The Weaker Language in Simultaneous Bilingualism:

Why it is not like L2

Susanne Döpke Department of Linguistics Monash University 1996

* The project was funded by ARC Small Grants in 1992, 1994 (Melbourne University), 1995 and 1996 (Monash University). Since mid-1994 I have been an ARC Fellow. I gratefully acknowledge this support. Many thanks go to the families who participated in the study.

Abstract

It has been suggested (Schlyter 1993) that children growing up with two languages acquire the weaker language, usually the one that is not shared by the society at large, like a second language. This hypothesis is being investigated on the basis of empirical data from bilingual German–English–speaking children. The data suggest that the similarities of the children's German structures to those of second language learners of German are superficial. The children are not constructing their German on the basis of previously acquired English structures. Instead, the development proceeds in parallel and the English-like structures in the children's German can be explained as a result of cue competition between German and English during a stage when non-salient functional variation of word order and word morphology in middle-sentence position cannot yet be sufficiently processed. The similarities between the weaker language in simultaneous bilingualism and second language acquisition suggest similarities between first and second language acquisition rather than differences between monolingual and bilingual acquisition.

I Introduction

We talk of simultaneous bilingualism when a young child acquires two languages instead of one during the period of primary language acquisition. MacLaughlin (1978) suggested that the cutoff point for considering a child to be learning two languages simultaneously as opposed to successively be set at 3 years of age. More recently De Houwer (1990) has argued that only continuous exposure to two languages from birth on can ensure that the child is not learning one language through the other. For the purpose of systematic research of similarities and differences between monolingual first language acquisition (L1) and bilingual first language acquisition (2L1) the more stringent requirement has been adopted during the last decade (De Houwer, 1990; Meisel, ed. 1990, ed. 1994; Schlyter, 1993; Döpke, 1992, 1998, 1999a,b)

Most people agree that equitable and long-term exposure to two languages is best assured by the 'one parent-one language' approach. Ideally, children in such situations acquire both languages at an equal rate. In that case, they might acquire each of their two languages like monolingual children of the respective languages, ie. the acquisition of both languages in simultaneous bilingualism can be like L1 acquisition. A number of researchers have argued that this is the 'true' form of simultaneous bilingualism (Meisel, ed. 1990, ed. 1994; Schlyter, 1993; De Houwer, 1994).

However, much more common is the observation that one of the languages is acquired somewhat more rapidly than the other and is thus "stronger" (Leopold, 1939–49; Arnberg, 1981; Taeschner, 1983; Lanza, 1988; Saunders, 1988; Schlyter, 1993; Döpke, 1992, 1993, 1998, 1999b). The stronger language is said to develop indistinguishably from that of monolingual children of the same language background (Saunders, 1988; Schlyter, 1993), while the weaker language develops more slowly and displays a degree of lexical and structural transference from the stronger language.

Schlyter (1993) compared the weaker language of her bilingual French–Swedish subjects with Meisel's (1991) list of differences between L1 and L2 acquisition and found that these children's development of French resembled that of second language learners more than first language learners on all accounts, ie. limited ultimate attainment, slower rate of acquisition and strong individual differences, discontinuity in acquisitional patterns, and grammatical phenomena which are related to specific parameters being learned as separate facts, for example verb-second and finiteness. She concluded that the weaker language in simultaneous bilingualism is acquired in much the same way as adults acquire a second language.

The last ten years have witnessed a lively debate about the differences and similarities between first language acquisition (L1) and second language acquisition (L2). The positions vary between L1 and L2 being acquired in principally the same way and L1 and L2 being acquired in principally different ways. The underlying assumption of the 'L1 equals L2' position

is that under both language learning conditions, learners have access to an innate Universal Grammar and only the process of parameter setting is different during L1 and L2 acquisition because UG parameters have already been set for L1 and therefore need to be reset for L2 in those grammatical areas in which L2 differs from L1 (Flynn, 1984, 1987; Flynn and Espinal, 1985; White, 1983, 1985, 1986, 1989; du Plessis, Solin, Travis and White, 1986; Tomaselli and Schwartz, 1990; Schwartz, 1991, 1992).

The underlying assumption of the 'L1 doesn't equal L2' position is that L1 acquisition is guided by principles of UG, while L2 is acquired through general cognitive abilities (Clahsen, 1984, 1987, 1988 a,b, 1990; Bley-Vroman, 1990; Meisel, 1991). Clahsen (1988a) compared the acquisition of German as L1 and L2 in three UG-related areas: (a) possible grammars, (b) developmental interaction between parameters, and (c) triggering experiences for the setting of parameters. He argued that L1 and L2 acquisition differ on all three accounts.

From the position of 'L1 doesn't equal L2', the suggestion that the weaker language in simultaneous bilingualism is acquired like L2 rather than L1 means that the theoretician is freed from having to integrate 2L1 phenomena and L1 phenomena within the same theoretical framework. The difficulty with this position is the difference in developmental stage between L2 learners and 2L1 learners: why should young bilingual children at 2-years-of-age learn their two languages in radically different ways just because one of the languages is slightly ahead of the other? After all, at this age even the "stronger" language is still in an early stage of development.

