

L2 Production of English Past Morphology in Advanced Spanish Natives: Syntactic Deficits or Phonotactic Transfer?

Gonzalo Campos
The University of Iowa

1. Introduction

It is not uncommon to find that adult second language (L2) learners fail to produce inflectional morphology consistently well in obligatory contexts. One situation where this has been attested is simple past in L2 English, with a number of studies having focused on native speakers of Chinese learners of English (e.g. Hawkins & Liszka 2003; Lardiere 1998a, b, 2000, 2007; Goad, White & Steele 2003; Goad & White 2006). To date, there have been at least two proposals that seek to account for the observed and documented fact that native speakers of Chinese tend to miss simple past morphology. On the one hand, it has been argued that such missing inflection results from a syntactic representational deficit (Hawkins & Liszka 2003), a view akin to the so-called morphology-before-syntax approach, whereby missing morphology is indicative of corresponding missing syntactic representation (White 2003). On the other hand, it has also been claimed that there is dissociation between formal syntactic features and their corresponding morpho-phonological forms, so that relatively poor morphological production in L2 learners is thought to be caused (at least in part) by some problem in the interface between syntax and morphophonology (e.g. Haznedar & Schwartz 1997, Lardiere 1998, 2000, 2007; Prévost & White 2000). In what follows, I will review some of the analyses put forward by these two approaches by including data from another group of L2 speakers of English. The reason for this is that, in a language like Chinese, there are at least two possible sources of linguistic transfer in the acquisition of English simple past tense. On the one hand, past tense is not grammaticalized in Chinese, i.e. the notion of past is encoded through adverbials and context rather than any functional morphology, and therefore syntactic transfer needs to be overcome. On the other hand, English simple past often involves complex codas, but in Chinese they are disallowed across the board. Therefore, since there are at least two possible sources of transfer, it will be hard for any analysis to tease them apart unquestionably. Then, in order to isolate these two possible sources of transfer, it becomes helpful to look at a group of language learners whose native language has only one of these two sources of transfer. Spanish constitutes such a language, since past tense is grammaticalized (like English) but at the same time, complex codas are disallowed (in a way similar to Chinese). Thus, if native speakers of Spanish learning English are shown to have problems with past morphology in the oral data in spite of target-like performance in other tasks, then such results will provide support for phonotactic transfer effects on functional morphology and consequently, indirect evidence against representational deficits accounts for native speakers of Chinese learners of English.

2. Some previous accounts

2.1. *The syntactic deficit account*

Recent developments in syntactic theory have been used to hypothesize that a critical period in L2 acquisition affects a certain set of formal features. Crucially, as posited in the Interpretability

*Thanks to the audience of GASLA-10 for their comments. Special thanks to Jason Rothman, Judith Liskin-Gasparro, Tiffany Judy, and Steven Schubert for their help at different stages of this study. All errors are mine.

Hypothesis (IH), while interpretable features are acquirable in adult L2 acquisition, uninterpretable ones are argued to be subject to a critical period (e.g. Hawkins & Hattori 2006; Tsimpli 2003; Tsimpli & Dimitrakopoulou 2007). Thus, if a certain uninterpretable feature was not selected from the universal inventory of features in first language (L1) acquisition, adult learners will not be able to acquire it in their interlanguage (IL) and consequently, this will cause learnability problems that result in inevitable differences in L2 mental representation. In line with this hypothesis, Hawkins & Liszka (2003) tested English L2 speakers regarding the marking of thematic verbs for simple past tense. In their study, the authors compared data from three L1 groups: German, Japanese, and Chinese. They argue that since native speakers of Chinese do not instantiate the relevant uninterpretable feature [\pm past] in L1 acquisition (while Japanese and German do), they are fated to variability in their marking of simple past tense since they cannot acquire the syntactic feature that underlies the grammatical representation for “pastness”. Their argument is made mainly through two kinds of evidence: a) a comparison of the suppliance of functional morphology across the three language groups and b) a comparison of the suppliance of complex codas in monomorphemes (*bare forms* from now on) and simple past forms, in order to rule out L1-transferred phonotactic constraints.

