Unexpected Constructions in SLA: A Diachronic Approach

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1. Unexpected constructions in SLA

When looking into the nature and properties of interlanguage grammars, researchers have often found constructions that are not present in the L1 nor the L2 but which are attested in other natural languages such as, for instance, wh-medial constructions (Gutiérrez 2006; Slavkov 2009). Although these constructions are normally taken as evidence that L2 learners have access to Universal Grammar, it is interesting to note that these constructions tend to show up in grammaticality judgment tasks but are difficult to find in spontaneous production data. Different explanations may account for this phenomenon. To begin with, it may be that the appearance of these constructions is an artifact of the task itself and, in that case, the presence of these constructions would not reflect language competence. Alternatively, it may be that there is a comprehension/production asymmetry that needs to be accounted for or, finally, these constructions may be interpreted as logical steps in the SLA process (Slavkov 2009), which is the view we adopt in this paper. We attempt to investigate (i) whether learners accept constructions/properties that are not attested in their L1 nor their L2 but which are attested in a previous stage of diachronic development; (ii) whether these constructions/properties can be predicted from the feature configurations of the L1 and the L2; and (iii) whether the order of loss of these properties resembles the order in which they were lost in diachronic development. To this end, we concentrate on the acquisition of L2 Spanish object clitics by L1 English learners. The interest of our proposal resides in that we attempt to predict potential problematic constructions on the basis of the featural properties of a given construction and the role those features have played in diachronic development.

2. A diachronic approach to SLA

The Grammar Competition Hypothesis (GCH) (Kroch 1994, 2001) was advanced to account for unstable periods of time where more than one parametric option was available for individual speakers (i.e. diglossia), as well as for the gradual and incremental nature of the diachronic change process. Zobl and Liceras (2006) argue that SLA is comparable to processes of diachronic development in that properties associated to a given parameter are acquired in a piecemeal fashion. Moreover, they propose that the GCH should be seen as an alternative framework for the study of SLA to the Fundamental Difference Paradigm (Hawkins 2001), which relies mainly on the comparison between L1 and L2 acquisition processes. Furthermore, very often diachronic change processes "are induced through second-language acquisition by adults in situations of language contact" (Kroch 2001: 2), which, as argued by Liceras (2007), should lead researchers working within the same theoretical framework to redefine concepts such as transfer and optionality as natural mechanisms that need to be explained both in instances of diachronic development as well as in other language contact situations in which speakers need to internalize more than one grammar.

From a purely linguistic point of view, there are also interesting similarities between the role of functional categories and interfaces in diachronic processes of grammaticalization and SLA. Roberts and Roussou (2003) define grammaticalization as the process whereby "reanalysis gives rise to a new exponent for a higher functional head" (Roberts and Roussou 2003: 200) or, in other words, the process whereby a lexical word becomes a grammatical word or affix. What is interesting about grammaticalization is that, first, it creates new functional material and, secondly, it affects interfaces, two areas that have been at the core of modern research on SLA. Specifically, SLA researchers have debated extensively on whether L2 learners are able to acquire functional categories that are not present

in the L1 (for an overview see White 2003), and about whether interfaces are vulnerable domains in SLA (see Sorace 2005). Thus, looking at the way reanalysis has given rise to new functional categories in diachrony as well as at the role played by linguistic interfaces (phonology and semantics) in shaping functional categories across time and across languages may offer interesting opportunities to investigate how L2 learners accommodate and reanalyze new linguistic data.

3. Clitics in the history of Spanish

The evolution of object clitics in the history of the Spanish language is a case of grammaticalization. According to Fontana (1993, 1994, 1997), Spanish clitics underwent a reanalysis from maximal projections (XPs) to heads (X°) from the 12th to the 16th century. Old Spanish had a system of second position clitics that tended to appear as enclitics to the first constituent of the clause. As maximal projections, Old Spanish clitics displayed the following properties:

(1) Interpolation
     que les dios fiziera   (Fontana 1993: 47; example 32a)
     that them god made

(2) V-Cl and Cl-V order
     Rogaronle que les diesses la llave   (Fontana 1993: 63; example 14a)
     Pray-him that them gave the key

(3) No clitic doubling
     Ael llamaban otrossi amosis   (Fontana 1993: 262; example 35c)
     To-him called also amosis

The trigger to the reanalysis of clitics was brought about by the loss of the [Spec, IP] position to host topicalized constituents, which triggered a change in the direction of phonological cliticization. Thus, the increase in the number of sentences where the clitic had no material to its left to which it could encliticize triggered a change towards procliticization, which in turn paved the way for the reanalysis of clitics in terms of object agreement markers.

