

Enhancing Metalinguistic Knowledge: Preterite and Imperfect in L2 Spanish

ABSTRACT

Framed within a Sociocultural theory perspective to L2 learning, this article investigated the potential of a suite of pedagogical materials for enhancing metalinguistic knowledge in a foreign/second (L2) language context. The linguistic focus of the project was the tense-aspect system, specifically the contrast between the Preterite and the Imperfect in Spanish given the challenges this poses for L2 learners. Six L1 English university students of L2 Spanish at intermediate level volunteered to participate in the study. Drawing on a pre/post-test research design as well as qualitative microgenetic analysis, the study revealed that all the participants benefited from the treatment and interaction with the pedagogical materials. The findings also reveal interesting insights into metalinguistic and strategic resources used by the participants to describe contrasts between the Preterite and Imperfect. The article concludes by discussing pedagogical and research implications regarding the alternative approach to L2 explicit grammar instruction considered in this study.

Keywords: metalinguistic knowledge; preterite vs imperfect; Sociocultural theory; tense/aspect

INTRODUCTION

In a recent volume exploring L2 pedagogy, Ellis and Shintani (2014: 27) state that ‘good teaching is teaching that proceeds in accordance with how learners learn. Instruction that is not compatible with the way L2 acquisition takes place cannot be successful.’ From a pedagogical stance informed by Vygotskian thought, learning about second language (L2) learning and ‘good teaching’ are inextricably linked. This view is best expressed through the concept of praxis: ‘the dialectical [bidirectional] unity of theory and practical activity as an instrument of change’ (Lantolf and Beckett 2009: 459, see also Lantolf and Poehner 2014; Lantolf 2008). For Vygotsky, theory provides the foundations for practice, which in turn helps refine and redefine theory.

The study presented in this article aims to contribute to a better understanding of L2 pedagogy and learning processes by investigating the potential of a suite of materials for activating and enhancing metalinguistic knowledge (MLK) in the L2 context. MLK is defined as explicit knowledge about language that can be brought into conscious awareness and be articulated (Hulstijn 2005; Roehr 2006). The use of MLK for conscious reflection about, and analysis of, language can be potentially beneficial to L2 learners, for example as a stepping stone towards L2 proficiency (Author 2009; Swain 1998; Elder and Manwaring 2004). It has been argued, however, that course books, and general pedagogical grammars should help students realise the ‘*meaningfulness* of grammatical constructions’ more effectively (Niemeier and Reif 2008: 326, *my italics*).

In what follows, I first provide an overview of the theoretical and methodological underpinnings of the study. I then report on the findings of an investigation on the potential of a suite of pedagogical materials to help L2 Spanish learners better understand

the concept of tense-aspect in Spanish. Finally, some pedagogical implications of the findings, reflections on future research, and limitations of the study are discussed.

THEORETICAL BACKGROUND

The overarching theoretical framework for this study was based on Sociocultural theory (SCT), a theory of mind rooted in the work of Vygotsky (1987). Vygotsky observed that higher forms of human activity are always mediated; in the physical world, instruments such as hammers and computers are drawn upon in order to modify the environment and adapt it to our specific circumstances and needs. Mental activity is also mediated by symbolic tools, language being the most important of them (Vygotsky 1978). Mediation, specifically defined as ‘the process through which humans deploy culturally constructed artifacts, concepts, and activities to *regulate* (i.e. gain voluntary control over and transform) the material world or their own and each other’s social and mental activity’ (Lantolf and Thorne 2006: 79), is therefore a fundamental notion in SCT.

Instruction from this perspective therefore aims at effectively organising pedagogical activity that mediates learning as a precursor of development, i.e., the revolutionary reorganization of mental functions and behaviour (see Lantolf 2008; Negueruela 2008: 190-192). The study I report in this article relied on material (concept maps¹, diagrams) and symbolic (verbalization, language) mediation to provide the basis for L2 students of Spanish to better understand the semantic contrast between the Preterite and the Imperfect.

Enhancing metalinguistic knowledge through pedagogical artifacts

The pedagogical materials designed for this study were inspired by recent work based on a pedagogical innovation known as Concept-Based Instruction (CBI) which, in turn, is rooted in Gal’perin’s (1969) Systemic Theoretical Instruction or ‘stepwise formation of mental actions’ (Arievitch and Haenen 2005; Lantolf and Poehner 2014: 64-68). More specifically, CBI is based on materialization of concepts and adheres to the following general principles (Negueruela 2003; 2008; Negueruela and Lantolf 2006). Concepts (i.e., categories of meaning) are seen as the minimal pedagogical unit; those concepts have to be materialized, for example, by means of diagrams or charts, which serve as didactic mediational tools for learners; as part of this pedagogical model, concepts must be verbalized, as the act of verbal explanation, either to the self or to others, is considered a psychological tool for gaining regulation, i.e., control.

Of particular interest is the challenging question of how we can materialize concepts in order to most effectively mediate L2 development in general and metalinguistic knowledge specifically in relation to the present study. Studies investigating the type of innovative materials and pedagogy I am referring to are still scarce. However, the findings reported to date provide promising evidence that warrants serious consideration of pedagogical alternatives to pervasive ones which rely primarily on discrete, often oversimplified, and even simplistic, pedagogical grammar rules. Examples of these studies include Van Compernelle (2012) who developed materials for the development of sociopragmatic knowledge of L2 French; Yáñez-Prieto (2008) who focused on verbal aspect in Spanish; Negueruela (2003, 2008) for the development of verbal aspect, mood, and modality in Spanish; Author (2011) who looked at materials for the development of verbal aspect in English; and a series of publications by Swain,

Lapkin and colleagues focusing on the concept of voice in French (Knouzi et al. 2010, Lapkin et al. 2008, Swain 2010; Swain et al. 2009). For comprehensive and in-depth overviews of studies based on CBI and Systemic-Theoretical Instruction refer to Lantolf and Poehner (2008, 2014).

Tense-aspect marking in Spanish

The tense-aspect system is a problematic area for L1 English learners of L2 Spanish even at advanced proficiency levels (Salaberry 2008). A problem some learners face, particularly at intermediate and advanced levels, is failure to develop an adequate understanding of the semantic implications of morphosyntactic choices at a conceptual level (Negueruela 2008). In other words, they have not fully developed their use of functional concepts in the L2 to ‘orient communication’ (Negueruela 2008: 204). To understand how the tense-aspect system in a given language works learners need to understand that we use grammar to describe a particular view of a situation (aspect) and how we ground or locate situations in time by means of tense. In other words, they need to understand that grammatical markers are tools that enable speakers to locate an event or a situation in time and highlight the speaker’s view or perspective of a situation (see Radden and Dirven 2007: 22).

The Spanish Preterite and Imperfect signal contrasting views of ‘the internal temporal constituency of a situation’ (Comrie 1976: 3), and the choice of one or the other highlights the speaker’s perspective on the situation (Klein 1994; Radden and Dirven 2007). The Preterite describes an event with clear boundaries (perfective aspect) and can also convey a distant viewing position, while the Imperfect is used to refer to an event as being in progress or unfinished (imperfective aspect) and conveys a closer viewpoint. As exemplified in (c) below, aspectual interpretation is also determined by an interaction between Preterite and Imperfect morphology on the one hand, and the inherent semantic characteristics of verbs on the other, e.g. whether a verb describes a telic event (with a natural endpoint, e.g. build a house) or an atelic event (lacking a natural endpoint, e.g. sleep) (Shirai 2013; Vendler 1957).