a) Comparison across groups

As can be seen below, the results of their study show that in the elicited production test, both L1 German and L1 Japanese speakers provided past morphology more often than the Chinese subjects (adapted from Hawkins and Liszka 2003: 28):

Figure 1: Results from elicited production test (percentages)

	Chinese (n=2)	Japanese (n=2)	German (n=5)	Controls (n=5)
Regular verbs	88.5	96.8	98.5	100

In the spontaneous elicited data, the difference between the Chinese group and the other groups was even more marked (adapted from Hawkins and Liszka 2003: 30):

Figure 2: Results from spontaneous data (percentages)

	Chinese (n=2)	Japanese (n=2)	German (n=5)	Controls n=5)
Regular verbs	62.5	91.9	96.3	100

Taken together, the authors claim that these results suggest that native speakers of Chinese have a different syntactic representation for past (since all L2 speakers were matched for proficiency), and argue that it stems from the access of each language group to the [\pm past] feature, which would explain why they have a marked difference with respect to the other two groups. However, it should be noted that the rather small number of L2 participants in each group weakens the strength of their generalizations. Moreover, the results obtained from the nonce regular verbs task show that the Chinese group could perform with higher accuracy in this task than in the others, and indeed, quite close to the other groups (adapted from Hawkins and Liszka 2003: 28):

Figure 3: nonce regular verbs (percentages)

	Chinese (n=2)	Japanese (n=2)	German (n=5)	Controls (n=5)
Nonce regular verbs	92.6	96.7	100	97.3

Since the results of these three tasks are quite different for the Chinese group, it seems evident that there is considerable variation of simple past morphology suppliance according to task type (62, 88 and 92 percent suppliance). Nonetheless, since the Chinese group supplies functional morphology at quite a high rate in nonce regular verbs, then, I do not see how their mental representation of past is as ‘deficient’ as proposed.

b) Comparison of the Chinese and Japanese group

Regarding the possible effect of L1-transferred coda constraints, the researchers argue that if they were responsible for low supply of simple past morphology (as had been previously argued in Lardiere 1998a, b, 2000), it should be expected that both the Chinese and Japanese group had experienced “similar problems because the relevant property (absence of word-final consonant clusters) is present in both L1s” (Hawkins and Liszka 2003: 30). Figure 4 presents the data they report from the spontaneous sample comparing fully uttered codas in bare forms and simple past forms (adapted from Hawkins and Liszka 2003: 31):

Figure 4: Results from bare forms in spontaneous data (percentages)

	Chinese (n=2)	Japanese (n=2)
Simple past forms	63	92
Bare forms	82	96

As can be seen, there are marked differences between the two groups in simple past forms, which, for the authors, is an indication that L1-phonotactics is not a factor in simple past morphology suppliance. However, even though there are observable differences between the two groups, since both groups have only two participants, these results are hardly generalizable, since the two L1 Japanese speakers could be, simply put, exceptional learners. Moreover, the L1-Chinese participants supply complete complex codas in 82 percent of the bare forms, that is is, when there is no functional morphology involved, and so it is hard to see what the reason could be if not phonotactic (or any other phonological transfer effect). A more detailed analysis of this set of data is beyond the scope of this study but it constitutes a challenge that should be addressed. It is also possible that there are different constraints at the prosodic level between Chinese and Japanese (e.g. along the lines of the analysis of Goad and White (2006)). It should also be pointed out that even though there is a marked difference between the two native Chinese speakers and the other groups, their percentage of past morphology suppliance is still high (88.5 percent and 62.5 percent in the elicited production test and the spontaneous data, respectively). Thus, if it is indeed the case that they cannot activate the [\pm past] feature, they would be expected to supply past morphology even less often. Indeed, because of the nature of the task, even 50 per cent supply of past verb morphology would indicate the presence of a representation for past.

