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L2 acquisition of Spanish clitic case morphology: A generative approach

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The present study has investigated the phenomenon of morphological variability in interlanguage grammars. Current L2 research does not seem to agree on whether erroneous morphological forms noticeable even in advanced and end-state. L2 grammars are due to an underlying syntactic impairment or learners' performance limitations. The use of Spanish direct and indirect object pronouns (known as clitics) by adult English speakers was analyzed to see whether morphological errors are the result of computational or representational difficulties. Similarly to previous L2 studies, data have shown that morphological features of Spanish clitics are very hard to be fully acquired. The problem, however, does not result from an underdeveloped functional structure, but rather a deficiency in mapping the morphological features with the syntactic information available. Clitic case morphology is fully acquirable, despite its absence in L1 grammar and the acquisition difficulties it causes. As such, they appear to support some form of continuity in L2 acquisition suggesting that the universal linguistic knowledge available in childhood is still accessible in post-pubertal age.

Key words: Morphological variability, Spanish direct and indirect object pronouns, L2 case morphology.

INTRODUCTION

Morphological variability is a well-known phenomenon in second language acquisition (henceforth: SLA). A large body of research, including Francescina (2001, 2002) and McCarthy (2007, 2008) for Spanish, Hawkins and Franceschina (2004) and Granfeldt (2000) for French, Lardièrè (1996a,b) and White (2002, 2003) for English, and Santoro (2008) for Italian, has attested that L2 morphological features are so difficult to acquire that ungrammatical forms may be noticed even at advanced acquisition stages.

Researchers, however, do not seem to agree on what may cause such a delay. Proponents of the *Impaired Representation Hypothesis* (henceforth: IRH) (Clahsen,

1988; Clahsen and Muysken, 1996; Bley-Vroman, 1989) attribute it to fundamental differences between L1 and L2 acquisition. The full range of parametric options available in L1 acquisition is no longer retrievable in adult age. Therefore, L2 learners need to rely on cognitive rather than strictly linguistic learning mechanisms to acquire L2 structures and forms. In other words, they use general problem-solving mechanisms, which include analysis, analogy, hypothesis formation and testing, as well as their L1 knowledge. Their core linguistic competency derives from the ability to analogize from their L1 to their L2. Aspects that are not present in learners' L1 may be problematic to acquire due to the lack of clear similarities between the native and the target language. That being the case, the morphological errors found in interlanguage grammars are the result of an underlying syntactic breakdown due to learners' inability to access their universal linguistic knowledge, usually known as UG.

Following this line of thought, Hawkins and Chan (1997) propose a more moderate version of the previous proposal. In their view, syntactic impairment does not involve the entire grammatical system, but only the L2

Abbreviations: **Acc**, Accusative case; **cl**, clitic; **COND**, conditional mode; **Dat**, dative case; **GER**, gerundive; **IMP**, imperative; **IMPERF**, imperfect tense; **INF**, infinitive; **MOD**, modal verb; **NEG**, negator; **PAST**, past tense; **PRES**, present tense; **REL**, Relative pronoun; **SUBJ**, subjunctive mood; **V_{fin}**, finite verb; **V_{inf}**, infinitival verb.

properties that differ from those displayed by learners' L1 grammar (*Failed Functional Features Hypothesis*, henceforth: FFFH).

Therefore, complete development and native-like use may not be reached in those areas where the two languages differ in terms of the categories and the features they realize. Morphology variability may be then due to structural differences between the two grammars.

In contrast, there are researchers who maintain that principles and categories available to child L1 learners are also available to adult L2 learners (*Full Access Hypothesis* henceforth: FAH) (Epstein et al., 1996). Their underlying grammatical representation is neither fully impaired nor restricted to L1 properties. Therefore, fossilized morphological forms may reflect a temporary difficulty given the gradual development of the functional structure in L2 grammars (*Minimal Tree Hypothesis*, henceforth: MTH) (Vainikka and Young-Scholten, 1994, 1996), or they may be a mere problem in lexical access (*Missing Surface Inflection Hypothesis*, henceforth: MSIH, Lardière, 1998a, b; Prévost and White, 2000, among others). In the latter view, morphological variability is a performance rather than a representation issue due to learners' inability to access certain morphological forms from the lexicon, and, hence, their failure to appropriately map them with the syntactic information available.

In sum, according to the first proposals, difficulties in acquiring L2 morphological features are attributable to the whole or partial breakdown of the grammatical system. Under the second account, morphological problems are just the result of an 'incorrect' use of the underlying knowledge.

In this state of affairs, the present study wishes to shed some clearer light on the reasons why L2 learners encounter so many problems in dealing with the morphological features of their target language. With that in mind, the author will analyze the use of Spanish direct and indirect object pronouns by adult English speakers. The choice of this particular language group and the selection of this specific aspect of Spanish cliticization are justified on the following grounds:

1. English and Spanish object pronominal systems are strikingly different. Spanish pronouns, besides being syntactically distinct from their English counterparts, are morphologically differentiated, an option not available in English. Therefore, focusing on two language groups whose pronominal systems are quite different should help us determine the causes of the delayed development of the clitic case features in L2 grammars.

