# Do children with a migrant background develop language deficits in their first or... 

Linguistics, Language Acquisition

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1. Introduction The issues of globalisation and hence immigration are everincreasing topics in Europe. Only recently it was stated that every second student is supposed to have sufficient knowledge of at least one foreign language at the age of 15 . An action plan formulated by the European Commission for the years 2004-2006 shows the importance of languages as means for integration and cultural awareness. " It is a priority for Member States to ensure that language learning in kindergarten and primary school is effective, for it is here that key attitudes towards other languages and cultures are formed, and the foundations for later language learning are laid. " (Commission of the European Communities 2003: 7) With reference to the educational system it is demanded that two other languages should be learned in schools under the heading of the ' life-long language learning' programme. Although today's countries are already coined by bilingualism and multilingualism the development and maintenance of different languages is still emotionally debated within politics and societies (cf. Meisel 2004: 1). This is especially the case in child language acquisition because it is assumed that different language input could negatively influence the cognitive mechanisms and that the children could be trapped between two or more unsteady developed languages. Referring to the situation of children with a migrant background the arguments on the one hand claim that the maintenance of the family language is threatened and on the other hand that the proficiency of the majority language is insufficient to interact within the environment and to proceed academically (cf. ibid.). Recalling the European Commission it is stated that because of the globalisation the knowledge of more than one language is seen as a basic skill and the
competence to communicate in languages apart from English takes on an important role. Since children with a migrant background are usually raised with various language, for instance, the family language (minority language), the language of the host country and further languages at school, they bring along apposite characteristics to become multilingual and to fulfill the goal set by the European Commission. However, these different language contacts in various settings also provide difficulties. The input from the close environment like relatives and neighbourhood shapes their language progress. As a result the children with migrant backgrounds happen to enter primary school with serious disadvantages (cf. Driessen, van der Slik \& de Bot, 2002: 176). Thus Stanat et al. (2010) reported in their presentation of the PISA tests and the compared results Introduction 6 from 2000-2009 that within Europe children with a migrant background still have considerable lacks in majority language competences compared to their monolingual peers. Because these results are often seen as consequences of insufficient language proficiency, this paper scrutinizes the bilingual development of children with a migrant background with the goal to find out how maintenance of the minority language and acquisition of the majority language are best achieved. The question is whether children with a migrant background develop language deficits in their first or second language and if so, why this happens. Thus factors which influence language development are examined whereas age as a main factor is particularly focused next to home language and formal educational impacts. Finally, it should be considered if there is something like linguistically balanced bilingualism and if it could be compared to monolingual language proficiency. The
examination paper at hand looks at cases of bilingual children who are exposed to a minority language at home and a majority language in society by birth or in early or late childhood. Furthermore the children's linguistic development is scrutinised throughout various analyses to show if probable language deficits in their first or second language persist into adulthood. At the beginning of the paper characteristics of monolingual first language acquisition are compared to adult second language acquisition including universal grammar (UG) as the underlying theory. This is done because these concepts serve as a foundation for further empirical findings regarding language development in children. Afterwards the term ' bilingualism' is defined and linked to the fact that not every bilingual input results in the successful acquisition of two actively used languages. This sets the basis for chapter 4 in which various studies and their outcome concerning incomplete language development in children mainly dependent on the age of onset of acquisition are described. In the last chapters the topics home language and language attitude are addressed because these factors receive increasing attention across research on linguistic behaviour. First and second language acquisition 7 2. First and second language acquisition To make claims about the acquisition and attrition of languages in children with a migrant background, it is important to look at the common suggestions that can be made about acquiring a first or second language and their implications for a bilingual development as the latter undergoes several alterations during the period of acquisition. Furthermore this paragraph scrutinises the role of age and the so called Critical Period Hypothesis (CPH) and its function and proposition for reaching ultimate attainment in one or more languages.

According to Meisel (2007) the main significance of first language (L1) acquisition is that it is generally successful. Typically every child fully acquires the structural features of the corresponding L1 independently from intelligence, personality and social context. Additionally the L1 is acquired nearly effortlessly without the need for any particular instructed lessons just by communicating with certain reference persons. For all learners the acquisition process takes place gradually and consistently throughout several stages regardless which language is acquired (cf. Meisel 2007: 95). In contrast to these features of L1 acquisition, foreign language learning in adults is presumed to highly vary in levels of competence in the learners and full language proficiency is rarely achieved. Thus the question is which different sources and systems children and adults draw on to acquire and use their language constructions correctly (cf. Bley-Vroman, 1990: 4). 2. 1 The Fundamental Difference Hypothesis The theory applied in this context is the Fundamental Differences Hypothesis (FDH) proposed by Bley-Vroman (1990: 3f) who has defended that child first language acquisition substantially differs from adult second language acquisition referred to as the logical problem of language acquisition and who has also looked at the role of innate devices as a part of a universal grammar (UG) leading to ultimate attainment in child language acquisition. There are 10 varieties discussed in detail by Bley-Vroman (1990: 8-10; Meisel 2011: 194) which indicate the fundamental differences. 1. 2. 3. 4. Lack of success General failure Variation in success, course, strategy Variation in goals First and second language acquisition 85 . Correlation in age and proficiency 6. Fossilization 7. Indeterminate intuitions 8. Importance of instruction 9.