To sum up, I maintain that the data reported in Hawkins and Liszka’s study are not conclusive for a critical period for an uninterpretable feature like [\pm past], and that more empirical data are needed before such claims can be made. Testing native speakers of Spanish in L2 English will help address this problem in that while Spanish does grammaticalize past (and thus the relevant [\pm past] feature is available for transfer), phonotactic constraints from the L1 exist in a way similar to Chinese.

2.2. Problems at the syntax-morphophonology interface

The idea that non target-like functional morphology is a problem at the surface rather than a problem in the syntactic representation has been proposed by different authors in different ways (Haznedar & Schwartz 1997; Prévost & White 2000; Lardiere 1998a, Lardiere 1998b; Rothman 2007; Slabakova 2008, among others). Thus, absence of inflection does not directly translate into a deficit in the interlanguage syntactic representation: “problems of adult L2 learners relate to the mapping of specific morphological forms to abstract categories” (Prévost & White 2000: 130), and so variability does not necessarily reflect insufficient syntactic knowledge (see Rothman 2007 for an epistemological discussion about how overt morphology is not a one-to-one representation of syntactic knowledge). In the specific case of L1 Chinese learners of L2 English, Lardiere has looked at and analyzed in detail longitudinal data from a native speaker of Chinese (Hokkien and Mandarin), known as ‘Patty’. Lardiere (2007) concludes that verb morphology data should not be taken as direct evidence of

underlying syntactic knowledge, based on the fact that while Patty supplies verb morphology at very low rates, other related properties are truly native-like (e.g. word order, subject case assignment). Her main point throughout (e.g. Lardiere 1998a, 1998b, 2000, 2007) has been that Patty's command of verb morphology underrepresents her syntactic knowledge, and that, therefore, syntactic knowledge and its morphophonological reflexes need to be understood separately. In Lardiere (2007), the author claims that different factors may be affecting Patty's suppliance of simple past morphology (only 34 percent), among which two are of interest for this study: phonological reduction due to L1 transfer (consonant clusters are disallowed) and the fact that, as reported in Bayley (1991), (some) native speakers of English are more likely to preserve final *-t/d* in past tense markings (e.g. *passed*) rather than in bare forms (e.g. *past*), and so greater exposure to English may result in a high degree of *-t/d* deletion. She also points out that Patty's written data show at least twice as much suppliance of past tense marking in obligatory contexts. In summary, she believes that "Patty's own representation of the cluster of properties associated with past are most likely influenced by her L1 at different levels: phonological, lexico-semantic, and discourse-pragmatic" (Lardiere 2007: 139). This study follows up on Lardiere's suggestion that mapping a syntactic representation for past to its morphophonological reflex is indeed influenced by L1 phonotactic constraints.

2.3. *Some brief comments on Spanish phonotactics*

As is well known, the syllable is constituted by a nucleus, and optionally an onset and a coda. While nuclei and simple onsets are present in all languages, codas, complex onsets and complex codas are subject to cross-linguistic variation. Thus, while English allows for a wide variety of codas and complex codas, Spanish allows for single consonant codas, but it disallows complex codas. There are some exceptions, however (e.g. [ns], *trans.por.te*; [ps], *bi.ceps*) but they are mostly found in written and in careful speech and only constitute a small number of cases. Complex codas, therefore, are highly restricted in Spanish.

3. Current study

3.1. *Hypothesis*

The initial hypothesis of this study was that Spanish phonotactic constraints transfer to L2 English and that they are pervasive even at advanced stages of acquisition, in such a way that both bare forms and simple past forms would show segment deletion in the last consonant of a complex word-final coda. More specifically, it was also predicted that there would be a measurable mismatch between written and oral tasks in terms of suppliance of simple past morphology. In line with theoretical accounts that claim for a mismatch between overt morphology and related syntactic properties, it was believed that non-native production of past morphology underrepresents actual representation of [\pm past] for L1-Spanish learners of English.