Fontana argues that the change from maximal projections to heads was gradual and took several centuries to complete. This process is illustrated in the following graphs, which display the results obtained in Fontana's analysis of written texts.
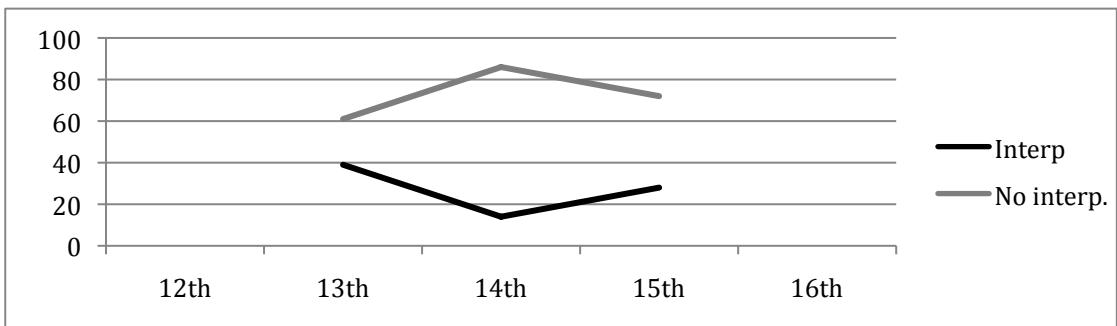

Figure 1: Interpolation in Old Spanish

Figure 2: V-Cl and Cl-V orders in Old Spanish

Figure 3: Clitic doubling in Old Spanish

As can be observed, the process of diachronic change from maximal categories to heads of their own projections did not take place abruptly. During those centuries, both grammatical options (clitics as XPs and X°s) coexisted in the minds of speakers until, eventually, the X° option replaced the XP one. According to Fontana (1993), interpolation was the first property to be lost, followed by the loss of V-Cl order and the incorporation of clitic doubling.

In (4), we have represented the changes that took place in the Old Spanish clitic system by means of the combination of two abstract features: [+/-phon] and [+/-XP]. These two features are intended to account for typological differences across different pronoun types as well as for the direction of grammaticalization in diachronic change. We have adopted a typology of pronouns that, for some authors, represents the direction of grammaticalization from full pronouns to verbal object agreement markers (see Camacho Taboada 2006), to which we add our feature combinations that define major properties of each clitic type.

(4) Full pronouns>   Simple clitics   >   2P clitics   >   Categorial clitics   > Agreement markers
    [-phon]   [+phon(enclisis)]   [+phon(proclisis)]
    [+XP]   [+XP]   [-XP]

English has full pronouns as opposed to clitics, which are phonologically deficient elements that need to attach to another element. Simple clitics are pronouns that suffer phonological reduction but with no consequences in the syntax as, for instance, when English pronouns are phonologically reduced (*I love'im*). Second position clitics are phonologically reduced elements that appear in the second position of the clause as enclitics to the first constituent. This is the type of clitics found in Old Spanish, Czech or Serbo-Croatian. Categorial clitics are elements that take only the verb as phonological host; examples of languages with categorial clitics are Italian, French or Portuguese. Finally, languages with clitics that are considered agreement markers are those that allow clitic doubling, as Modern Spanish or Bulgarian. From this perspective, the acquisition of Modern Spanish clitics by L1 English speakers implies a readjustment from [-phon] to [+phon] and from [+XP] to [-XP]. Thus, we hypothesize that L1 English learners of L2 Spanish may go through an intermediate stage where constructions that are compatible with a feature configuration [+phon] [+XP] (interpolation, V-Cl order and lack of clitic doubling) are available.

4. The study

4.1. Research questions

Based on the above, the research questions we will address are the following:

(i)   Do learners accept Old Spanish clitic configurations as logical competitive options that coexist with target-like (i.e. Modern Spanish) clitic constructions?

