

The Acquisition of Word Order in Different Learner Types

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1. Introduction

The aim of this work is twofold. First, I will examine whether the acquisition of word order is subject to transfer in child second language learners (cL2), as has been claimed for adult second language learners (Schwartz & Sprouse 1996). Second I will provide a classification of the cL2 children on the basis of the frequency of transfer, using predictions that can be derived from the Full Transfer Full Access Hypothesis (FTFA Schwartz & Sprouse 1996). I will investigate two groups of young children acquiring German (L1 French) and French (L1 German) as a second language at the age of 3-4. In particular, I will analyze the acquisition of word order by looking at the subject and verb position in main clauses and the OV/VO parameter (Neeleman and Weerman 1999) taking into account all clauses with complex verbs.

According to the FTFA: a) transfer must be systematic at the onset of acquisition and b) all of the syntactic differences in the L1 must be transferred into the L2 grammar. I will demonstrate that, contrary to the prediction of the FTFA, the attested transfer seems to depend on the structural properties of the languages involved, rather than reflecting full transfer from L1 to L2. More precisely, what seems to look like transfer is asymmetrically distributed in the observed syntactic domain: German children acquiring French do not transfer the German V2 into French, while French children acquiring German use the ungrammatical V3 structure, even in later stages of acquisition. In main clauses with a complex verb, transfer appears in both groups of children.

This paper is organized as follows: in section 2, I will outline the differences between French and German in the syntactic domain under investigation. In section 3, I will present the data. In section 4 and 5, I will move to the results. In section 6 conclusions will be drawn.

2. Word order in German and French

French and German are verb-raising languages (Pollock 1989) with different values for the VO/OV parameter: French is a VO-language (Belletti 1990), while German is an OV-language (cf. Platzack 1986), see examples below:

- (1) Marie a (déjà) lu le livre
Marie has (already) read the book
“Marie (already) has read the book”
- (2) John hat (gestern) das Buch gelesen
John has (yesterday) the book read
“John (yesterday) has the book read”

This typological difference is accounted for by a different position of the head within the VP and the TP: in French VP and TP are both head initial, while they are both head final in German. As far as

* This study is carried out as a part of the research project “Simultaneous and successive acquisition of bilingualism” directed by Jürgen M. Meisel. The research project is part of the Collaborative Research Centre on Multilingualism established at the University of Hamburg and funded by the DFG (Deutsche Forschungsgemeinschaft). I would like to thank the audience of the GASLA 10 (University of Illinois at Urbana-Champaign March 12-15 2009) and all members of the research group: Jürgen M. Meisel, Matthias Bonnesen and Anne-Kathrin Riedel, for their useful comments on an earlier version of this paper.

verb movement is concerned, German differs from the Romance languages in terms of the landing site of the verb in the syntactic structure. In French, the verb moves from V to T, while in German the verb moves twice: from V to T, and then from T to C (Grewendorf 2002). Empirical proof of this double movement in German is given by the verb second (V2)-phenomenon, exemplified in (3).

- (3) a. Ich kaufe heute ein Buch
 I buy today a book
 “Today I buy a book”
- b. Heute kaufe ich ein Buch
 Today buy I a book
 “Today I buy a book”
- c. Ein Buch will ich heute kaufen
 A book will I today buy
 “Today I will buy a book”

In French, the verb reaches T and the order is SVO in both subordinate and main clauses. In German, the verb moves to C, but when the C-position is filled by a complementizer, the verb only moves to T, resulting in an SOV order in the subordinate clause. A similar account holds for the V2-rule: when the position Spec, CP is occupied by a topicalized phrase or an adverb in declarative main clauses, only the first movement of the subject to Spec, TP applies, resulting in the apparent inversion of the verb and subject

Given the syntactic differences between French and German outlined above, if the young children behave like adults, according to the FTFA I expect this to be the case at the age of onset of acquisition¹:

- (4) German children acquiring French as L2 will use:
- a. the AVS, OVS pattern in main clauses
 - b. the IOV, IAOV and IOAV patterns in clauses with a complex verb
- (5) French children acquiring German as L2 will use:
- a. the V3 pattern in main clauses
 - b. the IVO, IAVO, IVA and IVAO patterns in clauses with a complex verb

Let us see if the predictions in (4-5) are corroborated by the data of the two groups of cL2 children.

