WORD ORDER VARIABILITY IN THIRD LANGUAGE ACQUISITION

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ABSTRACT. *This paper focuses on the acquisition of word order by learners of third language (L3) German whose first language (L1) is Spanish and whose second language (L2) is English. Taking as our starting point the claim that variability is expected when the L1 and the L2 differ in feature strength (Parodi, Schwartz and Clahsen 1997), we investigate (i) whether or not variability is found when there is an additional language involved, and (ii) whether or not variability is found when the L2 differs from both the L1 and the L3 in feature strength. In order to test the hypothesis above, we have collected data from 2 groups of teenage learners of German as L3 (Group I, n=12; Group II, n=12). The main results confirm the existence of optionality in both experimental groups when an L2 with a value different from that in the L1 and the L3 is involved. This confirms previous research findings (Parodi, Schwartz and Clahsen 1997; Bruhn de Garavito and White 2000, 2002).*
KEYWORDS: *variability, optionality, word order, strength features, L3*

RESUMEN. *Este trabajo se centra en la adquisición del orden de palabras por parte de aprendices de alemán como tercera lengua (L3) cuya primera lengua (L1) es el castellano y cuya segunda lengua (L2) es el inglés. Teniendo en cuenta que la variabilidad se espera cuando la L1 y la L2 difieren en el rasgo de fuerza (Parodi, Schwartz y Clahsen 1997), investigamos (i) si se encuentra tal variabilidad cuando se halla implicada una lengua adicional, y (ii) si la variabilidad se espera cuando la L2 difiere de la L1 y de la L3 en el rasgo de fuerza. Para comprobar esta hipótesis, hemos recogido datos de dos grupos de adolescentes que aprenden alemán como L3 (Grupo I, n=12; Grupo II, n=12). Los principales resultados confirman la existencia de la opcionalidad en ambos grupos cuando la L2 difiere de la L1 y de la L3 en el valor de fuerza del rasgo. Esto apoya lo encontrado en estudios previos (Parodi, Schwartz y Clahsen 1997; Bruhn de Garavito y White 2000, 2002).*
PALABRAS CLAVE: *variabilidad, opcionalidad, orden de palabras, rasgos de fuerza, L3*

1. INTRODUCTION

A major source of parametric variation is provided by differences in feature strength (Chomsky 1995). One of the most discussed parameters in L2 acquisition research to date is the Verb Movement Parameter (Ayoun 1999/2000, 2003). The main goal of the studies which deal with this parameter is investigating whether or not L2 learners can reset it (which depends on feature strength of the functional category Agreement). Some of these studies conclude that verb movement is optional only when the L1 and the L2 differ in feature strength (Parodi, Schwartz and Clahsen 1997), whereas other studies such as Beck (1998ab) show how optionality takes place even if the L1 and the L2 share the same feature strength value. Although there is extensive research on the acquisition of the verb movement parameter by L2 learners with different linguistic backgrounds, there are comparatively few data on the acquisition of this parameter by L3 learners.

This paper focuses on the acquisition of word order by learners of L3 German whose L1 is Spanish and whose L2 is English. Taking as our starting point the claim that variability is expected only when the L1 and the L2 differ in feature strength (Parodi, Schwartz and Clahsen 1997), we investigate (i) whether or not variability is found when there is an additional language involved, and (ii) whether or not variability is found when the L2[1] differs from both the L1 and the L3 in feature strength.

2. THE GERMAN SENTENCE

In German we can distinguish three types of word orders: SVO, SOV and VSO. The SVO order is typical of the main sentence. German is a V2 language, that is, a language which requires that the finite verb remains in the second position, as in (1):

(1) *Ich nehme oft   das Auto   vs. * Ich oft   nehme das Auto.*
  I   take   often the car   vs. I   often   take   the car
  "I often take the car"

The SOV order appears in subordinate clauses, as can be observed in (2):

(2) *Weil   ich ein neues Auto   habe,   bin   ich froh.*
  because I   a   new car   have   am   I   happy
  "I am happy because I have a new car"

The VSO order comes in sentences which start with an adverb, a subordinate clause, an object or a prepositional phrase, such as (3):

(3) *Montags   kaufe   ich die Zeitung.*
  Mondays buy   I   the newspaper
  "On Mondays, I buy the newspaper"

With respect to coordinate clauses, SVO is the default order. After the coordinating conjunction comes a clause with the SVO order:

(4) *Ich bin müde, aber ich gehe ins   Kino.*
  I   am tired but I   go   to the cinema
  "I am tired but I go to the cinema"

From recent proposals such as the Minimalist Program (MP) (Chomsky 1992 and others), some word order analyses have been proposed among which we take Zwart's (1997ab). This author adopts Kayne´s idea that movement is to the left, even in SOV languages. In Germanic languages with asymmetry such as German or Dutch, sentences with orders SOV and VSO derive from the canonical order SVO applying the rules [± movement of the verb].