(ii)   Is this competition (optionality) similar to the one observed in the period when these pronouns were undergoing a diachronic change?

(iii)   Does the order of disappearance of these properties resemble the order of loss of these properties in diachronic development?

4.2. Data collection procedure

Thirty-three learners of L2 Spanish with English as L1 participated in the study. At the time of the study, they were enrolled in a Spanish intensive course at the Universidad Internacional Menéndez Pelayo (UIMP), in Santander (Spain).[1] They were divided into three proficiency levels (beginner, intermediate and advanced) according to the placement test that is used at this institution and which consists of a grammar and vocabulary multiple-choice task, a writing exercise and an oral interview with two teachers. This process resulted in a group of 10 beginners, another one with 15 intermediates, and finally a group of 8 advanced learners. Fifteen Spanish native speakers acted as controls.

We designed an acceptability judgment task consisting of 102 sentences distributed as follows: thirty-six sentences featuring Old Spanish properties, thirty-six sentences featuring Modern Spanish properties and thirty distracters. The sentences corresponding to the Old Spanish grammar included the following conditions. First, there were eighteen sentences with interpolation, i.e. sentences in which an intervening constituent separates the clitic and the verb (see (5)). Nine of these sentences contained a direct object (DO) clitic and the other nine an indirect object (IO) clitic. Furthermore, within the DO and the IO group, sentences were divided into three subgroups (with three sentences each) according to whether the interpolated element was an adverb (ADV), the subject of the sentence (SUB) or the negative marker (NEG). Examples for all the conditions and their distribution follow.

(5)   a. María lo siempre compra en el mercado   [INT/DO/ADV]
           Mary it always buys at the supermarket

         b. Porque lo Pedro compró ayer   [INT/DO/SUB]
            Because it Pedro bought yesterday

         c. María lo no compró   [INT/DO/NEG]
            Mary it not bought

         d. María le siempre envía flores   [INT/IO/ADV]
            Mary him always sends flowers

         e. Porque le María dio un regalo   [INT/IO/SUB]
            Because him Mary gave a present

         f. María le no regaló un libro   [INT/IO/NEG]
            Mary him not gave a book

Secondly, for the condition involving a clitic in postverbal position, two groups (three sentences each) were made according to whether the clitic was DO or IO, as illustrated in (6).

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(6)   a. María compró lo ayer   [DO/V-CL]
          Mary bought it yesterday

       b. María envió le unos libros   [IO/V-CL]
          Mary sent   him some books

Finally, regarding clitic doubling sentences, a division was made between sentences in which doubling was obligatory and those in which it was optional. Also, the division between DO and IO was maintained. It is important to note that in order to address the specific research questions of this study we were not interested in examining whether the learners were aware of the conditions under which clitic doubling occurs in Spanish, we were just interested in determining if they preferred one option versus another. Some examples follow.

(7)   a. María vio a él en el cine   [DO/OBL/-CL]
          Mary saw to him at the cinema

       b. María vio a Juan en el cine   [DO/OPT/-CL][2]
          Mary saw to John at the cinema

       c. Juan dio los libros a él   [IO/OBL/-CL]
          John gave the books to him

       d. Juan dio los libros a María   [IO/OPT/-CL]
          John gave the books to Mary

As indicated above, for all these sentences corresponding to the Old Spanish grammar there were grammatical versions corresponding to Modern Spanish. Each sentence was introduced by a question so as to provide a minimum context of interpretation and appeared on screen for fifteen seconds. The learners were given a scale with five options to rate each sentence: (1) very bad; (2) bad; (3) don't know; (4) good and (5) very good.

4.3. Results

Figure 1 displays the results obtained by the beginner group in the acceptability judgment task. The numbers indicate the percentage of sentences that were rated (4) or (5)[3], i.e. that were accepted.

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[2] In Modern Spanish, clitic doubling with a non-pronominal DO is not optional, it is ungrammatical. However, we have included this condition in order to keep the balance between the number of sentences with DO clitics and sentences with IO clitics.