3. The Data

The data were collected at the Lycée Français de Hamburg. The corpus is made up of two groups of children: one group of 24 German children learning French (see tab.1), and one group of 12 French children learning German (see tab.2). In the French group there are children that do not speak German throughout the entire period under investigation, namely Pascal, Leon, Gerard, Nana and Petra. None of the children were exposed to the second language before the age of 3. The two groups of children differ with respect to the amount of the L2 input they are exposed to. Contrary to the German children, the French children acquiring German speak French at home and in kindergarten and receiving the German input from the environment.

The recordings were conducted with a native speaker of French and German respectively, every 3 to 5 months for about 20-30 minutes in the L2 language. A detailed picture of the two corpora is given in the following tables:

¹The labels in (4-5) and in the figures that follow indicate: O for the DP and PP complements, V for the verbs, A for the adverbs and I for the auxiliary and modal verbs.

Tab 1. German children acquiring French

CHILD	AO	ME <12		ME 12-24			ME 24-36			ME > 36		
Cristina	2;08	4	11	16	21	23		32				
Sara	2;11			16			26	31	33		(41)	
Wolf	3;01	5	10	15	20	22		32				
Jana	3.01			17	22		27	32	34		43	
Mike	3.02			17	22		(27)		(36)			
Alf	3;02			16	21		26	31	(33)			
Martin	3;02			15	18		26	31	33			
Willi	3;03			16	19		26	31	33		(42)	
Magda	3;03			15	18		26	31			41	
Ella	3;04			15	18		26	31			41	
Marika	3;06	5	10	(15)	20	22	30					
Nicole	3;06						28	32		38	43	(53)
Yann	3;07	3	10	15								
Julia	3;07	3	10	16	(20)	22	(28)					
Lars	3;07			16	21		27	(31)			42	
Ludwig	3;07			16	21		27	31			41	
Lara	3;07			16	21							
Luisa	3;07						28	32		38	43	(53)
Klaus	3;07						28	32		38	(43)	(51)
Vicky	3;07						28	31		38	(43)	(50)
Amelia	3;08			16	21		26	31			41	
Jeremie	3;08						28	31		38	43	(53)
Peer	3;08						28	32		38	43	(50)
Marion	4;00			16	19		26	31			41	

Tab 2. French children acquiring German

CHI	AO	ME < 12			ME 12-24			ME 24-36			ME > 36			
Bertrand	2;08										50	54	63	
Ellie	3;00										50	54	64	
Gustave	3;03					23								
Albert	3;05								33	38	43	52	55	
Lena	3;08							28	31	33				
Matilde	4;09				13	20		25		34				
Laure	5;0	9			14	19			(27)					

Let us see which of the predictions in (4-5) reported above are corroborated by the data.

4. The position of verb and subject in French and German cL2

In this section, I will verify the predictions in (4.a) and (5.a). In figures (1-2), I report the results for both groups of children. It can be observed that the prediction in (4.a) is not corroborated by the data of the German children acquiring French. No transfer from the German V2 rule is attested in the data of the cL2 children acquiring French, not even in the later stages, as reported by Hulk's (1991) data for adult Dutch L2 learners of French. In the entirety of the data, only two tokens are found that look like transfer of the German V2 rule, namely the sentences below, attested in the data of Marika and Alf:

- (6) et après a ça fait la brosse à dents après à lui là (Marika ME 20)
 and after has that do the toothbrush after him there
 "and after that has do the toothbrush after him there"

- (7) et aussi sont des plumes (Alf ME 26)
and also are some feathers
“and they are also feathers”

