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Aspectual tenses in native Spanish-speaking adults

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ASPECTUAL TENSES IN NATIVE SPANISH-SPEAKING ADULTS

by

Theresa Rachel Prisco

A thesis submitted in partial fulfillment of the requirements for the
Master of Arts degree in Speech Pathology and Audiology
in the Graduate College of
The University of Iowa

May 2010

Thesis Supervisor: Professor Richard Hurtig

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CERTIFICATE OF APPROVAL

MASTER'S THESIS

This is to certify that the Master's thesis of

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has been approved by the Examining Committee for the thesis requirement for the Master of Arts degree in Speech Pathology and Audiology at the May 2010 graduation.

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CHAPTER I

INTRODUCTION

The purpose of this project is to determine how adverbs and syntactic form influence the use of different forms of the past tense in adult native Spanish speakers. Additionally, the influence of temporal boundedness and unboundedness will be examined. The following research questions will be examined in this project:

1. Do adverbs or syntactic form (i.e. aspect) bias native speakers towards using preterit or imperfect forms of the past tense?
2. Does temporal boundedness influence the selection of the preterit or the imperfect in the past tense?

To accomplish this project, 14 research participants viewed several short videos depicting several verbs with that have differing degrees of completeness. After each video, participants selected a past tense verb that best described the video they just saw. Lastly, the participants read several brief paragraphs describing a past event and chose a form of a particular verb (the same verbs depicted in the videos) that best fit the context of the paragraph.

Linguistic Terminology

Before describing the project in more detail, some important linguistic terms will be defined. *Tense*, which refers to the time of an event in relation to the time an utterance was spoken, can be distinguished from *aspect*, which refers to the duration and completeness of an event. The following two sentences demonstrate this distinction: *He walked to school* versus *He was walking to school*. In the first sentence, it is clear that

the event is complete (*telic aspect*) because it had a specific endpoint (school). It is also clear that the event is over, so it is in the *past tense*. The second sentence does not indicate the endpoint of the event (*atelic aspect*), but it is in the past, so it is still in the *past tense*. While *tense* simply refers to the time of an event relative to the time of a spoken utterance, several factors are associated with *aspect*, which determine whether or not an event has *telic* or *atelic* aspect. Rapid, punctual events with clear endpoints are typically *telic*, while events with longer duration, that are repeated or ongoing, or that lack clear endpoints are *atelic*. Some languages divide these three factors up differently when they mark aspect on a verb, which is indicated by different verb forms in some languages. For instance, in English, the same form of the verb can be used to express a past event that repeated multiple times (*He walked to school every day*) or that occurred once (*He walked to school yesterday*). In both of the previous examples, the event has clear beginning and ending points. However, in Spanish, different forms of the verbs are used to express these two aspectual distinctions. Ongoing and iterative events in the past are expressed using the imperfect (*Él caminaba a la escuela cada día*) and completed events in the past are expressed using the preterit (*Él caminó a la escuela ayer*). Also, ASL differentiates aspect in a verb by expressing the degree of continuity of an action (Klima & Bellugi, 1979).

Prototypical Event Structure

The preterit form is generally associated with a completed or episodic event, and the imperfect form is generally associated with a habitual event in the past (Slabakova & Montrul, 2003). Prototypical event structure generally appears to aid the L2 learner in acquiring tense-aspect morphology (Slabakova & Montrul). Slabakova & Montrul

investigated the selection of the preterit and imperfect in Spanish by using forced-choice preterit and imperfect verbs within the context of a passage and by using a truth-value sentence judgment task, which each described a one-time event with a specific subject. They found that the results of the native speakers' judgments of the preterit as compatible with a one-time event and the imperfect with a habitual event ranged from 88% to 98%. However, when the type of subject (generic or specific) was manipulated in the truth-value judgment sentences, the results ranged from 81% to 90%, indicating that there are other factors than prototypical event structure that influence the use of the preterit and the imperfect in native speakers of Spanish.

However, aspect can be used as a way to distinguish events other than being episodic versus habitual occurrences. For example, Rothman & Iverson (2009) investigated the interpretation of different types of sentences with preterit verbs in native speakers of Spanish and adult L2 learners of Spanish. The sentences were structured to describe habitual events, but used preterit verbs. The preterit can be felicitous in these contexts when it is intended to have an +accidental interpretation, *e.g. Siempre que fuimos al parque, nos encontramos con Maria* (Always that we went [preterit] to the park, we happened to meet [preterit] Maria). *Siempre* is an adverb that would normally indicate habitual occurrence, but in this case, the preterit is used to indicate an accidental or chance occurrence. Therefore, the +accidental feature of a verb is another factor that can influence the selection or interpretation of the preterit and imperfect in Spanish.

Lexical Aspect

Lexical aspect, also referred to in the literature as *aktionsart*, describes the inherent semantic features of a given verb (Genarri, 2001). Genarri claims that temporal interpretation of sentence is determined by tense meanings, *aktionsart* properties, and pragmatic implications. The Spanish past tense has preterit aspect, which indicates an end state, and imperfect aspect, which indicates that an event was in progress and not necessarily finished. Genarri describes the preterit and imperfect in terms of truth conditions. Because an end point is implied in the preterit, a proposition has to be true at a time prior to the statement for the preterit to be used in a given sentence. However, the imperfect does not indicate a change of state, rather, it indicates overlap with the last reference point stated in the discourse. Therefore, when the imperfect combines with telic (completed) or atelic (ongoing) events, progressive readings are possible. Genarri claims that both progressive and intentional readings are possible with the imperfect, but the reading depends on the interaction with the *aktionsart* of the verb. Genarri's conclusion is that Spanish temporal interpretations depend on aspectual and *aktionsart* properties, as well as pragmatic implications.

Cipria & Roberts (2000) also discuss truth conditions of verbs and *aktionsart*. They state that the imperfect is always atelic, but that the preterit is indeterminate regarding *aktionsart*. The preterit is neither telic nor atelic, but rather, depends on other factors in the clause. Cipria & Roberts claim that aspect and *aktionsart* are independent categories and there is no one-to-one correlation between aspect and *aktionsart*. The preterit could have telic or atelic readings, but the imperfect can only have atelic readings. However, previous research has claimed that the imperfect is ambiguous and

can have four different meanings: progressive, habitual, intentional, and iterative.

However, Cipria & Roberts claim that the imperfect is an unambiguous form.

Kempchinsky (2000) discusses whether or not aspect is syntactically or lexically determined. There is support for both possibilities. For example, accomplishments (+dynamic, +durative, +telic) and activities (+dynamic, +durative, -telic) appear to be syntactically determined. That is, whether or not a verb is an activity or an accomplishment depends on the syntactic properties of the direct object. An accomplishment would have a specified direct object, whereas the direct object of an activity may not be specified. However, syntactic factors appear to play no role in the identification of verbs as states (-dynamic, -durative, -telic) or achievements (+dynamic, -durative, +telic). Therefore, it appears that lexical factors may determine aspect in these types of verbs. However, there are restrictions on the types of phrases in which achievements can appear. Kempchinsky describes three restrictions: (1) An achievement cannot be used in a phrase beginning with the preposition *por*, which is used to reference a specific amount of time, such as *por cinco minutos (for five minutes)*. (2) An achievement cannot appear in the phrase *terminar de + verb (finished verb-ing)*. (3) An achievement cannot appear in the simple present with a continuous reading. Only a habitual reading would be possible. Therefore, Kempchinsky concludes that aspect is syntactically determined.