2. Previous L2 studies (Montrul 1996; Duffield et al., 1997; Granfeldt and Schlyter, 2004; Herschensohn, 2004) have mainly investigated the acquisition of clitic placement. L2 researchers were mostly interested in seeing whether speakers of cliticless languages were able to acquire the correct positioning of Romance clitics

with respect to their selecting verb. To the author's knowledge, there is no L2 investigation that has strictly examined the acquisition of case distinction in Romance cliticization.

3. Data drawn from L2 acquisition of case do not lend themselves to multiple interpretations. As a result, they should be a reliable testing ground for the morphological development in SLA.

In sum, by taking a closer look at how English speakers deal with Spanish clitic case morphology, we should be able to provide more convincing evidence that could help us ascertain whether erroneous morphological forms are due to underlying syntactic impairment, or to learners' inability to 'translate' the syntactic information acquired into the appropriate morphological forms.

SPANISH AND ENGLISH PRONOMINAL SYSTEMS

The Spanish pronominal system features two morphologically distinct sets of object pronouns (known as clitics). They are case differentiated, even though they have similar lexical forms for the first and second person singular and plural. One group, in fact, displays accusative case morphology: *me* (me), *te* (you), *lo* (him, it), *la* (her, it), *nos* (us), *os* (you, plural), *los* (them, masc.), and *las* (them, fem.), whereas the other set shows dative case morphology. The equivalent dative clitics of the accusative ones are *me*, *te*, *le*, *nos*, *os*, and *les*. Syntactically, both sets of pronouns behave similarly to Romance clitics in general. For instance, they only appear in specific positions in the syntactic structure: Pre-verbally in simple tensed clauses (1), or post-verbally in imperative or non-finite constructions (2 and 3, respectively):

- (1) José **la** llama todos los días.
J. her_{acc} call-PRES all the days
'J. calls her every day.'
- (2) ¡Llámala! Está muy triste hoy.
call-IMP-her_{acc} be-PRES very sad today
'Call her! She is very sad today.'
- (3) Llamarla sería un error.
call-INF her_{acc} be-COND a mistake
'Calling her would be a mistake.'

Furthermore, they are restricted in their use in that they cannot be coordinated or contrastively stressed, as shown in (4) and (5), respectively:

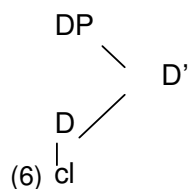
- (4) *José lo y la llama todos los días.
J. him_{acc} and her_{acc} call-PRES all the days
J. calls him and her every day.'
- (5) - *¿A quién llama José todos los días?

¿A su novia o a su hermano?

To whom-REL call-PRES J. all the days to his girlfriend
or to his brother

- José LA llama cada día'
- J. her_{acc} call-PRES every day
- 'Jose calls HER every day.' (not his brother)

Uriagereka (1995), Cardinaletti and Starke (1999) and Kayne (1994) claim that the limited use of Spanish object pronouns and most Romance clitics is due to their impoverished internal structure. In their view, clitics are just heads of the category determiner, projecting a DP lacking any nominal projection, illustrated as follows (chart adopted from Leonini, 2006):



Despite their structural deficiency, they bear strong case features which need to be checked at the syntactic level, before spell-out (Chomsky, 1995). Clitics are unable to do so internally for lack of structure; hence, they are forced to move to the agreement projection where this operation usually takes place, namely the object agreement projection (AGROP) for accusative case and the indirect object agreement projection (AGROIP) for dative case. These projections, in fact, have a dual function: They check the agreement features of the verb moving to their head position, and the phi features (case, gender, number) of the determiner phrases (DPs), including clitics, moving to their Specifier-position (Spec).

In Sportiche's (1996) view, however, clitics do not undergo any movement. They are generated where they appear heading their own functional projections, which are called voices. Their morphological features, including case, are checked by the movement of a related null pronominal element (*pro*) that carries the same phi features. This null element, base-generated in the argument position of the verb, moves to Spec-AGROP where it checks its case features. Then it proceeds to the Spec-position of the corresponding clitic voice where it licenses the clitic in a Spec-head agreement configuration, as stated in the clitic criterion:

(7) Clitic Criterion

- i. A clitic must be in a Spec-head relationship with [+F] XP at LF;
- ii. A [+F] XP must be in a Spec-head relationship with a clitic at LF. (Sportiche, 1996: 236)

This approach is schematized in (8) where the functional

category of the accusative clitic is located higher than its related agreement projection (irrelevant projections omitted).

- (8) José la llama todos los días.
J. her_{acc} call-PRES all the days
'J. calls her every day.'

As shown in Figure 1, the agreement reflex of the Spec-head relationship is expressed by case, number, gender and person agreement (at least in many Romance languages).

Sportiche (1996) also points out that only those pronouns that are [+specific], inherently referential, and display structural case, that is, nominative, accusative or genitive, are licensed in the way just described. Syntactically, these clitics behave like [+wh] Cs that license wh-phrases where every scopal property is satisfied in a Spec-head agreement, as stated in the Wh- Criterion as follows:

(9) Wh-criterion

1. A Wh operator must be in Spec-head configuration with X+wh
2. An X+wh must be in a Spec-head configuration with a Wh operator (Rizzi, 2000: 214)

If the analogy is correct, Spec-AccV should also function as an operator licensing the [+specific] feature of the clitic. Given that operators are expected to end up at the level of logical form (LF) in an A-bar position (as it is certainly the case for wh-phrases), one could safely assume that Spec-AccV must be a position of similar nature.