Negative evidence 10. Role of affective factors Bley-Vroman (1990: 13) has claimed that the L1 is acquired due to innate principles which provide children with the capability to acquire a language with ease. Furthermore as stated by White (2003) children produce more complex output than they could imitate from their received input. The crucial point is whether these innate principles adopted from UG are accessible by adult L2 learners or if their nonavailability is the reason for the mentioned different outcomes in L1 and L2 acquisition. Meisel (2011: 194) states that if adult learners cannot access UG via their L2, they still have a fully mastered L1 where certain UG principles have been shaped and there may be some UG-related information around somewhere. Table 1, Learning mechanisms available to children and adults (partly adopted from Montrul, 2008: 46) L1 acquisition by children The Fundamental Difference Hypothesis (Bley-Vroman, 1990) Universal Grammar L2 acquisition by adults L1 knowledge Domain-specific linguistic mechanisms Domain-general cognitive mechanisms The main factors demonstrated in these remarks are that there is full access to UG for children and there might be a partial access of UG for adult L2 learners and furthermore Bley-Vroman (1990: 32f; Meisel, 2011: 195) assumes that differences emerging in children L1 acquisition and adult L2 learning are age-related according to the Critical Period Hypothesis. In the following the latter one is addressed and looked at in more detail. First and second language acquisition 92.2 The Critical Period Hypothesis Age is the most prominent factor regarding the successful acquisition of a language. Endless studies with various hypotheses have been conducted to specify the exact function of age ranges for the outcome of bilingual - or second language acquisition and why adult second
language learners hardly acquire full attainment of a language comparable to that of native speakers (Bley-Vroman 1989, Johnson\&Newport 1991, Schachter 1990; as cited in Montrul 2008: 19). Most of these studies refer to the so-called Critical Period Hypothesis (CPH) which neurolinguistically determines an endpoint of being capable of learning a language nativelike as in childhood and whose relevance is still a matter of debate. Birdsong (1999: 2 ) introduced the CPH by emphasising the fact that there would be not only one critical period for the different grammatical structures in language but more critical periods for individual structures, for instance phonology or syntax (Seliger 1978, Long 1990; as cited in ibid.) or only for pronunciation like presumed by Scovel (1988). The main goal in CPH research from the 1960's onwards has been to find significant correlations between age, cognitive maturational constraints and the possible outcome of second or foreign language acquisition to prove the hypothesis. Krashen, Long and Scarcella, 1982 (as cited in Birdsong 1999: 2) have found that children learners eventually gain a higher language proficiency than older learners who acquire a second language quicker in the first stages but have a lower ultimate competence. Due to these assumptions researchers tried to find evidence for the Critical Period Hypothesis by showing that there would be a steady decline of competences related to an increasing age of arrival and furthermore show that adult L2 learners never achieve a native-like level of language proficiency in their second or foreign language. Birdsong (1999: 10f) has taken the study of Johnson \& Newport (1989) to demonstrate research results in favour of the Critical Period Hypothesis as a reason for a lack of linguistic competence of L2 learners compared to L1 acquisition.

Johnson \& Newport conducted a study with Chinese and Koreans learning English as their L2 and who had lived in the United States for at least 5 years while their age of acquisition differed from each other. Among the variable results of the grammatical judgement task the decisive finding concerning age was that the competences did not drop linearly with increasing age but that only a certain period affected the ultimate attainment. First and second language acquisition 10 This result was derived from the observed spread of grammaticality scores regarding the subjects' age of onset of acquisition (AO) which illustrated that a stronger correlation was found in the early arrivals whereas nearly no correlation was found in late arrivals aged 17 or older. This led to the result that maturation constraints the ability to acquire a second or foreign language and admitted as evidence for the existence of a critical period in second language acquisition. Birdsong (1999: 13) has also provided arguments against the CPH by demonstrating further findings from different researches not only referring to the maturational age effect but to cases of nativelike acquisition in older learners of a second language. Van Wuijtswinkel (1994; as cited in ibid.) carried out a study with 12 year old Dutch native speakers who started learning English and was examined using a grammaticality judgement subset of Johnson and Newport (1990). The result was that Johnson \& Newport attested native-like competence to 8 of 26 participants in a first group and 7 of 8 participants in a second group of learners. White and Genesee (1996) investigated on French native speakers acquiring English. They tested the subjects on different screening measures and assigned 45 participants nativelike performance in wh-extraction question building and judging grammaticality of wh-movements. 16 of the 45
participants were again aged 12 or older at their first contact with English. As a last example Birdsong (1992) scrutinised the French language acquisition of 20 native English speakers exposed to the language after puberty (range $11-28$ years) and who were living at least 3 years in France with a mean age of arrival at 28.5 years (range 19-48). When judging highly French specific, syntactic structures 6 of the 20 participants achieved a native-like score compared with native speakers (Birdsong 1999: 13). First and second language acquisition 11 2. 2 Universal Grammar and language attrition As universal grammar was already mentioned before when talking about differences in first and second language acquisition it can further be elaborated to provide a basis for research on language attrition as stated in Schmid (2002: 17). In order to stress the causal relation between change in universal grammar and resulting attrition, the principles and parameter view has to be looked at. Chomsky's concept of UG includes specified principles in every learner for every language and open parameters which are defined during the progress of acquisition according to individual languages (Chomsky, 1981; Seliger \& Vago, 1991; as cited in ibid.). Within the theory it is presumed that these parameters prefer a certain value or are set to a default, not marked setting (Sharwood Smith \& van Buren 1991; as cited in Schmid: 17). This approach has led to various studies referring to L1 and L2 acquisition raising questions about the parameters' nature such as are children born with an innate knowledge about universal properties of the linguistic system? if a parameter is set to a specific value, can that setting ever be neutralized (e. g. in L2 acquisition, if the settings for L2 differ from those of L1)? the role of markedness in this context: Can a marked
parameter be reset to an unmarked setting in L2 acquisition? (adopted from Schmid, 2002: 17) Amid the concept of L1 attrition Hakansson (1995; as cited in ibid.) suggested that a parameter gets reset to the unmarked value losing the previously carried L1 value of a grammatical feature. On the contrary Smith \& van Buren assumed another idea to explain attrition: They have argued that L1 values will continue to exist because the parameter values are shaped through input and attrition features a lack of contact and thus lack of clues for changing the setting. Hakansson (1995; as cited in ibid.: 18) implemented the parameters approach into her language attrition study on the V2rule in Swedish which is the only study in place applying the parameter hypothesis on attrition. However, she did not manage to prove that default SVO occurred in the subjects' sentence structure over inversed VS patterns. The subjects emerged to have the same distribution of SVO and VS pattern compared to unattrited Swedish monolinguals. Bilingualism 123. Bilingualism In order to identify the apparent origin of problems and concerns of children with a migrant background raised with more than one language, the term bilingualism used in the following context is further examined and explained. According to Butler and Hakuta (2006: 114) it is a difficult task to find a universal definition for a person who speaks more than one language. Questions could be asked according to the quantity and quality of the use of languages as to which linguistic structures must be controlled to which degree to count as a bilingual. Recently it is less assumed for bilinguals to have a nativelike command of both languages since fluency is complicated to measure and several individuals could count as bilinguals without being rated as native speakers. On the contrary it would
not be enough to control meaningful sentences in another language unlike stated by Haugen (1953; as cited in ibid.). This is because not every L2 learner reaches sufficient competences in a foreign language. The adopted in-between position is that individuals who have a certain level of oral and written proficiency in the two languages and are able to implement these skills for communicative purposes with speakers of one or more languages in their environment can be rated as bilinguals (Butler \& Hakuta, 2006: 115). 3. 1 Types of Bilingualism Becoming bilingual is a difficult process including complex aspects in the fields of psychological and socio-cultural linguistic competences (ibid.: 114). Within this process several factors play significant roles to achieve full command of the corresponding languages. Montrul (2008: 17) refers to the most influencing factors as "(1) age of acquisition (early in childhood versus late after puberty), and (2) order or sequence of acquisition in childhood (two languages being acquired simultaneously versus one language being acquired successively, after the other)" Because of the on-going discussion dependant on the age of acquisition whether a second language is seen as part of the L1 acquired early or a as a separate L2 acquired late, the field of second language acquisition also influences the studies on bilingualism (cf. ibid.). Bilingualism 13 Figure 1 taken from Montrul (2008: 18), portrays the various shapes and possible ranges of acquisition. Simultaneous and sequential bilingual acquisition can both be early and happen before puberty. Simultaneous bilingual acquisition is also Figure 1 Types of bilingualism by age and sequence of acquisition (Montrul 2008: 18) labelled as bilingual L1 acquisition in Meisel (2004). Although he presumes that the child is exposed to two languages immediately after birth.