3.2. *Experiment design*

3.2.1. *Participants*

Originally, 10 adult native speakers of Spanish from different dialects (Colombia, Mexico, Spain, and Venezuela) participated in the study. All but one of them reported having had some formal instruction of English in their native countries but at the same time they all reported having significant exposure to native English only upon arrival in the United States. Since their arrival, they have consistently used English on daily basis. They have frequent contact with native speakers, as they are all employed at the University of Iowa and they have lived in the United States between 1 and 12 years. Since this study is (indirectly) testing the critical period hypothesis, one of the participants' data was removed because he arrived in the United States at age 12. Beyond self-rating and anecdotal impressions, participants took an online English placement test (<http://www.world-english.org/test.htm>) and had to perform at an advanced level to qualify for inclusion. Based on the proficiency test, one of the participants, placing at the lower intermediate level, was removed from the

analysis, leaving the reported number equal to 8 (n=8). Data from 6 native English controls were included as well.

3.2.2. Tasks

Task 1

Participants took a written cloze test, where they were presented with a box with four words and four incomplete sentences. They had to choose the appropriate word to fill in the appropriate blank (see figure 5 below).

Figure 5: instrument sample

<div style="border: 1px solid black; padding: 5px; display: inline-block;"> call go visit fail </div>	
1. The experiment didn't work, it _____	[failed]
2. She _____ to Europe every summer	[filler sentence]
3. We _____ you next year	[filler sentence]
4. She is the person who _____ you yesterday	[called]

They were told that they could add auxiliaries or verbal inflection if necessary, and they were provided with a practice item. The total number of tokens was 22, further divided into:

- 6 bare forms ending in an [ld] coda, e.g. *cold*
- 6 target simple past forms ending in an [ld] coda, e.g. *called*
- 5 bare forms ending in an [nd] coda, e.g. *mind*
- 5 target simple past forms ending in an [nd] coda, e.g. *joined*

The targets, then, were sentences with obligatory past contexts together with bare forms. Twenty two filler sentences were included with contexts that required verbs in present and future tense, and others that required nouns and adjectives.

Task 2

The second task was similar to the first task in that participants were asked to complete a sentence; however, in the second task, they were asked to complete the sentence orally. Their answers were recorded with a microphone. The software used for recording the data files was *Audacity*. They could not see their previous responses nor could they write down the words they were selecting. However, they were allowed to strikethrough each word that they used, in order to facilitate the task. The order of the items presented was randomized.

For both tasks, participants were told that they could take as long as they needed, and that they could make corrections if necessary. The reason for this was to be able to obtain their best performance. Since I anticipated that L1 phonotactic transfer would be pervasive, I wanted to obtain data where participants would have the greatest opportunity to demonstrate native-likeness under the assumption that phonotactic transfer, if applicable, would be insurmountable in terms of overall consistency even despite conscious effort. It is probable that their spontaneous data may have revealed lower scores, as has been reported in, for example, Lardiere's and Hawkins and Liszka's studies.

3.2.3. Rating

Two native speakers of English with phonetic training coded the data. Since the goal was to measure the effect of L1-transferred phonotactic constraints, they were asked to rate the data as *supplied* or *non-supplied* (codas). This means that in cases where the two consonants of the complex codas were pronounced non-native-like (e.g. the final segment was devoiced), they were asked to rate

it as *supplied*. Likewise, in cases where the second consonant of a complex coda was produced as the onset of the following syllable, it was still coded as *supplied*. I understand that this could obscure the results, but it should be said that it rarely happened, since participants performed in a very controlled fashion (both L2 speakers and some controls), making clear pauses between word boundaries. They were also told that they could code the data as *unclear*. In these cases, they listened to them two more times.