The main factors contributing to the difficulty of the Preterite/Imperfect are that (a) aspectual contrasts in Spanish are obligatorily marked; that is, when referring to past events, learners must choose between Preterite and Imperfect; (b) to appreciate a speaker’s intended meaning, the learner needs to understand that aspectual interpretation is compositional: it depends on the whole verb phrase and other contextual information such as adverbials (Salaberry 2013); related to this, (c) grammatical information (past tense morphology) can override lexical information (the inherent semantic value of verbs); for example, while an event such as *dormir* (sleep) is atelic, the choice of the Preterite produces a telic interpretation: *Juan durmió* (pret) *en el parque* (Juan slept in the park/finished) as opposed to *Juan dormía* (imp) *en el parque* (Juan slept in the park/unfinished) (Domínguez et al., 2013; Salaberry 2011); (d) the meanings which can be conveyed by the Preterite/Imperfect are wide-ranging, going beyond (un)boundedness: habituality versus iterativity, genericity versus specificity, irrealis versus actual occurrence (Doiz-Bienzobas 1995). The resultant lack of transparency in form-meaning mappings leads to increased learning difficulty (Author 2009). The complexity of this grammatical contrast has led scholars and L2 teachers alike to call for the investigation into effective approaches to its teaching, including the appropriateness of metalinguistic

explanations used in instructional materials (Castañeda Castro, et al., 2014; Fernández 2011; Frantzen 1995; Llopis-García, et al., 2012).

In sum, this study aims to contribute to the adult instructed L2 field by assessing the potential of a suite of innovative materials to enhance metalinguistic knowledge related to the tense-aspect system in Spanish, a notoriously difficult feature for L2 learners. The content for the materials was informed by cognitive linguistics (see methodology below). The rationale for this was to move away from the prevalent use of discrete pedagogical grammar rules as attested in popular L2 materials and textbooks (see Negueruela and Lantolf 2006: 82-84; Fernández 2011). To this end, the following research question was addressed: To what extent, and how, did the materials and associated tasks help participants improve their understanding of tense-aspect marking in L2 Spanish? In the following section I provide details of the research design and methodological considerations.

METHOD

Participants

The participants, six university student volunteers (mean age 23, range 19-39), granted written consent and were compensated for their time. They were three males and three females all native speakers of English and students of L2 Spanish at the same British university where they attend three hours of Spanish classes per week. Tutors use a mixed-skills approach which addresses reading, writing, listening, speaking and grammar practice in a balanced way within individual sessions around a specific Hispanic culture topic each week. On average, the participants had studied the L2 in a formal setting, e.g., college/University, for 5.2 years. Furthermore, all participants had studied other L2s (French, German, or Italian).

Their level of Spanish was intermediate level (Common European Framework of Reference, CEFR B1) and based on their university curriculum, their experience regarding the Preterite/Imperfect contrast was as follows: In the first level Initial Spanish (CEFR – level A1 to A2), students are introduced to the two forms and some of their uses together with time expressions; in the second level Elementary Spanish (CEFR – level A2+), the two forms are revised and aspectual contrasts are highlighted based on simplified explanations such as Imperfect is used for description and Preterite to narrate action. In Intermediate Spanish (CEFR – level B1+), they are expected to build on previous knowledge and be able to make more accurate choices when using the two forms. More specifically, and as shown in the results of the pre-test reported below, the participants were familiar with Preterite /Imperfect morphology, e.g., they could recognise the forms and they could translate them into English, for example, but their understanding of the aspectual distinctions at a conceptual level and in terms of semantic interpretation was limited.

Data gathering tools and procedures

Data collection took place over three sessions/days (details below) with the researcher present at all times. All tense-aspect pre and post tests were completed individually, all oral data were audio-recorded, and the participants' interactions with the materials (CMaps) were screen-captured. Due to the fact that this study forms part of a wider investigation into CBI, for the treatment session the six participants were randomly

assigned to three different conditions: two participants worked as a dyad and two participants worked on an individual basis (these four participants were all asked to verbalize what their understanding of the materials was while interacting with them), the remaining two participants worked with the materials individually but were not asked to verbalize. For reasons of space and research focus findings specifically related to verbalization as a variable are to be reported elsewhere. The specific data gathering tools and procedures for data collection were as follows:

Session 1: MLK pre-test

Participants completed a *biodata questionnaire* consisting of a total of 10 questions about demographic variables, the participants' current status at the university where the study was conducted, and their language-learning history. This was followed by a *tense-aspect metalinguistic knowledge pre-test*: This test consisted of two sections. Section I, written, included the following five open-ended questions in English:

1. Can you explain what *tense* is?
2. Can you explain what *aspect* is?
3. How is *past tense* expressed in Spanish?
4. Can you give two examples of sentences in Spanish expressing past tense?
Example 1:
Example 2:
5. Can you define the following terms?
 - (a) verb:
 - (b) bounded event:
 - (c) unbounded event:
 - (d) speech time:

Section II of the MLK pre-test consisted of two short texts adapted from Salaberry (2002), see Appendix A for an example. The texts included a total of 20 bolded verbs in either the Preterite or the Imperfect and were designed to elicit the kind of explanations and representations of grammatical knowledge the participants had regarding these forms. To this end, participants were first asked to read silently through the texts and then go back to the bolded verbs and explain out loud what each verb meant and to also name the grammatical form each verb took. The participants had previously seen a demonstration by the researcher and had practised the exercise with bolded adjectives in a different text. Thus, while the first section of the MLK was written, the second section was spoken and audio-recorded for subsequent transcription and analysis.

Session 2: Working with the materials

The *treatment session* (39 minutes on average) consisted of three complementary stages (a-c below) to aid the activation of metalinguistic understanding of the concept of tense-aspect marking in Spanish. Given that the materials (CMaps) were electronic, the participants worked with a computer. As described above, they were asked to interact with the materials in three different conditions throughout the session whose three stages I will now describe:

Stage a (free exploration of the concept maps): The *electronic concept maps (CMaps) and embedded slides* were created using the software IHMC CMap Tools and consisted of a series of four interconnected Web-based concept maps with embedded slides (examples can be seen in the Results section).

The content of the CMaps and slides was based on Radden and Dirven's (2007) cognitive linguistics model; Salaberry (2008) and Spanish grammar books (e.g., Butt and Benjamin 2000) were also consulted. The design and construction of the materials followed a series of stages and revisions; particular attention was given to facilitating a semantically grounded understanding of the target concept. The diagrams and explanations aimed at illustrating schematically the concept of *boundedness* and how this relates to the targeted forms (Preterite vs Imperfect).

An important reason for using CMaps was to afford a non-linear approach to explicit L2 input that considered the concept of tense-aspect marking in a holistic manner. I wanted to move away from presenting discrete pedagogical grammar rules in a sequential way which assumes that learning will take place in a relatively linear, cumulative manner, e.g., the Preterite presented before the Imperfect, followed by contrasts between the two forms. During *stage a* the participants interacted freely with the materials, i.e., exploring the CMaps and looking at the embedded slides until they indicated they had finished.

Stage b (guided exploration of the concept maps): The participants were then given a paper worksheet containing a series of *questions*, e.g., how is past tense expressed in Spanish? What does 'speaker's viewpoint' or 'perspective' relate to? How can the speaker express his/her viewpoint or perspective of an event or action in the past? What do 'meaning' and 'form' have to do in all this?, and were invited to answer the questions either orally or in their minds by revisiting the CMaps while answering the questions. The idea behind this stage was to highlight key aspects behind the grammatical features.

Stage c (matching task): Finally, participants were given a paper task which required them to match four diagrams and four sentences (Appendix B). The aim of this stage was to help participants consolidate connections between meaning and form after they worked with the CMaps.

Session 3: MLK post-test

The day after the treatment the participants completed the *MLK post-test*. Section I (open-ended questions) was identical to the pre-test. Section II was similar to the pre-test, but the texts, and therefore the bolded verbs, were different.