In this paper, the question of the nature of the language development in the weaker language of 2L1 will be re-examined with respect to German–English bilingual children. In section 2, I will briefly discuss differences and similarities in the structure of German and English as they present themselves to the language learning child. In section 3, I will describe the children and their language background. In section 4, I will present some crucial aspects of variation between German as the weaker partner in the 2L1 acquisition context, L1 acquisition of German and L2 acquisition of German. In section 5, I will argue that crosslinguistic cue competition during the data aggregation stage prior to the correct setting of language specific parameters is responsible for the breadth of the variation found in primary language acquisition under simultaneous acquisition conditions.

II Background: structural differences and similarities between German and English

The study of the acquisition of German and English is particularly interesting because, on the surface, these two languages look identical with respect to simple syntactic structures, but the functional relationships are vastly different. This leads to clearly differentiated structures in more complex sentences (Chomsky, 1982, 1986; Deprez and Pierce, 1993; Haider, 1993).

Within the Principle and Parameter framework, English can be described as an SIVO language and German as a CSOVI language, this structural difference becoming increasingly transparent with increasing structural complexity of the utterance. The dominant position regarding German holds that, in simple sentences, the verb is raised from V^o via I^o to C^o, and the subject is raised from the specVP position via specIP to the specCP position, which can effectively result in SVO structure. Thus in simple sentences German appears to be identical in structure to English and other SVO languages (examples 1a. and 1b.).

a. English: subject[the dog] verb[bites] object[the cat]
 b. German: subject[der Hund] verb[beißt] object[die Katze]

In sentences with complex predicates, the German non-finite main verb remains in its headfinal position in the verb phrase while the finite part of the predicate is once again raised via I^o to C^{o} . German matrix clauses with complex predicates thus present as SAuxOV (2a.) while English sentences with complex predicates present as SAuxVO (2b). In more technical terms, (3a) and (3b) represent the structural relationships of the sentences depicted in (2a) and (2b).

(2) a. subject[der Hund] aux[wird]		object[die Katze]	verb[beißen]	
b.	subject[the dog]	aux[will] verb[bite]	object[the cat]	

(3) a. CP[specCP[der Hund] C'[Co[wird] IP[specIP[I'[VP[specVP[V'[die Katze Vo[beißen]] Io[t]]]
b. IP[specIP[the dog] I'[Io[will] VP[specVP[V'[Vo[bite] the cat]]]]]

The full extent of the structural difference between the CSOVI structure of German and the SIVO structure of English is only visible in subordinate clauses where due to C' being a proper governor in German the presence of a complementizer in the C^o position makes the finite part of the predicate remain in the head-final I^o position (4).

4) a. CP[specCP[C'[daß] IP[specIP[der Hund] I'[VP[specVP[V'[die Katze Vo[beißen]] Io[wird]]]
b. CP[specCP[C'[that]]] IP[specIP[the dog] I'[Io[will] VP[specVP[V'[Vo[bite] the cat]]]]

In contrast to some other SVO languages, English does not raise the main verb to I° in order for the verb to receive tense and agreement affixes in sentences with simple predicates but instead lowers the inflection affixes into the verb phrase and attaches them to the verb in its base position. This leads to a number of further structural differences between German and English in main clauses. Examples (5) and (6) show that in the presence of negation or adverbial particles both the negation and the adverbial particle precede the main verb in English, but follow it in German. (6b) further indicates that the negation blocks affix lowering. In this case a suppletive auxiliary is inserted in I° for inflection affixes to be realised.

- 5) a. $_{CP}[_{specCP}[der Hund]_{C'}[_{Co}[beißt]_{IP}[_{I'}[_{VP}[_{specVP}[oft]_{V'}[die Katze_{Vo}[t]]_{Io}[t]]]$
 - b. $_{IP}[_{specIP}[the dog]_{I'}[_{I0}[t]_{VP}[_{specVP}[often]_{V'}[_{V0}[bite+s] the cat]]]]]$
- 6) a. _{CP}[specCP[der Hund] C'[Co[beißt] NEG[nicht] IP[[I'[VP[specVP[V'[die Katze Vo[t]] Io[t]]]
 b. IP[specIP[the dog] I'[Io[does] NEG[not] VP[V'[Vo[bite] the cat]]]]]

Finally, these differences with respect to verb raising in German and English lead to German sentences featuring subject–verb inversion, more accurately called 'verb fronting', in questions (8a) or when constituents other than the subject are topicalised (7a). In English, topicalisation does not affect the SVO order (7b) and auxiliaries are obligatory in the formation of questions (8b).

7) a. $_{CP}[_{specCP}[gestern]_{C'}[_{Co}[bi\beta]_{IP}[_{specIP}[der Hund][_{I'}[_{VP}[_{V'}[die Katze_{Vo}[t]]_{Io}[t]]]$

b. $_{CP}[_{specCP}[yesterday]] _{IP}[_{specIP}[the dog] _{I'}[_{Io}[t] _{VP}[_{V'}[_{Vo}[bit] the cat]]]]]$

8) a. _{CP}[C'[Co[hat] IP[specIP[der Hund][I'[VP[specVP[V'[die Katze Vo[gebissen]] Io[t]]]

b. $_{CP}[C'[Co[did]]_{IP}[_{specIP}[the dog]]_{I'}[Io[t]]_{VP}[V'[Vo[bite]] the cat]]]]]$

The copula constitutes an exception to main verbs not being raised in English¹. Thus English sentences with copula verbs are identical in structure to German verbs, including questions, negation and topicalisation structures.