Each rater scored each token and the results of the two ratings were compared. In those cases where a token had been coded as *unclear*, I decided to weigh both raters' responses giving preference for the *clear* rating. In cases where both raters coded a token as *unclear*, I decided to consider it as *non-supplied*. I decided to proceed this way since controls' data were always clear. Cases where participants did not use a simple past form and used another tense instead (e.g., *peels* for *peeled*), were removed from the analysis. This was due to contexts where a past interpretation was not clearly forced.

3.3. Results

3.3.1. English Native Controls

Their behavior was as expected, with 100 percent suppliance of [ld] and [nd] codas in simple past contexts and bare forms. Their written task was also at ceiling. Therefore, their results will not be reported in more detail.

3.3.2. L2 speakers (group) results

The results were analyzed looking at the different tasks and conditions. I will first comment on the results according to task type and then according to condition types.

3.3.2.1. Task types: simple past morphology in written and oral data

Figure 6 shows the overall results by focusing on L2 speakers' data on the two tasks. The score of each participant was transformed into a percentage value, for example, a value of 90 represents the percentage at which the participant supplied past morphology for a given condition. The group mean for written past morphology was at ceiling (100 percent suppliance), while the group mean for the oral task was lower (86.7 percent).

Figure 6: written and oral simple past morphology (percentages)

Participants	1	2	3	4	5	6	7	8	Mean
Past form (Oral)	90	90	90.9	72.7	90	80	80	100	86.7
Past form (Written)	100	100	100	100	100	100	100	100	100

A two-tailed *t*-test was applied for the two group means revealing a statistically significant difference ($t(7) = 4.38, p < .05$). Thus, on average, participants supplied past morphology more often in the written version of the task while only one of the participants performed fully native-like in both tasks. So far, then, the first prediction is borne out. There is a measurable mismatch between the two tasks, suggesting that a morphosyntactic representation for [\pm past] can indeed be underrepresented in oral data.

3.3.2.2. Condition types: complex codas in simple past morphology and bare forms.

Figure 7 below compares the rate of suppliance of complex codas in bare forms (e.g. *cold*) and in simple past morphology (*filled*). The reason for this comparison is that if L1 phonotactic transfer is *not* a factor in the supply of past morphology, it would be hard to justify why it would affect bare forms. On the other hand, if L1 phonotactic transfer does take place, it may affect both past morphology and

bare forms. As can be seen, [ld] and [nd] codas are shown to be affected by phonotactic transfer (only 55.1 percent suppliance together).

Figure 7: [ld] and [nd] codas in simple past morphology and bare forms (percentages)

Participants	1	2	3	4	5	6	7	8	Group Mean
[ld] and [nd] codas in simple past	90	90	90.9	72.7	90	80	80	100	86.7
[ld] and [nd] codas in bare forms	50	90.9	60	18.1	50	50	22.2	100	55.1

However, an unforeseen result is that bare forms show a significantly lower suppliance of complex codas than simple past forms (as found in a two-tailed *t*-test ($t(7) = 4.13, p < .05$)). While this indicates a strong and pervasive L1 phonotactic transfer, it also poses a question: why should complex codas be more accurately produced in simple past contexts? This issue will be addressed in the discussion.

Figures 8 and 9 below show a closer look at the two complex codas in question. Figure 8 shows the results for [ld] codas in bare forms and in simple past forms, also revealing a significant difference between the means ($t(7) = 3.2, p < .05$).

Figure 8: [ld] codas in bare forms and in simple past forms (percentages)

Participants	1	2	3	4	5	6	7	8	Group Mean
Bare forms	60	83.3	80	0	60	83.3	33.3	100	62.4
Simple past	100	100	100	66.6	100	80	100	100	93.3

Figure 9 shows the results for the [nd] codas. A two-tailed *t*-test also revealed a statistically significant difference between the means for simple past and bare forms ($t(7) = 3.12, p < .05$).