Video Design

A review of the literature in the use of the preterit and the imperfect in native Spanish-speaking adults revealed that the methodology of most studies were paper-and-pencil tasks, such as sentences judgment or sentence completion. The literature review

did not reveal any studies that used videos as methodology. This novel methodology was of interest because short videos can lead subjects to choose the first answer that comes to mind while given a forced-choice response format (provided that they cannot see the response choices while viewing the videos). Also, if a similar study is conducted on children learning Spanish, videos are likely to be an easier and more interesting methodology than paper-and-pencil tasks, which would allow the results of children's responses to be compared with those of adult native speakers, which would inform the field of the development of aspect in L1 Spanish learners.

Adverbial Cues

In Spanish courses for adults who are native speakers of English, the preterit and imperfect distinctions have to be learned and may not be mastered until an advanced level of proficiency is attained (Slabakova & Montrul, 2003; Montrul & Slabakova, 2003). Students are often taught to distinguish between the preterit and imperfect by relying on adverbial cues (Rothman, 2008). That is, an adverb in a given sentence provides information about the time frame in which the event occurred. Adverbs that express a clear point in time, such as *ayer* (*yesterday*) or *anoche* (*last night*) tend to occur in the same sentence as a preterit verb. Other adverbs that express that an event occurred frequently or repeatedly, such as *frecuentemente* (*often*) or *siempre* (*always*) tend to occur in the same sentence as an imperfect verb.

Students learning L2 Spanish in a classroom setting are taught to use these adverbs as "clues" to determine whether to use the preterit or the imperfect (Rothman, 2008). In many cases, these adverbial cues do help students to correctly distinguish between the preterit and the imperfect. However, Rothman found that adult English

speakers receiving formal instruction in Spanish differed from native speakers of Spanish and naturalistic L2 learners of Spanish in choosing the preterit and imperfect in a cloze-passage and a fill-in-the-blank task. Classroom learners tended to deviate from target responses when the verbs were commonly used stative verbs, such as *ser* (*to be*), verbs that are taught to have different lexical meanings in the preterit and imperfect when translated into English, such as *querer* (*to want*), and verbs that were preceded by adverbs that are taught to be used as “cues” for choosing the preterit and the imperfect, such as *siempre* (*always*) (Rothman). However, studies do cite that classroom L2 learners do generally perform well on preterit and imperfect contrasts and that the correct use of adverbs and tense/aspect increases as students become more proficient in the language (Rothman; Montrul & Slabakova, 2003; Lubbers-Quesada, 2006). Therefore, it is possible that adverbial cues help L2 learners begin to distinguish between the preterit and the imperfect, although adverbs can sometimes lead them to choose the wrong form.

However, it is unclear whether or not adverbial cues are facilitative for the acquisition of the preterit and the imperfect in native speakers of Spanish. A study that compared the acquisition of the past tense in English-speaking children with Specific Language Impairment (SLI) with typically developing age-matched and MLU (mean length of utterance) peers suggested that adverbial cues make the selection of the past tense less accurate (Krantz & Leonard, 2007). However, aspect is marked differently in English than in Spanish, so when an adverbial cue was present, children usually did not mark tense, using a root infinitive instead (Krantz & Leonard). This suggests that adverbial cues may not be a natural way for native speakers to learn tense and/or aspect in a language.

However, it appears that there is variability in the use of the preterit and imperfect, as well as the past progressive in adult native Spanish speakers, based on our preliminary pilot data. Therefore, there may be cues other than adverbial cues that influence the use of the preterit and the imperfect, such as lexical aspect of the verb or prototypical event structure and boundedness in time of the event in the past. It is important to know whether or not adverbs actually do lead native speakers to choose a more prototypical event structure, or if there is a lot of individual variation.

Preliminary Results

A previous study, designed to investigate the influence of adverbial cues on the use of the preterit and the imperfect in native Spanish-speaking children was piloted on adults. Ten different verbs were depicted in videos in the following four conditions: (1) completed event, no adverbial cue, (2) completed event, adverbial cue present, (3) ongoing event, no adverbial cue, and (4) ongoing event, adverbial cue present. Subjects viewed the videos and then were prompted verbally to describe what happened in the video. As indicated above, two conditions contained adverbs as cues, such as *ayer* (*yesterday*). Subjects described the videos verbally, after listening to a prompt recorded by a native speaker of Spanish. For example, a typical spoken prompt was: “*El cuento terminó. Piglet no escuchó el cuento. ¿Puedes contarle lo que sucedía en el video? Tigger y Pooh ____.*” (*The story ended. Piglet didn’t listen to the story. Can you tell him what was happening in the video?*) In the adverbial cue conditions, adverbs were included in the spoken prompts, for example, the above prompt would change to “*Ayer, Tigger y Pooh ____.*” (*Yesterday, Tigger and Pooh ____.*)

Four adults were used as pilot subjects to verify that they described the videos the way that was expected, which was the following: (1) preterit verb, (2) preterit verb, (3) imperfect verb, and (4) imperfect verb. Some variability was expected. Therefore, it was hypothesized that conditions 2 and 4, which had adverbial cues present in the prompt, would bias subjects even more towards choosing the expected verb than conditions 1 and 3, as the adverbial cue would serve as a “reminder” of whether or not the event was completed or ongoing when the video ended.

However, the results of the pilot subjects were highly variable, as indicated in Table 1.

Table 1. Results of Preliminary Pilot Study

Condition	% items with target response	% items without target response	% items with unclear trends
1. Completed event (preterit), adverb absent	10	50	40
2. Completed event (preterit), adverb present	70	20	10
3. Ongoing event (imperfect), adverb absent	10	10	80
4. Ongoing event (imperfect), adverb present	0	10	0

As indicated in Table 1 above, the condition with the highest percentage of target responses was (2) completed event with an adverbial cue. This may indicate that the depiction of completed events in videos is clearer than the depiction of ongoing events, which was indicated by a curtain closing in the middle of the event. Also, an adverbial cue may serve as a reminder of the time frame of the event. However, the results of

conditions (3) and (4) were highly variable, with many responses in the present tense. When the subjects were debriefed about the purposes of the study, many commented that the adverbs in condition (3), such as *frecuentemente* (*frequently*) and *todo el tiempo* (*all the time*) indicated that the event was habitual or ongoing in the present, rather than habitual or ongoing in the past. Many subjects also answered in the past progressive in all conditions. It is not clear whether or not using the past progressive is an individual bias or a group bias in certain verbs or conditions.

In order to determine whether or not native speakers use the preterit and imperfect more consistently in specific contexts, the study was redesigned using two tasks: (1) the same video task, using a forced-choice response format, and (2) a written task, in which the time frame, or boundedness, of the events in the past was manipulated. The aim of the first task was to determine whether preterit or imperfect aspect of a verb is more natural for describing past events that have clear endings in comparison to events that do not have clear endings, as depicted brief videos of events using puppets. The use of adverbial cues on the selection of the aspect of the verb was also manipulated. Additionally, this elicitation form (videos) is not typically used in adult research on aspect.