While this account of similarities and differences between German and English is by no means exhaustive, it shows that bilingual German–English–speaking children encounter identical structures in their two languages with respect to simple SVO sentences and in sentences featuring copulas as the main verb. In all other sentence types the syntactic structures of German and English are clearly differentiated.

III Method

Evidence from German as the weaker language in 2L1 is based on longitudinal data from three German–English–speaking children, two boys, JH and CW, and one girl, NS. All three children are first-born. The families have adopted the 'one parent–one language' approach. As from birth, the children were spoken to in German by their mothers, and in English by their fathers and nearly everyone else in their environment. The language of communication between the parents was English in each family. The mothers were tertiary educated native speakers of German and had made a strong commitment to speaking German with their children at all times. The mothers did not mix German and English on either the lexical or the structural level.

All three children were fully able to understand utterances addressed to them in both languages and to express themselves spontaneously in both languages before recording commenced. This and the daily exposure to both languages were considered appropriate

¹ In the variety of English the children in this study were learning, 'have' is not a raising verb.

independent evidence that the children were simultaneous bilinguals. The children's ability to express themselves spontaneously in both languages continued to develop throughout the recording period and beyond. There was no interruption in the children's exposure to German except during the few days when NS's and JH's mothers were in hospital for the birth of their second children, but each child had once experienced a temporary interruption of their exposure to English during a visit to Germany with their mother.

The children were recorded once a month from 2;0 (CW and JH) or 2;2 (NS). Data collection took place in the children's homes. Each month the children were recorded with audio and video equipment in free play or other spontaneous interaction for two sessions of

	CW	JH	NS
Stage in MLU	German English	German English	German English
I: up to 1.74	2;0–2;3 2;0–2;2		
II: 1.75–2.74	2;4–2;6 2;3–2;6	2;0–2;2	2;2–2;4 2;2–2;3
III: 2.75–3.74	2;7–2;11 2;7–2;8	2;3–2;7 2;0–2;2	2;5–3;0 2;4–2;7
IV: 3.75–4.74	3;0-4;0 2;9-3;5	2;8–3;4 2;3–2;11	3;1-3;5 2;8-3;2
V: 4.75–5.74	4;8–5;0 3;6–3;7	3;5 3;0–3;5	3;6–3;9 3;3–3;9
VI: 5.75+	4;0		

 Table 1 Stages of development

45 minutes to one hour, one session each with their German-speaking mother and an Englishspeaking caregiver. English recordings were made with CW's father, predominantly JH's grandmother, and various babysitters of NS. The length of the period for which the children were included in the study was dictated by availability. The recordings were transcribed by a research assistant and checked for accuracy by myself. Discrepancies were resolved in discussions.

Following Clahsen, Penke and Parodi (1993/94), the children's linguistic progression is expressed in stages of development as defined by the average length of their spontaneous utterances in words. Table 1 shows that the transitions between stages happened slightly earlier

in English than in German for all three children. Thus, we can say that German was the weaker language for these bilingual children. This is further supported by the fact that German structures in the children's English were minimal, although not totally absent (Döpke, 1998, 1999a, b).

IV Comparison of the development in three acquisition contexts: German L1, German L2 and German 2L1

In this section, the acquisition stages of German L1 (cf. Mills, 1985; Clahsen, 1986, 1991; Clahsen and Penke, 1992; Clahsen, Penke and Parodi 1993/94) and German L2 (cf. Clahsen, 1984, 1988a, 1988b, 1990; Clahsen and Muysken, 1986; du Plessis et al., 1987; Jordens, 1988; Tomaselli and Schwartz, 1990; Meisel, 1991; Schwartz, 1992), as reported in the literature, will be compared with the developmental progress of my bilingual German–English–speaking informants. I will highlight similarities and differences between the language development in the three acquisition contexts at each stage of language development. The stages relate to various publications by Clahsen and have been referred to by a range of other researchers (du Plessis et al., 1987; Tomaselli and Schwartz, 1990; Meisel, 1991; Schwartz, 1991, 1992).

Not surprisingly, child language acquisition starts with more rudimentary syntactic structures than does adult second language acquisition, irrespective of acquisition context. In Stages I and II (Table 2), the development of 2L1 is very similar to the development of L1. **Table 2** Initial syntax in L1 and 2L1

<u>L1</u>	<u>L2</u>	<u>2L1</u>
Stage I and II:		Stage I and II:
• preference for verb-final		• frequent verb-final
 some finite verbs in final position 		 some finite verbs in final position

Most notably, the bilingual children correctly assumed head-final structures in the German verb phrase (XP_V) (see Döpke, 1998, for detailed quantitative data). The bilingual children also produced some utterances with finite verbs in final position. While this is not a feature of adult-

German matrix clauses, such structures are found in early child language and have been taken as an indication that the theoretical assumption of the inflection parameter being head-final and of verb-second structures being a result of double raising of the verb is, in fact, correct (Meisel and Müller, 1992). Thus initially, these bilingual children appear to have assumed the correct headfinal position for both the verb and the inflection parameter just like monolingual Germanspeaking children do².