Zwart (1997ab) makes use of the principle of economy and the checking theory proposed by the MP. For this author, lexical elements are bundles of features to be spelled out in a postsyntactic component called Morphology. Morphology is unable to spell out formal features (F-features) that are not part of a morphosyntactic complex containing lexical-categorical features (LC-features). Overt movement is a combination of F-movement and LC-feature movement. All movement for feature checking purposes is F-movement. LC-movement takes place as a Last Resort movement in order to create a morphosyntactic complex containing both F-features and LC-features.

For Zwart (1997ab), in main sentences such as (1), the verb (V) features of Subject Agreement (AgrS) are strong and attract the F-feature of the verb. The F-features of the verb move to AgrS. In order to make a morphosyntactic complex interpretable for Morphology, the LC-features of the verb move and adjoin to AgrS. The verb therefore gets spelled out in AgrS.

In embedded clauses as in (2), the V features of AgrS are strong and attract the F-feature of the verb. AgrS (containing the F-features of the verb) moves on to Complementizer (C). Since C is lexically filled, the F-features of the verb are united with the LC-features of the C. There is no need for movement of the LC-features of the verb to C. The verb therefore gets spelled out in V.

In inversion constructions as in (3), C does not contain LC-features. Therefore, the LC-features of the verb must move in order to be an interpretable object for Morphology.

3. RESEARCH QUESTIONS

Taking into account that variability is expected when the L1 and the L2 differ in feature strength (Parodi, Schwartz and Clahsen 1997; Gess and Herschensohn 2001), this study addresses the following research questions:

(i)   Is variability expected when there is an additional language involved?
(ii)   Is variability expected when the L2 differs from the L1 and the L3 in feature strength?

4. METHODOLOGY

Our study was conducted in an institutional setting. We focus on the acquisition of the verb raising parameter by two groups of adolescents who are in their fourth and third year of secondary education in schools in the Basque Autonomous Community (B.A.C.) and who are learning German as a second language after English.

4.1. *The subjects*

Table 1 displays the details of the subjects in the study:

	Group I	
Model A [2], L1: Spanish, L2: English, L3: German	Age	Years / hours a week of exposure to German
4º E.S.O[3]. (n=12)	15-16 years	4 years / 2 hours
	Group II	
Model A, L1: Spanish, L2: English, L3: German	Age	Years / hours a week of exposure to German
3º E.S.O. (n=12)	14-15 years	3 years / 2 hours

Table 1. *Subjects*

4.2. *Materials*

a. Questionaire about the academic background and previous linguistic knowledge
b. Proficiency level tests
c. Written production task
d. Grammaticality judgement task. This task consisted of 81 items, out of which 38 were distractors. We included sentences with the orders SVO, SOV, VSO and coordinate sentences.

5. RESULTS AND DISCUSSION

In this section we present the results of the written production task and the grammaticality judgement task.

5.1. *Written production task*

Table 2 shows the results obtained by Group I in this task:

	Correct	Incorrect	Total	% Correct	% Incorrect
SOV	8	2	10	80,0%	20,0%
VSO	52	35	87	59,8%	40,2%
SVO	42	0	42	100,0%	0,0%
COORD	27	8	35	77,1%	22,9%
TOTAL	129	45	174	74,1%	25,9%

Table 2. *Written production task. Group I*

The following generalizations can be drawn from the results of the written production task:

  a. Predominance of errors with the structures requiring the VSO order
  b. Predominance of VSO sentences
  c. Optional movement of the verb and the object, as in (5):

(5) a. *Dann habe ich gegessen*
       then   have I   eaten
       "Then I have eaten"
   b. **Dann ich habe gegessen*
        then   I   have eaten
        "Then I have eaten"

  d. *adv SVO is produced when the inversion of the subject is required, as shown in (6):

(6) **In der Abend,   Ich habe gegessen*
      in the afternoon I   have eaten
     "In the afternoon, I have eaten"

  e. The VSO order is produced after the coordinating conjunction, as we can observe in (7):

(7) **und habe ich schlafen in die Klasse*
      and have I   slept   in the class
      "and I slept in class"

  f. The SVO order is produced after COMP, as in (8):

(8) **Wenn ich habe die Schule gefinished*
      when I   have the school finished
      "When I have finished the school"

134

g. There are no errors with the SVO order
h. Difficulty hierarchy: VSO>COORD>SOV>SVO

Let's now move to the results of Group II which are presented in Table 3:

	Correct	Incorrect	Total	% Correct	% Incorrect
SOV	2	7	9	22,2%	77,8%
VSO	31	50	81	38,3%	61,7%
SVO	63	6	69	91,3%	8,7%
COORD	26	17	43	60,5%	39,5%
TOTAL	122	80	202	60,4%	39,6%