Sequential means that basic structures of the first language are already controlled when the child gets a second language input which usually happens around the age of 3-4. This classification also shows the overlap with second language acquisition as there is a L1 and a L2 occurring after one another. The L2 acquisition represents the sequential bilingualism which can take place early in childhood or late in adulthood. Early sequential bilingualism is identical to child L2 acquisition and as described in figure 1, lasts over a period of roughly 2 years (4-6) before school access. The subsequent late child L2 acquisition lasts through the period of primary school when the children instructively learn mostly the majority language. The last element is late sequential bilingualism which is equivalent to adult L2 acquisition characterised by previous Bilingualism 14 complete L1 acquisition and remaining stabilisation of the L1 throughout adulthood (cf. ibid.). De Houwer (2009: 4-5) has provided different definitions for bilingual first language acquisition (BFLA) and early second language acquisition (ESLA). Firstly she states that the word 'input' means speech that is received by children while ' regular input' involves almost daily language contact through interaction and catching conversations. BFLA in terms of De Houwer's definition means steady input straight after birth. The difference from Montrul above is that the time frame for ESLA is the age phase of $1 ; 6-4$ years (age $=$ year ; months) whereas formal second language acquisition is said to start at 5 or 6 when (pre-)schooling begins. These different approaches are indeed very interesting regarding later mentioned aspects of the presented studies. In the following Montrul's types of bilingualism are set as a basis. De Houwer's claims will be included into later discussions. De

Houwer (2009: 6) also raised the question if early language learning, for instance within year 1, turns out to be more like BFLA when children receive input from birth onwards or like ESLA when children start a second language at $1 ; 6$. This topic is addressed through statements of Meisel amongst others in the next paragraph. 3. 2 Nature of child L2 acquisition White (1990: 60) in a response to Bley-Vroman (1989) stated that the FDH should be applied to demonstrate differences in adult second language acquisition (aL2) versus child first language acquisition and that there could be an in-between state called child second language acquisition (cL2) with several similarities and differences to L 1 and aL2 according to the individual cL2 acquisition processes. Furthermore Meisel (2011: 211) has made certain claims about the nature of child second language acquisition due to the fact that variables like maturation and age cannot provide evidence for a sharp cut only between monolingual L1 and adult L2 acquisition at an exact point in time. Consequently it could be assumed that sequential child bilingual acquisition has both differences and similarities with L1 and aL2 acquisition (cf. ibid.). Meisel has promoted the hypothesis that cL2 learners adopt parts of their grammatical knowledge of the corresponding L1 grammar and that other linguistic knowledge would be similar to aL2 properties. Regarding the CPH as a result of influence on language acquisition by maturation and age, it has Bilingualism 15 been stressed that there is not only one period including all changes in acquisition but several sequential phases. These phases could again gather in different periods which explain why cL2 involves cognitive mechanisms of aL2 and L1 development in different degrees conditioned by the age of onset of acquisition (AO). Consequently assuming that L1 equals

L2, proficient aL2 learner have some kind of limited access to UG to build specific grammatical domains and assuming that increasing age of onset effects a decline in the chance of accessing certain structures, late cL2 acquisition has more resemblance to aL2 acquisition than early cL2 (cf. Meisel 2011: 211). Since it is not clear which age periods are affected by which critical phases, the topic of cL2 acquisition, possible resemblance to aL2 acquisition and consequences for the success of acquisition will be addressed in the part of attrition in middle/late childhood again. A study by DÃ 1 pke (1996) seizes on the idea of cL2 acquisition and includes it into the discussion of the existence of a weaker language in bilingual development. 3. 3 Incomplete Acquisition As pointed out before late bilingual language acquisition is not as successful in reaching the ultimate attainment as the L1 acquisition. Montrul (2008: 20) emphasises that an L2 progress will not reach complete linguistic competence if the input is only obtained after L1 acquisition. The incompleteness can emerge in basically two ways suggested by Sorace (1993; ibid.) namely throughout incomplete acquisition versus divergent representation. On the one hand, the interlanguage as a representation of the learner's progress from first language contact to target language competence completely misses a certain grammatical structure. Thus the learner produces contradictory utterances which are recognised as incomplete acquisition. Divergent representation, on the other hand, means that the structure is available in the interlanguage but the leaner cannot properly implement the grammatical property compared to the linguistic behaviour of a native speaker. In contrast to Sorace who claims that these phenomena are because of the maturational effects explained by the critical
period hypothesis in late bilingualism, this paper in the following adopts the view of Montrul (ibid.) concerning the case of incompleteness in early bilingual grammars that is especially featured in immigrant children. The incompleteness may also occur in both, L1 and L2, and within the time frame of the critical period which Bilingualism 16 is crucial for reaching the ultimate attainment seen in L1 and early bilingual acquisition. With regard to immigrant children fossilisation presumably appears in the event of reduced or vanished input when the family has to communicate in a new society L2 and the L1 is only used as a home language, called minority language, whereas the L2 is the major language in the host country which is used in schools and the new environment. The term incomplete acquisition henceforth defines the incomplete outcome of language acquisition or language attrition in childhood e. g. the latter may take place if the immense exposure to the L2 begins and L1 age appropriate levels of competence have not been reached. Furthermore it is substantial that synchronic occurrence of attrition and incomplete acquisition are likely to happen for different grammatical properties. Incomplete acquisition can happen, for instance, if a certain grammatical structure A emerged in the input was present in the linguistic proficiency but was never completely acquired, whilst the grammatical structure B has been learnt from input in the L1 early on and is not used anymore, maybe due to onset of L2 input and is uttered wrongly or even not at all at the current age (ibid.: 21). It is also imaginable that the incomplete acquired structure A that occurs infrequently, also undergoes the process of attrition so that the error rates get higher or the structure is not used anymore at a certain time as well. To match these statements to the
