The use of the past tense aspect in Spanish by study At-Home and Study-Abroad Chinese learners in semi-guided writing tasks

Yuliang Sun 孙玉良[1]，Lourdes Díaz[2]，Mariona Taulé[3]

Abstract. This work focuses on the influence of L2 acquisition environments (At-Home and Study-Abroad) on the language proficiency of L1 Mandarin Chinese learners of Spanish. We chose the use of Spanish past tense aspect (pretérito indefinido and pretérito imperfecto) as the entry point to analyze Chinese learners proficiency in three semi-guided writing tasks. Our results reveal that the different teaching objectives in these acquisition environments promote a different development of Chinese learners' language capacities in Spanish: the At-Home learners have a more native-like performance when factors at the discourse level are taken into account, whereas the Study-Abroad learners have a more native-like performance when factors at the lexical level are taken into account. However, the usage pattern of the Spanish past tense aspect by learners in both environments share prototypical associations at the lexical and discourse levels.

Keywords: past tense aspect, acquisition environment, L2 Spanish, L1 Mandarin Chinese,

[es] El uso de los tiempos aspectuales del pasado en español por aprendices chinos *study At-Home* y *Study-Abroad* en tareas de escritura semi-guiadas.

Resumen. Este estudio se centra en cómo los contextos de adquisición influyen en la competencia del español de los aprendices chinos. Elegimos el uso de pretérito indefinido y pretérito imperfecto como punto de partida para analizar su producción en tres redacciones semi-guiadas. Los resultados muestran que los diferentes objetivos de enseñanza promueven un desarrollo diferente en la competencia de español de los aprendices chinos: los aprendices de *At-Home* tienen un patrón de uso más cerca a hablantes nativos cuando se tiene en cuenta el factor al nivel discursivo; mientras que los aprendices de *Study-Aboard* muestran un patrón más cerca a hablantes nativos cuando se tiene en cuenta el factor al nivel de léxico. Sin embargo, los patrones del uso de los tiempos aspectuales del pasado en español en ambos contextos de adquisición muestran una tendencia tanto a la asociación prototípica al nivel discursivo como la al nivel léxico.

Palabras clave: tiempos aspectuales del pasado, contexto de adquisición, español como L2, chino mandarín como L1

_____

1 Nanjing Normal University (China). Email: 04440@njnu.edu.cn
2 Universitat Pompeu Fabra-CLiC-UB. Email:lourdes.diaz@upf.edu
3 Universitat de Barcelona-CLiC-UBICS. Email:mtaule@ub.edu

Contents. 1. Introduction. 2. Acquisition of L2 Spanish past tense aspect. 3. Two L2 acquisition environments: At-Home and Study-Abroad. 4. Hypotheses and methodology. 5. Data Analysis. 6. Discussion and conclusion.

1. Introduction

With the development of the world economy and increasing globalization, more and more people choose to learn a foreign language in a native speaking country. Many people believe that immersion in the target language (TL) environment facilitates progress in proficiency and knowledge of the culture in a shorter period. Research comparing the performance of second language (L2) learners who study At-Home (AH) and who Study Abroad (SA) point out that the SA experience indeed benefits learners, not only in their L2 language skills (Putra, 2014; Godfrey, Treacy & Tarone 2014; Schenker 2018), but also in their personal motivation and confidence in learning the TL (Lee 2018; Thompson & Lee 2014). However, not all researchers hold the same opinion, since the factors underlying the benefits of studying abroad are complex and include the duration of the stay and the students' L2 proficiency at the beginning their courses.

In this research, we focus on the acquisition of Spanish past tense aspect by Chinese learners and analyze the differences found in the usage patterns of Spanish aspect by two groups of Chinese learners of Spanish in two different learning environments: the AH and the SA groups. The elicitation instrument used in both contexts are three semi-guided writing tasks. In previous research, the acquisition of the perfective (pretérito indefinido, PIN) and imperfective (pretérito imperfecto, PIM) aspect in Spanish by Chinese learners has been analyzed from the perspective of various influences at the lexical, discourse and pragmatic levels, and the effect of first language (L1) transfer (Sun, Díaz & Taulé 2018, 2019a, 2019b; Sun et al. 2019; Mao 2009; Chin 2008). However, how the L2 study environment affects Chinese learners' usage pattern of Spanish past tense aspect has not been discussed so far. The aim of this work is to fill this gap. Concretely, we aim to: 1) analyze to what extent Chinese learners can benefit from their SA experience to make progress in their use of PIN and PIM compared to AH learners. 2) whether both Chinese learner groups follow the same developmental pattern as predicted by the Lexical Aspect Hypothesis (LAH, Andersen 1991; Andersen & Shirai 1994) and the Discourse Hypothesis (DH, Bardovi-Harlig 1994) in their usage patterns of Spanish aspect or whether studying at home or abroad plays a role in their usage patterns.

The structure of this paper is as follows: we summarize research on L2 acquisition of Spanish past tense aspect in Section 2 and related research on the influence of studying AH and SA on L2 acquisition in Section 3. In Section 4 we present our hypotheses and methodology. In Section 5 we analyze the data obtained, while Section 6 presents the discussion and summarizes the conclusions of this work.

2. Acquisition of L2 Spanish past tense aspect

In the general framework of Spanish L2 acquisition, the acquisition of the perfective aspect (pretérito indefinido, PIN) and the imperfective aspect (pretérito imperfecto, PIM) is one of the most extensively researched topics (Montrul & Slabakova 2002; Salaberry 2008, 2011; Díaz, Ruggia, Bekiou & Rosado 2003; Díaz, Bel & Bekiou 2008; Domínguez, Tracy-Ventura, Arche, Mitchell & Myles 2012; Comajoan 2014; González & Quintana Hernández 2017).

The perfective aspect reflects an external perspective for observing a situation as a whole; i.e. something that cannot be divided into distinct phases. In contrast, the imperfective aspect reflects an internal perspective for observing a situation of which only a part or a phase of the situation can be observed (Comrie 1976). Rojo (1990) points out that in the case of Spanish, the perfective aspect corresponds to the pretérito indefinido (trabajé) and the imperfective aspect corresponds to the pretérito imperfecto (trabajaba). However, since Mandarin Chinese does not have a verbal inflectional system, at the grammatical level aspectual information is conveyed by the association between aspectual markers and verbs. For instance, according to Chu (2006), the perfective aspect markers are –le and –guo, and the imperfective markers are zai- and –zhe in Mandarin Chinese.