Data analysis procedures

Section I of the MLK test was scored based on a prepared key and a scoring scheme adapted from Roehr (2008) and ranging from 0 to 3 points (0 = no evidence of knowledge or awareness, 3 = fully accurate knowledge in evidence) to assess the level of accuracy and sophistication of the participants' understanding of the concept of tense-aspect marking in Spanish. Based on the scoring scheme and the questions in the MLK tests (see above), the maximum possible score was 23 points (questions 1-3, max. 3 points each; question 4, 1 point for each correct example given; question 5 included 4 items with a possible 3 points each). Table 1 exemplifies the application of the scoring scheme.

TABLE 1

Tense-aspect Concept Metalinguistic Knowledge (MLK) pre and post Tests (Scoring example)

| Question example | Key |
|---|--|
| Can you explain what <i>aspect</i> is? | It is the grammatical form which shows how a speaker <i>views</i> a situation or event. Aspect can be expressed lexically (semantically) or grammatically (morphosyntactically). |
| Scored examples | Level |
| Pre-test: 'No' | 0 |
| Post-test: 'Aspect is the speaker's perception on an event & can be expressed both lexically and grammatically.' | 3 |

The audio recordings obtained for Section II of the MLK tests were transcribed in full and analysed to explore the kind and range of explanations and representations of grammatical knowledge the participants had regarding the Preterite and Imperfect. No specific coding system was applied to this data; instead, analysis grounded in the data was used to identify patterns and strategic behaviour. Finally, data obtained while participants were interacting with the materials was analysed through microgenetic analysis. Microgenetic analysis is a type of analysis which allows us to investigate and understand a specific event by tracing its history as a 'very short-term longitudinal study' (Wertsch 1985: 55, see also Siegler 2006 and Author 2008, 2009).

RESULTS

While percentages and means were calculated to provide a sense of the participants' performance differences between pre and post-tests, the qualitative dimension is key in this study. The reader is reminded that the aim of the trial was to enhance metalinguistic knowledge, in this case to help learners better appreciate the contrast between the Preterite and the Imperfect and, therefore, use of the target forms was not assessed as part of this study.

RQ: To what extent, and how, did the materials and associated tasks help participants improve their understanding of tense-aspect marking in L2 Spanish?

As a first step toward answering the research question, overall percentage scores were calculated for Section I of the pre and post MLK tests; as described above, this section consisted of open-ended questions about tense and aspect. Table 2 shows both individual and overall results.

TABLE 2

Metalinguistic Knowledge (MLK) Section I pre and post Tests Overall Results
(Expressed in % with raw figures in parentheses)

| | Pre-test | Post-test | Difference |
|-------|------------|-------------|------------|
| Julia | (7) 30.4% | (12) 52.1% | (5) 21.7% |
| Jim | (12) 52.1% | (17) 73.9% | (5) 21.8% |
| Neil | (11) 47.8% | (17) 73.9% | (6) 26.1% |
| John | (12) 52.1% | (18) 78.2% | (6) 26.1% |
| Ann | (10) 43.4% | (20) 86.9% | (10) 43.5% |
| Rita | (8) 34.7% | (18) 78.2% | (10) 43.5% |
| Mean | (60) 43.4% | (102) 73.8% | (42) 30.4% |

Note: All names are pseudonyms

As Table 2 illustrates, there was a difference (30.4 % overall) between the pre and post-tests results which reflects an improvement regarding the learners' ability to describe certain features relating to the tense-aspect system in L2 Spanish. Section II of the MLK test provided a complementary, and very different, source of data demonstrating the kind of metalinguistic knowledge used by the participants, before and after treatment, when asked to explain distinctions between Preterite and Imperfect verbs in the texts.

As described above, in this section of the test participants were given short texts (see Appendix A) which contained bolded verbs in the Preterite and Imperfect and they were asked to 'explain out loud' what the verbs meant and the grammatical form they took. The participants were fully consistent in the way in which they each approached the task from beginning to end; in other words, the way in which they began explaining the first bolded items in the texts was followed throughout the whole task.

The results of the pre-tests reflected the use of the following four metalinguistic variants or strategies with some participants resorting to one of them exclusively while most opted for a combination:

- (1) The simplest strategy used for this task was to focus on the spelling of the bolded verbs in order to identify the form as the following example illustrates: 'The first word is *pensé* and *pensé* eh to think...is a verb...it's in the preterite form I know this because it's got the *é* the accent the *é* with the accent.'
- (2) Some participants chose to simply identify the form, e.g., 'first person preterite' or 'this is the imperfect form of *volar*.'
- (3) Another choice was to convey the meaning of the target feature by using their L1 as in 'this means yesterday **I thought** of you umm while umm **I was flying**...a kite.'
- (4) Finally, some participants invoked pedagogical grammar rules to explain what they thought the reason behind the use of a certain form was. Variations of three discrete pedagogical grammar rules for all the items in the Preterite (10) and three discrete pedagogical grammar rules for all the items in the Imperfect (10) were used to explain the totality of items in the test. Table 3 shows representative examples of those pedagogical grammar rules used by the participants –as a group– and compares them to their equivalent rule as listed in typical L2 Spanish textbooks.

TABLE 3
Metalinguistic Knowledge (MLK) Section II pre Test Results

| Form | Participants' rule interpretations (verbatim) | Textbook examples (from Ortega et al. 2002) |
|------------------|---|---|
| Preterite | (1) it's an action that took place and now is finished | to refer to single, complete actions in the past |
| | (2) because it's an action that happened in a certain time | to locate an event in the past |
| | (3) because it has <i>ayer</i> (Gloss: 'yesterday' before it's referring to what happened in the past so it would use preterite | to refer to the events in a narrative in the past |
| Imperfect | (1) it's part of the story and is setting the scene for the description around the story so it would use imperfect | to set the scene in a narrative in the past |
| | (2) it's an action that was occurring it's a continued action an action that is still continuing | to refer to an ongoing action or state in the past with an unspecified time frame |
| | (3) the imperfect is something that happens like habitually | to refer to habitual actions in the past |

As Table 3 shows, the participants who chose to make use of pedagogical grammar rules to interpret the use of either the Preterite or the Imperfect in the pre tests appear to have been able to recall fairly accurately some of the metalinguistic input they had presumably been exposed to during their instruction experiences.

I will now turn to the results of Section II of the MLK post test where the participants had to perform the same task, i.e., ‘explain out loud’ what the bolded verbs meant and the grammatical form they took, after they had worked with the treatment materials.

By and large, there was a noticeable difference in the characteristics of metalinguistic resources used in the post test. From the four types of metalinguistic resources identified in the pre tests (see analysis above), the first one disappeared; the participant who had primarily resorted to the mechanics of form and conjugation to explain the use of specific features did not once mention those elements in the post test. Use of the L1 to render a translation to explain meaning of the form, and the identification of form, as in ‘first person preterite’ or ‘that comes from the verb *ser*’ were still used in combination with other resources. The most interesting change, however, relates to the use of pedagogical grammar rules, which was after all what was primarily expected as a result of the specific design and input from the materials. Table 4 shows an overview of the type of metalinguistic reflections made in relation to the texts in the post test as well as some of the input from the materials that appears to have influenced those reflections.

TABLE 4
Metalinguistic Knowledge (MLK) Section II Post Test results

| Form | Participants’ explanations (verbatim) | Associated input from the materials |
|-----------|--|--|
| Preterite | a specific night in the past from that person’s perspective | <i>Perspectives</i> which a speaker can take and express with regard to the temporal course of some event, action, process, etc. |
| | it’s a completed action ...within a time frame ...it’s not a continuous action | <pre> graph TD A[viewpoint aspect] --> B(Preterite) A --> C(Imperfect) B -- "speaker views situation as" --> D(complete) </pre> |
| | it’s a bounded event with a start and finish...in this | |

context there's a **start and a finish** to this event

looking back over an event that has happened

referring to something specific...when it actually happened

a specific sort of event

there is **no progressiveness or ambiguity** about the time

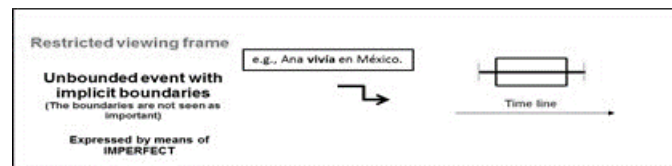


it's an **unbounded event** there's no mention of **time** since it's **not important** and it gives just a general **general picture of what's happening** there's no time specific mention

Perspectives which a speaker can take and express with regard to the temporal course of some event, action, process, etc.