types of acquiring a language it can be said that simultaneous or sequential child bilingualism (depends on age of onset of acquisition) is open to incomplete acquisition whereas attrition can become present in child and adult bilinguals if it can be proved scientifically that the grammatical structure was available in the output earlier. In short as a next step it should be examined whether children with a migrant background develop language deficits in their weaker language as a result of developing and interrupting L2 acquisition shown in adult L2 learner or if they rather experience language loss in their L1 due to incomplete acquisition and L1 attrition. At the end it should be discussed which factors play significant roles for becoming bilingual and which ways are the best to reach maintenance of the L1 and ultimate attainment of the L2 until adulthood for minority language speaking children and with which compromises they have to deal with (ibid.: 22) As it is the aim to acquire, store and use both languages successfully, the focus is now on the minority and majority languages of children with a migrant Language acquisition and loss - the age factor 17 background and the process of attrition and incomplete acquisition depending on age and input. 4. Language acquisition and loss - the age factor Although ultimate attainment is possible to acquire when bilingualism begins early, this paper focuses on instances where the attainment is not completely mastered. First language attrition was compared to second language acquisition (e. g. Sorace, 2005; as cited in Schmid \& Dusseldorp 2010: 126) since the observed variations in linguistic behaviour resemble advanced L2 speakers. That means that certain structures occur in the output of L2 speakers and L1 attriters because they cannot access specific rules for grammatical or lexical
domains that are generally applied by monolingual speakers. The range of difference within both types of language development (L2 acquisition and L1 attrition) can vary massively regarding the ultimate degree of proficiency or loss. Several researches debate on the question if a L2 learner can become native like or only highly proficient and why some learners do not reach sufficient levels of competence. A lot of factors and variables come into play when scrutinising the acquisition of languages like internal factors (e. g. age of onset of acquisition and use of language) and external factors (e. g. emotional and attitudinal factors) (cf. ibid.). It is questioned which factors have the most impact on either the complete acquisition of a language or incomplete acquisition and being stuck on a low level of competence. Attrition as an expression relates to the alteration of the first language in a bilingual individual who is exposed to a majorly used L2. Several consequences of L1 attrition have been found which are responsible for a changed language use involving lexical or morphosyntactic levels (Schmid \& KÃๆlpke 2009; Schmitt 2004, 2010; GÃ½rel, 2007; as cited in ibid.: 127), simplification (e. g. Seliger and Vago 1991; cf. ibid.) and speakers hesitations because of insecurity and a lack of confidence (e. g. Schmid \& Beers FÃagersten, 2010; cf. ibid.). Recalling the topic of this paper, attrition is often connected with migrant populations since often they are confronted with another majority language that is used in a certain society. Due to the fact that monolingual groups mostly have a better language proficiency than individuals who have suffered from attrition a Language acquisition and loss - the age factor 18 variety of tasks could be used to measure the degree of language loss, such as: grammaticality judgements (GJT) (de Bot et al. 1991;
cf. ibid.), picture verification tasks (Tsimpli et al. 2004; cf. ibid.: 128), cloze or fill in tests (Montrul 2002; cf. ibid.) and free speech or spontaneous interaction looking for morphological, syntactic and lexical diversities (Yagmur 1997; Schmid 2002; as cited in ibid.). KÃๆpke \& Schmid (2004: 9) relate to extralinguistic aspects of the various studies of language attrition and their relevance for children with a migrant background who can be simultaneous, early or late bilinguals. The crucial point is that attrition in children means that it affects a linguistic system which is not steady yet. Several studies show that the main factors with the most impact are " the age at the onset of bilingualism and age at the onset of attrition" (ibid.). Concerning to this it has been claimed that there is matching evidence that an L1 system can in fact be harmed massively if the attrition process starts a long time before puberty (e. g. Bode 1996, Kaufmann \& Aronoff 1991, Isurin 2000; as cited in KÃๆpke \& Schmid 2004: 9). The same counts for the presented results regarding L2 attrition among children (Kuhberg 1992, Olshtain 1986; as cf. KÃๆlpke \& Schmid 2004: 10). Ventureyra \& Pallier (2004; cf. ibid.) had found in their study that children with reduced L1 input before the age of 12 had happened to be unable to maintain hardly any structure of their previously acquired L1. On the other hand various findings support the view that speakers exposed to decreased input above the age of 12 are only barely affected by attrition even if they have largely used their L2 later in life. It turns out that age seems to be an important influential factor although it is not possible to pinpoint the exact point of time when in particular attrition is more likely to take place (cf. KÃๆfpke \& Schmid 2004: 10). To gain a closer look inside these phenomena the paper subsequently
provides several studies throughout the different stages of childhood until adulthood to examine where attrition and/or incomplete acquisition occur while mainly concentrating on the factors age and input. Language acquisition and loss - the age factor 19 4. 1 Early childhood The research findings from the previous mentioned studies show that particularly the early development in children is a decisive factor for the later development of the languages. It is therefore crucial to know which role each language takes in the learners learning environment and when exposure to these language begins. Montrul (2008: 99) introduces the " unbalanced development in early childhood" as a determining distinction between monolingual and bilingual learners of languages and their possible progress in reaching ultimate attainment regarding their input and use. The problem with bilingual children can be that there is theoretically enough input to acquire both languages but it cannot be completely assured. It is rather more likely that one language evolves stronger than the other while this superiority can vary between the two languages during the acquisition process. A closer look at the bilingual speaker's family language has become a helpful approach to evaluate the different sources of language input (ibid.). 4. 1. 1 The weaker language The following studies are presented to indicate how a weaker language develops dependent on the input a child gets during early bilingual development. Montrul (2008) notes that these are cases of imbalanced progress and the destiny of the minor language, especially when the minor language is the language spoken at home not encouraged in the general public. " Because many minority language-speaking children typically fail to develop ageappropriate levels of vocabulary and grammar in the family language,