Aspectual information can be conveyed at both the syntactic and the lexical levels. In the same way, certain implicit properties, such as the opposition between dynamic and non-dynamic, telic and atelic, durative and punctual, make it possible to classify verbs in terms of lexical aspect. The most cited aspectual classification framework is Vendler's (1967) four-way classification, according to which, verbs are classified into four categories: states (non-dynamic, atelic and durative), activities (dynamic, atelic and durative), accomplishments (dynamic, telic and durative) and achievements (dynamic, telic and non-durative). Researchers have applied this classification to different languages, including Spanish (De Miguel 1999) and Mandarin Chinese (Chu 2006).

Current research suggests that these lexical classes and the grounding information in discourse (foreground and background) can affect L2 learners' PIN/PIM usage patterns (Cadierno, 2000; López-Ortega, 2000; Quesada, 2006; Mao, Montrul & Perpiñán, 2011, Salaberry, 2011; Domínguez, et al., 2017). Based on the predictions of the LAH and the DH, prototypical associations exist between the lexical class/grounding information and the use of aspectual form: telic events (accomplishments and achievements) are prototypically associated with a perfective form in the foreground and convey the main line information in narration. In contrast, atelic verbs (states and activities) are prototypically associated with an imperfective form in the background and provide a description or comment on information regarding events in the foreground. Additionally, according to the LAH, there exists a developmental pattern in the usage of the perfective and imperfective aspect. At an early stage, L2 learners tend to prefer these prototypical associations and to reject the non-prototypical associations, even in cases in which non-prototypical associations are grammatical. With the development of L2 learners' competence, this use of perfective and imperfective of aspect will expand from the prototypical associations to the non-prototypical associations. That is to say, the perfective aspect will appear first with achievement verbs, expanding later to accomplishments and activities, and finally to states. The

imperfective will first appear with states, before expanding to activities and accomplishments and achievements verbs. This developmental pattern has been supported by Ramsay (1990), Camps (2005) and Lu, Cheng and Hung (2015). However, it has been challenged by later studies, such as Salaberry (1999, 2000, 2003, 2011), Salaberry and Ayoun (2005), Baker and Quesada (2011), and Fistrovic (2016), who propose that L2 learners with lower language competence use the perfective aspect as a default aspect form for all the verbal classes.

In the case of Chinese learners of Spanish, Chin (2008) claims that Chinese learners of Spanish are less sensitive to the contrast between PIN and PIM in states, accomplishments and achievements compared to English learners and she attributes this difference to the influence of learners' L1aspectual system. However, Mao (2009) finds that the usage pattern of PIN and PIM by Chinese learners of Spanish follow the prototypical associations predicted by the LAH. In addition, Sun, Díaz and Taulé (2018, 2019a, 2019b) and Sun (2019) argue that the performance of Chinese learners on Spanish does not conform to the developmental pattern predicted for the LAH in the use of PIN and PIM.

Previous research on these two hypotheses (the LAH and the DH) have largely focused on the L2 acquisition of Spanish past tense aspect, though without considering the influence of the L2 study environment (AH or SA). Concerning the aspectual system of Spanish and Chinese languages, Chinese lacks morphological inflection and has a different aspectual system from Spanish (Sun, Díaz & Taulé 2019a, 2019b), but it shares with Spanish a foreground/background distinction related to aspect (Chu 2006). In this research, we propose that factors at the lexical and the discourse levels influence learners' usage pattern of PIN and PIM and we analyze the role played by the acquisitional environments in the expression of L2 Spanish past tense aspect by Chinese learners at B1 and B2 levels. In particular, we study whether studying in SA environment results in a more native-like use of PIN and PIM in Spanish than that of AH learners.

3. Two L2 acquisition environments: At-Home and Study-Abroad

Research on L2 acquisition in AH and SA environments is plentiful (Whatley 2013; Putra 2014; Schenker 2018; Lafford & Uscinski 2014, among others) and approaches the subjects mainly from two different perspectives. The first approach deals with the psychological aspects that may cause differences in performance between AH students and SA students, such as their anxiety when involved in L2 interaction, their motivation for studying a specific L2 abroad and their attitude towards the L2 environment and culture. The second approach focuses on the progress in the different L2 skills observed in learners in the SA environments. In this work, we focus on the second perspective. In particular, we study the L2 acquisition of Spanish aspect by Chinese learners in AH and SA conditions. In the following lines we review previous related research.

Generally speaking, studies support the claim that L2 learners benefit from the SA experience and exhibit a more native-like production than AH learners at the same language competence level. Putra (2014) claims that the SA experience of SA Indonesian students of English in the USA is positive since they exhibit a more accurate grammatical use of English in their oral and written productions than AH students. The same point of view is supported by Godfrey, Treacy and Tarone

(2014) in their research on L2 French SA students, and by Schenker (2018) in her research on L2 German SA students, among other. Serrano, Tragant and Llanes (2012) propose that L2 learners of English can make significant progress in their L2 skills only if their SA duration is more than one semester. In contrast, Schenker (2018) finds that a short-period (8 weeks in her research) of SA experience can also help L2 learners of German to make progress in all language skills, including reading, listening and writing.

Regarding specific research on L2 Spanish acquisition, there are also studies which support the claim that L2 learners can benefit from their SA experience, such as Brecht, Davidson and Ginsberg (1995), who find that the more advanced L2 language competence is, the more progress learners can make in their oral production during their SA experience. Díaz-Campos (2006) and Lord (2010) found that the SA experience helps L2 Spanish learners to make progress in their production of certain phonemes. However, we also find studies arguing that SA Spanish learners do not always make more progress or show a more native-like performance than AH learners in all language skills. Lord (2009) posits that the SA experience improves L2 Spanish learners' written accuracy, but does not improve their written fluency. Collentine and Freed (2004) found that their SA Spanish group gained progress in lexical ability and sociolinguistic awareness rather than in grammatical accuracy. Concerning pragmatic ability, Bataller (2010), Lafford & Uscinski (2014); Shively (2014), Díaz, Taulé & Enríquez (2018), among others, claim that SA Spanish learners gain progress compared to AH groups. In contrast, Freed, So and Lazar (2003) and Mitchell, Tracy-Ventura and McManus (2017) failed to find such positive effects of studying abroad.

A key factor behind these discrepancies in the findings may be due to differences in the time spent studying abroad, together with differences in students' L2 proficiency at the beginning of their stays. Related to this, Lafford & Collentine (2006: 117) postulated the Threshold Hypothesis, which claims that L2 students can gain more progress from their SA experience if they have a "well-developed cognitive, lexical and grammatical base" before their SA stay. This prediction was confirmed by DeKeyser (2010) in research with L2 Spanish students in Argentina.

Finally, it is noteworthy that studies of Mandarin Chinese learners of Spanish in AH and SA environments are scarce, as are studies focusing on the acquisition of L2 Spanish past tense aspect by Chinese learners. For these reasons we decided to study the acquisition of Spanish L2 past tense aspect by Mandarin Chinese learners in AH and SA conditions.