One challenge of using videos to ask participants to describe past events is that viewpoint aspect is determined by each individual participant. Tense is also described in the literature as the relationship between the point of speech (S) and the point of the event (E). The point of reference (R) describes aspect (Prior, 1967). The relationship of these points can be used to describe different tenses. For example, the simple past can be described as the point of event occurring before the point of speech. Reichenbach (1947) also states that tenses determine time with reference to the time point of the act of speech.

Therefore, although the point of speech was designed to be the end of each video, each individual could interpret the point of speech at different instances. Therefore, it is difficult to manipulate the beginning and end of an event in a video, because each individual can use prior knowledge to determine the boundaries of an event. For example, even if an event was intended to be ongoing when the video ended, one individual could decide that it was a completed event because the video is over, and another individual could decide that the event was ongoing because the event was not completed when the curtain closed. Therefore, a forced-choice response format was used for the current study to limit the response options and help subjects quickly decide which choice best described the video.

The aim of the second task was to determine whether or not boundedness in the time of a past event, as determined by the written context of an event, is more likely to bias native Spanish speakers to choose a preterit verb rather than an imperfect verb. It is possible that the time frame, rather than simply whether an event was complete or incomplete, is more likely to influence the selection of a preterit or imperfect verb in describing past events. That is, an unbounded past event indicates that it took place in the past, but does not indicate the beginning and end of the time frame specifically, such as *They drew pictures during their childhood*. A bounded past event indicates specifically when the time frame of the event started and stopped, such as *They drew three pictures on Monday last week*. However, it is also possible that some bounded events repeat several times, such as *During the years of their adolescence, they drew a lot*. The previous three contexts were investigated in the second task.

Statement of the Problem

The problem is that it is not clear under which contexts of the past tense native speakers are most likely to use a preterit or imperfect verb. These two tasks were designed to manipulate different contexts that will be more informative of the tendency to use the preterit and imperfect. This problem is important in research on aspect because it will inform how adults learning Spanish as a second language are taught to use the preterit and imperfect. It will also serve as comparison data in future studies of the acquisition of the preterit and imperfect in native Spanish-speaking children.

Hypotheses

Task 1: It is predicted that adult native speakers of Spanish will select a preterit verb more often to describe videos which depict a completed event and will select an imperfect verb more often to describe videos which depict an ongoing event in the past. Additionally, it is predicted that contexts with an adverbial cue will show a higher effect of the selection of each expected verb aspect.

Task 2: It is predicted that adult native speakers of Spanish will select an imperfect verb more often to describe unbounded contexts and will select a preterit verb more often to describe bounded contexts. Additionally, it is hypothesized that participants will select a preterit verb more often in contexts that are bounded but describe repeated events.

CHAPTER II

METHODS

Participants

Fourteen adult native speakers of Spanish participated in this study.

Materials

Task 1

Brief videos were constructed using children's puppets and small toys as props. The videos were filmed on a camcorder and edited in Adobe Premiere Pro and Adobe After Effects. The Iowa E-Book Version 2.4 (Hurtig, 2009) was used to present the sequence of videos and response sheets. A log sheet is automatically generated by the program to record participant responses.

Task 2

The Iowa E-Book Version 2.4 was also used to present the sequence of written paragraphs and response sheets for Task 2. A log sheet is automatically generated by the program to record participant responses.

Verb Selection

In order to determine whether or not each verb is prototypically used in the preterit or imperfect form, the *Corpus del Español* database was analyzed (Davies, 2002). The database contains oral and written records of Spanish, including fiction, news, and academic writing. Records from the 1200s to the 1900s are available. The oral and written records from the 1900s were used for this project because most recent use of the Spanish language is of interest. The frequencies of each verb are located in a table in Appendix A.

Procedure

Each subject first answered demographic questions pertaining to dialect of Spanish spoken, dominant language, number of years in the U.S., and reading and formal instruction in Spanish grammar. Next, participants completed the two tasks: Task 1 (videos) and Task 2 (paragraphs). The order of these two tasks was counterbalanced across participants, as well as the order of items in each task. Therefore, there were four orders of item presentation across participants:

- (1) Task 1 (Order 1), Task 2 (Order 1)
- (2) Task 1 (Order 2), Task 2 (Order 2)
- (3) Task 2 (Order 1), Task 1 (Order 2)
- (4) Task 2 (Order 2), Task 1 (Order 1)

Task 1

Task 1 was a within-subjects manipulation that consisted of 10 verbs in 4 different conditions. There were 4 brief videos (ranging from 6 to 15 seconds) depicting each verb using puppets and toys. After each video, subjects were asked to describe the video using a multiple-choice response format. Five videos were repeated as filler items. Two conditions were designed to bias the subject towards choosing a preterit verb, and two conditions were designed to bias the subjects towards choosing an imperfect verb. Additionally, one of each of the preterit and imperfect verbs had an adverbial cue in all of the response choices. The preterit-biased videos depicted completed events, for example, for the verb *dibujar* (*to draw*), the puppets drew a smiley face, put their markers down, and then held up the drawing to the camera to show that they were done. In contrast, for the imperfect-biased videos for the verb *dibujar* (*to draw*), the video started when the

puppets were in the middle of scribbling on a paper, and ended while the puppets were still scribbling on the paper (but had not filled the whole page). This was intended to depict an ongoing event. Subjects had the option to replay the video up to one time, but were unable to view the video once they advanced to the response screen. The video screen and the response screen are shown in Figure 2.1.

Subjects were given four multiple-choice responses for each video: (1) a sentence with a preterit verb (*Grover y Ernie dibujaron.*), (2) a sentence with an imperfect verb (*Grover y Ernie dibujaban*), (3) a sentence with a gerund and a preterit auxiliary verb (*Grover y Ernie estuvieron dibujando.*), and (4) a sentence with a gerund and an imperfect auxiliary verb (*Grover y Ernie estaban dibujando.*). Choices (3) and (4) were given because many subjects used these forms in the preliminary pilot study, so it was determined that subjects needed several options to describe what was most natural for them. Response choices were randomized. A sample of the video and response screens is presented in Figure 2.1 and all video items with responses are in Appendix B.

Figure 1. Video and Response Screens

Video

Replay Video

Respond

Marque la opción que describa mejor el video que vio.