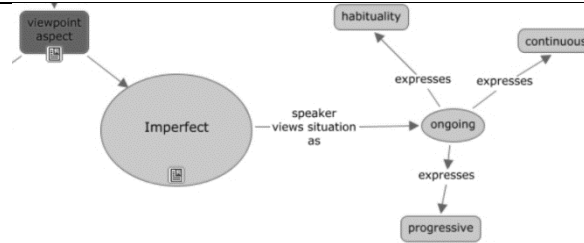
Imperfect

it's **not a bounded event** it's something that is **progressive** happening



the action still continued it didn't have a definite start and a definite end and we don't know when it ended so it's still **continuous**

there's no mention
of time specific
stuff...because it's
not important
**therefore in this
context is an
unbounded event**
therefore imperfect
is used



it's just giving a
general
perspective of that
it was just the
imagination and the
**time in which it
happens is not
important** and it's
an **unbounded
event** and therefore
you'd use
imperfect

it was his
imagination so he's
still **describing**

it's something
going on it's
describing what
happened...there's
**no time
specific**...no
mention of time

It is evident in the data that there was a change in the quality of the explanations given by the participants with respect to the bolded verbs in the texts used for the pre and post tests. As in the pre test, however, a tendency to overgeneralise the uses of either the Preterite or the Imperfect could still be observed. A specific example of this is the general perception of the common dichotomising view of these forms which tends to group most instances for the Preterite as either a ‘finished action’ (as characterised in the pre tests) or ‘completed’, ‘bounded’ (in the post test) versus ‘continuous’ (pre and post tests), ‘unbounded’ (post tests) for the Imperfect. It must be noted, however, that there were exceptions for individuals. For instance, one of the participants quite accurately justified the use of the Imperfect in the context below (see example below) as ‘it’s an unbounded event, there’s no mention of time since it’s not important and it gives just a general picture of what’s happening there’s no time specific mention’ for ‘*movía*.’ The same learner explained the use of ‘*daba*’ and ‘*esperaba*’ as ‘you just see that I gave and I waited but it’s not saying when this happened and there is no mention of time because time isn’t important, it’s an unbounded event and therefore you would use the Imperfect for this example with these actions.’

Example:

‘...*bajó la escalera tan suavemente que no **movía** un pie hasta no estar seguro de poder evitar el más imperceptible ruido, entonces **daba** otro paso y **esperaba**.*’ (Gloss: ‘went down stairs so quietly that he/she didn’t move one foot until making sure that not even the smallest noise would be made, then he/she would move again and wait’)

Overall, then, although changes were in evidence after the trial, the results suggest that the learners could further improve their awareness of the range of meaning nuances that can be realised through the grammatical markers in question. This section summarised the patterns observed for the participants as a group and provided insights into the promising impact of the materials to enhance metalinguistic awareness on the one hand and the kind of knowledge the participants’ appear to draw on in relation to the target features, on the other. In order to gain further insights into how the participants engaged with the materials at a cognitive level, I will now focus on one of the participants’s (Neil) developmental trajectory through microgenetic analysis.

Tracing Neil’s understanding of ‘aspect’

Neil’s oral data recorded while he was interacting with the materials was selected here because he was one of the two verbalizers who improved the most after working with the materials (see Table 2, Ann and Rita worked silently). Neil’s verbalized behaviour allows us to get a series of snapshots into the reasoning and problem-solving activity that led him to what can be considered a deeper understanding of aspect at a conceptual level. The type of understanding I am referring to here is reflected (a) in the difference between his pre and post MLK definitions of terms as shown in Table 5 and (b) in the quality of explanation given for the use of Preterite versus Imperfect in Section II of the MLK tests exemplified in Table 6:

TABLE 5

Neil's pre and post Metalinguistic Knowledge (MLK) Tests (Selected Items From Section I)

| Pre-test | Post-test |
|---|---|
| Aspect: <i>Aspect is the context in which a situation is.</i> | Aspect: <i>Aspect relates to the perspectives of the speaker during speech time about whether they consider the event to be bounded or unbounded.</i> |
| Bounded event: <i>No sé [I don't know]</i> | Bounded event: <i>A bounded event is an event which has a start and a finish and would need preterite.</i> |
| Unbounded event: <i>No sé [I don't know]</i> | Unbounded event: <i>An unbounded event is an event where the start and end are not specified or not important.</i> |
| Speech time: <i>The time in which you speak, whether slow or fast.</i> | Speech time: <i>Speech time is the time in which the speaker is speaking, when they would decide whether to use preterite or imperative whilst speaking.</i> |

TABLE 6

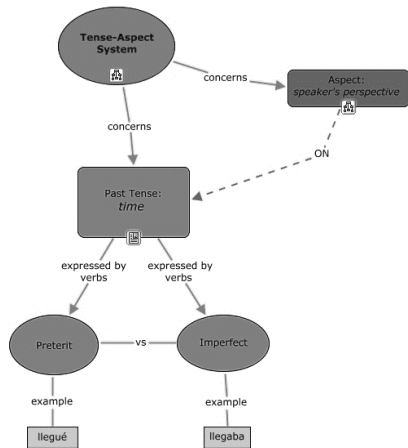
Neil's pre and Post Metalinguistic Knowledge (MLK) Tests (Selected Items From Section II)

| Pre-test | Post-test |
|---|--|
| <p>Preterite (<i>pensé</i>) Gloss: 'I thought': <i>because it has ayer before is referring to what happened in the past so it would use the preterite</i></p> | <p>Preterite (<i>reprodujo</i>) Gloss 's/he reproduced': <i>it's in the preterite because it's a bounded event with a start and finish and because it refer to anoche you can quite see you can see that in this context there's a start and a finish to this event therefore you wouldn't use imperfect.</i></p> |
| <p>Imperfect (<i>volaba</i>) Gloss 'flew': <i>It's part of the story and is setting the scene for the description around the story so it would use imperfect</i></p> | <p>Imperfect (<i>movía</i>) Gloss: 'moved': <i>it's an unbounded event there's no mention of time since it's not important and it gives just a general a general picture of what's happening there's no time specific mention.</i></p> |

In what follows, I will examine three Excerpts from Neil's data which, I argue, illustrate the kind of linguistic behaviour leading to the learning evidenced above. Excerpt 1 shows a fragment from Neil's protocol verbalized while he was looking at the CMap shown to the left of the Excerpt. His speech does not suggest much elaboration regarding the information he is trying to make sense of at this stage of the task; fillers and pauses are prevalent, but a noteworthy feature which is characteristic throughout most of Neil's protocol is the use of the pronoun 'you' as a device to create some kind of distance between himself and the task. At this stage, therefore, the main goal is to use language to describe and interpret the diagrams.

EXCERPT 1

Interacting With the CMaps



This Concept Map was created with
 MindMapTool

the tense aspect system is concerned with both speaker's perspective and it is also concerned with the past tense and (.) the past tense in Spanish is expressed through using verbs which is either the preterite or the imperfect ehm (.) and the way in which you chose which ehm whether to use the preterite or the imperfect ehm is decided by the speaker's perspective ehm (.) with the tense aspect system (.) ehm is concerned with the time tense he used and (.) and the the speaker's perspective can be expressed both lexically and grammatically ...