4. Hypotheses and methodology

Taking into account the previous studies, we propose the following two hypotheses in this work:

H1. Considering studies of the usage pattern of aspect in L2 acquisition observed in and AH Chinese learners of Spanish:

At the discourse level, based on the pattern predicted by the DH, learners will show a preference for using the prototypical associations of PIN-foreground and PIM-background.

At the lexical level, based on the pattern predicted by the LAH, the associations of PIN with achievements and accomplishments and PIM with states and activities will be prototypical associations for Chinese learners of Spanish.

From the perspective of cross-group analysis and language development, we contemplate two possibilities: the first is that one is the developmental pattern predicted by the LAH, that is, that the use of PIN will first appear with achievements, and then expand to accomplishments, activities and states. In contrast, the use of PIM, will first appear with states, and then expand to activities, accomplishments and achievements. The latter is the pattern proposed by Salaberry (2003, 2011, among others), which states that PIN is the default aspect form for all the verbal classes for learners of Spanish at lower competence levels, with the development of their L2 language proficiency, these learners will tend to be influenced more by the form-meaning mapping between the lexical classes and the use of PIN and PIM, that is to say, the use of PIN and PIM will be guided by verbal properties.

> H2. Addressing the question of the L2 learning environments, if L2 learners benefit more from their SA experience than AH learners from traditional classroom teaching, the SA learners will show a more native-like PIN and PIM usage pattern than AH learners at the same language competence level.

In this work we deepen the perspective adopted by Ruggia (2002) (L1 Japanese and L2 Spanish) and carried out three semi-guided story writing tasks to analyze AH and SA Chinese learners' L2 Spanish competence in the use of PIN and PIM. During the test, subjects were asked to write three short stories following the instructions given to ensure that they use the verbs and complements (items evaluated in this experiment) listed in the instructions at the beginning of each task. These three tests consisted of 43 stimuli. The distribution of items across tasks are shown in Table 1. Table 2 shows the items distributed in lexical aspectual classes (based on Vendler 1967). Instructions for each task provided the informational framework for these three stories in order to facilitate subjects' writing and guide their production of the targeted verbs. Infinitive forms of the target verbs were provided in the instructions. Subjects were asked to conjugate these verbs in the appropriate form (tense, aspect and person) according to the context (see Appendix 1).

	Test 1	Test 2	Test 3	Total
No. of items	11	12	20	43

Table 1: Distribution of items across the three tasks

	States	Activities	Accomplishments	Achievements	Total
No. of items	11	7	6	19	43

Table 2: Distribution of items across lexical aspectual classes

The participants in this study were 12 Chinese learners of Spanish, six of whom were Spanish students at Nanjing University Jinling College in China. None of these students had experience of language immersion in a Spanish native speaking

country. According to the SGEL placement test (Sánchez & Simón 1989), and in line with the CEFR (2000), three of them were placed at B1 level (marked as NNB1 in this work) and the other three were placed at B2 level (marked as NNB2). Our B1 group corresponds to the lower-intermediate level and our B2 group corresponds to the upper-intermediate level of the ACTF standards. NNB1 and NNB2 stand for non-native speakers of B1 and non-native speakers of B2.

The other six Chinese learners were students at Escuela Oficial de Idiomas – Drassanes in Barcelona, which means that they were SA Chinese students of Spanish. As three of them were placed by this language school at B1 level and the other three were placed at B2 level following the CEFR (2000) criteria, we followed the same classification as the language school. Subjects are marked respectively as NAB1 (Non-native speaker Study Abroad B1) and NAB2 (Non-native speaker Study Abroad B2) in this work. Moreover, we set up a control group consisting of three native speakers (henceforth referred to as the NS group) from Universitat Pompeu Fabra in Barcelona.

5. Data Analysis

The data considered in the following analysis excludes the items omitted by subjects in their writing production and the items that appear in morphological forms other than PIN or PIM. In total, there are 13 items (10.1%) excluded in NNB1, 17 (13.2%) in NNB2, 5 (3.9%) in NAB1, 6 (4.7%) in NAB2 and 11 (8.5%) in NS. Based on Salaberry (2011), in this research, items in the expected morphological forms are marked as 0 if they appear in the PIN form and as 1 if they appear in the PIM form. The mean values of these items (answers) across level groups sorted by grounding information in discourse or by lexical aspectual class, reveal subjects' tendency in the use of PIN and PIM in the two different acquisition environments (SA vs. AH). When the mean value approaches 0, the tendency is to use PIN, whereas when this value approaches 1, the tendency is to use PIM.

In order to evaluate the contrast between the usage patterns of PIN and PIM in both AH and SA Chinese learners' production, we considered three parameters: i) background/foreground contrast, ii) lexical aspectual classes, iii) both parameters combined. Figure 1, Figure 2 and Figure 3 show the mean values of items across groups when these parameters are taken into account. Statistical analyses were conducted in order to compare the significance of mean values between groups.

The Shapiro-Wilk test was applied to observe the distribution of data in all the samples (groups) using parameters i), ii) and iii) as variables. The results show that in all these cases, the data do not conform to the normal distribution. Therefore, the non-parametric Kruskal-Wallis test was applied to compare the mean values of answers between samples.
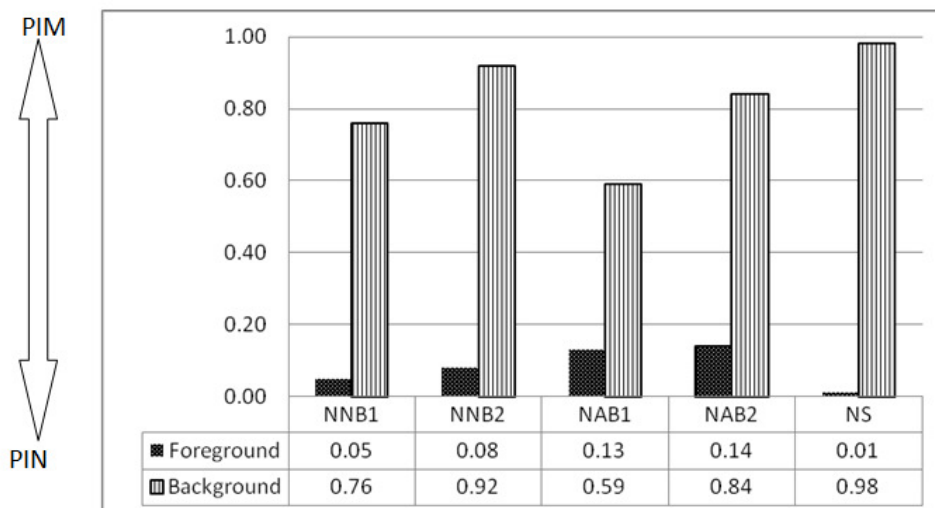
Figure 1: Mean values by group in Foreground/Background contrast