A. Grover y Ernie siempre lavaron platos.

B. Grover y Ernie siempre estuvieron lavando platos.

C. Grover y Ernie siempre lavaban platos.

D. Grover y Ernie siempre estaban lavando platos.

Task 2

Task 2 was also a within-subjects design that consisted of the same 10 verbs used in Task 1 in three different conditions. There were three brief paragraphs for each verb

that were each designed to bias subjects towards using a preterit or an imperfect form of the verb. The response format was a cloze passage in which subjects were provided with the infinitive form of the verb and had to choose the preterit or imperfect form of that verb after advancing to the response screen. Subjects were instructed to decide how to conjugate the verb before advancing to the next screen. Once they advanced to the response screen, they were unable to read the paragraph again in order to avoid any bias introduced by seeing the conjugated forms while reading the paragraph. The three conditions of each verb were:

(1) Unbounded context. This condition described a past event, but did not specify when the event started or ended. This was designed to bias subjects towards choosing an imperfect verb. For example, the unbounded context for the verb *dibujar* (to draw) was *Tigger y Pooh son mejores amigos y suelen pasar mucho tiempo juntos. Durante su niñez, (dibujar) diariamente. (Tigger and Pooh are best friends and usually spend a lot of time together. During their childhood, they (to draw) daily.*

(2) Bounded context. This condition described a past event and specified specific time boundaries. This was designed to bias subjects towards choosing a preterit verb. For example, the bounded context for the verb *dibujar* (to draw) was *Tigger y Pooh son mejores amigos y suelen pasar mucho tiempo juntos. El lunes de la semana pasada (dibujar) tres paisajes. (Tigger and Pooh are best friends and usually spend a lot of time together. Monday of last week (to draw) three landscapes.*


(3) Bounded context with repetition. This condition described a past event that was repeated several times within a time frame. However, the time frame was not as specific as in the second condition. It was expected that this condition would result in more

variable responses because the boundedness of the time frame could bias subjects towards choosing the preterit. However, the repetition of the event could bias subjects towards choosing the imperfect. For example, the bounded context with repetition for the verb *dibujar* (to draw) was *Tigger y Pooh son mejores amigos y suelen pasar mucho tiempo juntos. Durante sus años de adolescencia, (dibujar) mucho.* (Tigger and Pooh are best friends and usually spend a lot of time together. During the years of their adolescence, they (to draw) a lot.


In addition to the paragraphs for each of the three conditions for all 10 verbs in Task 2, three filler items for each verb were included to reduce the chance of subject bias. These items were written in the same cloze-style passage, but were designed to bias subjects towards choosing the present indicative or the present subjunctive form of the verb. A sample of the paragraph and response screens is presented in Figure 2.2 and all paragraph and filler items and response choices are presented in Appendix C.

Figure 2. Paragraph and Response Screens

Ernie y Grover son mejores amigos y suelen pasar mucho tiempo juntos. Durante su niñez, (bailar) diariamente.

 Seguir

Bailaron Bailaban

 Seguir

CHAPTER III

RESULTS

Participants

The participants were 14 adult native speakers of Spanish. There were 5 males and 9 females. The age range of the participants was 23 to 38 years (average age = 30). The average number of years that they had lived in the U.S. ranged from 7 months to 15 years (average number of years = 5.8), excluding one 31-year-old participant who had lived in the U.S. her whole life. Nine participants reported that Spanish was their dominant language, one reported that English was her dominant language, and four reported that they considered Spanish and English to be equally dominant. All participants reported that they read in Spanish and all reported that they had received formal instruction in Spanish grammar, although one participant reported that she only reads for her Spanish courses and only has had two courses in Spanish grammar. The participants were from the following regions: Colombia (5), Puerto Rico (3), Chile (2), Mexico (1), Cuba (1), Venezuela (1), and Texas (1).

Task 1 (Video Task)

Summary of Results

Overall, subjects selected preterit responses more often than imperfect responses for the completed event videos, with and without adverb cues, although the percentage of preterit responses was slightly higher in the adverb cue condition. Subjects selected imperfect responses more often than preterit responses for the ongoing videos without adverb cues, but imperfect and preterit responses for the ongoing video with an adverb cue were nearly equal, with a slightly higher percentage of preterit responses. The

proportion and percentage of responses for each condition in Task 1 are presented in Table 2. The percentages for each condition with both the preterit and preterit auxiliary + progressive and the imperfect and imperfect auxiliary + progressive are presented in Table 3.

Table 2. Proportion and Percentage of Responses Across Subjects for Each Condition in Task 1

Condition	Ongoing event, no adverb cue	Ongoing event, adverb cue	Completed event, no adverb cue	Completed event, adverb cue
Response				
Preterit	15/168 (9.9%)	16/154 (10.4%)	121/154 (78.6%)	125/154 (81.2%)
Imperfect	35/168 (20.8%)	31/154 (20.1%)	6/154 (3.9%)	5/154 (3.2%)
Preterit Auxiliary + Progressive	11/168 (6.5%)	72/154 (46.8%)	6/154 (3.9%)	9/154 (5.8%)
Imperfect Auxiliary + Progressive	107/168 (63.7%)	35/154 (22.7%)	21/154 (13.6%)	15/154 (9.7%)
Total Number of Responses	168	154	154	154

Table 3. Percentage of Responses Across Subjects in Task 1, Preterit and Imperfect Responses Collapsed

Condition	Ongoing event, no adverb cue	Ongoing event, adverb cue	Completed event, no adverb cue	Completed event, adverb cue
Response				
Preterit and Preterit Auxiliary + Progressive	16.5	57.2	82.5	87.1
Imperfect and Imperfect Auxiliary + Progressive	84.5	42.8	17.5	12.9

Because there were strong differences in responses in the ongoing event without adverb and ongoing event with adverb conditions, the responses in the ongoing event with adverbs were analyzed by specific adverb. The data responses were collapsed by non-progressive and progressive forms. The adverbs *todo el tiempo* (all the time) and *siempre* (always) resulted in more progressive responses (71.4%, 86.6%) and the adverb *todos los días* (every day) resulted in slightly more non-progressive responses (61.9%). Data for each adverb can be seen in Table 4. The verbs used with each adverb are included in the last column.

Table 4: Percentage of Responses in Ongoing Event with Adverb Condition, Sorted by Adverb

<i>Adverb</i>	<i>% Non-progressive responses</i>	<i>% Progressive responses</i>	<i>Verbs</i>
Todo el tiempo (all the time)	28.40	71.40	saltar, mezclar, dibujar
Todos los días (every day)	61.90	38.10	agarrar, bailar, nadar
Siempre (always)	13.40	86.60	beber, montar, cortar, cantar

Subject Results

Each individual subject's results were calculated and compared to the summary of results for all subjects. Overall, 11 of the 14 subjects showed a response pattern similar to the one observed for the group: a higher frequency of preterit responses for the completed event videos with and without adverb cues, a higher frequency of imperfect responses in

the ongoing event videos with no adverb cue, and a nearly equal number of preterit and imperfect responses in the ongoing event videos with adverb cues.

Two of the 14 subjects (2, 6) did not show the same pattern as for the ongoing event with adverb cue condition. One subject chose imperfect responses for 100% of the trials, and the other subject chose more imperfect responses (63%) than preterit responses (36%).

It is also notable that four of the 14 subjects (7, 8, 12, and 13) showed an even stronger preference for preterit responses than imperfect responses in the ongoing event with adverb cue condition. These subjects chose preterit responses at a frequency of 73% or higher.

One subject (10) differed from the others on two conditions: the ongoing event without an adverb cue, and the completed event with an adverb cue. This subject chose preterit responses slightly more often than imperfect responses in the ongoing event without an adverb cue condition, which was similar to her results in the adverb cue condition. This subject also chose a nearly equal number of preterit and imperfect responses in the completed event with an adverb cue condition. No other subjects showed these two patterns. Individual subject results can be seen in Table 5.