[3] In the doubling versus non-doubling condition we have only included the percentages obtained in the obligatory doubling condition.
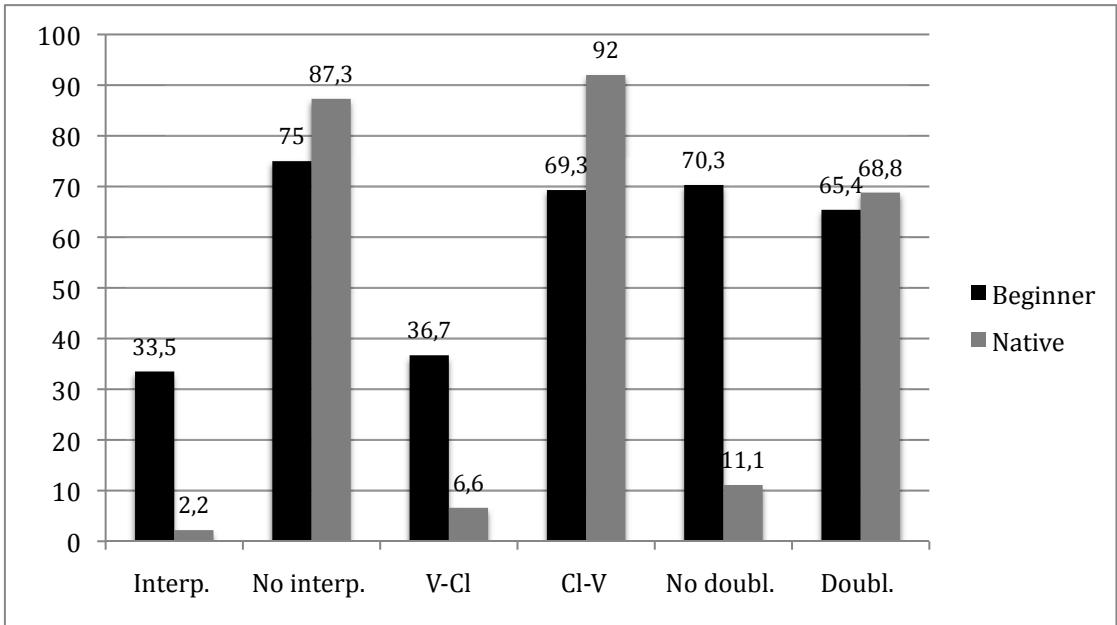
Figure 1: Acceptance of sentences with Old Spanish and Modern Spanish properties (Beginner group)

As can be observed, learners in the beginner group accept sentences containing interpolation (33.5%), V-Cl order (36.7%) and no clitic doubling (70.3%), which are the sentences that correspond to the Old Spanish grammar. However, it must be noted that in the interpolation and the Cl-V order conditions learners largely prefer sentences conforming to the Modern Spanish grammar. Interestingly, sentences with and without clitic doubling obtain similar percentages of acceptance, indicating that there are no clear preferences in this respect, which contrasts with the performance of native speakers, who clearly show a clear preference for clitic doubling constructions. Figure 2 shows the results obtained in the intermediate group.
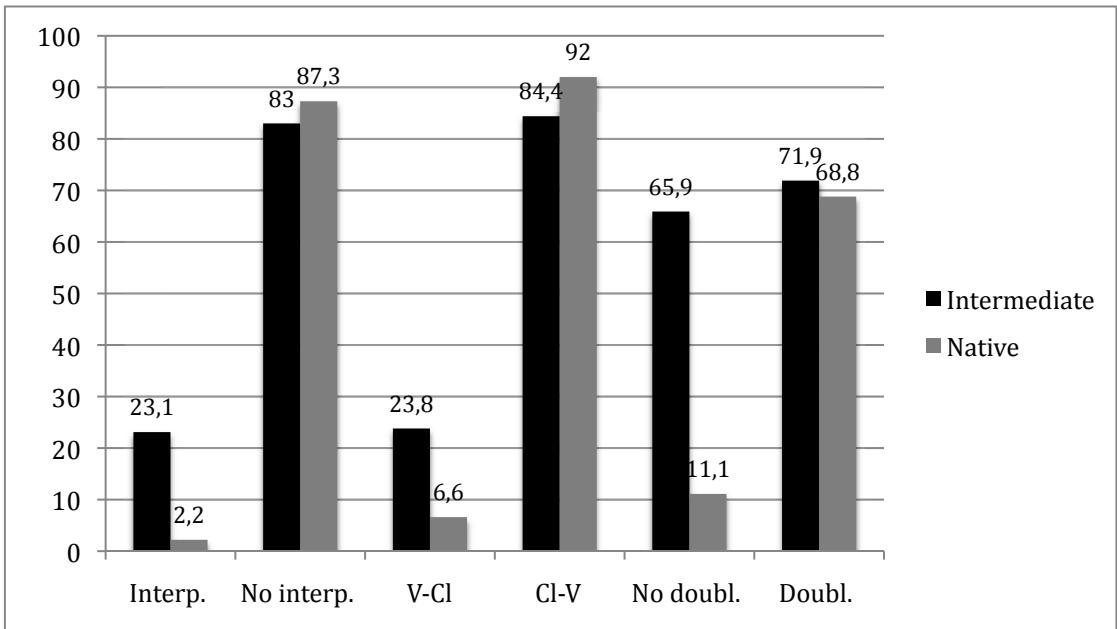
Figure 2: Acceptance of sentences with Old Spanish and Modern Spanish properties (Intermediate group)