In contrast to first language learners, second language learners of German immediately start with SVO structures (Clahsen, 1984). Thus, Stage I in German L2 is comparable to Stage III in German L1 and 2L1 (Table 3). Consequently, L2 learners' initial assumption regarding German is not OV as in L1 and 2L1, but VO. This assumption crucially expresses itself in the fact that, for L2 learners, VO structures are not dependent on finiteness of the verb in utterances with simple predicates, as they are for L1 learners, and that the verb precedes the complement even when it is clearly not raised, as in sentences with complex predicates of the SAuxVO type. Logically, this also leads to NegVO in the L2 context, but only NegOV in the L1 context. VNeg configurations tend to be stereotypical in L2 at this stage, but they are the norm for utterances with simple predicates in L1.

<u>L1</u>	<u>L2</u>	<u>2L1</u>
Stage III:	Stage I:	Stage III:
• S_V _{fin} _O	• S_V _{fin} _O and S_V _{nonfin} _O	• S_V _{fin} _O and S_V _{nonfin} _O
• S_aux/modal_OV	• S_aux/modal_VO	• S_aux/modal_VO > S_aux/modal_OV
 pre-verbal negation always NEG_OV 	• pre-verbal negation = NEG_VO	• pre-verbal negation optionally NEG_VO
• cop/mod/aux_NEG	• cop/mod/aux_NEG	• cop/mod/aux_NEG
• V _{fin} _NEG	• some V_NEG stereotypes	• V _{fin} _NEG <i>and</i> V _{nonfin} _NEG

Table 3 Stage III in L1 and 2L1 versus Stage 1 in L2

 ² Haider (1993) actually differs from the dominant view on this issue in assuming that verb inflections are generated in the base position of the verb. From a point of view of child cognition this is probably sensible. I chose to use the head-final I^o description because of its greater syntactic explicitness.

 verb paradigm acquired rapidly 	 all verb forms present immediately 	 verb paradigm acquired rapidly
	 non-finite -n widely overgeneralised 	 non-finite -n widely overgeneralised

At the same stage of grammatical complexity, the children who acquired German and English simultaneously (2L1) behaved similarly to L2 learners with respect to utterances with simple predicates, that is, the pre-complement verb position was not related to finiteness (see Döpke, 1998, 1999b, for detailed quantitative data). In complex predicates, VO and OV competed during Stages III and IV, with at least half of the complex predicates being of the SAuxVO type but never less than 20% being of the SAuxOV type (see Döpke, 1998, for quantitative details). Thus, the original verb-final assumption remained visible in spite of the overgeneralisation of the VO pattern to complex predicates. Not surprisingly, NegVO and NegOV competed as well (Döpke, 1999a). The majority of negated sentences, however, featured post-verbal negation on an ever increasing variety of verbs.

A further feature of L1 development during Stage III is the rapid acquisition of the various forms of the German verb paradigm. At the same stage of grammatical complexity, all forms of the verb paradigm are immediately present in L2 acquisition, in spite of -en being widely overgeneralised. The 2L1 development resembled L1 development with respect to the appearance of the verb paradigm, which was to be expected because of the similar cognitive stage the two learner groups are in. But like second language learners, the bilingual children widely overgeneralised non-finite -en. As post-verbal negation became productive, not even VNeg was limited to finite verbs as in L1 development (Poeppel and Wexler, 1993), but also appeared with non-finite verbs.

The crucial feature of L1 development during Stage IV (Table 4) is the appearance of 2nd person singular -st as the last of the inflection affixes of the German verb paradigm. Clahsen has argued (Clahsen and Penke, 1992; Clahsen, Penke and Parodi, 1993/94) that this is the first grammatical person to be marked consistently and that its appearance triggers the consistent application of agreement features for all other grammatical persons. In contrast, the development

of consistent subject-verb agreement is protracted in the acquisition of German as a second language.

<u>L1</u>	<u>L2</u>	<u>2L1</u>
Stage IV:	Stage II:	Stage IV:
• agreement system suddenly correct, triggered by -st	• protracted development of subject-verb agreement during Phases II to IV and beyond	• agreement system not mastered until later on, in spite of -st being used
	• S_aux/modal_OV	
	• V_NEG	
	• Adv/PP preposing	• Adv preposing
	Stage III:	
• verb-fronting rule co-varies with the attainment of subject-verb agreement	• verb-fronting independent of subject-verb agreement or even finiteness	• verb-fronting independent of subject-verb agreement or even finiteness
• NEG separation from verb	• NEG separation from verb	• NEG separation from verb
• VP scrambling	• VP scrambling	• VP scrambling

 Table 4 Stages IV in L1 and 2L1 versus Stages II and III in L2

My bilingual informants also used 2nd person singular -st with higher frequency and on an ever increasing range of verbs during Stage IV. However, they failed to do so consistently until Stage V or later (Döpke, 1999b). In fact, for those bilingual children for whom subject–verb agreement had developed sufficiently during the period of recording to make claims about it, first and third person singular were marked consistently before 2nd person singular was.³

Second language learners of German re-orient the assumed direction of government in the verb phrase from SAuxVO to SAuxOV during Stage II, which I have equated with Stage IV in L1 and 2L1 because of the parallelity of other developments. In contrast, the 2L1 learners still remained undecided about verb government during Stage IV.