Grounding information	Compared groups	Std. error	Significance
FOREGROUND	NS-NAB1	8.515	0.036
	NS-NAB2	8.515	0.036
BACKGROUND	NS-NAB1	9.662	0.005

Table 3: Non-parametric comparison between groups separated by grounding information

When grounding information in discourse is taken into account as a variable (i), both SA Chinese learner groups (NAB1 and NAB2) show significant differences compared to the NS group in the case of the foreground information, as shown in Table 3. The mean values in Figure 1 reveal that the mean values obtained from these two SA Chinese learner groups are significantly higher than those obtained by the NS group in the case of the foreground information. This means that the tendency exhibited by SA Chinese learner groups to use the prototypical morphological form (PIN in the foreground) is less strong than the tendency observed in the NS group. In addition, differences were also observed in the case of background information by the NAB1 compared to the NS group. As can be seen in Figure 1, the mean value of PIN/PIM use for the NAB1 group in background information is lower than that of the NS group. This means that the NAB1 shows a weaker tendency to use the prototypical morphological form (PIM in background) than the NS group. In contrast, the AH Chinese learner groups (NNB1 and NNB2) do not show significant differences compared to the NS group. Therefore, we can conclude that when grounding information is taken into account as a variable, the AH Chinese learner groups have a more-native like language performance than the SA Chinese learner groups. That is to say, both the AH Chinese learner groups and the NS group tend to use the prototypical associations predicted by the DH (PIN with foreground and PIM with background), while the grounding information does not guide the use of PIN and PIM as strongly for the SA Chinese learners groups as it does for the other groups. It seems that the AH Chinese learner groups in our study have a stronger capacity to perceive and process the foreground/background contrast than the SA groups.
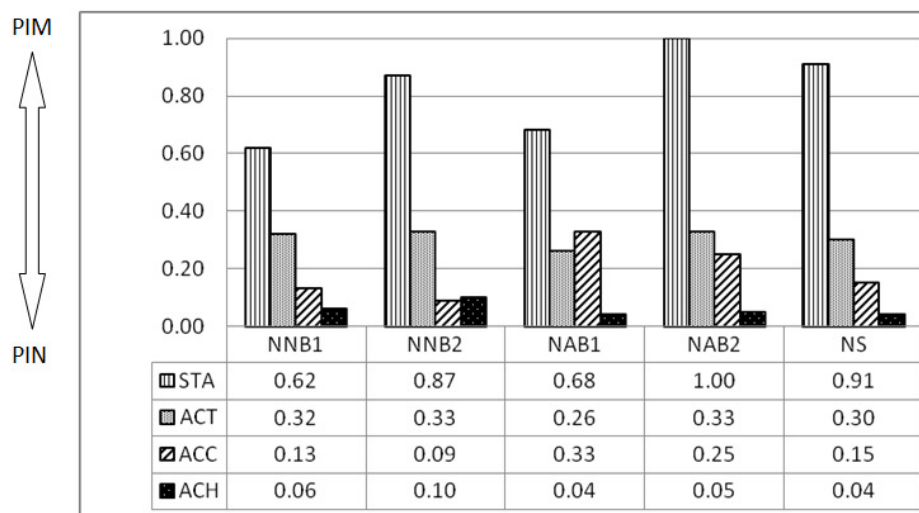
Figure 2: Mean values by group in lexical aspectual classes

| Aspectual classes	Compared groups	Std. error	Significance
STATES	NNB1-NAB2	8.798	0.030
	NNB1-NS	8.798	0.012
ACTIVITIES	NONE		
ACCOMPLISHMENTS	NONE		
ACHIEVEMENTS	NONE		

Table 4: Non-parametric test between groups separated by aspectual classes

Figure 2 and Table 4 show the results obtained when lexical aspectual class is taken into account as a variable (ii). The Kruskal-Wallis test reveals that a significant difference between groups is attested only in the case of states, between the NNB1 and NAB2 groups and between the NNB1 and NS groups. Figure 2 also shows that the mean values of states in both learner groups with lower proficiency (NNB1 and NAB1) are lower than in the groups with higher proficiency (NNB2 and NAB2), although the difference between NAB1 and the other groups is not statistically significant. Our results show that both AH and SA Chinese learners show a stronger tendency to use the prototypical associations predicted by the LAH in the case of states (PIM with states) throughout their Spanish language proficiency development. However, the tendency to use prototypical associations is stronger in the SA groups than in the AH groups as shown by the fact that the mean values for sates in the SA groups is higher than those of the AH groups. Moreover, as can be observed in Figure 2, both SA Chinese learner groups (NAB1 and NAB2) show a stronger preference to use PIM in the case of accomplishments and PIN in the case of achievements than the AH Chinese learner groups (NNB1 and NNB2), although these preferences are not statistically significant. In summary, when the lexical aspect is taken into account as a variable, a clearly distinctive pattern between AH and SA learner groups does not emerge. An increasing preference in the use of the prototypical association can only be attested in states for both the AH and SA learner groups throughout their L2 proficiency development. At the same time, it can be observed that the SA groups have a more-native like performance (preference for using prototypical associations) than the AH groups in the cases of states and achievements.

Figure 3 and Table 5 show the results obtained when both lexical aspectual class and grounding information in discourse (iii) are considered as variables. Again, a significant difference is only attested in the case of states. First of all, the NAB2 group shows a clear preference to use PIM for states, regardless of the grounding information provided by discourse. For this group, the atelic and non-dynamic properties of state verbs override the grounding information in discourse, which causes their preference to use PIM for states. Moreover, the NNB1 and NAB1 groups show a weaker tendency than the other groups to use the prototypical morphological form for states (PIM with states) when they appear in the background. It seems that both groups with a lower proficiency still lack the linguistic capacity to perceive and process the interactive information conveyed at the lexical and discourse level for deciding between PIN and PIM in the case of states.