Dative clitics also head their own 'Voice' (DatV). This functional category, however, behaves more as an agreement projection where dative case is assigned, rather than as an authentic clitic voice. There are a number of reasons that justify the view that these clitics are not linked to specificity. In many dialects of Spanish, for instance, dative clitics can be paired with any object, irrespective of their features of animacy or specificity (10 and 11):

- (10) Le hablé al profesor. [+spec +anim +/- def]
him_{dat} [I] speak-PAST to-the professor
'I spoke to the professor.'

- (11) No le hablé a nadie [-spec +anim -def]
NEG him_{dat} speak-PAST to nobody
'I did not speak to anyone.'

The use of double clitic constructions with accusative pronouns, on the other hand, is more limited. In Porteño Spanish, the dialect spoken in Buenos Aires, accusative clitics double only with arguments that are marked as Specific and animate (12 and 13: examples taken from Suñer (1992).

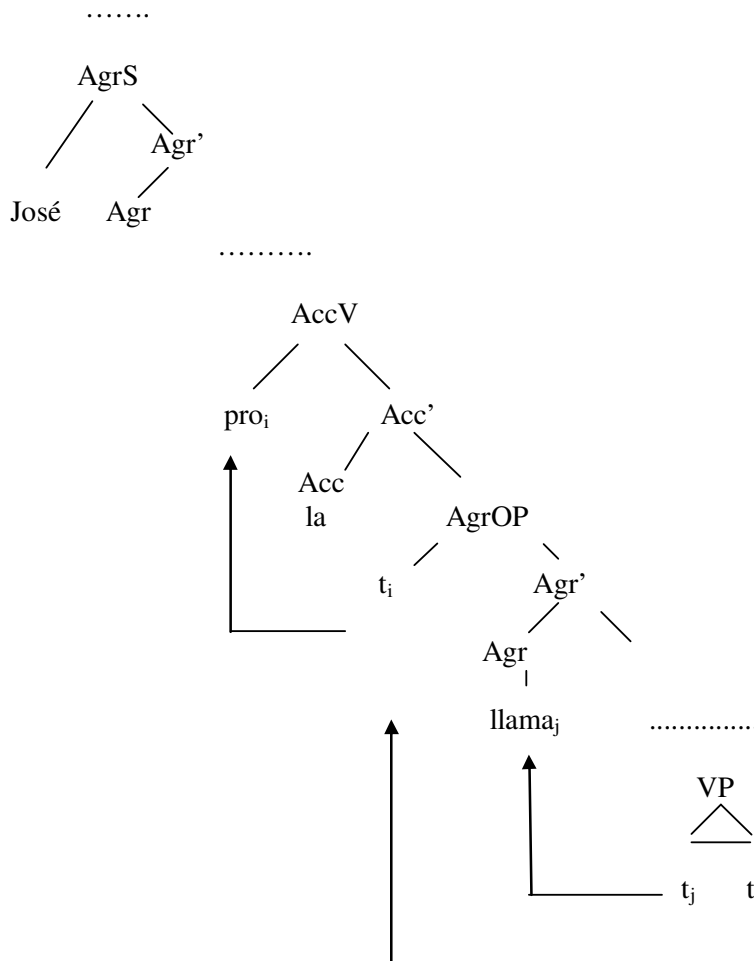


Figure 1. Syntactic structure of (8)

(12) **La** buscaban (a) una mujer que vendía cobras.
 [+spec + anim - def]
 [they] her_{acc} look-IMPERF to a woman that sell-IMPERF copperheads
 'They were looking for a woman that was selling copperheads.'

(13) ***La** buscaban (a) una mujer que vendiera cobras.
 spec + anim - def]
 [they] her_{acc} look-IMPERF to a woman that sell-SUBJ copperheads
 'They were looking for a woman that would sell copperheads.'

Example (12) is grammatical because the pronoun *la* refers to a specific female person. (13), on the other hand, is ruled out since the referent of the pronoun is someone that is not specified or definite. In sum, empirical evidence shows that dative clitics are indeed not linked to specificity. Since, as previously mentioned, this feature is only licensed in A-bar positions, a dative clitic voice must just function as an agreement projection

'devoid of interpretative consequences and assigning dative case in their A-position specifiers' (Sportiche, 1996).