³ This is the case for NS, JH and a fourth child, AS, who is not included in this paper because the development of verb–object word order has not been analysed yet. CW overgeneralised -en to a degree that none of the other person affixes were used consistently during the period of recording.

A parallel development in L2 and 2L1 acquisition is the pre-posing of adverbial phrases which effectlively generates verb-third structures typical of English and other SVO languages. German monolingual children have not been reported to produce sentences with more than one constituent preceding the verb. Instead, the attainment of the verb fronting rule coincides with the productive use of -st and its trigger effect for general subject–verb agreement during Stage IV of German L1 acquisition (Clahsen and Penke, 1992; Clahsen, Penke and Parodi, 1993/94).

In the L2 context, verb-fronting becomes available in Stage III after the re-organisation of the VP to verbs in head-final position and adverb preposing in Stage II (Clahsen and Muysken, 1986). However, verb-fronting is not dependent on subject-verb agreement in L2 acquisition. Verbs with default -en in fronted position are not uncommon. In the 2L1 context, the verb-fronting rule became productive at the same level of syntactic complexity as in the L1 context but coexisted with adverb preposing during Stage IV. Similar to the L2 context, verb fronting was not dependent on subject-verb agreement and frequently featured default -en on the fronted verb.

Other developments during Stage IV of L1 and 2L1 or Stage III of L2, like scrambling of the word order in the verb phrase and the separation of the negation form the verb, seem to happen in parallel in all three acquisition contexts.

<u>L1</u>	<u>L2</u>	<u>2L1</u>
Stage V:	Stage III:	Stage V:
		• S_aux/modal_OV
		• attainment of agreement system
• finite verbs are in final position in subordinate clauses, triggered by the filling of the conjunction slot	• subordinate clauses have main clause word order in spite of the conjunction slot being filled	• subordinate clauses have main clause word order in spite of the conjunction slot being filled

 Table 5 Stage V in L1 and 2L1 versus Stage III in L2

As indicated earlier, during Stage V (Table 5) important developments happened in the 2L1 context with respect to the head-final verb parameter, which finally won over its head-initial competitor, and with respect to subject–verb agreement, which was now applied consistently by JH and NS. However, the main achievement of Stage V in the L1 context is that the conjunction slot of subordinate clauses is consistently filled. For the vast majority of monolingual German–speaking children this automatically entails clause–final position of the finite verb (Clahsen, 1991; Rothweiler, 1993; but see Fritzenschaft et al., 1990). The bilingual children paralleled the monolingual development with respect to the filling of the conjunction slot, but once again, they behaved more like L2 learners with respect to word order, in that they

<u>L1</u>	<u>L2</u>	<u>2L1</u>
	Stage IV:	Stage VI:
	• V _{fin} -final in embedded clauses	• V _{fin} -final in embedded clauses

 Table 6 Final Stage of L2 and 2L1

maintained main clause word order in subordinate clauses (Döpke, 1992).⁴ Correct word order in subordinate clauses is attained as the last syntactic feature after Stage V of 2L1 or Stage III of L2, which are loosely labelled Stage VI and IV respectively (Table 6).

V Evaluation of the acquisition phenomena in the 2L1 context

This comparison of the acquisition of German in the three acquisition contexts indicates that the bilingual German–English–speaking children (2L1) indeed behaved differently to monolingual German–speaking children (L1) in all three UG-related areas explored by Clahsen (1988a): (a) the alternation between SAuxOV and SAuxVO during Stages III and IV does not present a possible grammar; (b) the setting of the finiteness parameter to verb-second is not related to the attainment of subject–verb agreement or even finiteness as an obligatory feature; and (c) the second person singular -st does not trigger verb-second, instead it is preceded by it, and the filling of the conjunction slot does not trigger verb-last in dependent clauses. But does that mean that in the 2L1 context German is not learned like a first language, but like a second language?

Stages I and II of 2L1 acquisition present a much more rudimentary linguistic level than Stage I of L2 acquisition because of the difference in processing ability which the two learner groups bring to the task. In 2L1 acquisition, structures are built up slowly as the children's concepts of word classes and their combinatorial possibilities increase. During the initial stage of grammatical structures 2L1 learners, like L1 learners, predominantly process the ends of utterances and perceive verbs to be in sentence-final position in German. That way the underlying head-final structure for the verb phrase is available right from the beginning.

Stage I in L2 acquisition is similar to Stage III in L1 and 2L1 acquisition. L2 learners perceive German to be an SVO language since they are immediately able to process complete simple sentences. This structure is supported by the German input as well as the learners' native language in some learner groups. As a type of syntactic bootstrapping, auxiliaries or modals are

⁴ Subordinate clauses have not formally been looked at for NS and JH, but the phenomenon is blatantly obvious even to the casual observer.

inserted between the subject (S) and the verb phrase (VO) in order to produce sentences with complex predicates (S_Aux/Mod_VO) (Gawlitzek-Maiwald and Tracy, 1996).

In Stage III of L1 and 2L1, the children's ability to process utterances has also increased. L1 learners now note the contrast between finite verbs and non-finite verbs and differentiate them by position: finite verbs move to a pre-complement position, non-finite verbs remain in final position (Figure 1). This creates a simple binary contrast (Clark, 1987) supported by frequent and reliable cues (Bates and MacWhinney, 1989).