Lexical aspect	Grounding information	Compared groups	Std. error	Significance
STATES	FOREGROUND	NNB1-NAB2	3.483	0.037
	BACKGROUND	NNB1-NS	7.091	0.035
		NAB1-NS	6.787	0.008
ACTIVITIES	FOREGROUND	NONE		
	BACKGROUND	NONE		
ACCOMPLIS HMENTS	FOREGROUND	NONE		
	BACKGROUND	NONE		
ACHIEVEM ENTS	FOREGROUND	NONE		
	BACKGROUND	NONE		

Table 5: Break down of three-way significant interaction effects
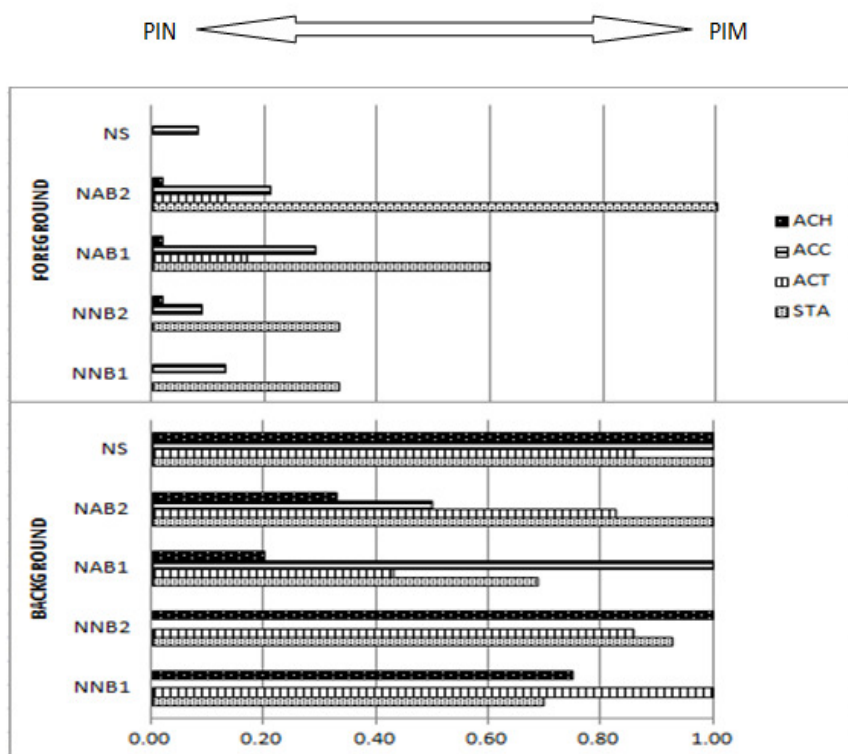
		NNB1	NNB2	NAB1	NAB2	NS
FOREGROUND	STA	0.33	0.33	0.60	1.00	0.00
	ACT	0.00	0.00	0.17	0.13	0.00
	ACC	0.13	0.09	0.29	0.21	0.08
	ACH	0.00	0.02	0.02	0.02	0.00
BACKGROUND	STA	0.70	0.93	0.69	1.00	1.00
	ACT	1.00	0.86	0.43	0.83	0.86
	ACC	N.A.	N.A.	1.00	0.50	1.00
	ACH	0.75	1.00	0.20	0.33	1.00

Figure 3: Mean values in Foreground/Background contrast according to aspectual lexical classes by groups

The results of this work are summarized in Figure 4. More native-like progress can be observed in groups in both environments (from NNB1 to NNB2 and from NAB1 to NAB2). However, among these groups, only the SA groups have a more native-like performance than the AH groups when lexical aspectual classes are taken into account as a variable. When grounding information is taken into account, progress is not observed in the SA groups. In contrast, the AH groups show a more native-like performance than the SA groups.
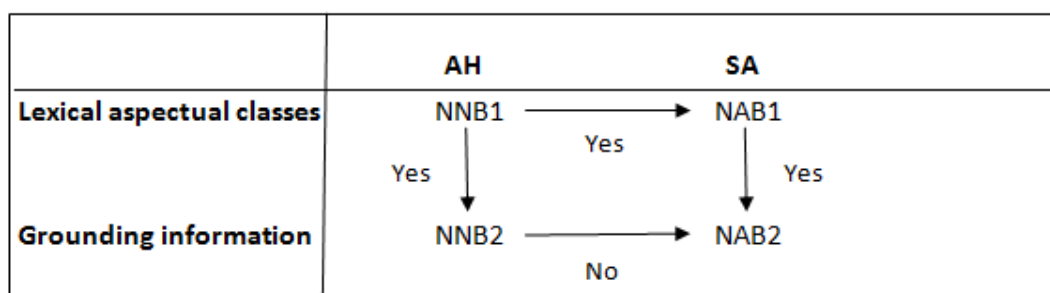

Figure 4: Progress observed between groups

6. Discussion and conclusion

In order to discuss the above presented results, we need to emphasize the differences in the acquisition contexts for our AH and SA Chinese learners of Spanish. In this work, the AH Chinese learners were Chinese university students studying Spanish in China and the SA Chinese learners were students at a language school in Barcelona, which is open to students from any educational background. Universities tend to adopt a formal teaching style oriented towards developing the ability to use the target language in both the oral and written modes in an academic context. Therefore, an extensive reading of formal texts and training in academic writing are typical activities. In contrast, at language schools, the aim is to train students' capacity for everyday communication focusing on common language, both oral and written, though spoken practice is prioritized.

The effects caused by these different teaching objectives can be observed in our study. First, SA Chinese learners are less sensitive to the influence of grounding

information in discourse in their use of PIN and PIM than AH students (See Figure 1 and Table 3), since their teachers focus more on conversational training rather than academic reading and writing. Compared to oral expression in daily life, academic reading and writing require a greater capacity to perceive the information conveyed by the context (discourse) when reading, and a greater capacity to organize discourse structure when writing. This explains why AH Chinese learners in our study are more sensitive to grounding information in discourse and have a more-native like performance when this information is taken into account as a variable in the analysis. In contrast, when lexical aspectual class is taken into account as a variable, SA Chinese student groups show a stronger developmental tendency towards the prototypical association with states (states with PIM) from NAB1 to NAB2 than AH Chinese learner groups (see Figure 2 and Figure 3). This means that SA Chinese learners become more sensitive to lexical aspectual information throughout the development of their Spanish proficiency. Our tentative explanation is that the immersion context in their SA experience allows for greater native language input, especially in conversations in their daily lives. As Tracy (2007) points out, in the production of Spanish native speakers, verbs are clearly biased to PIN or PIM nearly 70% of the time. This influence of input on L2 learners' aspect usage pattern is supported by Shirai (2004) and Salaberry (2011). Therefore, we speculate that the greater the input from native speakers have received, the stronger their tendency to use the prototypical associations predicted by the LAH for SA groups.