English grammar, on the contrary, does not have determiner-like pronouns. According to Cardinaletti and Starke (1999)'s typology, English object pronouns may project a full nominal structure (strong), or lack the highest functional layer (weak). The two sets of pronouns, however, are not lexically differentiated-the same pronoun can be used for either form. In other words, when it occurs in syntactic contexts allowing deficient pronouns, it will behave as such, allowing contraction but disallowing modification or coordination. When, on the other hand, it occurs in syntactic contexts that require full forms, it will be used as a strong pronoun, allowing coordination or modification, but disallowing contraction. Such a contrast is displayed as follows (examples taken from Cardinaletti and Starke, 1999):

(14) *Weak form: strong form*

a. John saw 'm. John saw him

- b. *John saw only'm. John saw only him
 c. *John saw 'm and Mary. John saw him and Mary
 d. *John saw 'm not Mary. John saw him not Mary

As we can see, English weak forms, in many respects, behave similarly to Spanish clitics. However, they maintain a consistent post-verbal position across different syntactic structures (except in constructions with perception verbs), whereas Spanish clitics may occupy a variety of positions with respect to their selecting verb. In addition, they are not case differentiated since "the abstract representation of dative is absent or has become inactive in English (Montrul, 1996, 1998)." Following Lightfoot (1991), the scholar, in fact, claims that in Middle English inherent dative case was lost and prepositions ceased to assign oblique case. As a result, new syntactic structures emerged such as double object constructions where both objects receive accusative case (15)

(15) John gave him it.

PREDICTIONS

In view of these morpho-syntactic differences, what predictions can be made regarding the development of clitic case morphology in Spanish L2 grammars and, most importantly, the causes of the expected morphological variability?

Empirical evidence should help us solve this interesting acquisition conundrum. For instance, if morphological errors are random and unpredictable affecting any type of clitic, and their inconsistency is noticeable throughout the entire acquisition process, one could claim that the syntactic structure responsible for the licensing of Spanish direct and indirect object pronouns, that is, Voices, AGROP, AGROIP, is unavailable to English speakers. Therefore, ungrammatical morphological forms could be the result of an underlying syntactic impairment due to the lack of clitics in English grammar and learners' inability to access their universal linguistic knowledge (consonant with IRH).

If, on the other hand, morphological variability tends to gradually decrease with time, and Spanish clitics are increasingly used in a native-like manner, one may assume that the functional apparatus of these pronouns is accessible to English speakers, even though underspecified. Clitic functional categories and features become progressively available as the exposure to L2 input increases and learners' proficiency level improves. This scenario would support some form of Continuity in adult SLA where post-puberty learners have still access to the parametric options of their childhood (consonant with FAH). However, as mentioned in the introduction of this paper, UG availability does not totally exclude the presence of optional and fossilized morphological forms even in end-state L2 grammars. Signs of difficulty in properly mastering the case features of Spanish clitics may

still be encountered at advanced acquisition stages. They, however, would not reflect a breakdown of learners' grammatical system, but rather a mapping problem between the surface realization of morphology and the abstract syntactic features (consonant with MSIH).

A third scenario could be that, at early acquisition stages, morphological errors mostly involve the use of Spanish dative clitics, whereas accusative clitics are used correctly from the beginning. This initial acquisition discrepancy could be attributed to the absence of the dative case in English grammar, and, hence, to clear L1 effects. If that is the case, one could claim that L2 acquisition of Spanish clitic case morphology is restricted to only L1 features, and anticipate that native-like use of dative clitics will be never attained (consonant with the failed functional features hypothesis).

However, if the initial difficulty with dative pronouns tends to visibly decrease as L2 learners become more proficient in their target language, one could argue that 'language transfer' is only a temporary phenomenon. English speakers will be ultimately able to fully acquire the case distinction of Spanish object pronouns, suggesting that they may have still access to the full range of the parametric options of their childhood. Proponents of the *Full Transfer/Full Access Hypothesis* (henceforth: FT/FAH), in fact, claim that, initially, learners may interpret L2 syntactic structures and morphological forms through apparently similar L1 categories. In other words,

"... all the principle and parameter values as instantiated in the L1 grammar immediately carry over as the initial state of a new grammatical system on first exposure to input from the target language" (Schwartz and Sprouse, 1996: 41)

These erroneous forms will be eventually restructured with the help of UG and L2 input, and will more and more resemble those of the target language. In sum, the empirical evidence that will be obtained in the present study should help us determine whether morphological errors are the result of temporary or permanent syntactic impairment, or just due to learners' performance limitations. As such, it will also assist us in better understanding more general issues such as UG availability in post-puberty age and the role of L1 grammar in adult SLA.

THE EXPERIMENT

Subjects

A total of forty-four subjects participated in the experiment. Thirty-two were adult native English speakers studying Spanish in various New York City colleges. Their age ranged between eighteen to thirty years, and they had no previous knowledge of Spanish language. They were divided into two different groups according to their proficiency level. Their competence was determined by the number of Spanish classes attended. Subjects were categorized as high-beginners and high-intermediate.

The beginners' group consisted of seventeen subjects that had

completed the first year of instruction in their target language. By the end of the first year of instruction, English learners of Spanish have been formally exposed and instructed on the use of Spanish accusative and dative clitics. They were engaged in simple communicative tasks, such as going shopping, order a meal in a restaurant, where unnecessary repetition of the object(s) or person(s) previously described should be avoided.

The intermediate group, on the other hand, consisted of 15 subjects that had completed two years of instruction. At such a high level of instruction, the use of Spanish clitics is reviewed in a less formal manner. L2 learners participate in more challenging tasks, that is, summarizing or discussing newspaper articles, or previously-read story where the need of pronouns in order to properly communicate is greater and more complex.