Figure 1. The subject position in main clauses: German children acquiring French

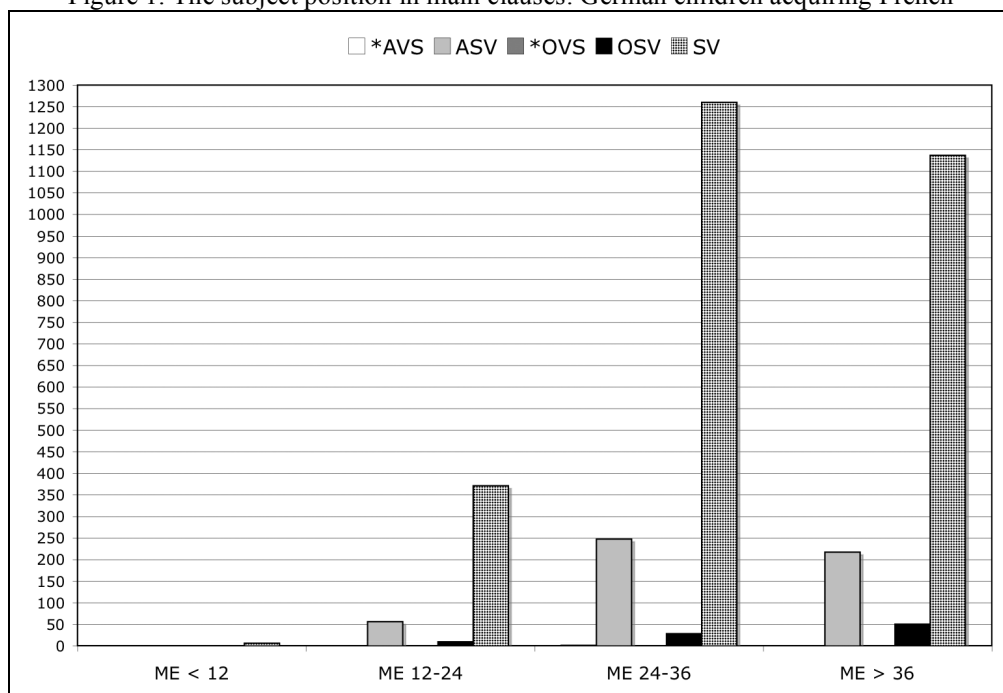
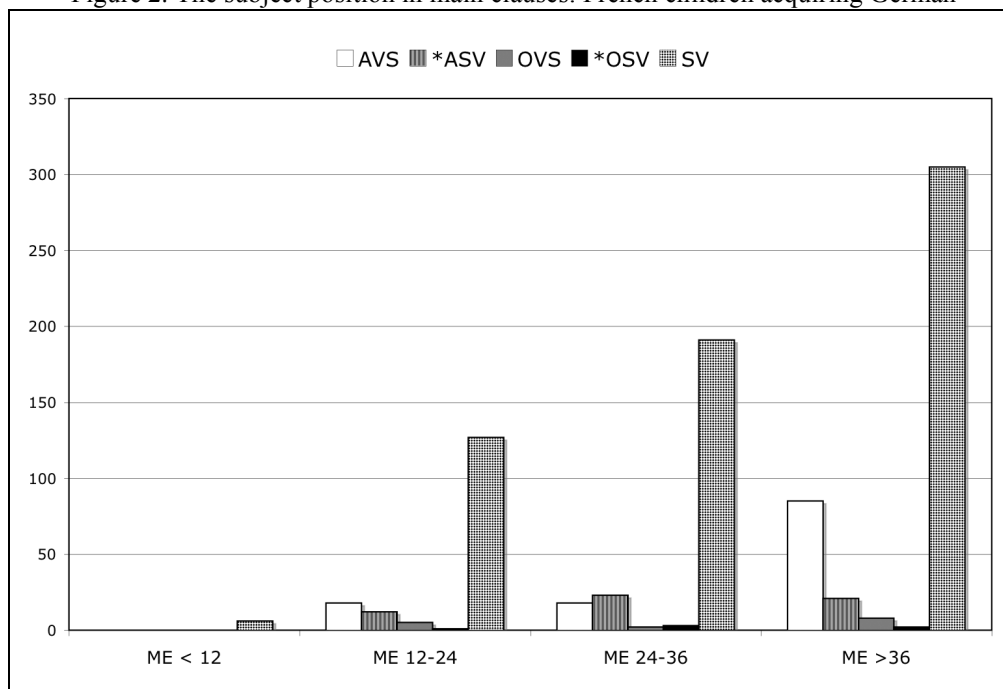


Figure 2. The subject position in main clauses: French children acquiring German



The picture emerging from the data of the French children acquiring German (cf. Figure 2) is very different. As can be observed, the cL2 of German quite frequently produce the wrong V3 structure in German, illustrated in the sentences below:

- (8) also erst die geht spazieren (Albert ME 43)
 so first she goes walk
 “so she takes a walk”