There are not many differences with respect to the learners in the beginner group. Interpolation and V-Cl order continue to be accepted in similar proportions (23.1% and 23.8% respectively), and learners seem to make no difference between sentences with clitic doubling and those without. This picture slightly changes in the advanced group, as can be observed in Figure 3.
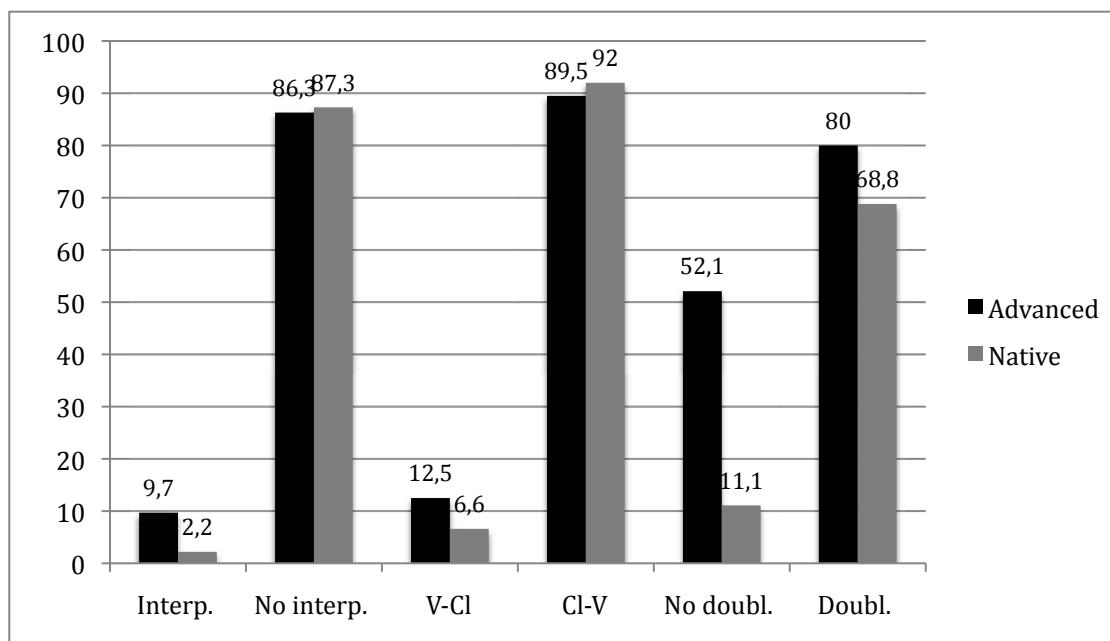
Figure 3: Acceptance of sentences with Old Spanish and Modern Spanish properties (Advanced group)

With regards to sentences with interpolation and V-Cl order, the rate of acceptance decreases noticeably compared to learners in the beginner and the intermediate group. In the clitic doubling condition, for the first time we observe a preference for doubled versus non-doubled sentences, although these learners are still far from behaving like natives in this respect.