In addition to the thirty-two experimental subjects, twelve native Spanish speakers served as a control group. They were all college Spanish instructors and were pursuing a graduate degree in the USA. They ranged in age from twenty-five to thirty-five years old.

Material

Subjects were tested using a *Preference Task* (henceforth: PT). A similar version of the experiment had been successfully used in other studies on L2 acquisition of Romance clitics (Hagen, 1990 for French; Montrul, 1996 for Spanish). Participants would read forty-four pairs of sentences where the same NP appeared in both of them. Once they had understood them, subjects had to replace the second occurrence of the NP with the appropriate object pronoun. They were given five different choices, including the option where they would indicate that they did not know the answer. An example is illustrated as follows:

(14) La ciudad de Nueva York es muy interesante. Visitamos la ciudad de Nueva York dos veces al año.

- a. lo. b. la. c. le. d. las e. do not know.

The test-items consisted of pairs of sentences that would require either accusative or dative clitics. The experiment investigated three different variables: L1 transfer, acquisition of accusative or dative case. Each variable was tested in two different syntactic structures, namely (1) simple finite clauses (cl-V_{fin}), and (2) finite clauses with a modal verb (cl-MOD- V_{inf}). Some examples are given in Tables 1 to 3.

The first group of stimuli featured fourteen pairs of sentences with verbs that, contrary to their English counterparts, select an indirect object. The second group of items investigated the use of accusative clitics. It also presented fourteen pairs of sentences where all verbs used selected direct objects.

The third group of items, on the other hand, analyzed the use of dative clitics. All fourteen pairs of sentences featured verbs that select an indirect object.

All sentences were lexically and semantically controlled in order to avoid misinterpretations. They were also systematically randomized so that any fatigue factors that could jeopardize the scientific validity of the data were eliminated.

* One of the reviewers has raised the issue that L2 learners' correct/incorrect choice of a particular pronoun may be due to their familiarity or unfamiliarity with pronominal gender rather than case distinction. Data on L2 acquisition of morphological gender in DPs have indeed indicated that there is a tendency among L2 learners to latch on a specific gender, usually masculine, and to use it indiscriminately (De Garavito, 2002; Grandfeldt, 2000, among others). However, the present study has reported that our subjects' pronominal selection is not biased by any particular gender. Grammatical and ungrammatical choices have involved either masculine or feminine pronouns.

Procedure

The PT was conducted individually by the experimenter. Prior to the administration of the test, subjects were trained on the modalities of the experiment by completing a practice session. In addition, a list of five Spanish words used in the experiment was presented to them. These terms were translated to English in order to avoid unnecessary comprehension difficulties. Participants took an average of thirty-five to forty minutes to complete the task.

For the control group, the PT was also administered individually. They followed the same training procedure as the experimental subjects. Spanish native speakers, however, were urged to make their pronominal selection based on how Spanish direct and indirect object pronouns are being taught rather than following their own regional variety. In fact, there are areas in Spain and Latin America that tend to be "leistas" characterized by an indiscriminate use of indirect object pronouns, or "loistas" where accusative clitics are found in dative contexts.

ANALYSIS OF THE DATA

As previously mentioned in the introduction, the main objective of this study is to see whether fossilized morphological forms encountered at any proficiency level are the product of an underlying syntactic impairment, or are due to learners' performance limitations. In order to have a better understanding of this interesting acquisition phenomenon and the theoretical ramifications it entails, other related issues were also investigated, namely:

1. Whether morphological variability is random and unpredictable or follows a more consistent pattern;
2. Whether its occurrence decreases with time and totally disappears at high proficiency levels;
3. Whether it equally affects accusative and dative clitics, or it is more noticeable in the use of one set of pronoun than the other;
4. Whether morphological errors show elements traceable to learners' native pronominal system.

These issues were analyzed by measuring the two experimental groups' accuracy rates in correctly substituting the second occurrence of the NP with the appropriate object pronoun. Furthermore, their responses were compared to those of the control group in order to determine their progress towards a native-like performance.

Before moving on to the experimental report, some aspects of the experimental design vis-à-vis the statistical analyses performed on the data need to be briefly addressed and explained. Responses to target sentences were coded as "correct" or "incorrect", based on whether subjects had chosen the appropriate pronoun. Subjects received zero points for each incorrect answer and one point for each correct one. All earned points were then added to determine their final score, which was, subsequently, used to calculate their degree of correctness. Accuracy rates were then computed both across items for each participant, and across subjects for each item. Thus parallel analyses were carried out on participant-based

Table 1. Samples of test-items testing for L1 transfer.

Item-type	Test-item
<i>cl-V_{fin}</i>	Carlos quiere mucho a sus padres. Cuenta siempre a sus padres sus problemas.
<i>cl-MOD-V_{inf}</i>	Carlos, cuando veas a Margarita, ¿puedes preguntar a Margarita a qué hora va a ir a la universidad mañana?

Table 2. Samples of test items testing for accusative case.