Interestingly enough, the number of transfers seems to increase during the acquisition. This tendency is much more evident when we look at the production of transfers for every individual child. With the exception of Gustave and Lena, who produce transfers in a single recording, transfers of the French V3 appear for all other children after the child seems to have correctly acquired the V2 rule. In the first year of acquisition, Laure produces only SV structures; evidence for the V2 rule is attested later, namely at ME 14, when the first two AVS structures appear and display the correct word order. However, in the later recording, V3 is attested quite frequently: the error rate reaches 83% at ME 19 and decreases to 14% at ME 27. While in the data of Laure it is possible to observe a decrease in the rate of mistakes, at least after the first occurrence of transfer, this is not the case for the other children. In Mathilde’s data, the rate of V3 at ME 33 is around 33% and strongly increases in the later recordings to 83% at ME 25 and 75% at ME 34. In Albert’s data, the rate V3 is around 20% at ME 33, 14% at ME 38 and increases at ME 43, reaching 79%. Albert continues to use the wrong V3 structure for a long period of time: at ME 52, the rate of mistakes is still around 23%. The V2 rule seems to have been acquired by Albert only in the last recording at ME 55, where the rate of mistakes decreases to under 10% (7%). As with Albert, other children use the V3 structure even after the third year of acquisition. In Bertrand’s and Ellie’s data, there is only one recording where the children use V3, while in the other recordings, the two children correctly use the V2 rule (AVS or XVS structure). In particular, V3 is attested in Bertrand’s data at ME 54 (17%) and in Ellie’s data at ME 50, when the rate of mistakes is still around 56%.

An interesting asymmetry in the distribution of transfer emerges from the analysis of the subject position in main clauses: cL2 of French do not transfer the German V2 pattern in French, while the cL2 of German transfer the French V3 into the German grammar, even in the later stages of the acquisition. In short, only one of the predictions in (4-5.a) is corroborated by the data, namely the prediction in (5.a). Let us see whether the same asymmetry is attested in the acquisition of the VO/OV parameter.

5. Complex verbs in main clauses: the acquisition of the OV/VO parameter

In this section, I will verify the predictions made in (4.b) and (5.b). In figures 3 and 4, I report the results of the analysis. I have divided the children based on the ME.

As can be observed, all of the cL2 children begin to use sentences with complex verbs from the second year of acquisition onward. Transfer appears uniformly in both groups of children. However, not all of the cL2 children produce transfer. There is a degree of interindividual variation among the cL2 children in the use and rates of transfer.

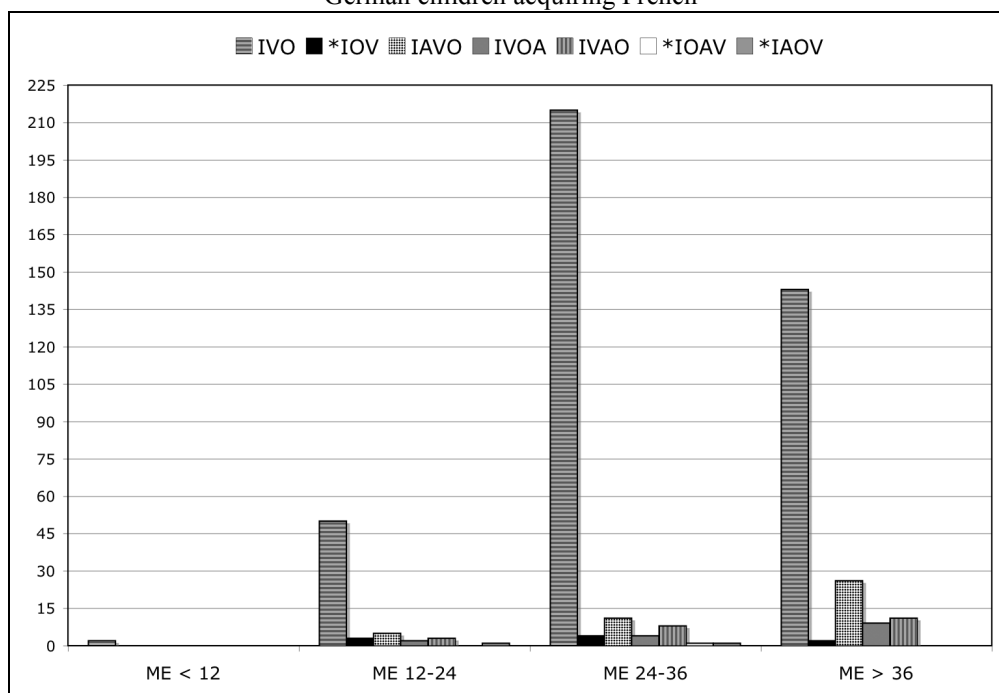
It is possible to distinguish three main subgroups of children for the German children acquiring French. A first group of 4 children who do not produce complex verbs for the entire period under investigation consists of Cristina, Mike, Yann and Lars. A second group of 10 children who do not transfer the German pattern into the French grammar includes Sara, Wolf, Alf, Magda, Lara, Ludwig, Amelia, Nicole, Luisa and Klaus. And finally, a third group of 9 children who produce sentences like (8-9) displaying the German word order is comprised of Julia, Jana, Martin, Ella, Vicky, Marion, Willi, Jeremie and Peer.