Concerning Hypothesis 1 (H1), we can observe in Figure 1 that both the AH and SA Chinese learner groups show a preference to use the prototypical associations predicted by the DH. That is, they prefer to associate PIN with the information in the foreground and PIM with the information in the background. The preference for prototypical associations predicted by the LAH can also be observed in Figure 2, at least in the case of states and achievements. The preference to associate states with PIM and to associate achievements with PIN is a clear tendency in both the AH and SA Chinese learner groups. However, in the cases of activities and accomplishments, the SA Chinese learner groups do not show a clear PIN and PIM usage pattern. In particular, the SA Chinese learner groups have higher mean values than the AH Chinese learner groups for accomplishments and therefore tend to use PIM. It is obvious that the verbal properties of states (non-dynamic, atelic and durative) and achievements (dynamic, telic and non-durative) make PIM the prototypical form for the former, and PIN the prototypical form for the latter. However, situations conveyed by activities (dynamic, atelic and durative) and accomplishments (dynamic, telic and durative) are less prototypical than situations conveyed by states and achievements. According to Tracy (2007), the associations of PIM with states and PIN with achievements are the most frequent patterns, whereas PIN and PIM share a similar proportion in activities and accomplishments. This can explain why SA Chinese learners show a less clear pattern in the use of PIN and PIM for activities and accomplishments than AH Chinese learners, because AH Chinese learners base their selection of PIN and PIM on the language knowledge gained from traditional classroom training. Therefore, our results partially support the prototypical associations predicted by the LAH and the DH for both SA and AH Chinese learner groups of Spanish, although an

important effect of the differences in teaching objectives for AH and SA environments can be observed.

From the perspective of cross group analysis and language developments, Figure 2 shows that both lower proficiency groups (NNB1 and NAB1) show a tendency to use PIN compared to the two more advanced groups (NNB2 and NAB2), except in the case of accomplishments. In contrast to the developmental pattern predicted by the LAH, the two higher proficiency groups (NNB2 and NAB2) show a usage pattern of PIN and PIM that is more strongly guided by lexical aspectual classes. Therefore, this result contradicts the development pattern predicted by the LAH for groups in both acquisition contexts.

Regarding Hypothesis 2 (H2) of this work, AH and SA learners show different degrees of progress in different linguistic aspects (lexical vs. grounding) in each acquisition environment. However, we speculate that this difference is caused by different teaching objectives, rather than the different language acquisition environments neither is it caused by learners' original L2 proficiency at the beginning of the SA course, as predicted by the Threshold Hypothesis. In our study, SA Chinese learners made more progress in processing information at the lexical aspect level than in processing the grounding information at the discourse level compared to AH Chinese learners, as shown in their use of PIN and PIM. In contrast, AH learners perform better when processing discourse information (foreground vs. background) for their selection of PIN and PIM. We propose that the expectations of the progress to be made by studying abroad should conform to realistic possibilities (input effect on lexical aspectual classes choice), whereas in AH, the formal teaching context helps learners to improve their ability to discriminate discourse information (background/foreground), since this is an academic objective. It is important for students to have a clear idea of which aspect of the L2 they would like to improve before making the AH/SA decision. Only by doing so can they choose the best program for them and obtain the maximum benefit from their study experience.

To conclude, we found that the usage patterns of Spanish past tense aspect of learners in both acquisition contexts (AH vs. SA) coincide in their preference to use prototypical associations at lexical and discourse levels. Based on the information they acquire in each context, Chinese learners tend to use the morphological associations predicted by the LAH and the DH. Moreover, this work also shows that teaching objectives play a role in L2 learners' capacity for processing lexical and discourse information, and that different approaches to teaching (lexical aspectual class and grounding information in discourse) results in differences in L2 learners' progress across levels and acquisition environments. According to our research, L2 learners at universities and language schools should be assessed so that they have a clear idea of which aspect(s) of their target language are more likely to improve depending on the acquisition environments and teaching objectives. And also it is recommended that the importance of pragmatic-discourse should be stressed in teaching grammar as well. Only by doing so will the L2 learners be able to choose the most appropriate course for them and take maximum advantage of it.

Acknowledgements

References

Andersen, R. W. 1991. Developmental sequences: The emergence of aspect marking in second language acquisition, *Crosscurrents in second language acquisition and linguistic theories.* Amsterdam: John Benjamins, 305-324.

Andersen, R. W., & Shirai, Y. 1994. Discourse motivations for some cognitive acquisition principles. *Studies in Second Language Acquisition*, *16*, 133–156.

Baker, J., & Quesada, M. L. 2011. The effect of temporal adverbials in the selection of preterit and imperfect by learners of Spanish L2, in L. Plonsky & M. Schierloh (eds.), *Selected proceedings of the 2009 Second Language Research Forum.* Somerville, MA: Cascadilla, 1-15.

Bataller, R. 2010. Making a request for a service in Spanish: Pragmatic development in the study abroad setting. *Foreign Language Annals, 43(1),* 160–175.

Bardovi-Harlig, K. 1994. Anecdote or evidence? Evaluating support for hypotheses concerning the development of tense and aspect, in E. Tarone, S. Gass & A. Cohen (eds.), *Research methodology in second-language acquisition.* NJ: Lawrence Erlbaum, 41–60. Hillsdale.

Brecht, R., Davidson, D., & Ginsberg, R. 1995. Predictors of foreign language gain during study abroad. *Second language acquisition in a study abroad context*, pp. 37-66.

Cadierno, T. 2000. The acquisition of Spanish grammatical aspect by Danish advanced language learners. *Spanish Applied Linguistics, 4,* 1-53.

Camps, J. 2005. The Emergence of the Imperfect in Spanish as a Foreign Language: The Association between Imperfective Morphology and State Verbs." *International Review of Applied Linguistics, 43*, 163–92.

Chin, D. H. J. 2008. A cross-linguistic investigation on the acquisition of Spanish aspect, in Joyce Bruhn de Garavito and Elena Valenzuela (eds), *Selected Proceedings of the 10th Hispanic Linguistics Symposium.* Somerville: Cascadilla Press, 36-50,

Chu, C. C. H. 2006. *Hanyu Pianzhang Yufa (A Discourse Grammar of Mandarin Chinese).* Beijing: Beijing Language and Culture University Press.

Collentine, Joseph G. & Barbara Freed. 2004. Learning Context and its Effects on Second Language Acquisition: Introduction. *Studies in Second Language Acquisition, 26(2)*, 153–172.

Comajoan, Llorenc. 2013. Tense and aspect in second language Spanish. In Geeslin, K. L. (ed.), *The handbook of Spanish second language acquisition.* UK: John Wiley, 235-252.

Comrie, B. 1976. *Aspect: An introduction to the study of verbal aspect and related problems (Vol. 2).* New York: Cambridge university press.

Conroy, M. A. 2016. Contextual factors in second language learning in a short-term study abroad programme in Australia. *The Language Learning Journal, 44*, 1–21. https://doi.org/10.1080/09571736.2015.1118643

Council of Europe 2000. Common European Framework of Reference for Languages: learning, teaching, assessment. Strasbourg: ce. https://www.coe.int/t/dg4/linguistic/source/framework_en.pdf.