Item-type	Test-item
<i>cl-V_{fin}</i>	¿Te acuerdas de María? Sabes, veo siempre a María cuando voy a la piscina.
<i>cl-MOD-V_{inf}</i>	Alejandro, ¿tienes el número de teléfono de los señores Rodríguez? Quiero invitar a los señores Rodríguez a ver una película muy interesante.

Table 3. Samples of test items testing for dative case.

Item-type	Test-item
<i>cl-V_{fin}</i>	Mis abuelos son muy cariñosos. Mando siempre a mis abuelos tarjetas para sus cumpleaños.
<i>cl-MOD-V_{inf}</i>	-Si vas a ver a tus amigas esta noche, ¿puedes entregar a tus amigas este paquete, por favor? -¡Claro que sí!

means (F_1) and item-based means (F_2). Significance (or lack thereof) in both analyses means greater confidence in the replicability of the results with a different sample of participants and a different set of items. The report of the outcomes of these analyses as well as those of paired comparisons of the material subsets (t_1 and t_2 , respectively) will be reported subsequently.

We should turn to the first issue already stated, namely whether morphological variability is an inconsistent and unpredictable phenomenon or if it follows a more uniform pattern that would eventually lead to its complete disappearance. From an acquisition point of view, this is a very important piece of information to obtain, since it could be a testing ground for UG availability in adult age. Recall that proponents of the Impaired representation hypothesis exclude any early appearance of clitics, less so with correct case morphology, due to learners' inability to access their universal linguistic knowledge and absence of clitics in their L1 grammar. They also anticipate a large use of erroneous morphological forms involving any type of clitics and structures. Such a widespread phenomenon may or may not improve with time. L2 learners, however, will never reach a native-like use of these two pronouns.

Approaches that do not deny UG accessibility in post-puberty, on the other hand, predict a more consistent and uniform pattern of morphological errors, which are expected to decrease or even disappear at high proficiency levels.

With that in mind, learners' general performance was evaluated in order to see whether morphological variability does improve as learners become more proficient in

Spanish. Table 4 shows that the intermediate group is not very accurate in providing the appropriate pronoun. Spanish clitics, in fact, are correctly chosen at a rate of only fifty-three percent.

These results indicate that, initially, English speakers have great difficulty in dealing with the morphological distinction of Spanish pronouns. Their understanding, nonetheless, visibly improves with time. As we can see, subjects' accuracy rate shows an increase of twenty-five percentile points reaching seventy-eight per cent. Such an improvement is statistically significant in both subject-based and item-based statistical analyses ($F_1 = 45.60$, $p < 0.001$; $F_2 = 125.17$, $p < 0.001$), suggesting that the occurrence of morphological errors is not random and unpredictable, but it gradually decreases as our groups' ability levels improve.

However, despite the noticeable improvement, the intermediate learners' performance is far from being native-like. Erroneous morphological forms are still clearly present as shown by their significantly lower level of accuracy as compared to that of the control group ($t_1 = -5093$, $p < 0.001$; $t_2 = 8.327$, $p < 0.001$). Such outcomes indicate that two full years of exposure and formal instruction in the target language are not sufficient to gain full control of the morphological differentiation of Spanish clitics.

With regard to the issue of whether morphological variability equally involves accusative and dative clitics, subjects' general performance with the two sets of pronouns, considered separately, was compared and contrasted. Table 5 summarizes the mean accuracy rates reported by the English speakers and the Spanish natives

Table 4. Mean percent of correct responses to all test-items reported by the two experimental groups and Spanish native speakers.

Beginners (k = 714)	Intermediates (k = 588)	Natives (k = 504)
53	78	99

k = Number of responses.

Table 5. Mean percent of correct responses to items testing for dative, and accusative case reported by the two experimental groups and the Spanish native.

	Beginners (k= 238)	Intermediates (k = 196)	Natives (k = 168)
Dative	42	80	99
Accusative	69	78	97

k = number of responses

natives in using accusative and dative clitics.

As we can see, initially, the percentages of accuracy with items testing for dative and accusative case are visibly discrepant. A paired-samples t-test indicates a feature asymmetry ($t_1 = -3.217$; $p < .05$; $t_2 = -3.700$; $p < 0.05$) with accuracy higher in accusative than in dative contexts.

However, the discrepancy in accuracy that characterizes the lower level group tends to decrease and even disappear as English speakers become more proficient in their target language. As can be seen, the intermediate group performs quite uniformly with regard to the two types of test-items. In fact, a paired-samples t-test does not show any Manipulation-type effect ($t_1 = .313$, $p = > 0.05$; $t_2 = -1.576$, $p > 0.05$).

A similar performance is displayed by the control group where the slight discrepancies in accuracy between the two manipulations (99 vs. 97%) are statistically irrelevant ($t_1 = 0.735$, $p > 0.5$; $t_2 = 0.336$, $p > 0.05$).