Note: (.) = short pause

A more complex explanation of the target concept emerges when Neil begins to tackle the sub-task of answering the series of guiding questions meant to encourage participants to further explore, and interact with, the CMaps (stage b, see Method section). At this stage, Neil's use of the pronoun 'you' has disappeared and an even more distant position is adopted by using the third person instead, i.e., 'the person', 'they', to talk *about* the concept as shown in Excerpt 2:

EXCERPT 2

Answering the Guiding Questions

- What does the 'tense-aspect system' refer to?
- How does it work?
- What is tense?
- What is aspect?

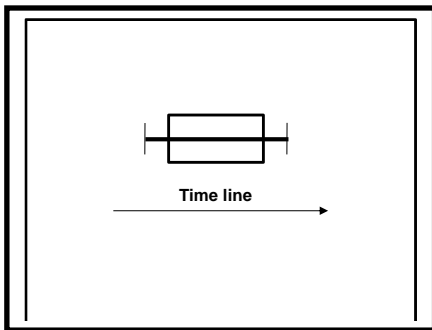
the way in which it works is ehm is to do with time firstly but also time links with speaker's perspective and this view point of the person and whether they feel the event is bounded or unbounded (.) would prompt the person to use either the preterit or imperfect (.) using the preterit when the speaker feels that the situation is complete and imperfect when is continuous and something is progressive and something hasn't been completed just yet (.) aspect concerns with how the tense aspect works (.) aspect is basically where the person views where the situation it's down to the person's different understanding of the situation and whether they feel the situation is in the past whether it has a (.) specified start and beginning point and whether these points haven't been specified...

Finally, the reasoning markers identified in Neil's protocol, e.g., so, because, were all vocalised while he was tackling the 'matching task' (stage c). Although he is still speaking in generalities and talking about the concept, some of the metalinguistic

understanding is now being applied at a more functional (rather than purely conceptual) level. In other words, Excerpt 3 reflects Neil's ability to apply his increasing understanding of the target concept to specific L2 examples. The reasoning markers in the Excerpt demonstrate how highly abstract conceptualisations materialized by means of the CMaps and diagrams which underpinned the first stages of the treatment session become the basis for Neil's successful effort to map meaning to form toward the end of the treatment session.

EXCERPT 3

Matching Meaning and Form



in regards to the matching task with ehm (.) if the first diagram this is an unbounded event so the imperfect would be used (.) so in this time line with the unbounded event you would use the sentence *Mi tío viajaba mucho cuando era joven* (Gloss: My uncle used to travel a lot when he was young) because the situation the bounded is not important ehm and you can clearly see that it's an unbounded event and therefore the imperfect is used...

The final stage of Neil's learning journey in this trial is apparent in the kind of thinking and explanation evidenced in Section II of the MLK post test (see Table 6 above). The data show that Neil becomes increasingly able to apply his understanding about the concept to explain the use of certain forms in context without the mediational tools previously scaffolding those explanations, i.e., the CMaps and diagrams. The argument here is that the answers from Neil's tests, and his verbalized data, demonstrate that the treatment session helped him gain a deeper, more accurate, understanding of aspect and closely related concepts, at least in the short term.

DISCUSSION

This section is organised in two parts: First, I discuss key findings in relation to the research question then, I outline some limitations of the study and explore avenues for future research motivated by the findings discussed.

The main goals of the materials and treatment were to (a) enhance the participants' metalinguistic knowledge of aspectual categories realised by the Preterite versus the Imperfect and (b) try to move them away from a compartmentalised view of language as a series of discrete, often opposing, pedagogical grammar rules. Overall, the materials and tasks succeeded in achieving these goals, principally (a), at least in the short term. The changes observed are particularly interesting if we consider that we are comparing the type and quantity of input the participants had been exposed to during years of instructed L2 learning with the type and length of treatment received during this trial, i.e., one hour approximately. So even quite short periods of instruction can be effective (see Norris and Ortega 2000).

The data analysis shows that the participants were able to remember some of the terminology introduced during the trial; for instance, they used terms such as bounded and unbounded, events, and time frames to explain the use of Preterite versus Imperfect. Crucially, some participants appeared to have grasped the all important concept of speaker or writer's *perspective* in relation to aspectual choices and were able to refer to it in both Sections of the MLK post test. However, in this section I would like to focus on two key issues evident from the results and which are considerably important in the context of instructed second language learning and teaching; the first one is the limited range of metalinguistic resources used by the participants both before and after working with the materials; the second, often identified by scholars interested in L2 Spanish (see Theoretical background) is the limited understanding of the fundamental *nuances* in meaning that can be conveyed by each of the forms as well as the *contrasts* in meaning when one form over the other is selected by the speaker or writer.

As explained in the results section, participants were generally consistent in the way in which they, as individuals, approached the task; for example, there was a tendency to use pedagogical grammar rules to cite one or two rules to justify all the items in the Preterite and one or at most two rules to justify all the items in the Imperfect. As remarked by Whitley (2002: 116), among other scholars, this approach, i.e., relying on memorised discrete, often polarizing, rules, can result in oversimplification, random guessing, and failure to use grammar as a full functional tool for communication.

The second, interrelated, issue is that even intermediate students seem unable to identify important meaning nuances (see Salaberry 2008). For example describing both *pensé* and *notó* as 'completed actions' or 'what actually happened', as some participants did, is neither very useful nor fully accurate particularly when comparing them with the description of *volaba*, *hacía*, and *juntábamos* as 'setting the scene' or describing a 'continued action.' While it is true, for example, that the latter are indeed setting a scene or building up a description, the same can be said for *pensé* when read in the context of the whole text where that sentence appears. The use of Preterite in *notó* would be more usefully and accurately described as the speaker or writer's beginning or 'ingression' (see Whitley 2002: 120) of a state of knowledge and a similar item was also found in the post test data. In sum, learners seem to be failing to see that rather than being two dichotomous forms the Preterite and the Imperfect are 'categories that represent different *aspects* of the same past tense' (Whitley 2002: 116, italics in original) and that these forms can convey a range of subtle meanings. The all too familiar consequence of this are the well documented inaccuracies that become apparent when students, even at intermediate and advanced levels of Spanish, produce the forms (see, for example, Westfall and Foerster 1996).

Based on the results from this study, the type of materials used in the treatment session appeared to have gone some way towards enhancing the participants' metalinguistic understanding and quality of resources to think about the Preterite and Imperfect. Nonetheless, further attention and research into the design of pedagogical materials and their effects on L2 development is very much needed in order to help learners realise the nuanced meanings behind formal choices more effectively.

Pedagogical Implications, Limitations and Future Research

Becoming successful users of an L2 represents a gradual, complex process which involves the mapping of meaning and form into linguistic units to be used for communication and thought in an appropriate way. For the L2 adult learner in particular time is at a premium. It is, therefore, our responsibility as L2 educators and researchers to seek, investigate, and ascertain how we can most effectively facilitate the learning process. We know that grammar teaching can accelerate the rate of L2 learning (e.g., Ellis 2005; Larsen-Freeman 2009) and that even quite short periods of instruction can be helpful although there are various factors that need to be considered (see Norris and Ortega 2000). Rooted in Vygotskian thought, this study represents an attempt to use specific mediational tools, e.g., CMaps, diagrams, to help learners better understand a notoriously difficult feature in L2 Spanish (i.e., the contrast between the Preterite and the Imperfect). When it comes to realising aspectual distinctions, the choice of form is particularly important if we are to succeed in understanding and/or conveying key nuances in meaning.

I hope that the findings presented in this paper and the observations discussed in this and the preceding sections might encourage other practitioners and researchers to consider this type of pedagogical approach and to further develop its empirical investigation. I am aware there are various limitations to this study and will conclude this section by discussing some of them along with possible ways to enhance future trials.