DeKeyser, R. 2010. Monitoring processes in Spanish as a second language during a study abroad program. *Foreign Language Annals, 43,* 80–92. https://doi.org/10.1111/j. 1944-9720. 2010.01061.x

De Miguel, E. 1999. El aspecto léxico. In Bosque, I. and Demonte, V. (eds.), *Gramática descriptiva de la lengua española*. Madrid: Espasa Calpe, 2977-3060.

Díaz-Campos, Manuel. 2006. The Effect of Style in Second Language Phonology: An Analysis of Segmental Acquisition in Study Abroad and Regular-Classroom Students. In Carol A. Klee and Timothy L. Face (eds.), *Selected Proceedings of the 7th Conference on the Acquisition ofSpanish and Portuguese as First and Second Languages*. Somerville, MA: Cascadilla Proceedings Project, 26–39.

Díaz, L., Bekiou, K. & Bel, A., 2008. Interpretable and uninterpretable features in the acquisition of Spanish past tenses. in J. Liceras, H. Zobl, & H, Goodluck (eds.), *The role of formal features in second language acquisition,* New Jersey: Lawrence Erlbaum Associates, 484-512.

Díaz, L., Bel, A., Ruggia, A., Bekiou, K., & Rosado, E. 2003. Morphosyntactic interfaces in Spanish L2 Acquisition: the case of Aspectual Differences between Indefinido and Imperfecto. In Juana M. Liceras et al. (eds.), *Proceedings of the 6th Generative Approaches to Second Language Acquisition Conference (GASLA 2002)*. Somerville: Cascadilla Press, 76-84.

Díaz, L., Taulé, M., & Enríquez, N. 2018. Being Polite at the Railway or Bus Station. In Sanz, C. & Morales-Front, A.(eds), *The Routledge Handbook of Study Abroad Research and Practice*. New York: Routledge.

Domínguez, L., Arche, M. J., & Myles, F. 2017. Spanish Imperfect revisited: Exploring L1 influence in the reassembly of imperfective features onto new L2 forms. *Second Language Research*, *33(4),* 431-457.

Domínguez, L., Tracy-Ventura, N., Arche, M. J., Mitchell, R., & Myles, F. 2012. The role of dynamic contrasts in the L2 acquisition of Spanish past tense morphology. *Bilingualism: Language and Cognition, 16(3),* 558–577. https://doi.org/10.1017/S1366728912000363

Fistrovic, T. K. 2016. *The Interpretation of Spanish Grammatical Aspect with Habitual and Episodic Readings*. Doctoral dissertation, Arizona State University.

Freed, B., So, S., & Lazar, N. A. 2003. Language learning abroad: How do gains in written fluency compare with gains in oral fluency in French as a second language? *ADFL Bulletin, 34,* 34–40.

González, P., & Quintana Hernández, L. 2018 Aspect and L1 Transfer in the L2 Acquisition of Spanish Grammatical Aspect. *The Modern Language Journal*, *102(3),* 611-625.

Godfrey, L., Treacy, C., & Tarone, E. 2014. Change in French second language writing in study abroad and domestic contexts. *Foreign Language Annals, 47,* 48–65. https://doi.org/10.1111/flan.12072

Lafford, B., & Collentine, J. 2006. The effects of study abroad and classroom contexts on the acquisition of Spanish as a second language: From research to application. In R. Salaberry & B. Lafford (eds.), *The art of teaching Spanish: Second language acquisition from research to praxis*. Washington, DC: Georgetown University Press, 103–126.

Lafford, B., & Uscinski, I. 2014. Study abroad and second language Spanish. In K. L. Geeslin (ed.), *The handbook of Spanish second language acquisition*. Boston, MA: Wiley-Blackwell, 386–403.

Lee, J. H. 2018. The effects of short-term study abroad on L2 anxiety, international posture, and L2 willingness to communicate. *Journal of Multilingual and Multicultural Development, 39(8),* 703–714.   https://doi.org/10.1080/01434632.2018.1435666

López-Ortega, N. 2000. Tense, aspect, and narrative structure in Spanish as a second language. *Hispania, 83 (3),* 488– 502.

Lord, Gillian. 2009. Second-Language Awareness and Development during Study Abroad: A Case Study. *Hispania, 92(1)*, 127–141.

Lord, Gillian. 2010. The Combined Effects of Immersion and Instruction on Second Language Pronunciation. *Foreign Language Annals, 43(3),* 488–503.

Lu, H. C., Cheng, A. C., & Hung, S. Y. 2015. La adquisición del tiempo-aspecto en español en L3 para los aprendices taiwaneses. *Círculo de Lingüística Aplicada a la Comunicación*, *63*, 200-217.

Mao, E. P. W. 2009. La aspectualidad en la interlengua de estudiantes taiwaneses de E/LE. Un estudio empírico sobre la dicotomía pretérito indefinido/pretérito imperfecto. *Revista Nebrija de Lingüística Aplicada, 2009 (5),* 87-103.

Mitchell, R., Tracy-Ventura, N., &McManus, K. 2017. *Anglophone students abroad. Identity, social relationships and language learning*. London/New York: Routledge.

Montrul, S., & Perpiñán, S. 2011. Assessing differences and similarities between instructed heritage language learners and L2 learners in their knowledge of Spanish tense-aspect and mood (TAM) morphology. *Heritage Language Journal, 8(1),* 90-133.

Montrul, S., & Slabakova, R. 2002. The L2 acquisition of morphosyntactic and semantic properties of the aspectual tenses preterite and imperfect. In A.T. Perez-Leroux and J. Munoz Liceras (eds.), *The Acquisition of Spanish Morphosyntax*, *Vol. (1).* Kluwer Academic Publishers, 115-151.

Pearson, N. 2004. The idiosyncrasies of out-of-class language learning: A study ofmainland Chinese students studying English at tertiary level in New Zealand. Paper presented at the Independent Learning Conference, September 2003 in Melbourne, 13–14.

Putra, K. A. 2014. The effect of study abroad on grammatical accuracy of Indonesian students' oral and written performance. *Parole: Journal of Linguistics and Education, 3,* 84–94. https://doi.org/10.14710/parole.v3i2% 20Okt.5391

Quesada, M. L. 2006. La percepción de las propiedades semánticas y la adquisición de la morfología verbal en el español como L2. *Estudios de Lingüística Aplicada, 44,* 11–35.

Ramsay, V. 1990. *Developmental stages in the acquisition of the perfective and the imperfective aspects by classroom L2 learners of Spanish.* Unpublished phD dissertation, University of Oregon.

Rojo, G. 1990. Relaciones temporalidad y aspecto en el verbo español. In I. Bosque (ed.), *Tiempo y aspecto en español*. Madrid: Cátefra, 17–43.