key questions arise as to the linguistic nature of these delayed and underdeveloped grammatical systems. " (Montrul 2008: 93). For instance with reference to the acquisition of a first or second language it must be questioned whether the weaker language possesses features of L1 acquisition in childhood or of the adult-like L2 acquisition (Montrul 2008: 93) regarding the different acquisition processes underlying the FDH mentioned earlier. As stated by Montrul (2008: 102) it is very difficult to completely control both languages as they are in a steady shift which is proved by Kravin (1992) who conducted a study " of an English-Finnish bilingual child living in the United States" (Montrul 2008: 102). While hearing Finnish from his mother and English from his Language acquisition and loss - the age factor 20 father, the boy quickly adapted to English when he got childcare in English at the age of $1 ; 5$. Although the family went to Finland over the summer period twice with the child aged 2;1-2; 4 and 5;1-5; 4 the boy's Finish skills decreased drastically until he was 6 years old. Consequently this case study by Kravin (1992) shows that input only provided by one parent might be not enough to stabilise the family's language knowledge against all the major language influences from the surrounding environment. It seems that some linguistic features were lost due to a continuous lack of input (attrition) and that a full linguistic ability was never reached (delayed- or incomplete acquisition). Schlyter (1993; as cited in Montrul, 2008: 102) carried out a longitudinal study with six Swedish-French bilinguals from Stockholm. Within the families they applied the one-parent-one-language approach and the children were recorded from their third age onwards every half a year while playing. There was a mix of weaker and stronger languages
as three of the six were weaker in the minority language (French) and the other three were weaker in the majority language (Swedish) since they were exposed to more input of the French-speaking parent. According to Montrul (2008: 103) the evaluation indicates that the stronger language has a significant higher accuracy percentage than the weaker language, although none of the subjects reach 100\%. Resulting from this the tested children are amid their acquisition process. It is assumed that the stronger language follows the L1 acquisition process and the weaker language the L2 acquisition process, but a statement on the further development of the weaker and stronger languages is issued within a closer look on middle and late childhood acquisition later on. Interestingly the study shows that both, not only the minority but also the majority language, are open to delayed development depending on the exposure of input (ibid.). As a last example to show possible resembling patterns of weaker simultaneous acquired languages in childhood and a second language Schleyter and Hakansson (1994), as described in Montrul (2008: 104), conducted a study to scrutinise the V2 acquisition in Swedish of children with different premises: " 5 monolinguals, 5 sequential bilinguals or child L2 learners of Swedish (4-5 year olds), and 6 simultaneous French-Swedish bilinguals ( 3 with Swedish as a stronger- and 3 as a weaker language)". V2 means that a subject-verb inversion is compulsory if the sentence is fronted by an object or adverbial and in yes-no questions, see (1) and (2) below. The canonical Language acquisition and loss - the age factor 21 sentence structure, without a topic, is S-V, as in (3) and (4). Swedish subordinate clauses do not have S-V inversion (5). Therefore Swedish sentence structures consist of (X)-V-S and

S-V-(X). (1) Nu kommer Now comes he 'He comes now' (2) Kommer han? (VS) Comes he ' Does he come?' (3) Han kommer (S-V) He comes ' He comes.' (4) Han kommer He comes ' He comes now.' han (X-V-S) nu (S-V-X) now (5) ...eftersom han inte Since he not â€šSince he is not coming...' kommer (S-Neg-V) comes The focus was on sentences with finite verbs either preceding (VS) or following (SV) the subject. Schlyter and Hakansson found that whereas the monolingual children generated $98 \%$ accurate V2 sentences, the L2 learners produced ungrammatical XSV structures. Additionally, in contrast to the monolinguals who used SV utterances nearly $60 \%$ of the time, L2 children adopted that structure in $90 \%$ of the cases. As in the study mentioned before, the simultaneous bilinguals stronger in Swedish behaved more like monolinguals as opposed to the weaker Swedish bilinguals who produced more errors like the L2 learners according to all presented structures (cf. Montrul 2008: 104). Although it is noted that even fewer correct occurrence of utterances of the L2 learners with Swedish as a weaker language have indicated that they are able to formulate those structures, they instead produced V3 (XSV) sentences that do not exist in the children's language who have a stronger competence in Swedish. This has illustrated a different grammatical system within the group of simultaneous learners between the stronger and the weaker Swedish performers that corresponds to either monolingual or child L2 acquisition (ibid.: 105). Language acquisition and loss - the age factor 22 4. 1. 2 Attrition or incomplete acquisition According to Montrul (2008: 107) the difference to adults who have fully attained their linguistic knowledge if L1 attrition arises is that children are amid their language development so that the language loss due
to decrease of L1 and increase of L2 exposure can be the process of incomplete acquisition, attrition or both. In the case of L1 attrition Montrul (2008: 109) reports on studies by Kaufman and Aronoff (1991) and Turian and Altenberg (1991) who tried to show the rapid attrition in young children immigrated into a major English environment. They portrayed the linguistic development of Michal, a fluent speaker of Hebrew who had a suitable level of Hebrew proficiency regarding her age. At 2; 7 Michal started to visit an English nursery school for three hours a day one month after having moved into the country. The attrition process began soon and Kaufman \& Aronoff concentrated on the level of code-switching measurement and created stages of attrition (1)onset of attrition; ages 2; 8-3; 1, after 4-7 months in L2 setting, (2) bilingual period: ages 3; 1-3; 2, after 7-8 months, (3) disintegration of L1: ages 3; 23; 5, after 8-11 months and (4) idiosyncratic template: ages 3; 5-4; 6, after 12-24 months in L2 environment. The characteristics of the four stages are that first the lexicon was affected when the child fitted English nouns into the Hebrew sentences. In the second stage it seemed that the child had bilingual control of the languages although there are no scientific measures to validate this kind of competence. Interestingly apart from the insertion of nouns and verbs the Hebraic syntax remains stable. At the third stage the child has a diminished use of Hebrew and broad use of English. Additional to the borrowing of verbs, now Michal even changes to nontarget like Hebrew verb forms. The fourth stage illustrates convergence to English as the verbal pattern is blended with English and Hebrew. These are the changes found in the morphosyntactic abilities. The assumptions of this and another similar study are that attrition
