

Learners' Competence May Be More Accurate than We Think: Spanish L2 and Agreement Morphology

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1. Introduction

An important debate in SLA revolves around the issue of whether the mental representation of agreement in the L2 grammar is somehow deficient. In children we find a direct relationship between their knowledge of verb morphology and syntactic correlates such as verb raising (Meisel 1992; Poeppel and Wexler 1993; Meisel 1997). L2 learners, however, may exhibit knowledge of the syntactic properties of the language while consistently omitting verb inflection (Lardiere 1998a; Lardiere 1998b). This disassociation between morphology and syntax has led some researchers to argue that second language acquisition differs from first language acquisition either because new functional categories or feature values are not attainable in L2 acquisition (Tsimplici and Roussou 1991), because the learner is restricted to the formal features found in the L1 (Hawkins and Chan 1997; Franceschina 2001), or because after a certain age UG is no longer accessible (Meisel 1997). On the other hand, Prévost and White (2000) have argued that the problem in the production of inflection is not related to a deficit but is rather a problem of mapping. This paper will examine this question in relation to the acquisition of Spanish as a second language.

Most of the research carried out on learners' knowledge of morphology is based on production data (Meisel 1997; Lardiere 1998a; Lardiere 1998b; Prévost and White 2000). The present paper takes an experimental design to examine knowledge of agreement in the grammar of adult L2 learners of Spanish at the beginning stages. It examines elicited production and recognition data, looking at the types of errors produced and any possible differences between recognition and production. It will show that production errors are much more frequent than recognition errors, and, in fact, even these are fewer than one would expect from results found in the literature. This is taken as evidence for the hypothesis that there is no deficit in second language acquisition.

2. Spanish morphology

As is well known, Spanish is a pro-drop language with very rich subject agreement morphology on the verb. This morphology is quite consistent across verb classes and across verb tenses, with the exception of the simple past (pretérito).

There are three classes of verbs, and they differ from each other by the thematic vowel that appears in each. The thematic vowel follows the stem, then we find tense or aspect markings, although not all tenses show these. The agreement morphemes come at the end. The complete paradigm of a verb whose stem is *a* is illustrated in Table 1.

Table 1
Verb *hablar* 'to speak'

habl- o	habl- a-mos
habl- a-s	habl- á-is
habl- a-∅	habl- a-n

3. Experiment

3.1 Participants

The experiment included two groups. A group of 22 English L1 learners of Spanish as a second language and a group of native speakers. The L2 group was made up of learners who began to study Spanish at or after puberty in a university setting. They had taken an average of 10 months of Spanish, 4 hours a week. Their level in Spanish was determined by a cloze test and a vocabulary test (Duffield and White 1999). According to the language profile they filled out, their first language and the language they used at home when they were children was English. Most had taken some French at school in Ontario, but they did not speak it.

The control group consisted of 14 Spanish L1 speakers. None of these participants was an early bilingual although all spoke English to a certain degree. They had emigrated to Canada after the age of puberty.

3.2 Description of tests.

Besides the placement test mentioned above, the participants completed four tasks. An effort was made to ensure that all the tasks, both production and recognition, should include the same verbs in a variety of person agreement forms. There were a total of 18 verbs, six regular verbs belonging to the first class (-ar verbs), six regular verbs belonging to the second and third class (-er/-ir verbs), and six irregular verbs. Among the regular verbs there were four stem changing verbs. In this way, it was easy to tell whether the form of a verb had any influence on ease of acquisition.

The first task consisted of a multiple choice vocabulary test, which was included to show whether the learners knew the meanings of the verbs that appeared in the test. Results show all of the participants were able to identify the verbs used.

The second was a written recognition task, in which the participants were given a sentence that was missing a subject, as illustrated in (1). They were asked to identify the missing subject as quickly as possible. This test was included because it could be argued that recognition may be a better indication of competence. It is possible that part of the problem involved in production is due to a higher processing load (White et al. 2001). The test included a total of 80 sentences. The verbs appeared 4 times each, with a different person. There were 8 fillers.

(1) Ernesto, Pablo y yo nadamos todos los días, pero solamente _____ juega tenis.