Table 5. Percentage of Responses for Individual Subjects in Task 1, Preterit and Imperfect Responses Collapsed

Subject	Response	Ongoing event, no adverb cue	Ongoing event, adverb cue	Completed event, no adverb cue	Completed event, adverb cue
1	<i>Preterit and Preterit Auxiliary + Progressive</i>	0%	55%	91%	100%
1	<i>Imperfect and Imperfect Auxiliary + Progressive</i>	100%	45%	9%	0%
2	<i>Preterit and Preterit Auxiliary + Progressive</i>	25%	36%	91%	82%
2	<i>Imperfect and Imperfect Auxiliary + Progressive</i>	75%	63%	9%	18%
3	<i>Preterit and Preterit Auxiliary + Progressive</i>	17%	45%	64%	82%
3	<i>Imperfect and Imperfect Auxiliary + Progressive</i>	83%	54%	36%	18%
4	<i>Preterit and Preterit Auxiliary + Progressive</i>	25%	54%	91%	100%
4	<i>Imperfect and Imperfect Auxiliary + Progressive</i>	75%	45%	9%	0%
5	<i>Preterit and Preterit Auxiliary + Progressive</i>	8%	55%	64%	82%
5	<i>Imperfect and Imperfect Auxiliary + Progressive</i>	92%	45%	36%	18%
6	<i>Preterit and Preterit Auxiliary + Progressive</i>	0%	0%	64%	91%
6	<i>Imperfect and Imperfect Auxiliary + Progressive</i>	100%	100%	36%	9%
7	<i>Preterit and Preterit Auxiliary + Progressive</i>	16%	73%	91%	82%
7	<i>Imperfect and Imperfect Auxiliary + Progressive</i>	83%	27%	9%	18%
8	<i>Preterit and Preterit Auxiliary + Progressive</i>	17%	82%	91%	91%
8	<i>Imperfect and Imperfect Auxiliary + Progressive</i>	84%	18%	9%	9%

Table 5-continued

9	<i>Preterit and Preterit Auxiliary + Progressive</i>	0%	63%	64%	91%
9	<i>Imperfect and Imperfect Auxiliary + Progressive</i>	100%	36%	36%	9%
10	<i>Preterit and Preterit Auxiliary + Progressive</i>	58%	54%	100%	55%
10	<i>Imperfect and Imperfect Auxiliary + Progressive</i>	42%	45%	0%	45%
11	<i>Preterit and Preterit Auxiliary + Progressive</i>	25%	54%	91%	100%
11	<i>Imperfect and Imperfect Auxiliary + Progressive</i>	75%	45%	9%	0%
12	<i>Preterit and Preterit Auxiliary + Progressive</i>	25%	91%	100%	91%
12	<i>Imperfect and Imperfect Auxiliary + Progressive</i>	75%	9%	0%	9%
13	<i>Preterit and Preterit Auxiliary + Progressive</i>	0%	73%	82%	91%
13	<i>Imperfect and Imperfect Auxiliary + Progressive</i>	100%	27%	18%	9%
14	<i>Preterit and Preterit Auxiliary + Progressive</i>	0%	64%	73%	73%
14	<i>Imperfect and Imperfect Auxiliary + Progressive</i>	100%	36%	27%	27%

Task 2 (Written Paragraph Task)

Summary of Results

Overall, subjects selected imperfect responses most often for the unbounded contexts and preterit responses for the bounded contexts and the bounded contexts with repetition, although there were more preterit responses in the bounded context without repetition. The proportion and percentage of responses for each condition in Task 2 are presented in Table 6.

Table 6: Proportion and Percentage of Responses Across Subjects for Each Condition in Task 2

Condition	Unbounded Context	Bounded Context	Bounded Context with Repetition
Response			
Preterit	24/140 (17.1%)	138/140 (98.6%)	107/140 (76.4%)
Imperfect	116/140 (82.9%)	2/140 (1.4%)	33/140 (23.6%)
Total Number of Responses	140	140	140

Subject Results

Each individual subject's results were calculated and compared to the summary of results for all subjects. Nine of the 14 subjects showed a similar pattern to the average results: a higher frequency of imperfect results in the unbounded condition, nearly all preterit responses in the bounded condition, and a higher frequency of preterit than imperfect results in the bounded with repetition condition.

Two of the 14 subjects (1, 10) showed different patterns in the bounded with repetition condition. Each of these subjects chose 40% preterit responses and 60% imperfect responses.

Three of the 14 subjects (5, 8, and 13) showed different patterns in the unbounded condition. These subjects selected an equal or nearly equal number of preterit and imperfect responses. Individual subject results can be seen in Table 8.

Table 7. Percentage of Responses for Individual Subjects in Task 2

Subject	Response	Unbounded Context	Bounded Context	Bounded Context with Repetition
1	Preterit	0%	100%	40%
1	Imperfect	100%	0%	60%
2	Preterit	0%	100%	70%
2	Imperfect	100%	0%	30%
3	Preterit	20%	100%	90%
3	Imperfect	80%	0%	10%
4	Preterit	10%	80%	60%
4	Imperfect	90%	20%	40%
5	Preterit	60%	100%	90%
5	Imperfect	40%	0%	10%
6	Preterit	0%	100%	90%
6	Imperfect	100%	0%	10%
7	Preterit	0%	100%	80%
7	Imperfect	100%	0%	20%
8	Preterit	50%	100%	90%
8	Imperfect	50%	0%	10%
9	Preterit	20%	100%	90%
9	Imperfect	80%	0%	10%
10	Preterit	10%	100%	40%
10	Imperfect	90%	0%	60%
11	Preterit	10%	100%	80%
11	Imperfect	90%	0%	20%
12	Preterit	0%	100%	80%
12	Imperfect	100%	0%	20%
13	Preterit	50%	100%	90%
13	Imperfect	50%	0%	10%
14	Preterit	10%	100%	80%
14	Imperfect	90%	0%	20%

Task 1 and 2 Verb Analysis

The responses to each condition in Task 1 and Task 2 were calculated separately for each verb and compared to the averages across conditions for each task.

In Task 1, the response pattern differed in five individual verbs when compared to the average across conditions. In the ongoing event with no adverb cue, no verbs differed from the overall pattern. However, the verbs *agarrar* (to grab), *saltar* (to jump), and

bailar (to dance) differed from the overall pattern in the ongoing event with an adverb cue condition. Subjects chose imperfect forms more often than preterit verbs (64% and 36%, respectively) for the verbs *agarrar* and *saltar*. The pattern was not as strong for the verb *bailar* (43% for preterit and 57% for imperfect). This differed from the overall pattern for the ongoing event with an adverb cue condition, which was 57% for the preterit and 43% for the imperfect.

In the completed event conditions in Task 1, three verbs showed different patterns: *bailar* (to dance), *cantar* (to sing), and *mezclar* (to mix). The preterit responses in each completed event condition for *bailar* and *mezclar* were 57% and 60%, respectively, and the preterit responses for *cantar* were 43% in the no adverb cue condition and 57% in the adverb cue condition.