took place since the grammatical competence of the subjects decreased within the period of one year. However, the researchers did not manage to provide data of monolingual control groups to depict whether the corresponding grammatical structures were ageappropriately acquired so that it is not certain if the structures in question had been fully mastered before they were lost again. Due to this and the fact that the study only scrutinised isolated forms, it is rather difficult to draw a conclusion on the Language acquisition and loss - the age factor 23 amount of attrition. Without further reaching data the decrease in linguistic competence can also be through incomplete acquisition which is further described in the following studies (Montrul 2008: 111). The loss of verbal and nominal inflectional morphology was examined by Anderson (1999, 2001; cited in ibid.). The subjects were two Spanish-speaking siblings with a normal language development - Beatriz and Victoria. Immigration took place at the ages of 3; 6 (Beatriz) and 1; 6 (Victoria). The children were 4; 7 and 6; 7 when the data collection began and the longitudinal study lasted 2 years. The home language was Spanish and the children mixed Spanish and English while talking to each other at the beginning of the research, while at the end they mainly used English with each other and spoke Spanish to their parents. Only the older sibling had some literacy experience in Spanish while English literary skills evolved during the time at pre-school and the daycare centre. As mentioned before the study looked at the nominal and verbal inflection, particular in the Spanish gender agreement. There is masculine where most nouns end in —o and feminine gender mostly ending in -a, with several exceptions. The noun phrase agreement exists between the head noun, the
adjective and the determiner as shown in (11) and (12). (11) La bufanda thefem scarf-fem ' The white scarf' El coche the-mas car-mas " The yellow car' blanca white-fem Amarillo yellow-mas (12) Table 2 Percentage of gender agreement errors in the Spansih of two bilingual siblings (adopted from Anderson 1999; cited in Montrul (2008: 112) Age first recording 6; 7 4; 7 \%errors on gender agreement 0\% 8\% Age last recording 8; 5 6; 5 \%errors on gender agreement 5. 8\% 18. 2\% Beatriz Victoria Language acquisition and Ioss - the age factor 24 Errors with gender by the two siblings were made as presented in Table $X$. It can be seen that at the beginning of the recordings Beatriz - 3; 6 - behaved like a monolingual learner of Spanish her age and had no errors at all in gender agreement. Victoria generated 8\% errors at the first data collection. At the end of the study period the table shows a gradual increase in the amount of errors to $25 \%, 17.4$ and finally 18. 2 as a result of the last three sessions. Regarding the different types of bilingualism the older child may be seen as a sequential bilingual due to the age of arrival (AoA, USA 3; 6) whereas Victoria, the younger sibling, would be simultaneous bilingual (AoA 1; 6). This longitudinal study over only two years portrays that gender matching in Spanish was influenced more in Victoria - earlier AoA of English - than Beatriz. Beatriz shows first language attrition as she managed to command the agreement structure with $100 \%$ correct utterances at the beginning of the recordings and at the end she makes 5 , 8\% errors. Although this does not seem a lot it is a crucial figure because after the acquisition of gender concord, which was achieved by Beatriz, this grammatical structure should remain stable. Another benchmark is that more than 5\% gender agreement errors count as fossilisation in adult L2
learners. The case of incomplete acquisition and attrition is illustrated by the results of Victoria as seen in the table she produced $8 \%$ errors at the beginning of research and had more than twice as much errors after the two year period (ibid.: 113). Investigating the results of the error pattern of the two siblings it can be stated that the factors mentioned before, age of onset of bilingualism and time of exposure to L1 Spanish, level of Spanish proficiency before the English L2 acquisition. 4. 1. 3 The weaker language hypotheses As noted earlier and indeed is claimed in bilingual research regarding linguistic abilities is that all children are capable of acquiring more than one language without greater difficulties although some of the above mentioned studies show that in certain bilingual settings and circumstances a balanced competence of the language is hardly achieved. Although, for example, Meisel (2004; as cited in Meisel 2007: 495) investigated on the successful outcome of balanced bilingual proficiency as there are often cases where one language is weaker than the other. These non-dominant languages often occur in children in minority language Language acquisition and loss - the age factor 25 environments where input from a larger community is limited and thus language attrition and finally incomplete acquisition are more likely to emerge (Montrul 2008: 123). Meisel (2007: 498f) points out that there are difficulties with defining the term weaker as it can basically refer to the grammatical structures or the preferred use of one language over the other. In the following the term refers to the firstmentioned grammatical structures and this problem is addressed at the end of this paragraph again. Recalling the factors that were dealt with regarding language acquisition namely age of acquisition and quantity and quality of
input, it seems to be due to this variables that language dominance changes more quickly in children than in adults. Consequently on the one hand there is the human language faculty which can handle various languages in childhood early on and on the other hand there are different findings on the topic of which competences are genuinely acquired until the age of 45 and how stable the individual structures are (Montrul 2008: 123). Trying to find answers to this problem it is discussed if the weaker language in simultaneous bilinguals is acquired differently than the stronger L1 because of the variable attainments of these languages. Montrul (ibid.) draws a relation " to the Critical Period Hypothesis, or the maturational constraints on language learning" affecting not only L2 acquisition but L1 attrition and incomplete acquisition as well. The Weaker Language as L2 Hypothesis was promoted by Schlyter (1993) and Schlyter and Hakansson (1994) who studied the development of inflectional morphology with French and Swedish bilinguals and found out that the stronger language followed the acquisition process of monolinguals claims that vice versa the weaker language behaves like a second language in the acquisition process. According to the Fundamental Different Hypothesis and the CPH distinguishing child L1 from adult L2 acquisition, emphasised at the beginning of this paper, it is difficult to transfer the concept of adult second language acquisition on the language acquisition of simultaneous bilingual children. This suggestion is also what the critics of Schlyter's idea contradict (Montrul 2008: 124, Meisel 2007). It is focused that child L1 learners have access to universal grammar whereas adult learner receive their input through their own L1 and general problemsolving skills. Montrul (ibid.) makes clear that the reason why second
language learning in adults is not as successful as L1 acquisition in children involves the inability to reset the parameters of UG because of the existence of a critical period which adults have Language acquisition and loss - the age factor 26 already passed. By using the example of Schlyter's and Hakansson's (1994) study Montrul questions the theoretical frame of that hypothesis and especially criticises the skill of simultaneous bilingual children to access UG with the stronger L1 to become fully competent and in contrast to avoid UG with the weaker language for which the usual input domains for an L2 learner, L1 knowledge and general cognitive mechanism, are yet to be established. Because of these interdependences of access to UG, the age of acquisition and the unavailability of mechanism to acquire the weaker language as L2 are Montrul's counterarguments to the weaker language as L2 hypothesis. Meisel (2007: 501; Montrul 2008: 125) particularly focuses on Schlyter \& Hakansson's study of word order (V2, SV and VS) in Swedish and scrutinises the research results itself together with their implications for UG to prove that Schlyter's proposal is not sustainable throughout their study and that other factors might come in play. After presenting the various results and revaluating the findings Meisel (2007) points out that all the discussed word order structures even if more infrequently used than by mono- and balanced bilinguals are actually in place and that parameters are set correctly for the weaker language. Although there were some wrongly used word order structures Meisel (2007) claims that the children acquired the language successfully and set the correct UG parameters. The wrong structures are explained by delayed acquisition in the weaker language. " In brief, the foregoing discussion