(1) Contrast of verb positions in L1:

2L1 learners notice the alternation in verb position as well, but the contrast between final and non-final verbs is more complex than for L1 learners. 2L1 learners do not only have to contrast final and non-final verbs in German but in addition have to differentiate between non-final verbs in German and non-final verbs in English (Figure 2). Instead of a simple binary contrast German–English bilingual children have to work through a more complex three-way contrast. The cues for this are still frequent, but they are much less reliable since English and German sentences often look alike syntactically. Thus, the cue competition surrounding verb positions is more intense for bilingual German–English–speaking children than it is for monolingual German–speaking children.

(2) Contrast of verb positions in 2L1



Non-final verbs in English and non-final verbs in German can only be differentiated if the differences in functional specifications in the middle field are understood. For a functional analysis of the middle field, the children need to understand that German finite verbs are in a structural position above the verb phrase similar to English auxiliaries and modals, but dissimilar to English verbs, which remain inside the verb phrase. This, in turn, is dependent on the children understanding what auxiliaries in English and verbs (and auxiliaries) in German can do, namely precede the negation and invert with the subject. Until these grammatical functions have been cognitively realised, the bilingual children cannot properly differentiate between German and English verbs in pre-complement position and a fair proportion of the verbs is obviously moved from a head-final position to a head-initial position in the verb phrase instead of being raised to a functional node above the verb phrase.

L2 acquisition shares with 2L1 acquisition the potential for crosslinguistic cue competition, but the nature of the crosslinguistic cue competition is different in the two acquisition contexts. In L2 acquisition, the learners already have knowledge about functional relationships through their first language and bring this as expectations to the new acquisition task. MacWhinney (1992) suggested that L2 learners originally attempt to map the new language input onto their established linguistic knowledge, but gradually give that strategy up as the incoming cues from the new language can be processed in relation to one another. Thus L2 learners are able to shift from SAuxVO to SAuxOV more or less suddenly as they are progressing from Stage I to Stage II because they are already aware of the function of finiteness encoded in auxiliaries and modal verbs as well as the different structural roles for finite and non-finite verbs.

In contrast, 2L1 learners do not have pre-existing expectations of syntactic structure coming from an already established language system. Instead, the structural overlap between German and English presents evidence that German and English are structurally alike, at least to a certain degree. Prior to a proper analysis of the middle field, it must seem to the children that the English sentence structure is constant and the German sentence structure flactuates. In other words, cues for the VO structure are more frequent than cues for the OV structure considering the whole of the input the children receive. At the same time, the bilingual children do not treat German and English as if they were one linguistic system. This is clearly evident from the fact that OV and VO are both systematically represented in the children's German during Stages III and IV, but German verb-last structures are only found very sporadically in the children's English (Döpke, 1998).

Still in Stage III, L1 and 2L1 learners rapidly acquire the inventory of the agreement system, which is immediately available to L2 learners. But while L1 learners clearly differentiate between finite verbs and non-finite verbs by position, 2L1 learners and L2 learners overgeneralise the -en affix, which denotes non-finiteness as well as 1st and 3rd person plural. The motivation for this overgeneralisation is once again different for these two learner groups. L2 learners are most likely to overgeneralise -en due to the formal address in German also being marked with -en. This is clearly not the case for 2L1 learners as not even L1 learners manage formal address before their early primary school years. Instead, 2L1 learners appear to overuse -en in order to mark verbs as German. This is supported by English verbs in the German context carrying -en affixes at times (Döpke, 1999b).

Correct subject-verb agreement is triggered by the appearance of 2nd person singular -st in Stage IV of L1 acquisition. This development is not paralleled in the other two acquisition contexts in spite of -st also increasing in frequency at least in the 2L1 context. Progress with subject verb agreement at this stage might be hindered by the need 2L1 and L2 learners have to overgeneralise -en, although this need is differently motivated for the two learner groups.

The fact that the productive use of -st does not affect subject-verb agreement in the 2L1 context, as it does in the L1 context, casts doubt on the UG interpretation of -st having a triggering effect for consistent subject-verb agreement. The correlation between the appearance of -st and consistent subject-verb agreement for all grammatical persons in L1 acquisition might be an artefact of the rest of the verb paradigm having developed sufficiently by the time -st appears.

In spite of the agreement system not being properly acquired yet, other areas of syntactic development, such as verb-fronting, do proceed in the 2L1 and L2 contexts. For L1 acquisition, the UG-motivated belief is that verb-fronting and subject-verb agreement are developmentally related. Once again, the fact that verb-fronting is quite possible without agreement (or even finiteness) but at the same stage of utterance length as it happens in L1 acquisition suggests that

it is more an effect of processing ability with respect to the non-salient positions in the middle of the sentence than of the acquisition of particular functional operations.

For 2L1 learners, verb movement is not a function of finiteness prior to Stage V, instead finiteness is treated as an option. The bilingual children seem to reduce the intense cue competition between finite and non-finite verbs in their various positions by temporarily ignoring the syntactic motivation for verb affixes and treating them as optional. Instead they concentrate on word order as a contrastive feature of German and English.