‘Ernesto, Pablo and I swim every day, but only _____ plays tennis.’

(a) Pablo (b) Pablo y Ernesto (c) yo (d) Pablo y yo (e) NA

The third test consisted of a production task. The speakers read a number of stories in English that were designed to contrast several verb persons. They were then asked to retell the story in Spanish using cues. The cues included the infinitives of verbs, eliciting 3 different persons for each verb. The verbs included were the same 18 which appeared in the recognition task, each eliciting three different persons, first, second and third. There were 5 fillers, for a total of 61 sentences.

The last test consisted of a word order preference task made up of 72 pairs of sentences contrasting word order. I will not be talking about the results of this test in this paper (see Bruhn de Garavito (to appear) for more information).

4. Results

4.1 Production task

Recall that in the production task the participants were asked to tell a story which led to the production of 61 sentences with differing person subjects. In the analysis of the data only errors in agreement were counted, all other errors were not. For example, forms in which the thematic vowel

was wrong (2) or where the verb stem had not undergone the appropriate changes (3) but where the agreement ending was correct were counted as correct.

- (2) Tú *compres*
'You buy.'

Target: Tú *compras*.

- (3) Juan *recorda*
'John remembers.'

Target: Juan *recuerda*.

Excluded from the count were all verbs that were impossible to interpret. For example, in one case the target was the first person present of the verb *servir* (*sirvo*), but the participant produced the third person of the past test (*servió*). Because the two forms are quite similar and both end in *-o* it is possible that the speaker thought she was producing the correct form. Therefore this form was not included in the count. There were 21 verbs excluded for this reason.

4.1.2 Types of errors found in the production task

Excluding the 21 uninterpretable forms, the L2 speakers produced a total of 1 324 verb forms. Of these I found only 89 errors in agreement, that is, 6.7% (recall that this does not mean the verb is correct, only that the agreement morphology is correct). Table 2 shows the breakdown of errors by category.

Table 2
Percentage of total number of errors for each type

Type of error	Percentage
Infinitive used for a conjugated verb	13.5% (12 errors)
Third person to replace another person	66.3% (59 errors)
First person to replace another person	12.4% (11 errors)
Second person to replace another person	7.9% (7 errors)

As shown in Table 2, the greatest number of errors consisted in the production of the third person in place of other person forms. This is to be expected. In Spanish, unlike languages such as English, the infinitive is morphologically marked. The third person, however, invariably ends in the stem vowel (the preterit tense may be the exception). The L2 speakers seem to be generalizing the one form which is not overtly inflected.

The second largest number of errors is the use of the infinitive in the place of a conjugated verb. However, only seven of the participants made this type of error.

Recall that we had 6 verbs belonging to the first class (-ar verbs), 6 belonging to the second and third classes (-er and -ir verbs) and 6 irregular. Of the irregular verbs, only the verb 'to be' (*ser*) and perhaps the verb 'to go' (*ir*) are totally exceptional. The other verbs which appeared in this test are only irregular in the first person, and may exhibit stem changes (*tener*, *hacer*, *venir*). Table 3 shows the breakdown of errors by verb class.

Table 3
Percentage of total number of errors by verb type

Verb type	Percentage
Verb 'to be'	23.6% (21 errors*)
Verb 'to go'	4.5% (4 errors)
Other irregular verbs	12.4% (11 errors)
Verbs of the first class	29.2% (26 errors)
Verbs of the second and third classes	30,3% (27 errors)

*17 of these errors consisted of the use of the third person (*es*) instead of the second (*eres*)

It is clear from Table 3 that an important proportion of errors is due to the confusion between the third person of the verb 'to be' (*es*) and the second person (*eres*). A possible explanation lies in the input. It may be that there are not many occasions to say 'you are' in an informal setting, and therefore this form is not frequently used. On the other hand, the third person is very frequent.

Irregular verbs in general seem to cause fewer errors than regular verbs. These are, of course, high frequency verbs. Errors with regular verbs accounted for more than half of those committed (59.5%). It is possible, as has been suggested (Pinker 1999) that regular verbs are acquired paradigmatically while the forms of irregular verbs are memorized. The very low percentage of error in the production of the verb 'to go' and in most forms of the verb 'to be' seems to point in this direction.