The nature of this qualitative investigation does not allow for conclusive interpretation of the results. That is, in order to ascertain the effectiveness of the materials both in the short and longer term, it is clearly necessary to (a) carry out much larger trials allowing to conduct statistical analyses and (b) conduct delayed post-tests in addition to immediate post-tests. An important, and much needed, line of investigation in the context of instructed L2 learning is individual variation and preferences which have been found to play a key role in L2 development (see Dörnyei 2005; Ellis 2008). Individual learner differences such as aptitude and cognitive style preferences could be particularly relevant in relation to the use of materials where diagrams and schematic representations, for example, are used. Following from this, it would also be useful to compare the type of metalinguistic explanations used in the design of the materials for this study with other, more conventional L2 input, e.g., discrete pedagogical grammar rules, and their relative effectiveness for students at different proficiency levels.

Furthermore, as we know pedagogical treatments such as the one considered in this study involve more than a suite of materials and tasks, language (e.g., verbalizing) can be considered a powerful, if not the most powerful, mediational tool for cognitive change (Vygotsky 1987; Smagorinsky 2001; Swain 2006). It could be argued that by trying to preserve ecological validity, it becomes difficult to ascertain the relative contribution of each of the ‘components’ of a pedagogical intervention. I trust, however, that the type of analysis used in this study provides useful insights into specific kinds of interactions – and their value – between the learners and the materials as evident in the data from Neil’s microgenetic analysis. Furthermore, the analysis provided information about specific metalinguistic representations and strategies used by the participants relating to aspectual contrasts.

As mentioned in the Introduction to this paper, from a Vygotskian stance, theory and practical activity, tool and inquiry method, represent dialectical [bidirectional] and, therefore, inseparable units (see Lantolf and Beckett 2009). The methodological stance

hereby adopted, and advocated, is one that allows for the study of process and outcome as an interdependent developmental unit. Nonetheless, as L2 educators we need to learn as much as possible about the relative value of the multiple sources and tools for development. Data from the present trial suggest there are differences in metalinguistic performance between participants who were asked to verbalize and those who were not. This is an aspect that requires consideration and I will report in a subsequent paper, but further, large scale, empirical trials comparing various verbalization conditions are necessary (cf. Knouzi et al. 2010, Lapkin et al. 2008, Swain 2010, Author 2011 for studies on dyadic verbalization).

In this trial the focus was exclusively the enhancement of metalinguistic awareness. It is, of course, necessary to acknowledge that although ‘knowing about language’ might play a role in L2 development in general (see Hulstijn and de Graaff 1994; Author 2009), much more is needed to use language as a tool for communication and competent participation in an L2 target community. A further mechanism to achieve this aim includes giving learners the opportunity to use the target concepts as tools for communicative orientation² and control. Gal’perin’s (1969) Systemic Theoretical Instruction (STI) (see Theoretical Background) represents a pedagogical programme aimed precisely at enhancing L2 development through the internalization of concepts (see Lantolf and Poehner 2014).

Finally, based on the results of this trial, I believe that computer applications for L2 learning, in this case electronic concept maps (CMaps), represent a promising tool for enhancing L2 awareness through the ‘discovery’ of grammar. In particular, the interactive nature of the hyperlinking facilities of CMaps can be a successful way to avoid a linear, inflexible representation of the target concept. This characteristic has the potential to help students make sense of complexity and think through the various relationships associated with the target domain, which in a dialectical (bidirectional) way can support the formation of concepts through association, attention, and representation advocated by Vygotsky (see Gredler and Shields 2007: 128). CMaps enable learners to navigate backwards and forwards through the explanations and diagrams, thus supporting increasing levels of agency and individual control.

CONCLUDING REMARKS

Framed within a Sociocultural theory perspective to L2 learning, this study set out to investigate the potential of a suite of pedagogical materials as mediational tools for the activation and enhancement of metalinguistic knowledge in the L2 context. The linguistic focus of the project was the tense-aspect system, specifically the contrast between the Preterite and the Imperfect in Spanish given the challenges this poses for L2 learners. The materials were designed to act as a stepping stone to help intermediate adult learners gain a deeper understanding of the system at a conceptual level. The view adopted in this study is that for L2 learners to be able to refer to the past in a fluent and accurate way both conceptual understanding as well as procedural ‘mastery’ of verb morphology is required. As highlighted in the introductory sections of this article, the pedagogical procedures aimed at supporting students whose problems in relation to the Preterite and Imperfect in L2 Spanish are not necessarily rooted in morphology, but in a deeper understanding (or lack of) of the conceptual and semantic implications behind morphological choices (see Negueruela 2008).

Pedagogically, this study demonstrates the value of empirical evaluation of materials for L2 teaching and learning. More specifically, the approach adopted in this project led to positive results for the participants who seemed to have benefited from the exploration of the CMaps and diagrams. Despite the controversies and debates surrounding the potential value and contribution of metalinguistic knowledge to L2 development (see Alderson et al. 1997, DeKeyser 2003, Ellis 2006), widespread practice relies on pedagogical grammar rules as a stepping stone in instructed L2 learning. This study explored an alternative approach to the presentation of discrete rules of thumb with a view to enhancing metalinguistic understanding and awareness at a deeper, more accurate, and semantically grounded level.

REFERENCES

- Alderson, J. C., C. Clapham and D. Steel. 1997. 'Metalinguistic knowledge, language aptitude and language proficiency.' *Language Teaching Research* 1: 93–121.
- Appel, G. and J. P. Lantolf. 1994. 'Speaking as mediation: A study of L1 and L2 text recall tasks.' *The Modern Language Journal* 78: 437-452.
- Arievitch, I. M. and J. P. P. Haenen, 2005. 'Connecting Sociocultural theory and educational practice: Galperin's Approach.' *Educational Psychologist* 40/3: 155-165.
- Author. 2008.
- Author. 2009.
- Author. 2011.
- Author. 2009.
- Butt, J. and C. Benjamin 2000. *A New Reference Grammar of Modern Spanish* (3rd ed.). London: Arnold.
- Castañeda Castro, A., Z., Alhmoud, I., Alonso Aparicio, J., Casellas Guitart, M. D., Chamorro Guerrero, L., Miguel López and J. Ortega Olivares. 2014. *Enseñanza de Gramática Avanzada de ELE*. Madrid: SGEL.
- Cmap Tools. Software created by the Florida Institute for Human and Machine Cognition (IHMC). URL: <http://cmap.ihmc.us/>
- Comrie, B. 1976. *Aspect: An introduction to the study of verbal aspect and related problems*. Cambridge: Cambridge University Press.
- DeKeyser, R. M. 2003. 'Implicit and explicit learning' in Doughty, C. J. and M. H. Long (eds.): *The Handbook of Second Language Acquisition* (pp. 313–48). Blackwell Malden, MA.
- Doiz-Bienzobas, A. 1995. *The Preterite and the Imperfect in Spanish: Past situation vs. past viewpoint*. Ph.D. dissertation, University of California San Diego.
- Dominguez, L., N. Tracy-Ventura, M. J. Arche, R. Mitchell and F. Myles. 2013. 'The role of dynamic contrasts in the L2 acquisition of Spanish past tense morphology.' *Bilingualism: Language and Cognition* 16/3: 558-577.
- Dörnyei, Z. 2005. *The Psychology of the Language Learner: Individual Differences in Second Language Acquisition*. Mahwah, NJ: Erlbaum.