- (9) il a le grand piqué et il est tombé (Martin ME 26)
 he has the big sting and he is fallen
 “he has the big sting and he fell”
- (10) il veut le lapin tuer (Jana ME 32)
 he will the rabbit kill
 “he will kill the rabbit”

5 children of the third group produce only one transfer in the period under investigation: Vicky at ME 31 (1/42 2%), Ella at ME 41 (1/10 10%), Julia at ME 22 (1/5 20%), Martin at ME 26 (1/4 25%) and Jana at ME 27 (1/3 33%). The other 4 children, in contrast, produce more than one transfer. Jeremie and Marion produce only 2 transfers: Jeremie at ME 27 (2/8 25%), with Marion producing one at ME 16 (1/2 50%) and the other at ME 19 (1/5 20%). Peer produces 3 transfers, two of them at ME 32 (2/7 29%) and one at ME 38 (1/11 9%). Willi produces 5 transfers, one at the ME 16 (1/3 33%) and 4 at ME 27 (4/15 27%).

It is important to emphasize that the rates may not be considered systematic for most of the children producing transfers, though it oscillates between 10 and 30%, with the exceptions of Ella, Vicky and Marion. Moreover, transfer does not seem to be a phenomenon of the onset of the acquisition for any of the other children. Notice that all children begin to use complex verbs only after the second year of the acquisition. Julia uses two sentences with complex verbs at ME 10 and three more sentences at ME 16, all of which display the correct French word order IVO. The same developmental route is attested in the data of Martin, Vicky and Jana. Martin correctly uses 13 clauses with a complex verb at ME 18 prior the first recording of a transfer. Vicky produces 18 clauses with a complex verb at ME 28, all with the correct word order. Jana correctly uses one complex verb at ME 27 before producing a transfer.

Figure 3. The OV/VO Parameter in main clauses with complex verbs:
German children acquiring French