4.2 Recognition vs. production

Both the recognition and the production task used the same verbs, and contrasted first, second and third persons. The recognition task included the contrast between third singular and third plural for every verb, while the production task included the third person singular or plural for each verb. One of the objectives of this paper was to ascertain whether recognition is easier than production, given that recognition may demand a smaller processing load. During recognition, it is not necessary to access the correct form, only to identify it. The prediction is born out by the results, as illustrated in Figure 1.

Figure 1: recognition vs. production

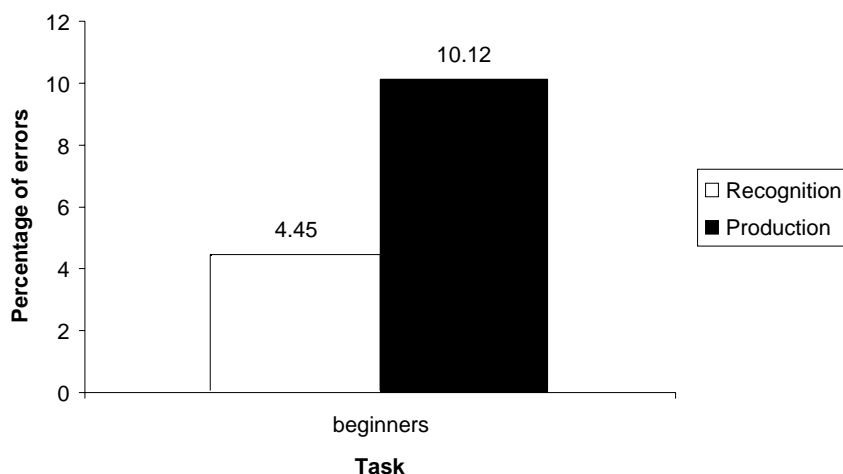


Figure 1 shows the percentage of errors, the first column the errors in the recognition task, the second the errors in the elicited production task. It is clear that the errors in recognition are less than half those committed during production, as expected. There is a strong correlation of .79 between the two tests, which seems to indicate they are both equally valid.

An examination of the individual pattern of errors shows that 15 of the 22 Spanish L2 learners produced between 0 and 10% error rate, that is, 1 to 6 errors out of 61 sentences. The remaining 6 subjects produced between 11% and 45%. Considering these are beginning students, these results seem to indicate that verbal person agreement in Spanish is acquired at a relatively early stage, at least in a formal setting.

5. Discussion

Research into first language acquisition has shown that there seem to be two types of languages. In the first type, L1 learners go through an Optional Infinitive Stage (Wexler 1994) in which non-finite forms alternate with correctly inflected finite verbs. Languages of this type include English, German and French. On the other hand, in pro-drop languages such as Spanish and Basque, the production by L1 learners of non-finite forms in a finite context is almost non-existent (Ezeizabarrena 2002). It has been argued that this is because in these languages the infinitive is morphologically marked.

Most of the research into verbal agreement in second language acquisition has concentrated on the acquisition of French and German (Meisel 1997; Prévost and White 2000) and English (Haznedar and Schwartz 1997; Lardiere 1998a; Lardiere 1998b), that is, languages of the first type. At least since the studies carried out in the 1970s and 80s on the order of acquisition of different morphemes it has been known that, in languages such as English, agreement is acquired relatively late (Bailey, Madden et al. 1974; Dulay and Burt 1974; Lightbown 1983a; Lightbown 1983b) and there is a great deal of variability in the use of non-finite and inflected verb forms. This has led to an intense debate among researchers on the implications of optionality in L2 acquisition. On the one hand, it is argued that this optionality is the reflection of the lack of accessibility to UG which characterizes adult SLA (Meisel 1997), or it is a reflection of a local impairment in the acquisition of functional categories and feature values (Eubank 1994; Eubank, Bischof et al. 1997; Beck 1998). On the other hand, according to the Missing Surface Inflection Hypothesis (Prévost and White 2000), there is no deficit at the abstract featural level, and the problem is one of mapping between the surface inflection and the abstract formal features.