In sum, data indicate that, initially, morphological errors occur more frequently when L2 learners are using dative pronouns than accusative clitics, as revealed by their visibly discrepant accuracy rates (accusative: 69%; dative: 42%). However, an additional year of exposure/instruction in Spanish has a positive impact on learners' performance with dative clitics. The accuracy rate in using these pronouns increases notably, taking a jump of thirty-eight percentage points. The difference between the two grand means (42 vs. 80%), in fact, is statistically significant ($t_1 -3.191$, $p < 0.05$; $t_2 -7738$, $p < 0.001$). Morphological accuracy with accusative clitics, on the other hand, does not follow the same pattern. Acquisition time does not seem to have any visible impact on learners' performance. In fact, the difference in accuracy between the beginners' group (69%) and the intermediate one (78%) reaches statistical significance only in the item-based analysis ($t_1 = -1.116$, $p < 0.05$; $t_2 -5.559$, $p < 0.001$).

In any case, despite the substantial decrease of morphological errors with dative pronouns, L2 acquisition

of Spanish accusative or dative case morphology, considered separately, is far from being complete. After two years of exposure/instruction in Spanish, morphological errors are still quite visible. In fact, paired-samples t-tests between the intermediate group and the natives reveal significant discrepancies for both types of clitics (dative: $t_1 = -2.886$, $p < 0.05$, $t_2 = -4.819$, $p < 001$; accusative: $t_1 -2.471$, $p < 0.05$; $t_2 = -3.584$, $p < 0.05$), indicating that English speakers use of Spanish clitics is far from being native-like.

We now turn to the issue of whether L1 grammar plays any role in L2 acquisition of Spanish clitic morphology and the occurrence of morphological errors. Results indicate that the beginners' group did struggle in choosing the correct pronoun in sentences featuring verbs that are semantically similar to their English counterparts, but do not share the same selecting requirements, e.g. *contar* (to tell), *preguntar* (to ask) These verbs are frequently used in the communicative tasks students usually engage in a Spanish class.. As shown in Table 6, they responded to these test-items at an accuracy rate of only forty-two percent, suggesting that, initially, English grammar does have a negative impact on the grammatical use of Spanish object pronouns.

Interestingly, such a low percentage does substantially improve with the intermediate group taking a jump of thirty-eight percentile points. A paired-samples t-test of the data, in fact, has reported that the difference in accuracy between the two experimental groups is statistically significant ($t_1 = -3.518$; $p < 0.05$; $t_2 = -8.071$; $p < 001$), indicating that L1 effects are more visible and noticeable in early acquisition stages, and tend to disappear with time.

It needs to be also pointed out that the gradual disappearance of errors attributable to English grammar's interference parallels with the progressive improvement in the grammatical use of dative clitics. In fact, at the beginning and the intermediate acquisition stages, learners' performance with items testing for L1 transfer and those testing for dative case is identical in terms of

Table 6. Mean percent of correct responses to items testing for L1 transfer reported by the two experimental groups and Spanish natives.

	Beginners (k = 238)	Intermediates (238)	Natives (k = 238)
L1 transfer	42	80	97

k = number of responses

accuracy (beginners 42 vs. 42%; intermediates 80 vs. 80%). These similarities suggest that, initially, English speakers appear to struggle with the case-distinction of Spanish pronouns, and tend to rely on more familiar pronominal forms, namely those of their native language. At the intermediate proficiency level, however, English speakers have gained a better understanding of these case features and have almost totally overcome their dependence on their native pronominal system.

In sum, the following pattern regarding the occurrence of erroneous morphological forms in Spanish L2 grammars can be distinguished in the data:

1. After 10 months of L2 input (end of the first academic year), morphological variability is a quite widespread and visible phenomenon. Morphological errors, however, seem to involve more the dative pronouns than their accusative counterparts. Such difficulties become even more visible when learners have to deal with Spanish verbs that are lexically and semantically similar to their native forms, but select different pronouns.
2. After 20 months, (end of second academic year) the occurrence of ungrammatical morphological forms are less visible and equally spread between the two sets of pronouns. At this acquisition stage, in fact, the amount of morphological errors in using either type of pronoun has substantially decreased. Similarly, ungrammatical forms attributable to possible L1 effects have also become much less noticeable.

DISCUSSION

In brief, group results have confirmed that:

1. Morphological variability is quite persistent, even though it decreases with time.
2. In early acquisition stages, it appears to be inconsistent affecting more the use of dative pronouns than that of their accusative counterparts. This phenomenon, however, becomes less evident as L2 learners reach higher proficiency levels.
3. English grammar does play a crucial role in the occurrence of morphological errors. However, its impact is more noticeable in early acquisition stages.

In light of this acquisition scenario, what assumptions can be made with regard to the morphological errors

encountered in Spanish L2 grammars?

Previously we mentioned that English pronominal system lacks syntactic clitics suggesting that the functional structure needed for their case-checking and licensing may not be part of learners' native grammar. From an L2 acquisition point of view, this deficiency presupposes a slow and delayed developmental process characterized by a great deal of difficulties since clitic features and categories need to be acquired *ex novo*. Data, however, have presented a relatively accurate use of Spanish accusative clitics after a quite brief period of exposure and instruction. In ten months of instruction, in fact, these pronouns were appropriately chosen at a rate of sixty-nine per cent. Such positive results seem to indicate that the clitic functional apparatus may be available (even though unspecified) from the beginning. The visible increase in producing either type of pronouns after an additional year of instruction further supports this assumption. That being the case, morphological variability noticed in Spanish L2 grammar does not appear to be determined by the absence of clitics in English grammar and learners' inability to retrieve the necessary morphological information from UG. Furthermore, evidence that English speakers could have relied on cognitive learning mechanisms, that is, analysis, analogy or hypothesis formation, rather than linguistic mechanisms to deal with Spanish clitic case morphology has not been reported in the data. If that had been the case, morphological errors would have been more random and inconsistent. First of all, we would not have noticed the relatively high level of accuracy with accusative clitics at such an early acquisition stages.