Figure 9: [nd] codas in bare forms and in simple past forms (percentages)

Participants	1	2	3	4	5	6	7	8	Group Mean
Bare [nd]	40	100	40	40	40	0	0	100	45
Past [nd]	80	80	80	80	80	80	60	100	80

Another observation that can be made from figures 8 and 9 is that group results indicate that [nd] codas seem to be overall more challenging for L2 speakers in both simple past forms and bare forms. It is beyond the scope of this study to account for this fact but it is certainly something to be taken into consideration for further studies.

4. Discussion

In this section, I will discuss the main findings of the study in terms of the hypotheses posed earlier: mismatch between the results of the two tasks and strong phonotactic transfer effects in both simple past morphology and bare forms.

4.1. Differences between oral versus written data

As seen earlier, there was a significant difference between suppliance of past morphology in written versus oral data, with the written data showing target-like performance and the oral data being significantly lower. First, I would like to discuss the validity of the comparison of the two tasks as a way to measure knowledge of past tense in L2 English. To begin with, the only significant difference between the two tasks was that of modality (i.e. writing versus speaking), the tokens and the environmental conditions (i.e. the physical setting, the time allowed), were the same. The relevance of

the conditions is that performance factors for both tasks were the same (to the extent possible) and that their results are fully comparable. Likewise, the fact that participants showed a very conscious approach to both tasks, since they uttered sentences slowly, with clear pauses between word boundaries, serves to make the point that even in a task where participants have the time and opportunity to control their speech, it is still difficult for them to overcome the effects of L1-transferred phonotactic constraints. The data also show, however, that this is not insurmountable, since one of the participants showed target-like performance across both tasks. In reference to Hawkins and Liszka's dismissal of phonotactic effects for L1-Chinese learners, the implication is that since such phonotactic effects are at work in the L1-Spanish speakers of English, they may well also be at work in the L1-Chinese participants, with the subsequent effect of lowering their suppliance of past morphology in the oral data. In the present case, the data show that L1 Spanish speakers have similar problems in oral production of English past morphology as compared to Chinese L1 speakers despite the fact that their L1 provides the morphosyntactic features for past. So, if phonotactic transfer is the best explanation of the present performance problems, then it cannot be a priori ruled out for Chinese L1 speakers as well. Regarding why such performance was not observed for the L1-Japanese subjects in Hawkins and Liszka's study, it may be the case that those two participants were indeed exceptional, as was one of the Spanish participants in this study. Nonetheless, I do not think that phonotactic transfer is the only factor in the case of L1-Chinese speakers of English; rather, I want to make the point that it should not be dismissed as a factor.

Moreover, I maintain that, as pointed out in Lardiere (2007), transfer may happen at different levels and is, thus, differentially deterministic. Even though the data show target-like simple past morphology performance in the written data, I do not take such a performance as a direct indication of the learners' syntactic representation (since there is no single way to tap competence). As Rothman (2007) points out, even in data where native-like performance is observed, it is not desirable to claim that the underlying representation is target-like, making the recommendation of also carrying out experiments that demonstrate semantic and syntactic reflexes of the morphology under investigation in order to make truly compelling arguments for or against convergence at an underlying level. Thus, experiments that target related syntactic and semantic reflexes of this morphology within the same learner groups are warranted.

4.2. L1-transferred phonotactic constraints for [ld] and [nd] codas in bare forms and simple past

As shown in figures 7, 8 and 9, group results revealed that bare forms with [ld] and [nd] complex codas were consistently reduced by almost all speakers. What this adds to the analysis is that since in bare forms there is no functional morphology involved, failure to supply the second consonant of the complex coda can be attributed to L1-transferred phonotactic constraints. Thus, it is reasonable that the same may be happening in simple past forms. The direct implication is that if phonotactic transfer takes place in L1-Spanish speakers, it may also be happening for L1-Chinese speakers of English.