suggests that the rate of development can indeed be delayed, in some cases quite seriously. Whether this can ultimately lead to incomplete acquisition in that certain phenomena that are typically acquired late will not be acquired anymore, is a question that cannot be answered, based on the available research results. For the time being, delay must be regarded as a quantitative modification of the process of acquisition" (Meisel 2007: 510). Montrul (2008: 126) states that although there are major lacks of competence within the weaker language grammar such as delay and regression, they could occur due to reduced input and only affect parts of the grammar e. g. the inflectional morphology and not the overall domain of syntax. Furthermore she proposes the weaker language as L1 hypothesis which states that despite lower level in proficiency the weaker language uses the same cognitive and linguistic means as the stronger L1 in simultaneous bilingual children. Like Montrul (ibid.) has stated before when criticising the theoretical frame of Schlyter (1993) she puts emphasis on the age Language acquisition and loss - the age factor 27 factor in early bilingual children who acquire 2 L 1 with the help of UG and innate mechanisms. The various outcomes of the weaker and stronger language depend on the input and frequency of language use and are not constraint by the lack of access to implicit learning mechanism. To continue the ideas whether the weaker language more resembles the acquisition concepts of rather L1 or L2, a third view has been proposed by DÃๆpke (1996). DÃๆpke (1996: 6) studied a sample of three German-English bilinguals raised in a one parent-one language environment. German was the weaker language and was only spoken by the mothers whereas English was the stronger majority language
spoken by the fathers, between the parents and in the overall society. The children counted as simultaneous bilinguals as they could comprehend and produce both languages spontaneously and received input of both languages every day. Recording took place twice a month for 45 minutes to one hour, one session in German and the other in English. Two children started at age 2; 0 and the third at 2; 2. The weaker language status of German has been shown by stages of progress according to the mean length of utterance suggested by Clahsen, Penke and Parodi (1993/94 as cited in ibid.: 7) in free play and interactions. To compare the found 2L1 patterns with either L1 or L2 DÃ lpke took the varying developmental stages of German acquired as L1 and L2 (Meisel 1991; Clahsen 1994; Schwartz 1991; as cited in ibid.) and demonstrated that 2 L 1 resembled L1 acquisition at the very beginning. Later on development at stage III for L1 and 2L1 versus stage I for L2 acquisition showed overlap from L1 and L2. Consequently both shaped the 2L1 progress. L1 Stage III: - S_Vfin_O - S_aux/modal_OV - pre-verbal negation always NEG_VO - cop/mod/aux_NEG - Vfin_NEG L2 Stage I: -S_Vfin_O and S_Vnonfin_O - S_aux/modal_VO - pre-verbal negation = NEG_OV cop/mod/aux_NEG - some V_NEG stereotypes 2L1 Stage III: - S_Vfin_O and S_Vnonfin_O - S_aux/modal_VO > S_aux/modal_OV - pre-verbal negation optionally NEG_VO - cop/mod/aux_NEG - Vfin_NEG and Vnonfin_NEG (adapted from DÃ 1 pke 1996: 9) Language acquisition and loss - the age factor 28 Ongoing evidence showed (for details see DÃ 1 pke 1996: 11-13) that the $2 \mathrm{L1}$ in the beginning could be compared to L 1 acquisition but during the course of development consisted of features of both L1 and L2 developmental paths which even led to delayed approval so that specific
structures in 2L1 were acquired incompletely in stage 4 but completely in stage V. The latter mentioned grammatical domain had been acquired in L1 and L2 at stage III and stage II respectively. DÃๆpke (1996: 19) as stated in her title " why 2L1 is not like L2" has demonstrated that the weaker language did not show any features in the developmental stages justifying the resemblance to count as L2 acquisition but she has not supported Montrul's view of ' the weaker language as L1' either. DÃๆpke (ibid.) has claimed " that 2L1 creates a bridge between L1 and L2: the evidence suggests that the two languages in a simultaneously bilingual context are not processed in isolation from each other, but that the children compare and contrast them. " In sum, as stated before the language system in simultaneous bilingual or early L2 acquiring children is very vulnerable to input changes and their linguistic competence undergoes rapid shifts like illustrated in the weaker and stronger language use, leading to an incomplete development in the weaker language. The questions that follow these findings is whether the so-called delayed development mentioned by Meisel (2007), can catch up and the language finally becomes fully acquired at the children's higher age or if it leads to permanent incomplete acquisition. To further amplify discussions on these issues, the influence of the weaker and stronger language use by parents at home and the impact of language support in schools will be examined. As Allen et al. (2006: 578) point out it is very difficult for bilingual children to determine which language should be used and how to maintain both, the heritage language which is spoken at home and more or less within the children's cultural society or their second, dominant language in the major society that is needed to
succeed in the educational system. Language acquisition and loss - the age factor 29 4. 2 Middle and late childhood With regard to the middle and late childhood years the progress of the weaker language and the level of L1 loss during the school period are pursued. Montrul (2008: 131) claims that a critical period for first language attrition would exist so that vulnerability to L1 loss becomes less likely with increasing age and later onset of the L2. The following studies are presented in order to find correlations between the children's age, age of onset of L2 and degree of L1 loss. As the middle childhood means that children start to attend school it will be demonstrated how different concepts of language support in schools influence the L2 acquisition and L1 maintenance by minority-speaking children. As most of the studies in general and the ones presented by Montrul (2008) took place in the USA because of the prolonged, continuing immigration from especially Spanish-speaking people, different school systems have been established which use various approaches to support language maintenance and learning (L1 and L2). The predominant model still does not support any language other than English, though. This is because the main aim has been to convey English as early as possible so that the children are able to academically succeed. The first of two types of school concepts supporting some minority languages are the transitional bilingual programmes which are limited to certain languages. This model concentrates on the first two years of primary school where children get instructions in English and the heritage language. From the third grade on the children are placed in English-only classes (cf. ibid.: 136). By this the transitional schools try to simplify the transition to English only classes through heritage language use