In Task 2, the response pattern differed in three verbs: *beber* (to drink), *dibujar* (to draw), and *bailar* (to dance). The only verb that was different in the unbounded condition was *beber*, for which 35% of responses were preterit, and 65% of responses were imperfect. While there was still a preference for the imperfect, it was not as strong as across the overall pattern (17% preterit, 83% imperfect). No verbs differed in the simple bounded condition, but *dibujar* and *bailar* differed in the bounded with repetition condition. The preterit responses for *dibujar* and *bailar* were 43% and 21%, respectively, while the imperfect responses were 57% and 79%, respectively. This is different than the overall pattern of 76% preterit responses and 24% imperfect responses. The data for all verbs in Task 1 can be seen in Table 9 and in Table 10 for Task 2.

Table 8. Percentage of Responses in Task 1 by Verb

	<i>Response</i>	Task 1: Ongoing event, no adverb cue	Task 1: Ongoing event, adverb cue	Task 1: Completed event, no adverb cue	Task 1: Completed event, adverb cue
Dibujar	<i>Preterit +Preterit Progressive</i>	21.40%	64%	100%	100.00%
	<i>Imperfect +Imperfect Progressive</i>	78.60%	35.70%	0%	0%
Agarrar	<i>Preterit +Preterit Progressive</i>	25%	35.70%	100%	100.00%
	<i>Imperfect +Imperfect Progressive</i>	75.00%	64.30%	0.00%	0.00%
Beber	<i>Preterit +Preterit Progressive</i>	14.30%	71.40%	92.90%	92.90%
	<i>Imperfect +Imperfect Progressive</i>	85.70%	28.50%	7.10%	7.10%
Montar	<i>Preterit +Preterit Progressive</i>	21.40%	64.30%	100%	93%
	<i>Imperfect +Imperfect Progressive</i>	78.50%	35.70%	0.00%	7.10%
Saltar	<i>Preterit +Preterit Progressive</i>	7.10%	35.70%	100%	100%
	<i>Imperfect +Imperfect Progressive</i>	92.80%	64.30%	0.00%	0.00%
Bailar	<i>Preterit +Preterit Progressive</i>	28.50%	42.80%	57.10%	71.40%
	<i>Imperfect +Imperfect Progressive</i>	71.40%	57.20%	42.90%	28.60%
Cortar	<i>Preterit +Preterit Progressive</i>	14.20%	71.40%	100%	93%
	<i>Imperfect +Imperfect Progressive</i>	85.70%	28.60%	0.00%	7.10%

Table 8-continued

Nadar	<i>Preterit +Preterit Progressive</i>	7.10%	50.00%	92.90%	85.70%
	<i>Imperfect +Imperfect Progressive</i>	92.80%	50.00%	7.10%	14.30%
Mezclar	<i>Preterit +Preterit Progressive</i>	14.20%	57.20%	60.70%	71.40%
	<i>Imperfect +Imperfect Progressive</i>	85.70%	42.90%	39.30%	28.50%
Cantar	<i>Preterit +Preterit Progressive</i>	0%	64.20%	42.90%	57.10%
	<i>Imperfect +Imperfect Progressive</i>	100.00%	35.70%	57.10%	42.80%

Table 9. Percentage of Responses in Task 2 by Verb

	<i>Response</i>	Task 2: Unbounded Context	Task 2: Bounded context	Task 2: Bounded context with repetition
Dibujar	<i>Preterit</i>	14.30%	100%	42.90%
	<i>Imperfect</i>	85.70%	0	57.10%
Agarrar	<i>Preterit</i>	7.10%	100%	71.40%
	<i>Imperfect</i>	92.90%	0	28.60%
Beber	<i>Preterit</i>	35.70%	100%	78.60%
	<i>Imperfect</i>	64.30%	0	21.40%
Montar	<i>Preterit</i>	14.30%	100%	85.70%
	<i>Imperfect</i>	85.70%	0	14.30%
Saltar	<i>Preterit</i>	21.40%	92.90%	85.70%
	<i>Imperfect</i>	78.60%	7.10%	14.30%
Bailar	<i>Preterit</i>	7.10%	100%	21.40%
	<i>Imperfect</i>	92.90%	0	78.60%
Cortar	<i>Preterit</i>	28.60%	100%	85.70%
	<i>Imperfect</i>	71.40%	0	14.30%
Nadar	<i>Preterit</i>	21.40%	100%	92.90%
	<i>Imperfect</i>	78.60%	0	7.10%
Mezclar	<i>Preterit</i>	14.30%	92.90%	100%
	<i>Imperfect</i>	85.70%	7.10%	0
Cantar	<i>Preterit</i>	14.30%	100%	92.90%
	<i>Imperfect</i>	85.70%	0	7.10%

CHAPTER IV

DISCUSSION

Completed vs. Ongoing Events in Tasks 1 and 2

The results of Task 1 (videos) show that the depiction of an event with a clear ending is most likely to be described with a preterit verb. The frequency of preterit responses for completed videos with and without adverb cues were nearly equal (82.5% and 87.1%, respectively), which suggests that as long as the context of an event is clear, an adverb does not necessarily help clarify that an event is completed. Further support is provided from the results of Task 2 (contextual paragraphs) in the bounded condition. A preterit verb was selected for almost every item of the bounded condition (98.6%). Although the frequency of preterit verb selections was not as high in the bounded with repetition condition, there was still a clear preference for the preterit over the imperfect (76.4% and 23.6%).

In contrast, there was a higher frequency of imperfect verb selections than preterit verb selections for the ongoing event videos with no adverb cues (84.5% and 16.5%, respectively). However, there was no such preference for the imperfect for the ongoing event videos with adverb cues (57.2% preterit, 42.8% imperfect). However, the imperfect was selected at a high frequency for the unbounded context condition in Task 2 (82.9%). This suggests that the imperfect is not always used just to describe ongoing or unbounded events. It appears that the adverbial cues influenced subjects to choose the preterit slightly more often. Described another way, adverbial cues for ongoing videos did not influence subjects to choose the imperfect more often, although they were designed to give subjects unspecific endpoints. The adverbs used were *todo el tiempo*, *todos los días*,

and *siempre* (*all the time, every day, and always*). It is possible that some subjects interpreted the videos with adverbs as defining a specific time period, and that some interpreted them as an ongoing time period. Generally, these results are supported by literature that claims the preterit form is generally associated with a completed or episodic event, and the imperfect form is generally associated with a habitual event in the past (Slabakova & Montrul, 2003). The adverb analysis also provides a possible explanation for the differences in no adverb cues and adverb cues. The adverbs *todo el tiempo* (*all the time*) and *siempre* (*always*) resulted in more progressive than non-progressive responses. The adverb *todos los días* (*every day*) resulted in more non-progressive than progressive responses. It is possible that the differences in adverbs influenced responses in this condition because the meanings of *todo el tiempo* (*all the time*) and *siempre* (*always*) are similar in that they do not define time as specifically as *todos los días* (*every day*). The adverb *every day* may have influenced some subjects to interpret the events as over, because a day is over, but repeated. *All the time* or *always* may influence subjects to choose progressive responses more because it implies a more ongoing time frame. Further analysis of subject differences and verb differences provides other possible explanations.

Subject Differences in Tasks 1 and 2

While there were some differences in individual subject patterns, most subjects' data followed the overall data trends for Task 1 and 2. There were few notable differences in subjects. Subject #10 showed different patterns in Task 1 in the conditions of ongoing events without adverb cues and the completed events with adverb cues. The only notable difference in this subject was that she was born in Texas and lived in the

U.S. her whole life, whereas all other subjects were born outside of the U.S., although there was variability in how long they have lived in the U.S. This subject also reported fewer Spanish grammar courses and reading in Spanish only for Spanish courses, so it is possible that differences in conversational and academic Spanish influenced the results.