- Elder, C. and D. Manwaring. 2004. 'The relationship between metalinguistic knowledge and learning outcomes among undergraduate students of Chinese.' *Language Awareness* 13/3: 145-162.
- Ellis, R. 2005. 'Measuring implicit and explicit knowledge of a second language: a psychometric study.' *Studies in Second Language Acquisition* 27/2: 141-172.
- Ellis, R. 2006. 'Current issues in the teaching of grammar: An SLA perspective.' *TESOL Quarterly* 40: 83-107.
- Ellis, R. 2008. *The Study of Second Language Acquisition* (2nd ed.) Oxford: Oxford University Press.
- Ellis, R. and N. Shintani. 2014. *Exploring Language Pedagogy through Second Language Acquisition Research*. London: Routledge.
- Fernández, C. 2011. 'Approaches to Grammar Instruction in Teaching Materials: A Study in Current L2 Beginning- level Spanish Textbooks.' *Hispania* 94/1: 155-170.
- Frantzen, D. 1995. 'Preterite/Imperfect Half-Truths: Problems with Spanish Textbook Rules for Usage.' *Hispania* 78/1: 145-158.
- Gal'perin, P. I. 1969. 'Stages in the development of mental acts' in Cole, M. and I. Maltzman (eds.): *A Handbook of Contemporary Soviet Psychology* (pp. 249-73). Basic Books, New York.
- Gredler, M. E. and C. C. Shields. 2007. *Vygotsky's Legacy: A Foundation for Research and Practice*. Guilford Press, New York, NY.
- Hulstijn, J. H. 2005. 'Theoretical and empirical issues in the study of implicit and explicit second-language learning: Introduction.' *Studies in Second Language Acquisition*, 27: 129-40.
- Hulstijn, J. H. and R. de Graaff. 1994. 'Under what conditions does explicit knowledge of a second language facilitate the acquisition of implicit knowledge? A research proposal.' *AILA Review* 11: 97-112.
- Klein, W. 1994. *Time in Language*. London: Routledge.
- Knouzi, I., M., Swain, S. Lapkin and L. Brooks. 2010. 'Self-scaffolding mediated by languaging: microgenetic analysis of high and low performers.' *International Journal of Applied Linguistics* 20/1: 23-49.
- Lantolf, J. P. 2008. 'Praxis and classroom L2 development.' *Estudios de lingüística inglesa aplicada* 8: 13-44.
- Lantolf, J. P. and M. E. Poehner. 2014. *Sociocultural Theory and the Pedagogical Imperative in L2 Education: Vygotskian Praxis and the Research/Practice Divide*. Routledge.
- Lantolf, J.P. and T.G. Beckett. 2009. 'Research Timeline: Sociocultural theory and second language acquisition.' *Journal of Language Teaching* 42/4: 459-475.
- Lantolf, J.P. and S.L. Thorne. 2006. *Sociocultural Theory and the Genesis of Second Language Development*. Oxford University Press, Oxford.
- Lapkin, S., M. Swain and I. Knouzi. 2008. 'Postsecondary French as a second language students learn the grammatical concept of voice: study design, materials development, and pilot data' in Lantolf J.P. and M. Poehner (eds.): *Sociocultural Theory and the Teaching of Second Languages* (pp. 228-55). Equinox Press, London.

- Larsen-Freeman, D. 2009. 'Teaching and Testing Grammar' in Long M. H. and C. J. Doughty (eds.): *The Handbook of Language Teaching* (pp. 518-542). Oxford: Wiley-Blackwell.
- Llopis-García, R., J. M., Real Espinosa and P. Ruiz Campillo. 2012. *Qué Gramática Enseñar, qué Gramática Aprender*. Madrid: Edinumen.
- Norris, J. M. and L. Ortega. 2000. 'Effectiveness of L2 instruction: a research synthesis and quantitative meta-analysis.' *Language Learning* 50/3: 417-528.
- Negueruela, E. 2003. *A sociocultural approach to teaching and researching second language: Systemic-theoretical instruction and second language development*. Unpublished doctoral dissertation, The Pennsylvania State University, University Park, PA.
- Negueruela, E. 2008. 'Revolutionary pedagogies: learning that leads (to) second language development' in Lantolf J. P. and M. E. Poehner (eds.): *Sociocultural Theory and the Teaching of Second Languages* (pp. 189-227). Equinox, London.
- Negueruela, E. and J. Lantolf. 2006. 'Concept-Based Instruction and the Acquisition of L2 Spanish' in Salaberry, M. R. and B. A. Lafford (eds.): *The Art of Teaching Spanish: Second Language Acquisition from research to praxis* (pp. 79-102). Georgetown University Press, Washington, DC.
- Niemeier, S. and M. Reif. 2008. 'Making progress simpler? Applying cognitive grammar to tense-aspect teaching in the German EFL classroom' in de Knop, S. and T. de Rycker (eds.): *Cognitive Approaches to Pedagogical Grammar* (pp.225-255). Mouton de Gruyter, Berlin.
- Novak, J. D. and A. J. Cañas. 2008. *The Theory Underlying Concept Maps and How to Construct and Use Them*. Technical Report IHMC CmapTools. Florida: Institute for Human and Machine Cognition. Available at: <http://cmap.ihmc.us/Publications/ResearchPapers/TheoryUnderlyingConceptMaps.pdf>
- Ortega, A., T., Beaven, C. Garrido and S. Scrivener. 2002. *Exacto: A Practical Guide to Spanish Grammar*. London: Arnold.
- Radden, G. and R. Dirven. 2007. *Cognitive English Grammar*. John Benjamins, Amsterdam.
- Roehr, K. 2006. 'Metalinguistic knowledge in L2 task performance: A verbal protocol analysis.' *Language Awareness* 15/3: 180-198.
- Roehr, K. 2008. 'Metalinguistic knowledge and language ability in university-level L2 learners.' *Applied Linguistics* 29/2: 173-199.
- Salaberry, R. 2002. 'Tense and aspect in the selection of Spanish past tense verbal morphology' in Salaberry, R. and Y. Shirai (eds.): *The L2 Acquisition of Tense-Aspect Morphology* (pp. 398-415). Amsterdam: John Benjamins.
- Salaberry, R. 2008. *Marking Past Tense in Second Language Acquisition: A theoretical model*. Continuum, London.
- Salaberry, 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, M. R. 2013. 'Research design: Operationalizing and testing hypothesis' in Salaberry M. R. and L. Comajoan (eds.): *Research Design and Methodology in Studies on L2 Tense and Aspect* (pp. 187-218). Berlin: De Gruyter Mouton.

- Shirai, Y. 2013. 'Defining and coding data: Lexical aspect in L2 studies' in Salaberry M. R. and L. Comajoan (eds.): *Research Design and Methodology in Studies on L2 Tense and Aspect* (pp. 271-308). Berlin: De Gruyter Mouton.
- Siegler, R. S. 2006. 'Microgenetic analyses of learning' in Damon, W. and R. M. Lerner (Series Eds.) and Kuhn D. and R. S. Siegler (Vol. Eds.), *Handbook of child psychology: Volume 2: Cognition, perception, and language* (6th ed., pp. 464-510). Hoboken, NJ: Wiley.
- Smagorinsky, P. 2001. 'Rethinking protocol analysis from a cultural perspective.' *Annual Review of Applied Linguistics* 21: 233-245.
- Swain, M. 1998. 'Focus on form through conscious reflection' in Doughty, C. and J. Williams (eds.): *Focus on form in classroom second language acquisition* (pp. 64-81). Cambridge University Press, Cambridge.
- Swain, M. 2010. 'Talking-it-through': Languaging as a source of leaning' in Batstone R. (ed.): *Sociocognitive perspectives on language use and language learning* (pp. 112-130). Oxford University Press, Oxford.
- Swain, M. 2006. 'Verbal protocols: What does it mean for research to use speaking as a data collection tool?' in Chalhoub-Devill, M., C. Chapelle and P. Duff (eds.): *Inference and Generalizability in Applied Linguistics* (pp. 97-112). John Benjamins, Amsterdam.
- Swain, M. and S. Lapkin. 1995. 'Problems in output and the cognitive processes they generate: A step towards second language learning.' *Applied Linguistics* 16: 371-391.
- Swain, M., S. Lapkin, I. Knouzi, W. Suzuki and L. Brooks. 2009. 'Languaging: university students learn the grammatical concept of voice in French.' *Modern Language Journal* 93: 6-30.
- Vendler, Z. 1957. 'Verb and times.' *Philosophical Review* 66: 143-160.
- Vygotsky, L.S. 1978. *Mind in Society: The Development of Higher Psychological Processes*. Harvard University Press, Cambridge, MA.
- Vygotsky, L. S. 1987. *The Collected Works of L. S. Vygotsky: Vol. 1. Problems of General Psychology. Including the Volume Thinking and Speech*. Reiber, R.W. and A.S. Carton (eds.). Plenum, New York.
- Wertsch, J. V. 1985. *Vygotsky and the Social Formation of Mind*. Harvard University Press, Cambridge, MA.
- Westfall, R. and S. Foerster. 1996. 'New Strategies for Teaching the Preterite and the Imperfect.' *Hispania* 79/3: 550-560.
- Whitley, M. S. 2002. *Spanish/English Contrasts: A Course in Spanish Linguistics* (2nd Ed.). Washington, D.C.: Georgetown University Press.