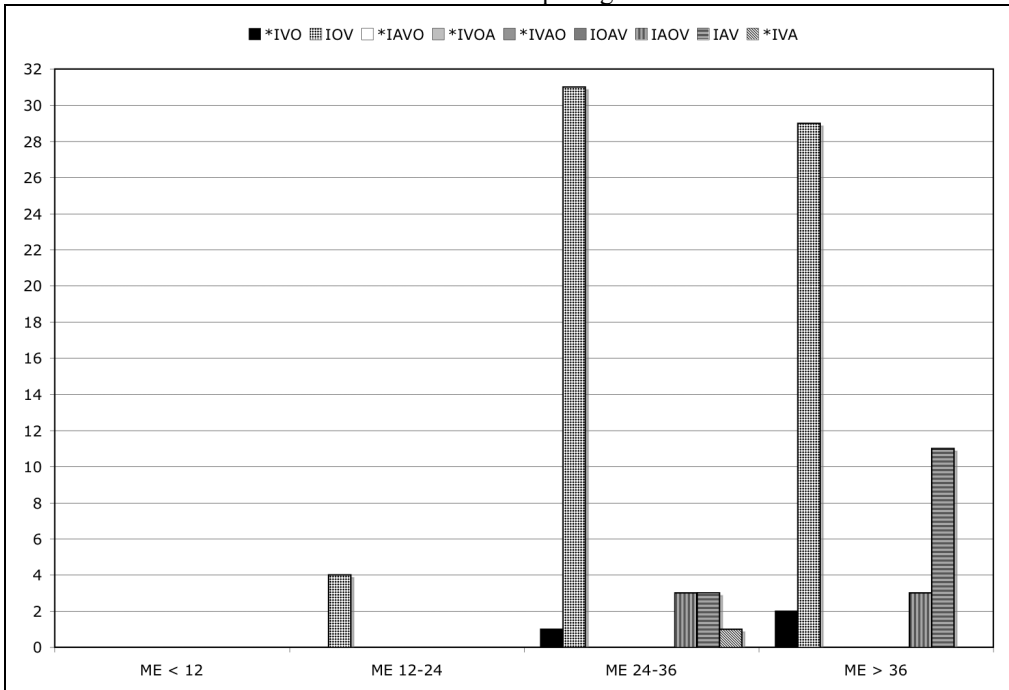


Only in the data of Ella, Willi, Marion and Peer do transfers appear as soon as the child begins to use complex verbs. Ella begins to use transfers very late, during the fourth year of the acquisition, and with rates of transfer lower than 10%. In Willi's data, the rates of transfer do not change during the acquisition process. Only in the data of Marion and Peer do the rates of transfer seem to decrease throughout the course of the acquisition. However, the rates of transfer are not systematic.

The same picture emerges from the data of the cL2 of German, where only three children produce transfer. Mathilde correctly uses three sentences with a complex verb in the second recording (ME 25). Only in the third recording, during the third year of acquisition (ME 34), does the transfer of the French syntax appear in the data, reaching a rate of mistakes of 7.7% (1/12). As with Mathilde, Laure begins to produce transfers after the third year of acquisition at ME 27. More precisely, she correctly produces three sentences with a complex verb, displaying the IOV pattern at ME 19. She produces the instance of transfer with the IVO structure shown below only in a later recording:

- (11) __das ist meine mami und sie hat geschreibe auf eine anderes bild (Laure ME 27)
 that is my mummy and she has written on another drawing
 “that is my mummy and she wrote on the other drawing”

Figure 4. The OV/VO Parameter in main clauses with complex verbs:
 German children acquiring French



In the same recording, Laure produces one more complex verb with the correct German order. The rate of errors at this point of acquisition is relatively high: 50%. It is important to emphasize that transfer is not attested at the onset of acquisition, but only after a period where the child correctly leaves the non-finite verb at the end of the clause. For Laure as well as for Mathilde, I found an increase in the percentage of mistakes, going from 0% to 7.7% in the data of Mathilde and to 50% in the data of Laure. The same developmental route is observable in the data of Albertine. Albertine correctly uses four clauses with complex verbs at ME 33, only later producing transfers, more precisely at ME 38 (14,3% 1/6) and at ME 52 (8.3% 1/11). As in the case of Matilde and Laure, the rate of mistakes increases, contrary to the prediction of the FTFA.

6. Conclusion

The aim of this paper was to verify whether cL2 children behave like adult learners in the acquisition of word order and whether they produce transfers from L1 at onset of the acquisition as claimed by the FTFA. As we have seen, not all of the predictions in (12-13), taken from the FTFA, are corroborated by the data.

- (12) German children acquiring French as L2 will use:
- the OVS pattern in main clause
 - the IOV, IAOV and IOAV patterns in clauses with a complex verb
- (13) French children acquiring German as L2 will use:
- the V3 pattern in main clause
 - the IVO, IAVO, IVA and IVAO patterns in clauses with a complex verbs

More precisely, the prediction in (13.a) only holds for the French children who acquire German as cL2. In contrast, German children learning French as a second language after an AO of 3-4 correctly use the grammatical pattern in French. I found no errors such as OVS or AVS orders with regard to the placement of subject and verb. All of the children use the V3-pattern when Spec CP is occupied by an argument or an adjunct, as required in the target language. In contrast, the predictions in (12-13.b) are corroborated by the data of both groups of children. This type of asymmetry may be problematic for the FTFA. In addition, and contrary to the prediction of the FTFA, transfer only appears later, when the cL2 children correctly use the structure of interest. One possible explanation for the results presented here is to claim that cL2 acquisition at an AO of 3-4 may still be classified as Bilingual First language acquisition: a question that has recently received an increasing amount of interest (Schwartz 2004, Meisel 2007.b, 2008). However, the rates of transfer attested are quite high; they oscillate between 20% and 30% in main clauses with complex verbs, while in the V3 structure they reach the 80%. These results cannot be compared with 2L1 acquisition, where transfer is a rare phenomenon (Paradis and Genesee 1996, Meisel 2001) that does not exceed the 10%. Some of the cL2 children seem to be hybrid learners.