for a limited amount of time. Together with the English only concept transitional schools encourage the early adaption to monolingual English education. The second heritage language promoting programme is the double immersion school also called two-way bilingual school. These schools use the heritage language, mostly Spanish, in $40 \%$ of the time while English fills the other $60 \%$. This concept is realised until the fifth grade and gives the simultaneous and sequential bilingual children the chance to further progress and maintain both languages. However, it is important to note that the best and fastest way to acquire the majority language is to immerse the children into English only lessons from early on to guarantee academic achievements (cf. ibid.: 137). Language acquisition and loss - the age factor 30 In the next presented study the focus at the end lies on the validity of proficiency scores. The study was carried out by Allen (2007) who tested the development of Inuktitut which is an aboriginal language mainly spoken in Alaska, Siberia and Eastern Canada. The children are taught Inuktitut until grade 2 in schools while in grade 3 the teaching of French and English are used to convey knowledge in schools because these are the official languages. If Inuktitut has been taught further in the school settings depended on the availability of teachers. The competence of young, simultaneous bilingual children (1; 8-2; 11 years) is reported to be very nativelike and there are no significant overt lacks in language development in the grammatical domains of both, English and Inuktitut (cf. Montrul 2008: 140). Wright, Taylor \& Macarthur (2000) examined the transition from kindergarten to school for four years in 62 Inuit children. In the school setting the children either received ongoing input in Inuktitut or the exposure to

English or French began. In order to follow the shifts of the corresponding language development a test battery was used as an instrument before and after each academic year to test the children's language ability. Table 2 shows the proficiency of Inuktitut depending on the mainly used language of instruction (ibid.). Table 3 Proficiency scores (in percentages) in Inuktitut for Inuit children receiving language instruction in Inuktitut, English or French (adapted from Wright Taylor \& Macarthur; adopted from Montrul, 2008: 141). Language of N Kindergarten Grade1 Grad2 Instruction Fall Spring Fall Spring Fall Spring Inuktitut 3139.04 58. 5 57. 5572 75. 7 82. 99 English 1437.38 48. 12 26. 25 56. 13 55. 41 60. 14 French 17 36. 56 48. 2046.8457 .5456. 3065.18 At the beginning of the analyses (Kindergarten, fall) there is no considerable difference in the children's competences of Inuktitut which can be seen in the percentages $39.04-36$. 56. Afterwards from the Kindergarten test in spring onwards one could observe a significant decline in the Inuktitut competence of the Inuit children using English and French, in contrast to the children who continued to use Inuktitut as a language in school. The overall difference between the children who receive Inuktitut input and the children receiving input in English or French amounts to 20\% in the spring of grade 2. Language acquisition and loss - the age factor 31 As the validity of proficiency was mentioned before, it is important to point out that although a decrease of Inuktitut as a native language was attested as a result of increasing exposure to the majority language, Allen (2007) stated that despite these findings children became active bilinguals with Inuktitut as one language (Montrul 2008: 141). Furthermore Allen et al (2006: 593) claimed that there are on the one hand results that showed lack of
grammatical knowledge and reduced output but on the other hand some children did not show considerable language decrease in their minority language which could also be dependent on the size of their community group they can use it to interact. The question which proficiency score is the turning point in using a language actively or passively will be addressed in the conclusion again. There are several summaries of studies to follow who illustrate L1 attrition and incomplete acquisition dependent on the changing age of onset of acquisition and language support in schools. In the following analyses the focus lies on the decrease of L1 knowledge and afterwards cases of L2 incomplete acquisition are discussed in 4. 3. 4. 2. 1 L 1 attrition and school environment Merino (1983, as cited in Montrul: 141) conducted studies on Spanish- speaking children visiting English schools without encouraging the further acquisition of Spanish. Measuring the development of a range of grammatical features of English and Spanish (gender, number, tense, word order, relative clauses, conditional and subjunctive) in 41 bilingual children from age 5-10 the outcomes provide statements on the acquisition and loss regarding language production and comprehension. Findings showed gradual progress of English skills in production and comprehension from kindergarten to 4th grade but skill loss in the comprehension of Spanish in grades 3 and 4 compared to the comprehension in grade 1 and 2 although it is not that dramatic. More significantly are the results concerning production as you can observe a drastic fall in Spanish production from $84 \%$ to $65 \%$ within the school years. Referring to the detailed grammatical structures in production it turned out that the subjunctive and complex verb forms were greatly affected.

Language acquisition and loss - the age factor 32 Table 4 (Montrul 2008: 142) English L2 acquisition and Spanish L1 decline in MexicanAmerican children (adapted from Merino 1983) Production Grade K 1234 N 949109 Spanish English 56\% 52\% 84\% 86\% 71\% 75\% 77\% 81\% 65\% 86\% Spanish English 73\% 86\% 86\% 75\% 80\% 76\% 89\% 85\% 86\% 88\% Comprehension In order to see the further development, two years later Merino (1993; as cited in Montrul 2008: 142) carried out a second sample including 32 children who also participated in the first study. The methods were the same as before so that the children's comprehension and production in English and Spanish was tested. Like in the first findings the abilities in English steadily increased for all children whereas the performance in Spanish underwent further massive losses in $50 \%$ of the cases, while in $25 \%$ the children's acquisition fossilised without any further development. The grammatical structures of past tense, subjunctive and relative clauses were especially affected in the children who continued their education on English-only or transitional bilingual schools. Montrul (2008: 143) also introduces the use of home languages as indicator of successful language attrition and maintenance. Using only Spanish at home and with peers had a positive effect on the children's Spanish competence. In contrast, the use of both languages, English and Spanish, at home and with friends caused a drastic loss in the L1 competence. Consequently, it could be seen that majority language use combined with unavailable school support of the heritage language led to language shift and attrition. Introducing a further variable