4.3. Comparison with results from a preliminary study: task effects

I would like to compare the results of this study with those of a preliminary study, where participants performed a translation task in written and oral (same sentences). It was found that complex coda reduction was more frequent in simple past morphology than in bare forms. Even though these results confirm the pervasive effect of phonotactic transfer, they also contradict what has been found in this experiment. As can be seen below in figure 10, suppliance of past morphology was much higher for the current experiment (93.3 percent versus 59.6 percent) suggesting that task effect can have great influence on the results. On the other hand, while there is also an observable difference in bare forms, it is less marked (71.8 percent in the translation task 62.4 percent in this experiment). All of this suggests that the task chosen for measuring past morphology can supply incredibly different results and also, that regardless of the task chosen, such differences will affect more deeply past morphology than bare forms.

Figure 10: comparison of results in current study and preliminary study (percentages)

Condition	Translation task (exp 1)	Cloze test (exp 2)
[ld] in bare forms (e.g. <i>cold</i>)	71.8	62.4
[ld] in simple past (e.g. <i>filled</i>)	59.6	93.3
Past morphology in written data	96	100

One possibility for such disparate results is that in a cloze test, participants may be able to monitor their oral production more so than in a translation task, since the latter is more demanding. However, what is remarkably similar in both experiments is that results from the written task for simple past morphology in both experiments were quite similar (96 percent and 100 percent for the translation and cloze test, respectively), showing that in written tasks, there is much less variability, all of which suggests that phonological factors play a decisive role in oral data, and that phonological analyses are necessary.

4.4. Higher suppliance of complex codas in simple past than in bare forms

As mentioned before (see figure 7), participants supplied complex codas in higher rates for simple past forms than in bare forms, which was unexpected, especially considering the findings from the preliminary study. It is possible, then, that L2 speakers are behaving in the same fashion that native speakers do. As commented before (section 2.2), native speakers of English were more likely to preserve final *-t/d* in past tense markings rather than in bare forms (Bayley 1991) and indeed, it was observed that one of the native controls in the preliminary (translation) study was more likely to produce complex codas in past tense forms than in bare forms. It seems clear that this different behavior within the same speaker is probably related to the fact that the final consonant in a bare form is not critical for interpretation (unless there was a minimal pair), while in a verb it can mark tense.

5. Conclusion

To summarize, based on the findings of this study and the other studies reviewed, I conclude that the answer to the question in the title of this paper (*syntactic deficits or phonotactic transfer*) is that L1-transferred phonotactic effects are pervasive for simple past tense morphology and bare forms in L1-Spanish L2-speakers of English. Regarding the case of L1-Chinese L2-speakers of English, I would like to argue that their suppliance of simple past morphology is most likely affected by L1-phonotactic transfer (contra Hawkins and Liszka), since I found that in a group of L2 speakers whose L1 instantiates the $[\pm\text{past}]$ feature, it was seen that factors other than syntactic can be at work. It seems clear that more empirical research on this matter is needed, particularly where syntactic and phonological properties can be teased apart.

References

- Bayley, R.J. (1991). *Variation theory and second language learning: Linguistic and social constraints on interlanguage tense marking*. Unpublished doctoral dissertation, Stanford University.
- Goad, H., L. White, & J. Steele. (2003). Missing inflection in L2 acquisition: Defective syntax or L1-constrained prosodic representations? *The Canadian Journal of Linguistics/La Revue Canadienne De Linguistique*, 48 (3-4), 243-263.
- Goad, H., & L. White. (2006). Ultimate attainment in interlanguage grammar: A prosodic approach. *Second Language Research*, 22, 243-268.
- Hawkins, R. & H. Hattori. (2006). Interpretation of English multiple wh-questions by Japanese speakers: a missing uninterpretable feature account. *Second Language Research*, 22, 3.
- Hawkins, R., & S. Liszka. (2003). Locating the source of defective past tense marking in advanced L2 English speakers. In van Hout, R., A. Hulk, F. Kuiken, R. Towell (eds.), *The lexicon-syntax interface in second language acquisition* (pp. 21-44). Amsterdam; Netherlands: John Benjamins.