All in all, in response to our first research question about the appearance of these constructions in an experimental task, all groups accept constructions that do not belong to the L1 nor to the L2 but which are attested in a previous stage of diachronic development. Focusing on specific constructions, learners seem to be aware of the correct properties of clitics from the early stages because sentences without interpolation and with Cl-V order are primarily preferred by learners at all levels. The case of constructions involving clitic doubling is different, as learners in all groups differ from natives in that they accept both doubled and non-doubled versions, whereas natives prefer sentences with clitic doubling. This indicates that, although learners in all groups are aware of the properties of Spanish clitics as heads, they still accept configurations that are compatible with an analysis of clitics as maximal projections.

Our second research question inquired whether the competition (optionality) observed in the L2 data resembled the one observed in periods of diachronic change. If we compare our results with the ones reported in Fontana (1993) (see Figures 1, 2 and 3), we observe that the distribution of the data across level groups shows a different pattern to the one observed in diachrony.
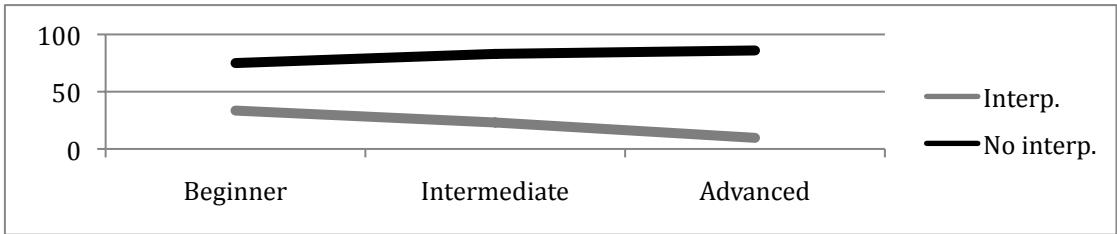
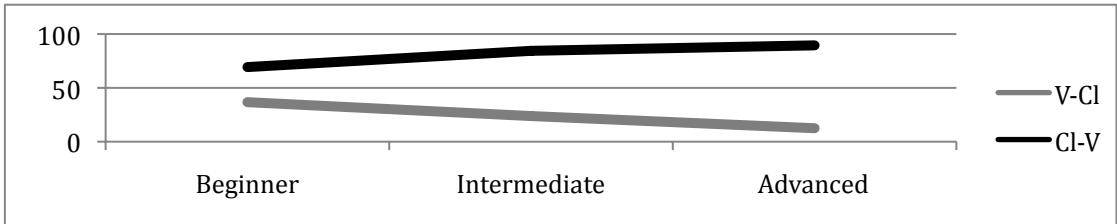Figure 4: Optionality (competition) in the interpolation condition

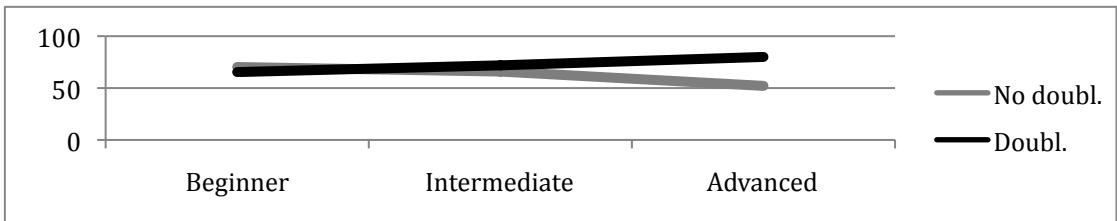Figure 5: Optitonality (competition) in the V-Cl order condition

Figure 6: Optionality (competition) in the doubling versus non-doubling condition

The L2 data show a different picture when compared to what is observed in diachronic development, especially in as far as the substitution process is concerned. In diachrony, the competition between two grammatical options is resolved via substitution of one option by another. In the L2 data, with regard to interpolation and V-Cl order, learners choose the Modern Spanish option from the early stages, and a process of abandonment of the competing Old Spanish option is observed, whereas in clitic doubling, both options coexist even at the advanced stage, and although there are signs that learners start to prefer clitic doubled sentences, they are still far from performing like natives in this respect. Further research should address if at native-like levels a substitution process is indeed achieved.