The condition with the most variability in Task 1 was the one with ongoing events with adverb cues. The overall results were 57.2% preterit and 42.8% imperfect responses. Two subjects showed a stronger preference for imperfect than preterit responses, and four subjects showed an even stronger preference for preterit responses (73% or higher). This suggests that individual subjects may have interpreted videos in this condition differently. Also, it is possible that the videos were confusing because it is difficult to depict an event that was ongoing in the past because even if the event was ongoing, the video was over. Therefore, each individual subject's viewpoint aspect may have influenced their selection of verbs in the videos. The completed event videos may have been interpreted similarly by most subjects because the event and the video were clearly over, as opposed to the ongoing event videos.

There were no notable differences among subjects in the bounded condition in Task 2. Two subjects showed a slight preference for the imperfect (60%) in the bounded with repetition condition, suggesting that a repeated event could be interpreted as ongoing. Three subjects selected an equal or nearly equal number of preterit and imperfect responses in the unbounded condition, as opposed to a higher frequency of imperfect responses. It is possible that these differences are simply due to individual subject preferences or random variation.

Verb Differences in Tasks 1 and 2

The individual verb analysis showed that the frequency of preterit and imperfect responses was variable across verbs. This suggests that lexical aspect influenced verb selection. According to a Spanish language database (Davies, 2002), the following verbs appeared more often in the preterit than the imperfect: *agarrar* (to grab), *beber* (to drink), *montar* (to ride), *saltar* (to jump), and *cortar* (to cut). The following verbs occurred more often in the imperfect than the preterit: *dibujar* (to draw), *bailar* (to dance), *nadar* (to swim), *mezclar* (to mix), and *cantar* (to sing).

Therefore, it was hypothesized that whether a verb is more prototypically preterit or imperfect (i.e. occurs more frequently in the preterit or the imperfect) would influence the selection of preterit and imperfect. The results will be discussed in terms of prototypically preterit and prototypically imperfect verbs.

Prototypically Preterit Verbs

In Task 1, the verbs that were more frequent in the preterit were *agarrar* (to grab), *beber* (to drink), *montar* (to ride), *saltar* (to jump), and *cortar* (to cut). Of these verbs, the percentage of preterit responses was at least 92.9% both with and without adverb cues. This supports the frequency data that these verbs are more prototypically preterit and that the completed videos depicted the verbs in a context that was compatible with completed events.

In the ongoing event videos, the verbs *montar* and *cortar* had similar percentages of preterit and imperfect responses as the overall results for all verbs. However, *agarrar* and *saltar* showed a similar percentage of preterit and imperfect responses to the overall results in the ongoing event with no adverb cue, but a different pattern in the ongoing

event with an adverb cue. The percentage of preterit responses for both of these verbs was 35.7% (in contrast to 57.2% overall) and 64.3% for imperfect responses (in contrast to 42.8% overall). These results are interesting, as the frequency of imperfect responses for these two verbs was much higher and they are prototypically preterit verbs. Perhaps the adverbial cues did influence subjects to view the events as ongoing, but this was not the pattern for all verbs in this condition because they were not prototypically preterit. However, *cortar*, *beber*, and *montar* did not show these patterns. Another possibility is the nature of the actions depicted in these videos. The ongoing event videos for *agarrar* and *saltar* depicted a series of completed events because of the nature of these verbs, whereas the videos for *cortar*, *beber*, and *montar* depicted events in which the video truly ended in the middle of an action. Perhaps the subjects used the adverb cues to determine that the videos for *agarrar* and *saltar* should be interpreted as ongoing, which is not prototypical.

In Task 2, all of these verbs had a similar frequency of preterit and imperfect responses to the overall results in each condition. Only one verb (*beber: to drink*) showed a slightly different pattern in the unbounded condition. There was a clear preference for the imperfect, but only 64.3% of responses were imperfect, which was lower than the average percentage of imperfect responses in the unbounded condition (82.9%). Perhaps this is due to the prototypically preterit nature of this verb, but it was the only verb that showed this pattern, so it is not likely that lexical aspect always overrides the context of a given verb.

Prototypically Imperfect Verbs

In Task 1, the verbs that were more frequent in the imperfect than the preterit were *dibujar* (to draw), *bailar* (to dance), *nadar* (to swim), *mezclar* (to mix), and *cantar* (to sing). Of these verbs, the percentage of imperfect responses ranged from 71.4% to 100% for all verbs in the ongoing event without an adverb cue videos. The percentage of imperfect responses in the ongoing event with adverb cues videos ranged from 35.7% to 57.2%. This shows that overall, the prototypically imperfect verbs followed the overall pattern in the ongoing event with adverb condition. Because the results were variable and nearly equal in preterit and imperfect responses, it is possible that viewpoint aspect was variable among subjects and that the adverbial cues caused different viewpoints regarding the time frame of the event.

In Task 2, only two verbs showed different patterns in the bounded with repetition condition: *dibujar* (to draw) and *bailar* (to dance). The preterit responses for *dibujar* and *bailar* were 42.9% and 21.4%, respectively, as opposed to the overall results of 76.4% preterit responses. Again, perhaps this is due to the prototypically imperfect nature of these verbs, but it only these two verbs that showed this pattern, so it is not likely that lexical aspect always overrides the context of a given verb.

Lexical Aspect

It appears that lexical aspect can explain some of the differences in the verb patterns. For example, *dibujar* (to draw) and *bailar* (to dance) had a higher frequency of imperfect than preterit responses in the bounded with repetition condition, as opposed to a higher frequency of preterit responses overall. Cipria & Roberts (2000) state that a verb phrase with a preterit verb can have telic or atelic readings, but a verb phrase with an

imperfect verb can only have atelic readings. Perhaps the contexts for *dibujar* (*to draw*) and *bailar* (*to dance*) appeared atelic to several subjects, resulting in more imperfect responses. It is possible that reclassifying the test stimuli in both tasks as telic or atelic could produce different results because a verb + object determines telicity rather than just a verb alone. For example “dibujaron un círculo” (drew a circle) is a telic VP.

However, it has been proposed that aspect is not lexically determined, but rather, is syntactically determined, as telicity is calculated at the VP level (Verkuyl, 2005). For example, Kempchinsky (2000) states that lexical aspect may determine aspect in achievements (+dynamic, -durative, +telic), but there are restrictions, as described in the introduction. Therefore, lexical aspect could be syntactically determined by the context of the event.

CHAPTER V
CONCLUSION

Research Questions and Hypotheses

In conclusion, the problem that was examined in this project was determining under which contexts native speakers of Spanish were more likely to use preterit or imperfect verbs, as preliminary research demonstrated variable results. This study is informative to the fields of L1 and L2 Spanish acquisition. The following research questions and hypotheses were examined:

1. Do adverbs or syntactic form (i.e. aspect) bias native speakers towards using preterit or imperfect forms of the past tense?