Because so little research has been carried out on the L2 acquisition of verbal inflection in languages of the second type, such as Spanish, it is not clear where they would fit within this debate. Furthermore, most of the work which has been conducted has concentrated on natural production, and it is possible production under-represents the learners' competence. It is here that the results of the present experiment contribute to our understanding of SLA.

The first question to be asked is whether we find optionality in the elicited production of verbal inflection. The answer is affirmative, although the percentage of errors is much lower than expected (under 7%). It is also clear that the learners resort to a default form to express agreement. Not surprisingly, the infinitive, which has a clear morphological marking in Spanish (stem vowel + -r), is not the preferred default, in spite of the fact that the test provided the speakers with this form. The preferred default is clearly the third person singular, which accounted for almost two thirds of the errors. This is to be expected given that the third person singular invariably ends in the stem vowel and does not exhibit any overt person marking. The learners must be aware of this although it is not explicitly taught.

The role of a default form in L2 acquisition is not uncontroversial. Franceschina (2001) argues that there is no role for a default within current linguistic frameworks. However, it is clear that defaults are common in natural language, particularly in the domain of morphology. It has been claimed that the masculine is the default gender in Spanish (Harris 1991). In spoken Brazilian Portuguese the third person is used as a default. In standard Portuguese there are 4 different forms in the conjugation of the verb to speak (*falo, fala, falamos* and *falam*), but in the spoken form often the third person *fala* is used for all persons except the first (Azevedo 1992).

Verb class did not seem to play a role. This argues against frequency of input as a determining factor, given that the verbs of the first class (-ar) make up by far the largest class, not only overall but also if we look at the most frequent verbs. However, excluding the verb *to be*, there were almost half as many errors with irregular as with regular verbs. Lardiere (2002) also found that her subject produced fewer errors with irregular verbs.

The number of errors in the recognition task was very low, and, in fact, 15 participants committed between 0 and 3 errors out of 80 sentences on this task. This seems to indicate that the learners do relate the correct endings to the different persons when the processing load is lower. However, the high correlation between the production and recognition tasks shows that both tasks are equally valid.

A final question we may ask relates to the role of explicit teaching in the results obtained here. Verb agreement plays a very important role in the formal teaching of Spanish. Nevertheless, it is my impression that the third person singular is also extensively taught in English as a second language classes, and yet research shows it is not often acquired. Therefore teaching cannot be the only explanation for the high accuracy found in this study. It could be argued that the difference between English and Spanish verbal agreement is that in Spanish it has a high communication value, given that Spanish is a pro-drop language, while in English the third person *-s* is totally redundant.

Results of this test provide evidence that there is no impairment in adult second language acquisition. The number of errors was low. If it is correct to assume that the recognition task provides a better picture of the learners' competence, the number of errors was almost non-existent, showing learners are able to acquire verbal agreement inflection. The fact that learners have problems in producing agreement in some languages may be due to other factors, unrelated to any deficit in the domain of functional categories.

A great deal of further research is needed in languages such as Spanish. In particular, it is necessary to try different methodologies and look at learners who are acquiring Spanish in a non-formal context. Nevertheless, results of the present study indicate that the acquisition of agreement in Spanish may actually be faster and there may be less variability than what has been found in the literature in other languages.