The other area of triggering claimed to be operative in L1 acquisition, ie. the filling of the conjunction slot and verb last in subordinate clauses, does not happen in that way in 2L1 and L2 acquisition either. The retention of main clause word in subordinate clauses for an extended period sheds doubt on the necessity of a structural relationship between complementizer and finiteness and thus complementizer and verb last. In fact, Fritzenschaft et al (1990) have shown that even monolingual children might at times choose alternative acquisition paths to the vast majority of their peers and not alter the position of the finite verb in dependent clauses. However, bilingual German–English–speaking children and second language learners of German seem to take this route predictably.

On the whole, the major differences in cognitive maturity between L2 and 2L1 learners make language acquisition in these two context clearly different. The major difference between 2L1 and L1 acquisition lies in the fact that the monolingual child only hears German target structures but the bilingual child is exposed to a much wider range of syntactic possibilities. Thus the bilingual child has structural options which the monolingual child does not have. In that respect 2L1 acquisition is similar to L2 acquisition.

The variation in language output between L1 and 2L1 learners does not prove that monolingual and bilingual language acquisition is qualitatively different. A conceptualisation of language acquisition as driven by cue frequency, cue reliability and, thus, cue strength can account for the phenomena under both acquisition conditions.

This does not mean that bilingual children assume a common syntactic structure for their two languages. The comparison between the children's German and English clearly showed different distributions of language specific structures which can only be motivated by the language specific input (Döpke, 1998, 1999b).

VI Conclusions

In this comparison between L2, 2L1 and L1 acquisition of German I have argued for processibility and competition between forms as the driving force in the acquisition of syntax. I have shown that we can conceptualise L1 and 2L1 acquisition as similar in principle if we disregard the assumptions of possible grammars, developmental interaction and triggering as characteristic features of L1 acquisition but adopt the model of cue competition as the driving force during the data aggregation stage prior to the setting of the parameters to their language specific values. This is an attractive option given the identical cognitive state L1 and 2L1 learners are in.

As for the title of this paper "why 2L1 is not like L2", I have argued that 2L1 is not like L2 instead of being like L1. Rather, I believe 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; thus the relative cue strength for grammatical features in one language might be altered through the simultaneous input in another language. The extent to which that happens will depend on the degree of structural overlap between languages: the more overlap, the stronger the crosslinguistic cue competition. That the output of 2L1 learners presents a degree of similarity to the output of L2 learners further strengthens the assumption of crosslinguistic cue competition under simultaneous acquisition conditions. At the same time, it suggests similarities in all three acquisition contexts in principal.

VII References

- **Arnberg, L.** 1981: Early childhood bilingualism in the mixed-lingual family. Unpublished PhD dissertation, Linköping University.
- Bates, E. and MacWhinney, B. 1989: Functionalism and the Competition Model. In MacWhinney, B. and Bates, E., editors, *The Crosslinguistic Study of Sentence Processing*. Cambridge: C.U.P.
- **Bley-Vroman, R.** 1990: The logical problem of foreign language learning. *Linguistic Analysis* 20, 3–49.

Chomsky, N. 1981: Lectures on Government and Binding. Dordrecht: Foris.

Chomsky, N. 1986: Barriers. Cambridge, MA: MIT Press.

- Clahsen, H. 1984: The acquisition of German word order: a test case for cognitive approaches to L2 development. In Andersen, R.W., editor, *Second languages. A crosslinguistic perspective.* Rowley, MA: Newbury House.
- —— 1986: Profilanalyse. Berlin: Marhold.
- 1987: Connecting theories of language processing and (second) language acquisition. In Pfaff, C., editor, *First and second language acquisition processes*. Rowley, MA: Newbury House.
- 1988a: Parameterized grammatical theory and language acquisition: A study of the acquisition of verb placement and inflection by children and adults. In Flynn, S. and O'Neil, W., editors, *Linguistic theory and second language acquisition*. Dordrecht: Kluwer.
- 1988b: Critical phases of grammar development: a study of the acquisition of negation in children and adults. In Jordens, P. and Lalleman, J., editors, *Language development*. Dordrecht: Foris.
- - 1991: Child language and developmental dysphasia. Amsterdam: Benjamins.
- **Clahsen, H.** and **Muysken, P.** 1986: The availability of universal grammar to adult and child learners: a study of the acquisition of German word order. *Second Language Research* 2, 93–119.
- **Clahsen, H.** and **Penke, M.** 1992: The acquisition of agreement morphology and its syntactic consequences: new evidence on German child language from the Simone-Corpus. In Meisel, J., editor, *The acquisition of verb placement*. Dordrecht: Kluwer.
- Clahsen, H., Penke, M. and Parodi, T. 1993/94: Functional categories in early child German. Language Acquisition 3: 395–429
- Clark, E. 1987: The Principle of Contrast: A constraint on language acquisition. In MacWhinney, B. and Bates, E., editors, *The crosslinguistic study of sentence processing*. Cambridge: C.U.P.
- **De Houwer, A.** 1990: *Two at a time: an exploration of how children acquire two languages from birth.* Cambridge: Cambridge University Press.
 - 1994: The separate development hypothesis: method and implications. In Extra, G. and L. Verhoeven, editors, *The cross-linguistic study of bilingual development*t. Amsterdam: Royal Netherlands Academy of Arts and Science.
- **Deprez, V.** and **Pierce, A.** 1993: Negation and functional projections in early grammar. *Linguistic Inquiry* 24, 25–647.
- Döpke, S. 1992: Approaches to first language acquisition: evidence from simultaneous bilingualism. *Australian Review in Applied Linguistics* 15, 137–150.
- 1998: Competing language structures: the acquisition of verb placement in bilingual German-English children. *Journal of Child Language* 25(3): 555–584.
- 1999a: Cross-linguistic influences on the placement of negation and modal particles in simultaneous bilingualism. *Language Sciences* 21, 143–175.
- —— 1999b: The development of verb morphology and the position of the finite verb in bilingual German-English children. ms.
- du Plessis, J., Solin, D., Travis, L. and White, L. 1987: UG or not UG, that is the question: a reply to Clahsen and Muysken. *Second Language Research* 3, 56–75.