- Haznedar, B., & B. D. Schwartz. (1997). Are there optional infinitives in child L2 acquisition? In E. Hughes and A. Greenhill (eds.) *Proceedings of the 21st Annual Boston University Conference on Language Development* (pp. 257-268). Somerville, MA: Cascadilla Press.
- Lardiere, D. (1998a). Case and tense in the 'fossilized' steady state. *Second Language Research*, 14, 1-26.
- Lardiere, D. (1998b). Dissociating syntax from morphology in a divergent L2 end-state grammar. *Second Language Research*, 14(4), 359-375.
- Lardiere, D. (2000). Mapping features to form in second language acquisition. In J. Archibald (ed.), *Second language acquisition and linguistic theory*. (pp. 102-29). Oxford: Blackwell.
- Lardiere, D. (2007). *Ultimate attainment in second language acquisition: a case study*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Prévost, P., & L. White. (2000). Missing surface inflection or impairment in second language acquisition? evidence from tense and agreement. *Second Language Research*, 16(2), 103-133.
- Rothman, J. (2007). Sometimes they use it, sometimes they don't: an epistemological discussion of L2 Morphological production and its use as a competence measurement. *Applied Linguistics*, 28(4), 609-614.
- Slabakova, R. (2008). *Meaning in the second language*. Berlin/New York: deGruyter.
- Tsimpli, I. M. (2003). Interrogatives in the Greek/English interlanguage: a minimalist account. In Mela-Athanasopoulou, E. (ed.) *Selected papers on theoretical and applied linguistics*. Thessaloniki: Aristotle University, 214-225.
- Tsimpli, I.M. & M. Dimitrakopoulou (2007). The interpretability hypothesis: Evidence from wh-interrogatives in second language acquisition. *Second Language Research* 23 (2), 215-242.
- White, L. (2003). *Second language acquisition and Universal Grammar*. New York: Cambridge University Press.

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

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

Cascadilla Proceedings Project Somerville, MA 2009

Copyright information

Proceedings of the 10th Generative Approaches to Second Language Acquisition Conference (GASLA 2009)
© 2009 Cascadilla Proceedings Project, Somerville, MA. All rights reserved

ISBN 978-1-57473-434-8 library binding

A copyright notice for each paper is located at the bottom of the first page of the paper.
Reprints for course packs can be authorized by Cascadilla Proceedings Project.

Ordering information

Orders for the library binding edition are handled by Cascadilla Press.
To place an order, go to www.lingref.com or contact:

Cascadilla Press, P.O. Box 440355, Somerville, MA 02144, USA
phone: 1-617-776-2370, fax: 1-617-776-2271, e-mail: sales@cascadilla.com

Web access and citation information

This entire proceedings can also be viewed on the web at www.lingref.com. Each paper has a unique document # which can be added to citations to facilitate access. The document # should not replace the full citation.

This paper can be cited as:

Campos, Gonzalo. 2009. L2 Production of English Past Morphology in Advanced Spanish Natives: Syntactic Deficits or Phonotactic Transfer? In *Proceedings of the 10th Generative Approaches to Second Language Acquisition Conference (GASLA 2009)*, ed. Melissa Bowles et al., 210-219. Somerville, MA: Cascadilla Proceedings Project.

or:

Campos, Gonzalo. 2009. L2 Production of English Past Morphology in Advanced Spanish Natives: Syntactic Deficits or Phonotactic Transfer? In *Proceedings of the 10th Generative Approaches to Second Language Acquisition Conference (GASLA 2009)*, ed. Melissa Bowles et al., 210-219. Somerville, MA: Cascadilla Proceedings Project. www.lingref.com, document #2271.