References

- Azevedo, Milton (1992). Introducción a la lingüística española. Upper Saddle River, Prentice Hall.
- Bailey, N., C. Madden, Krashen S. (1974). "Is there a 'natural sequence' in adult second language learning?" Language Learning 24: 235-243.
- Beck, Maria-Luise (1998). "L2 acquisition and obligatory head movement: English-speaking learners of German and the local impairment hypothesis." Studies in Second Language Acquisition 20: 311-348.
- Bruhn de Garavito, J. (to appear). "The (dis)association between morphology and syntax: The case of L2 ." Montrul, S. (ed.) Proceedings of the 4th Conference on the Acquisition of Spanish and Portuguese, University of Illinois at Urbana Champaign, October 2001.
- Duffield, Nigel and Lydia White (1999). "Assessing L2 knowledge of Spanish clitic placement: convergent methodologies." Second Language Research 15(2): 133-160.
- Dulay, Heidi and Marina Burt (1974). "Natural sequences in child second language acquisition." Language Learning 24: 37-53.
- Eubank, Lynn (1994). Optionality and the initial state in L2 development. Language acquisition studies in generative grammar. T. Hoekstra and B. Schwartz. Amsterdam, John Benjamins: 369-388.
- Eubank, Lynn, Bischof, Janine, Huffstutler, April, Leek, Patricia and Clint West (1997). "Tom eats slowly cooked eggs": thematic-verb raising in L2 knowledge." Language Acquisition 6: 171-199.
- Ezeizabarrena, María José (2002). Root infinitives in two pro-drop languages. The Acquisition of Spanish Morphosyntax: The L1/L2 Connection. Ana Teresa Pérez-Leroux and Juana M. Licerias. Dordrecht, Kluwer: 33-64.
- Franceschina, Florencia (2001). "Morphological or syntactic deficits in near-native speakers? An assessment of some current proposals." Second Language Research 17(3): 213-247.
- Harris, James W. (1991). "The exponence of gender in Spanish." Linguistic Inquiry 22(1): 27-62.
- Hawkins, Roger and Yuet-hung Cecilia Chan (1997). "The partial availability of Universal Grammar in second language acquisition: the 'failed functional features hypothesis'." Second Language Research 13(2): 187-226.
- Haznedar, Belma and Bonnie Schwartz (1997). Are there optional infinitives in child L2 acquisition? Proceedings of the 21st Annual Boston University Conference on Language Development. E. Hugues, M. Hugues and A. Greenhill. Somerville, MA, Cascadilla Press: 293-206.
- Lardiere, Donna (1998a). "Case and tense in the 'fossilized' steady state." Second Language Research 14: 1-26.
- Lardiere, Donna (1998b). "Dissociating syntax from morphology in a divergent end-state grammar." Second Language Research 14: 359-375.

- Lardiere, Donna (2002). Second language knowledge of [+/- Past] vs. [+/- Finite]. Generative Approaches to Second Language Acquisition 6 (GASLA 6), University of Ottawa and Carleton University.
- Lightbown, Patsy (1983a). Acquiring English L2 in Quebec classrooms. Language Development at the Crossroads. S. Felix and H. Wode. Tübingen, Gunter, Narr, Verlag.
- Lightbown, Patsy (1983b). Exploring relationships between developmental and instructional sequences in L2 acquisition. Classroom Oriented Research in Language Acquisition. H. Seliger and M. Long. Rowley, Mass., Newbury House.
- Meisel, Jürgen (1992). Getting fat. Finiteness, agreement and tense in early grammar. Bilingual first language acquisition: French and German grammatical development. J. Meisel. Amsterdam, John Benjamins: 89-129.
- Meisel, Jürgen (1997). "The acquisition of the syntax of negation in French and German: contrasting first and second language acquisition." Second Language Research 13: 227-263.
- Pinker, S. (1999). Words and Rules: The Ingredients of Language. New York, Basic Books.
- Poeppl, David and Kenneth Wexler (1993). "The full competence hypothesis of clause structure in early German." Language 69(1): 1-33.
- Prévost, Philippe and Lydia White (2000). "Missing surface inflection or impairment in second language acquisition? Evidence from tense and agreement." Second Language Research 16(2): 103-133.
- Tsimplici, Ianthi Maria and Anne Roussou (1991). "Parameter resetting in L2?" University College London Working Papers in Linguistics 3: 149-169.
- Wexler, Kenneth (1994). Optional infinitives, head movement and the economy of movement. Verb movement. D. Lightfoot and N. Hornstein. Cambridge, Cambridge University Press: 305-350.
- White, Lydia., Valenzuela, Elena, Kozłowska-Macgregor, Martyna, Leung, Ingrid and Hela Ben Ayed (2001). The status of abstract features in interlanguage: gender and number in L2 Spanish. Proceedings of the 25th annual Boston University Conference on Language Development. L. Domínguez and A. Johansen. Somerville, MA, Cascadilla Press. 2: 792-802.

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