Ruggia, A. 2002. La composición el aspecto en la interlengua española de estudiantes japoneses. *Memoria del Máster de la Universidad de Barcelona.*

Salaberry, M. R. 1999. The Development of Past Tense Verbal Morphology in Classroom L2 Spanish. *Applied Linguistics, 20(2),* 151–178.

Salaberry, M. R. 2000. *The Development of Past Tense Morphology in L2 Spanish.* Amsterdam: John Benjamins Print.

Salaberry, M. R. 2003. Tense Aspect in Verbal Morphology. *Hispania 86.3,* 559–73.

Salaberry, M. R. 2008. *Marking Past Tense in Second Language Acquisition: A Theoretical Model*. New York: Continuum International Publishing Group.

Salaberry, M. R. 2011. Assessing the effect of lexical aspect and grounding on the acquisition of L2 Spanish past tense morphology among L1 English speakers, *Bilingualism: Language and Cognition, 14(2),* 184–202.

Salaberry, Rafael, & Dalila Ayoun. 2005. The Development of L2 Tense-Aspect in the Romance Languages. In Ayoun, D & Salaberry, R. (eds.), *Tense and Aspect in the Romance Languages: Theoretical and Applied Perspectives*. Amsterdam: John Benjamins, 1–32.

Sánchez, A., & Simón, T. 1989. *Examen clasificatorio: español para extranjeros.* Madrid: Sociedad General Española de Librería.

Serrano, R., Tragant, E., & Llanes, À. 2012. A longitudinal analysis of the effects of one year abroad. *Canadian modern language review, 68(2),* 138-163.

Schenker, T. 2018. Making short-term study abroad count—Effects on German language skills. *Foreign Language Annals, 51(2),* 411–429. https://doi.org/10.1111/flan.12339

Shirai, Y. 2004. A multiple-factor account for the form– meaning connections in the acquisition of tense-aspect morphology. In J. Williams, B. VanPatten, S. Rott & M. Overstreet (eds.), *Form–meaning connections in second language acquisition*. Mahwah, NJ: Lawrence Erlbaum, 91–112.

Shively, R. 2014. Language in context. Pragmatics in SL Spanish. In K. L. Geeslin (ed.), *The handbook of Spanish second language acquisition*. Boston, MA: Wiley-Blackwell, 331–350.

Sun, Y. 2019. *Estudio sobre la adquisición de los tiempos aspectuales simples del pasado en español por aprendices chinos a partir de distintas perspectivas lingüísticas.* Tesis doctoral, Universitat de Barcelona.

Sun, Y., Díaz, L. & Taulé, M. 2018. A writing based study of the acquisition of aspect in Spanish by Mandarin Chinese learners. In Díaz, F. J. and Moreno, M. A. (eds.), *Languages at the Crossroads: Training, Accreditation and Context of Use*. Jaén: University of Jaén, 51-62.

Sun, Y., Díaz, L. & Taulé, M. 2019a. The development of dynamicity in the acquisition of Spanish by Chinese learners. *International Journal of Applied Linguistics*, 170:1, 80-111.

Sun, Y., Díaz, L. & Taulé, M. 2019b. Patrones adquisicionales de los pasados aspectuales en distintos tipos de tarea. ¿Cómo se acercan al uso nativo del aspecto los aprendices de ELE sinohablantes? *Marcoele, 28*, pp.1-21.

Sun, Y., Gonzalez Gonzalez, P., Parafita Couto, M.C., Mauder, E., Child, M. W., Díaz, L. & Taulé, M. 2019. Adquisición del aspecto en español por aprendices chinos" *Círculo de Lingüística Aplicada a la Comunicación*. 78, 287-315.

Thompson, A. S., and J. Lee. 2014. The Impact ofExperience Abroad and Language Proficiency on Language Learning Anxiety. *TESOL Quarterly 48 (2),* 252–274.

Tracy, N. 2007. *Testing the Distributional Bias Hypothesis: A corpus-based study of lexical and grammatical aspect in Spanish*. University of Southampton.

Vendler, Z. 1967. *Linguistics in philosophy*. Ithaca: Cornell University Press.

Whatley, M. 2013. The acquisition of past tense variation by L2 learners of Spanish in an abroad context. In Jennifer C. A., Gillian L. Ana P. P. & Jessi E. A. (eds.), *Selected Proceedings of the 16th Hispanic Linguistics Symposium*. Somerville, MA: Cascadilla, 190-205.

Appendix 1: writing tests in Spanish

*En este ejercicio ustedes redactarán tres historias en el pasado sobre el tema que se muestra abajo, utilizando todas las frases en que aparecen verbos en infinitivo y los pondrán en la forma conjugada del pasado que correspondan por contexto. (ATENCIÓN: deberán conjugar los verbos según el tiempo y la persona que se indica entre paréntesis). Tendrán 5 minutos a redactar en ESPAÑOL para cada tema. La redacción de las historias siempre empieza con **El martes pasado…** Recuerden: antes de empezar, pueden consultar al investigador si tienen cualquier duda sobre el proceso de redacción.*

Tema 1: en casa
 (yo) ESTAR en casa toda la tarde.
Mientras (yo) VER la tele. TOMAR un vaso de leche.
De repente, SONAR el teléfono
SER el portero
ESTAR absolutamente histérico
(yo) DECIDIR llamar a los bomberos
(nosotros) OIR las sirenas
(nosotros) ECHAR agua
Al final, los bomberos SOFOCAR el incendio
Todo QUEDAR en un susto

Tema 2: en el parque
 HACER sol…
(yo) ESTAR aburrido de estar en casa
(yo) REDACTAR un trabajo para la clase
(yo) IR a dar una vuelta al parque
 (yo) VER un billete de mil pesetas
(el billete) ESTAR al lado de un árbol
No HABER nadie alrededor
(yo) QUEDÁRmelo
(yo) VOLVER a casa tranquilamente
(yo) ENCARGAR un pizza por teléfono para invertir la mil pesetas
(yo) COMERSE la pizza
(yo) PONERSE enfermísimo

Tema 3: policías y ladrones
 (yo) ACABAR DE tomar un baño por la noche
(yo) OIR un grito
(alguien) LLAMAR a la puerta estrepitosamente
(yo) COGER mi trofeo de ajedrez, de 7 kilos
(yo) MIRAR POR al agujerito de la puerta
No HABER nadie
(yo) VOLVER A mirar
(yo)OIR voces que DISCUTIR en el piso de enfrente
(yo) LLAMAR a la policía
(yo) ESTAR asustado
Cuando la policía VENIR, (la policía) PREGUNTAR por lo ocurrido
(yo) LLAMAR a la puerta de los vecinos
No HABER nadie
SUBIR la portera y DECIR que allí no VIVIR nadie
La policía DECIDIR arrestarme
Entonces, (yo) DESPERTAR.