–29.
- Müller, Natascha, Laia Arnaus Gil, Nadine Eichler, Jasmin Geveler, Malin Hager, Veronika Jansen, Marisa Patuto, Valentina Repetto, and Anika Schmeißer. 2015. *Code-Switching: Französisch, Italienisch, Spanisch. Eine Einführung*. Tübingen: Narr.
- Müller, Natascha, Tanja Kupisch, Katrin Schmitz, and Katja F. Cantone. 2011. *Einführung in die Mehrsprachigkeitsforschung*. Tübingen: Narr.
- Paradis, Johanne, and Fred Genesee. 1997. On continuity and the emergence of functional categories in bilingual first language acquisition. *Language Acquisition* 6: 91–124. [[CrossRef](#)]

- Parodi, Teresa. 1990. The acquisition of word order regularities and case morphology. In *Two First Languages. Early Grammatical Development in Bilingual Children*. Edited by Jürgen M. Meisel. Dordrecht: Foris, pp. 157–90.
- Patuto, Marisa, Malin Hager, Laia Arnaus Gil, Nadine Eichler, Veronika Jansen, Anika Schmeißer, and Natascha Müller. 2014. Child-external and -internal factors in bilingual code-switching: Spanish, Italian, French and German. In *Language Contact around the Globe. Proceedings of the LCTG3 Conference*. Edited by Amei Koll-Stobbe and Sebastian Knospe. Frankfurt am Main: Lang, pp. 191–209.
- Picallo, M. Carme, ed. 2014. *Linguistic Variation in the Minimalist Framework*. Oxford: Oxford University Press.
- Pinker, Steven, and Ray Jackendoff. 2005. The faculty of language: What's special about it? *Cognition* 95: 201–36. [CrossRef]
- Poeste, Meike, Natascha Müller, and Laia Arnaus Gil. 2019. Code-mixing and language dominance: Bilingual, trilingual and multilingual children compared. *International Journal of Multilingualism* 16: 459–91. [CrossRef]
- Polinsky, Maria, and Gregory Scontras. 2019. Understanding heritage languages. *Bilingualism: Language and Cognition* 23: 4–20. [CrossRef]
- Quay, Suzanne. 2001. Managing linguistic boundaries in early trilingual development. In *Trends in Bilingual Acquisition*. Edited by Jasone Cenoz and Fred Genesee. Amsterdam: Benjamins, pp. 149–99.
- Rizzi, Silvana, Laia Arnaus Gil, Valentina Repetto, Jasmin Müller, and Natascha Müller. 2013. Adjective placement in bilingual Romance-Romance and Romance-German children. *Studia Linguistica* 67: 123–47. [CrossRef]
- Roberge, Yves. 1990. *The Syntactic Recoverability of Null Arguments*. Montréal: McGill-Queen's University Press.
- Romaine, Suzanne. 1995. *Bilingualism*. Oxford: Blackwell.
- Ronjat, Jules. 1913. *Le Développement du Langage Observé chez un Enfant Bilingue*. Paris: Champion.
- Rothman, Jason. 2009. Understanding the nature and outcomes of early bilingualism: Romance languages as heritage languages. *International Journal of Bilingualism* 13: 155–63. [CrossRef]
- Rothman, Jason, and Janine Treffers-Daller. 2014. A prolegomenon to the construct of the native speaker: Heritage speaker bilinguals are natives too! *Applied Linguistics* 35: 93–98. [CrossRef]
- Scalise, Elena, Johanna Stahnke, and Natascha Müller. 2021. Parameter setting and acceleration: Subject omission in a trilingual child with special reference to French. Submitted.
- Schlyter, Suzanne. 1987. Language mixing and linguistic level in three bilingual children. *Scandinavian Working Papers on Bilingualism* 7: 29–48.
- Schlyter, Suzanne. 1990. The acquisition of tense and aspect. In *Two First Languages. Early Grammatical Development in Bilingual Children*. Edited by Jürgen M. Meisel. Dordrecht: Foris, pp. 87–121.
- Schmeißer, Anika, Malin Hager, Laia Arnaus Gil, Veronika Jansen, Jasmin Geveler, Nadine Eichler, Marisa Patuto, and Natascha Müller. 2016. Related but different: The two concepts of language dominance and language proficiency. In *Language Dominance in Bilinguals: Issues of Operationalization and Measurement*. Edited by Carmen Silva-Corvalán and Janine Treffers-Daller. Cambridge: Cambridge University Press, pp. 36–65. [CrossRef]
- Schmitz, Katrin, and Anna-Lena Scherger. 2017. Effects of age and education on variable but native heritage grammars: Theoretical and empirical implications for the Null Subject Parameter. *Applied Linguistics Review* 10: 443–67. [CrossRef]
- Seifert, Nadine. 2017. Intracententiale und intersententiale Sprachmischungen bei einem trilingualen Kind (Französisch-Spanisch-Italienisch) im Französischen. BA thesis, Bergische Universität Wuppertal, Wuppertal, Germany. Unpublished work.
- Silva-Corvalán, Carmen. 1994. *Language Contact and Change: Spanish in Los Angeles*. Oxford: Clarendon.
- Sivakumar, Abira, Natascha Müller, and Laia Arnaus Gil. 2020a. Code-mixing in the weak language: A case study of the simultaneous acquisition of French, Italian and Spanish. In *New Trends in Language Acquisition within the Generative Perspective*. Edited by Carla Suárez-Gómez and Pedro Guijarro Fuentes. Berlin: Springer.
- Sivakumar, Abira, Nadine Sette, Natascha Müller, and Laia Arnaus Gil. 2020b. Die Entwicklung des rezeptiven Wortschatzes bei bi-, tri- und multilingual aufwachsenden Kindern. *Linguistische Berichte* 263: 229–64.
- Stenzel, Achim. 1994. Case assignment and functional categories in bilingual children: Routes of development and implications for linguistic theory. In *Bilingual First Language Acquisition. French and German Grammatical Development*. Edited by Jürgen M. Meisel. Amsterdam: Benjamins, pp. 161–208.
- Taeschner, Traute. 1983. *The Sun is Feminine: A Study on Language Acquisition in Bilingual Children*. Berlin: Springer.
- Veh, Birgitta. 1990. Syntaktische Aspekte des Code-Switching bei bilingualen Kindern (Französisch-Deutsch) im Vorschulalter. Staatsexamensarbeit, Universität Hamburg, Hamburg, Germany. Unpublished work.
- Volterra, Virginia, and Traute Taeschner. 1978. The acquisition and development of language by bilingual children. *Journal of Child Language* 5: 311–26. [CrossRef]
- Wei, Li. 2000. *The Bilingualism Reader*. Edited by Li Wei. London: Routledge, pp. 3–25.
- Weinreich, Uriel. 1970. *Languages in Contact. Findings and Problems*. The Hague: Mouton.