In addition, native-like performance would have improved at a much slower rate than it actually did. Secondly, erroneous morphological forms involving dative clitics would have been more visible and persistent due to the absence of the dative case system in English grammar. On the contrary, data have shown that, despite the initial discrepancies, morphological variability progressively decreases following a more uniform path towards its complete disappearance. Most likely, the initial inconsistency could have just been the result of insufficient exposure to L2 input.

Results have also reported an initial widespread use of accusative pronouns with verbs that, contrary to their English cognates, select an indirect object, suggesting that English grammar may have played an important role in the occurrence of these errors. However, their substantial decrease after only one year of instruction and

and the drastic improvement in the use of dative pronouns indicate that L2 acquisition of clitic case morphology is not limited to L1 features and categories, as proponents of the failed functional features hypothesis would claim. If English speakers had only projected structures and functional categories consistent with their L1, morphological errors involving dative pronouns would have followed a different pattern, and L1 effects would have been more persistent. As we have seen, at intermediate proficiency levels, morphological variability has become less random and more uniform, and similarly affecting both types of clitics. The presence of elements traceable to English grammar has also decreased along with a gradual but general movement towards a native-like performance.

In summary, the acquisition scenario drawn from the data suggests that the morphological differentiation of Spanish clitics is indeed acquirable despite the fact that English pronominal system is not case-differentiated. Furthermore, L2 learners do not seem to fully rely on their cognitive mechanisms or their native grammar to deal with the case features of these pronouns. L2 learners are still able to retrieve the necessary syntactic information from their universal linguistic knowledge, and, as such, supporting some form of continuity in adult SLA. English grammar may constitute one of the leading causes of the morphological errors encountered in early Spanish L2 grammars. However, it does not constitute the entire interlanguage grammatical system. Contrary to what FFFH would predict, the case features of Spanish clitics will be eventually completely mastered with the help of UG and L2 input, despite their absence in learners' L1 grammar.

Data have also shown that, even though morphological variability progressively decreases with time, it never totally dissipates. After two years of exposure and instruction, the presence of morphological errors is still quite visible. However, due to learners' relatively high proficiency level and the existing evidence supporting their access to UG, those morphological errors should not be attributed to a breakdown of learners' grammatical system, but rather to their inability to convert the syntactic information available into appropriate morphological forms.

Conclusion

The acquisition scenario obtained suggests that Spanish clitic case morphology is acquired in a slow and piecemeal manner, and may take quite a long time to be fully mastered. In fact, morphological errors are noticed throughout the entire acquisition process. They, however, do not reflect an underlying syntactic impairment, but rather a general problem in mapping the morphological information with the appropriate syntactic features. In other words, the incorrect use of Spanish clitics does not necessarily entail absence of the associated syntactic

representations. The relevant functional projections hosting these pronouns and the (abstract) morpho-syntactic feature-checking mechanisms appear to be in place from the beginning, as shown by the early use of accusative clitics. The morphological variability reported in the data is, therefore, an interface problem, reflecting difficulties in using the underlying knowledge.

At a more general level, results indicate that the development of morphological affixation is dissociated from the syntactic knowledge of formal features, suggesting that clitic case-morphology develops independently from its syntactic representation. This would convene with a modular view of language acquisition, according to which linguistic modules may develop separately from one another, or may be more or less susceptible to the influence of learners' first language.

Data have also reported an early use of accusative clitics reaching a surprisingly high accuracy rate of sixty-nine percent, despite the absence of these pronouns in learners' native language. Such a premature acknowledgment and familiarity with Spanish clitics has been taken to be strong piece of evidence to argue for some form of continuity in SLA in that categories and properties, unavailable in L1 grammars, may be retrieved with the help of UG, even in adult age.

Furthermore, even though L1 effects seem to be quite pervasive in early acquisition stages, empirical evidence does not seem to be fully consonant with FFFH. English grammar, in fact, does not completely regulate the development of clitic case morphology in Spanish L2 grammars. If that had been the case, we would have had an acquisition scenario totally different from the one obtained. Furthermore, dative morphology would have emerged later than it actually did, and its accusative counterpart would have completed its course within the two years of exposure. In light of these outcomes, we could safely conclude that, in concomitance with the missing surface inflection hypothesis, the morphological variability reported in the data could be a performance rather than a representational problem.

We understand the limitation of the study since it has investigated only part of the morphological features displayed by Spanish object pronouns and with a relatively small group of informants. Future research should be extended to a larger number of participants and involve a less guided and more spontaneous data collection procedure. Furthermore, other pronominal features such as gender and number should be included in the investigation in order to have a more complete picture of the development of morphology in L2 grammars, and most importantly, whether learners' performance limitations is a restricted or a more general acquisition phenomenon.

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