A more coherent explanation emerges when we reject the FTFA as a criterion for classification and use the prediction taken from the Fundamental Difference Hypothesis (FDH Bley-Vrom 1989). According to the FDH, the acquisition of a second language after the critical period is not a restructuring process of the existing parameters in the mind of the learner, but rather a process guided by general learning principles and not by UG. The main evidence for this claim is the absence of the clustering effect between apparently unrelated phenomena and the correct values of a specific parameter in L2 acquisition (see Neeleman and Weerman 1997, Möhring and Meisel 2001). When we look at the data of cL2 of German, we find an interesting fact: as in aL2 acquisition of German, the OAV structure is absent in cL2 acquisition of German. Following Möhring and Meisel (2001), this fact suggests that the clustering effect related to the OV/VO parameter is no longer present.

References

- Belletti, A. (1990). *Generalized verb movement: aspects of verb syntax*. Turin: Rosenberg and Sellier.
- Bley-Vrom, R. (1989). The logical problem of foreign language learning. In S. M. Gass & J. Schachter (eds.), *Linguistics Perspectives on Second Language Acquisition*. Cambridge University Press.
- Grewendorf, G. (2002). *Minimalistische Syntax*. Tübingen: Narr.
- Hulk, A. (1991). Parameter setting and the acquisition of word order in L2 French. *Second Language Research* 7, 1-34.
- Neeleman, A. and Weerman, F. (1997). L1 and L2 word order acquisition. *Language Acquisition*, 6 (2), 125-170.
- Neeleman, A. and Weerman, F. (1999). *Flexible Syntax. A Theory of Case and Arguments*. Dordrecht: Kluwer.
- Meisel, J. M. (1986). Word order and case marking in early child language. Evidence from simultaneous acquisition of two first languages: French and German. *Linguistics* 24, 123-183.
- Meisel, J. M. (2001). The simultaneous acquisition of two first languages: early differentiation and subsequent development of grammars. In J. Cenoz and F. Genesee (eds.), *Trends in Bilingual Acquisition*, Amsterdam: John Benjamins, 11-41.
- Meisel, J. M. (2007.b). Child Second Language Acquisition or Successive First Language Acquisition?. *Arbeiten zur Mehrsprachigkeit Working Papers in Multilingualism*, Folge B Series B, 80.
- Meisel, J. M. (2008). Child second language acquisition or successive first language acquisition? In B. Haznedar & E. Gavrusseva (eds.) *Current Trends in Child Second Language Acquisition: A Generative Perspective*, Amsterdam: John Benjamins.
- Möhring, A. and Meisel, J. M. (2001). The Verb-Object parameter in simultaneous and successive acquisition of bilingualism. In C. Lleó (ed.), *Interfaces in Multilingualism*. Amsterdam, Benjamins, 295-334.
- Paradis, J. & Genesee, F. (1996). On the continuity and the emergence of functional categories in bilingual first-language acquisition. *Language Acquisition* 6 (2), 91-24.
- Platzack, C (1986). COMP, INFL, and Germanic Word Order. In L. Hellen and K. Hoch Christensen (eds.) *Topic in Scandinavian Syntax*, Kluwer Academic Publishers, Dordrecht.
- Pollock, J.-Y. (1989). Verb Movement, Universal Grammar and the structure of IP. *Linguistic Inquiry* 20, 365-424.
- Schwartz, B. D. (2004). On child L2 development of syntax and morphology. *Lingue e Linguaggio*, 3, 97-132.
- Schwartz, B. D. & Sprouse, R., (1996). L2 cognitive states and Full Transfer/Full Access model. *Second Language Research* 12, 40-72.

Proceedings of the 10th Generative Approaches to Second Language Acquisition Conference (GASLA 2009)

edited by Melissa Bowles, Tania Ionin,
Silvina Montrul, and Annie Tremblay

Cascadilla Proceedings Project Somerville, MA 2009

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Pierantozzi, Cristina. 2009. The Acquisition of Word Order in Different Learner Types. In *Proceedings of the 10th Generative Approaches to Second Language Acquisition Conference (GASLA 2009)*, ed. Melissa Bowles et al., 264-271. Somerville, MA: Cascadilla Proceedings Project.

or:

Pierantozzi, Cristina. 2009. The Acquisition of Word Order in Different Learner Types. In *Proceedings of the 10th Generative Approaches to Second Language Acquisition Conference (GASLA 2009)*, ed. Melissa Bowles et al., 264-271. Somerville, MA: Cascadilla Proceedings Project. www.lingref.com, document #2275.