Tabla 3. *Written production task. Group II*

We can establish the same generalizations as for Group I. They differ in the following:

a. Use of the order SOV after the coordinating conjunction, as in (9):

(9) *und wir zu Hause gehen*
    and we to house go
    "And we go home"

b. There exist errors with the order SVO when perfect tenses are used, as observed in (10):

(10) *Ich habe trinken Milch mit Cola-Cao*
    I   have drunk milk   with Cola-Cao
    "I have drunk milk with Cola-Cao"

c. Difficulty hierarchy: VSO>SOV>COORD>SVO

5.2. *Grammaticality judgement task*

Table 4 shows the results obtained by Group I in this task:

	Correct judgements	Incorrect judgements	Total	Correct %	Incorrect %
Main clause SVO	96	21	117	82,1%	17,9%
Inversion VSO	88	40	128	68,8%	31,2%
Coordinate sentence	108	66	174	62,1%	37,9%
Subordinate clause	64	29	93	68,8%	31,2%
TOTAL	356	156	512	69,5%	30,5%

Tabla 4. *Grammaticality judgements. Group I*

As in the preceding section, we present some generalizations which can be drawn from the data coming from the grammaticality judgement task. The following generalizations apply for Group I[4]:
   a. Overgeneralization of SOV to constructions requiring SVO in native German
   b. *adv SVO is accepted for those sentences which require the inversion of the subject
   c. Overgeneralization of SOV to structures which demand VSO
   d. SVO is accepted after COMP
   e. VSO is accepted after COMP
   f. [LC] features are attributed to the coordinating conjunction

g. VSO is accepted after the coordinating conjunction
h. Difficulty hierarchy: COORD>VSO>SOV>SVO

Table 5 shows the results obtained by Group II in this task:

	Correct judgements	Incorrect judgements	Total	Correct %	Incorrect %
Main clause SVO	90	29	119	75,6%	24,4%
Inversion VSO	96	35	131	73,3%	26,7%
Coordinate sentence	99	64	163	60,7%	39,3%
Subordinate clause	62	33	95	65,3%	34,7%
TOTAL	347	161	508	68,3%	31,7%

Tabla 5. *Grammaticality judgements. Group II*

With regard to Group II, we can establish the same generalizations for Group I. They differ only in the difficulty hierarchy:

a. Difficulty hierarchy: COORD>SOV<VSO> SVO

Following Parodi et al. (1997) and Gess and Herschensohn (2001), among others, we have addressed two research questions:

(i) Is variability expected when there is an additional language involved?

The results obtained from the experimental groups confirm the existence of optionality. Our results are quite consistent with previous research (Eubank 1993/94; Vainikka and Young-Scholten 1996; Beck 1998ab) since we have evidence of optional movements at intermediate stages of acquisition. For instance, we have seen how the learners produce not only the order SOV after the COMP but also SVO in the written production task. In the grammaticality judgement task, we have also observed this type of variability.

Our findings are in line with Robertson and Sorace's (1999) assumption that effects of optionality are confined to syntax, instead of inflection, resulting from inappropriate lexical entries. The learners have lexical/functional categories and the strength features in their lexicons. Even if certain forms have been acquired, there may nevertheless be occasions when these are not accessible for processing reasons. In other words, there seems to be some kind of temporary breakdown between the syntax and the lexicon.

The second research question was:

(ii) Is variability expected when the L2 differs in value from the L1 and the L3?

Our results confirm the existence of optionality in both experimental groups in both tasks. These results support other studies such as Bruhn de Garavito and White (2000, 2002). This finding suggests that when an L2 with a different value from the L1 and the L3 is involved, variability should occur. This could be explained as a consequence of the underspecification of verbal features. The learners have strong features (due to the knowledge of Spanish) and weak features (due to the knowledge of English) and the learners alternate between these two options, accepting both as correct. They produce the appropriate German order at the same time as the L2 order. There seems to be L2 influence but this is not consistent, since L2 effects alternate with L3 properties.

Word order alternations, although rare, are also encountered in monolingual corpora (Rizzi 1993/94). This is not surprising if the feature values of lexical items, being as they are language-specific, must be learned by children in the process of language acquisition (Gavarró 1998). In the light of our data, we could claim that multilinguals, like monolinguals, are expected to show variability.

Finally, our study has shown that optionality is part of intermediate stages of acquisition. As Klein and Casco (1999) and Papp (2000) have pointed out, intermediate stages are characterized by variability and indeterminacy, and, for this reason, it would be interesting to replicate this study in advanced stages of acquisition.

NOTES

1. English has weak features, in contrast to Spanish and German whose Agreement (Agr) features are strong.
2. The language of instruction in Model A is Spanish and Basque is taught as a second language.
3. E.S.O. stands for Enseñanza Secundaria Obligatoria "Compulsory Secondary Education".
4. For reasons of space, it is not possible to provide examples with regard to each generalization.

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