Finally, we focus on whether the order of loss of properties of Old Spanish clitics in L2 acquisition resembles the order of loss of these constructions in diachrony. Figure 7 displays the rate of acceptance of sentences conforming to the Old Spanish grammar across levels.
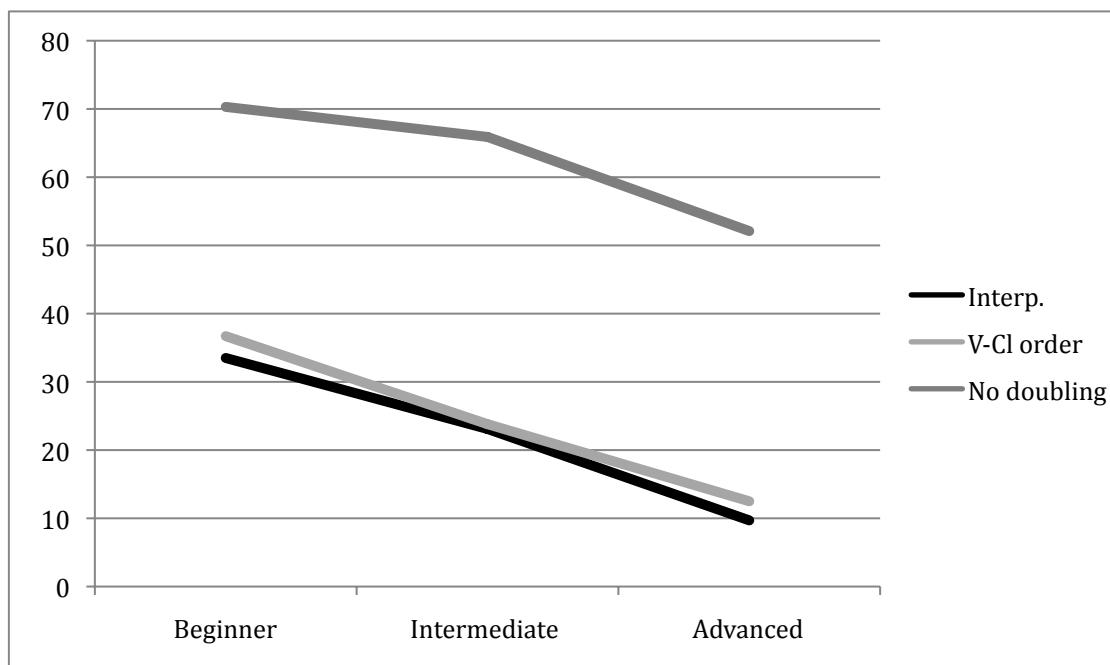
Figure 7: Old Spanish constructions across level groups

According to the data displayed in Figure 7, it seems that interpolation and V-Cl order are fixed at approximately the same time, whereas clitic doubling constructions are still problematic in the advanced stages. This is not exactly the order found in diachrony, where interpolation was lost before V-Cl. However, both constructions are related to the phonological status of clitics (our feature [+/-phon]), which leads us to propose the generalization that properties related to the [+/-phon] feature are fixed or acquired earlier than properties related to the feature [+/-XP], as is the case with clitic doubling.

5. Conclusions

In this paper we have undertaken to establish a parallelism between processes of diachronic change and SLA. The comparison is grounded on the possibility that opposite parametric options may coexist in the mind of a single speaker. We have seen that L1 English learners of Spanish accept clitic configurations that are not found in the target language, but which are found in a previous stage of diachronic development and, more specifically, it has been observed that not all properties of clitics seem to be equally problematic to learners. In fact, properties related to the direction of phonological cliticization (interpolation and V-Cl order) are acquired earlier and more successfully than properties related to the syntactic status (as XP or Xº) of the clitic, which results in problems with clitic doubling structures even at advanced stages. Our study has also shown that even though the CGH is compatible with the L2 data, there are differences with regard to the way competition is implemented in diachronic development versus SLA: first, because learners are aware of some properties of Modern Spanish clitics (lack of interpolation and Cl-V order) from the very beginning and a substitution process is not observed in the acquisition pattern of these constructions; and second, because in the clitic doubling condition, and despite the learners' indeterminacy in accepting both the doubled and non-doubled versions, the clitic and the doubled element are never in complementary distribution, as was the case in Old Spanish. However, we would like to highlight the interest of drawing parallelisms between situations of language change and SLA processes because, ultimately, joint research in the two areas may lead to a better understanding of how speakers internalize and resolve competing grammar situations.

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