NOTES

1. Concept maps are defined as ‘graphical tools for organizing and representing knowledge. They include concepts, usually enclosed in circles or boxes of some type, and relationships between concepts indicated by a connecting line linking two concepts’ (Novak and Cañas 2008: 1).
2. Orientation refers to ‘the way individuals view an object or a task, the kind of goals they establish relative to the task, and the plans and means they devise to carry the task to its completion’ (Appel and Lantolf 1994: 443).

APPENDICES

APPENDIX A

Metalinguistic Knowledge (MLK) Section II (Sample From Pre-test)

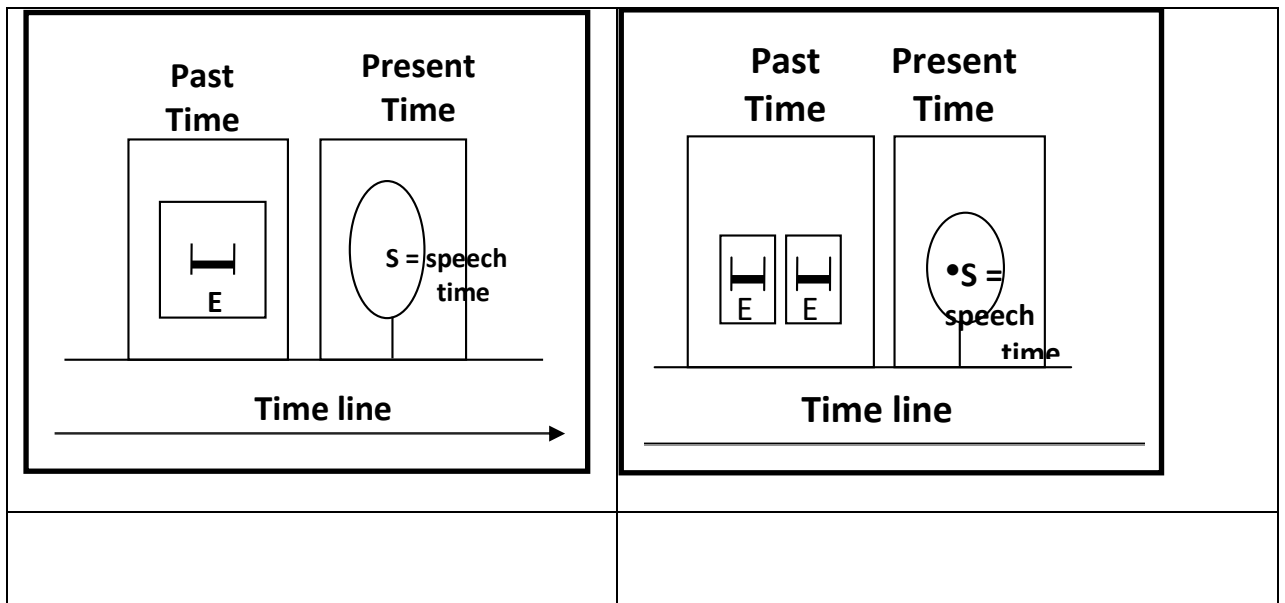
Texto 1: Ayer **pensé** en ti Susana mientras **volaba** papalotes. **Oí** un sonido que venía del pueblo y me **hizo** imaginarte junto a mí. ‘Ayúdame, Susana.’ El aire nos **hacía** reír; **juntábamos** la mirada de nuestros ojos, mientras el hilo del papalote **corría** entre los dedos del viento, hasta que **se rompía** con un ‘crack’. De pronto, el pájaro de papel **cayó** arrastrando su cola y se **perdió** en el verde de la loma.

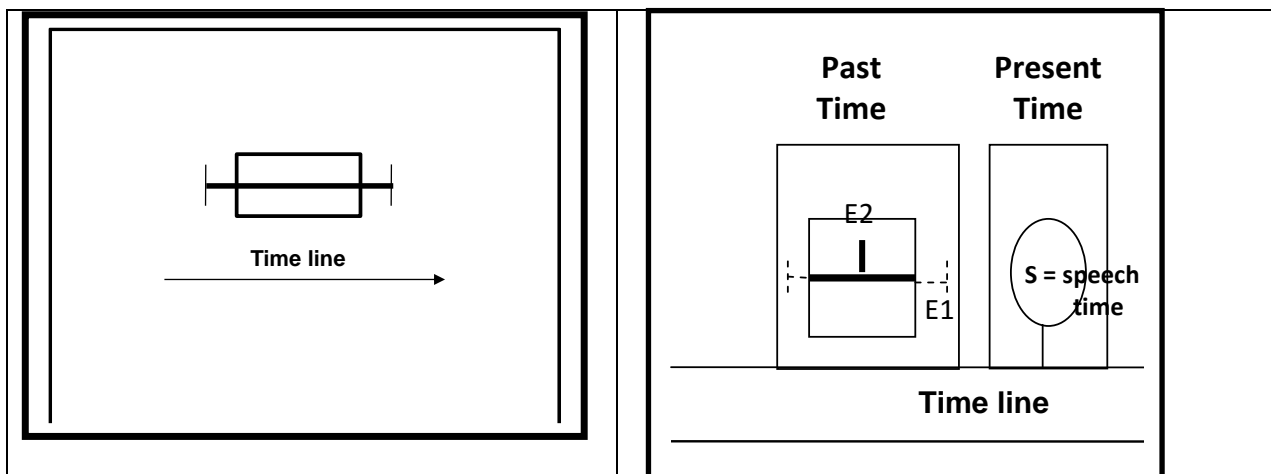
Gloss: ‘Yesterday I thought about you Susana while I was flying kites. I heard a sound coming from the village and that made me think you were with me. ‘Help me, Susana.’ The wind made us laugh; we saw each other, while the kite’s string ran through the wind’s fingers, until it broke with a ‘crack.’ Suddenly, the paper bird fell down dragging its tail and disappeared over the green of the hill.’

APPENDIX B

Matching Task

Instructions: Study the diagrams and sentences carefully. Match each sentence with the diagram that best reflects the meaning of the sentence. The E in the diagrams represents the (main) ‘event’ or ‘action’ the sentence refers to.





| | |
|---|---|
| <p><i>Mi tío viajaba mucho cuando era joven.</i> Gloss: 'My uncle used to travel a lot when he was young.'</p> | <p><i>García Márquez escribió Cien Años de Soledad.</i> Gloss: 'García Márquez wrote One Hundred Years of Solitude'</p> |
| <p><i>Yo dormía cuando empezó la tormenta.</i> Gloss: 'I was sleeping when the storm started.'</p> | <p><i>Primero estudié para el exámen y después vi la película.</i> Gloss: 'First I studed for the exam and then I watched the film.'</p> |