- Flynn, S. 1984: A universal in L2 acquisition based on PBD typology. In Eckman, F., Bell, L. and Nelson, D., editors, *Universals of second language acquisition*. Rowley, MA: Newbury House.
 - 1987: Contrast and construction in a parameter setting model of L2 acquisition. Language Learning 37, 19–62.
- Flynn, S. and Espinal, I. 1985: Head-initial/head-final parameter in Chinese L2 acquisition. Second Language Research 1, 93–117.
- Fritzenschaft, A., Gawlitzek-Maiwald, I., Tracy, R. and Winkler, S. 1990: Wege zur komplexen Syntax. Zeitschrift für Sprachwissenschaft 9, 52–134.
- Gawlitzek-Maiwald, I. and Tracy, R. 1996: Bilingual bootstrapping. *Linguistics* 34: 901–926.
- Haider, H. 1993: *Deutsche Syntax Generativ* [German Syntax Generative]. Tübingen: Narr.
- Jordens, P. 1988: The acquisition of word order in L2 Dutch and German. In Jordens, P. and Lalleman, J., editors, *Language Development*. Dordrecht: Foris.
- Lanza, E. 1988: Conversations with bilingual two-year-olds. Paper presented at the Eleventh Annula Meeting of the American Association of Applied Linguistics, 27–29 December 1988.
- Leopold, W.F. 1939–49: Speech Development of a Bilingual Child. Evanston, Illinois.
- MacLaughlin, B. 1978: Second language acquisition in childhood. Hillsdale, NJ: Erlbaum.
 MacWhinney, B. 1987: Applying the Competition Model to bilingualism. Applied Psycholinguistics 8, 315–327
- MacWhinney, B. 1992: Transfer and competition in second language learning. In Harris, R., editor, *Cognitive processing in bilinguals*. Amsterdam: Elsevier.
- Meisel, J. 1991: Principles of Universal Grammar and strategies of language use: on some similarities and differences between first and second language acquisition. In Eubank, L., editor, *Point – counterpoint: Universal Grammar in second language*. Amsterdam: Banjamins.
- -----, editor, 1990: Two first languages. Dordrecht: Foris.
- ——, editor, 1994: *Bilingual first language acquisition*. French and German grammatical *development*. Amsterdam: Benjamins.
- Meisel, J. and Müller, N. 1992: Finiteness and verb placement in early child grammars: Evidence from simultaneous acquisition of French and German in bilinguals. In Meisel, J., editor, *The Acquisition of Verb Placement*. Dordrecht: Kluwer.
- Mills, A.E. 1985: The acquisition of German. In Slobin, D.I., editor, *The crosslinguistic study* of language acquisition. Hillsdale, NJ: Erlbaum.
- **Poeppel, D.** and **Wexler, K.** 1993: The full competence hypothesis of clause structure in German. *Language* 69, 1–33.
- Rothweiler, M. 1993: Der Erwerb von Nebensätzen im Deutschen. Tübingen: Niemeyer.
- Saunders, G. 1988: From birth to teens. Clevedon: Multilingual Matters.
- Schlyter, S. 1993: The weaker language in bilingual Swedish–French children. In Hyltenstam, K. and Viberg, A., editors, *Progression and regression in language*. Cambridge: C.U.P.
- Schwartz, B.D. 1991: Conceptual and empirical evidence: a response to Meisel. In Eubank, L., editor, *Point counterpoint: Universal Grammar in second language*. Amsterdam: Banjamins.
- ——, 1992: Testing between UG-based and problem-solving models of L2A: developmental sequence data. *Language Acquisition* 2, 1–19.
- **Taeschner, T.** 1983: *The sun is feminine: a study on language acquisition in bilingual children.* Berlin: Springer.
- **Tomaselli, A.** and **Schwartz, B.** 1990: Analysing the acquisition stages of negation in L2 German: support for UG in adult SLA. *Second Language Research* 6, 1–38.
- White, L. 1983: Markedness and parameter setting: some implications for a theory of adult second language acquisition. *McGill Journal of Linguistics* 11, 1–12.
- ——, 1985: The acquisition of parameterized grammars: subjacency in second language acquisition. Second Language Research 1, 1–17.

, 1986: Implications of parametric variation for adult second language acquisition: an investigation of the 'pro-drop' parameter. In Cook, V., editor, *Experimental approaches to second language acquisition*. Oxford: Pergamon.

——, 1989: Universal Grammar and second language acquisition. Amsterdam: Benjamins.