Hypothesis 1: It is predicted that adult native speakers of Spanish will select a preterit verb more often to describe videos which depict a completed event and will select an imperfect verb more often to describe videos which depict an ongoing event in the past. Additionally, it is predicted that contexts with an adverbial cue will show a higher effect of the selection of each expected verb aspect.

In summary, adverbs did not influence the selection of the preterit and imperfect in videos with a completed event. It appears that the end of the event is sufficient context for native Spanish speaking adults to select the preterit more often than the imperfect. In all conditions except the ongoing event with an adverb cue, prototypical event structure appears to have influenced the selection of preterit or imperfect verbs.

2. Does temporal boundedness influence the selection of the preterit or the imperfect in the past tense?

Hypothesis 2: It is predicted that adult native speakers of Spanish will select an imperfect verb more often to describe unbounded contexts and will select a preterit verb more often to describe bounded contexts. Additionally, it is hypothesized that participants will select a preterit verb more often in contexts that are bounded but describe repeated events.

In summary, the hypothesis was supported, although some differences in individual verbs and subjects were noted, perhaps because of individual subject preferences.

Implications for Future Research

The results of this study have the potential to inform future research in both L1 and L2 acquisition of Spanish. First, it is important to consider the order of acquisition of the preterit and the imperfect in L1. One of the earliest studies on this topic was Morales, 1989. The study found that children ages 2;0 to 2;9 used the preterit in 99% of past contexts. Older children preferred the preterit but began using other forms of the past tense, including the imperfect. Children ages 5;0 to 6;0 used the preterit in 71% of past contexts and the imperfect in 26% of past contexts. This shows that children learn the preterit first, implying that it is simpler and easier to acquire. Some researchers claim that aspect and tense are acquired separately (Almegren & Idiazabal, 2001; Guijarro-Fuentes & Clibbens, 2004). Almegren & Idiazabal believe that aspect is required first because they found that children used the preterit with achievement verbs and the imperfect with stative verbs. However, Guijarro-Fuentes & Clibbens studied simultaneous bilinguals and found that aspectual distinctions were difficult for them, as in L2 learners. Therefore, perhaps prototypical verb structure facilitates development of the preterit and the imperfect. Future research using videos with children could be challenging because of the

attention required to respond to the videos. Written paragraphs would also be challenging because they would require reading. However, it may be feasible to conduct a similar study with older children, because Morales found that children ages 5;0 to 6;0 use the preterit and the imperfect. Presenting the written paragraphs orally to children and asking them to choose which verb fits best in the paragraph may be possible, but it may be challenging to maintain their attention for several presentations.

One of the most important conclusions was the influence of adverbial cues, or rather, lack thereof. There was no significant difference in the completed videos with and without adverbial cues. In the ongoing videos, adverbial cues seemed to produce more variable results, which does not support that they are helpful for determining the imperfect. Perhaps teaching L2 students to use adverbial cues is not helpful. Rothman (2008) found that they do not always lead students to choose aspect correctly. However, the results of Task 2 in the bounded and unbounded conditions produced more consistent results. Perhaps it would be more helpful to teach L2 students to determine the time frame of an event, rather than relying on a heuristic adverbial cue to determine whether or not to use the preterit or the imperfect. Future research in L2 acquisition might include conducting this study on advanced L2 learners and comparing the results with the results of this study.

In conclusion, it appears that the results of this study show that viewpoint aspect is an important factor in native speakers' interpretation of the aspectual tense of events. In particular, viewpoint aspect may have played an important role in the interpretation of the video events because subjects could have perceived the end of the event at variable times (e.g. the end of the event, the end of the video, etc.) Therefore, adverbial cues and

interrupted ongoing events may not provide necessary context for interpretation of past events.

In summary, this study used a new methodology to study the preterit and the imperfect to determine under which contexts native speakers of Spanish use the preterit and the imperfect. Although the preterit was clearly used with completed events, the imperfect was not used as clearly for ongoing events. However, unbounded versus bounded contexts did provide more consistent results.

APPENDIX A

VERB FREQUENCY DATA

Table A1. Verb Frequency Data
(Davies, 2002)

Verb	Preterit/Imperfect Proportion
1. Dibujar <i>To draw</i>	0.72
2. Agarrar <i>To grab</i>	2.98
3. Beber <i>To drink</i>	1.50
4. Montar <i>To ride</i>	1.74
5. Saltar <i>To jump</i>	2.66
6. Bailar <i>To dance</i>	0.61
7. Cortar <i>To cut</i>	2.84
8. Nadar <i>To swim</i>	0.32
9. Mezclar <i>To mix</i>	0.82
10. Cantar <i>To sing</i>	0.60

APPENDIX B

TASK 1 STIMULI

Instrucciones: Marque la opción que describa mejor el video que vio. No hay ninguna respuesta incorrecta. Solo nos interesa su opinión. (Instructions: Choose the option that best describes the video you saw. There is no incorrect response. We are only interested in your opinion.)

1a. PAA dibujar (preterit, no adverb, *to draw*)

[Video: Tigger and Pooh draw a picture of a face and each hold up their drawing when they finish.]

- a. Tigger y Pooh dibujaron una cara.
- b. Tigger y Pooh dibujaban una cara.
- c. Tigger y Pooh estaban dibujando una cara.
- d. Tigger y Pooh estuvieron dibujando una cara.

1b. PAP dibujar (preterit, adverb cue, *to draw*)

[Video: Grover and Ernie draw a picture of a sun and each hold up their drawing when they finish.]

- a. Ayer, Grover y Ernie dibujaron el sol.
- b. Ayer, Grover y Ernie dibujaban el sol.
- c. Ayer, Grover y Ernie estaban dibujando el sol.
- d. Ayer, Grover y Ernie estuvieron dibujando el sol.

1c. IAA dibujar (imperfect, no adverb, *to draw*)

[Video: Grover and Ernie scribble and continue to scribble when the video ends.]

- a. Grover y Ernie dibujaron.
- b. Grover y Ernie dibujaban.
- c. Grover y Ernie estaban dibujando.
- d. Grover y Ernie estuvieron dibujando.

1d. IAP dibujar (imperfect, adverb cue, *to draw*)

[Video: Tigger and Pooh scribble and continue to scribble when the video ends.]

- a. Todo el tiempo, Tigger y Pooh dibujaron.
- b. Todo el tiempo, Tigger y Pooh dibujaban.
- c. Todo el tiempo, Tigger y Pooh estaban dibujando.
- d. Todo el tiempo, Tigger y Pooh estuvieron dibujando.

2a. PAA agarrar (preterit, no adverb, *to grab*)

[Video: Ernie and Grover each grab one cookie from a plate and sit down with the cookie.]

- a. Ernie y Grover agarraron una galleta.
- b. Ernie y Grover agarraban una galleta.
- c. Ernie y Grover estaban agarrando una galleta.

d. Ernie y Grover estuvieron agarrando una galleta.

2b. PAP agarrar (preterit, adverb cue, *to grab*)

[Video: Tigger and Pooh each grab one piece of fruit from a plate and sit down with the fruit.]

a. Anoche, Tigger y Pooh agarraron fruta.

b. Anoche, Tigger y Pooh agarraban fruta.

c. Anoche, Tigger y Pooh estaban agarrando fruta.

d. Anoche, Tigger y Pooh estuvieron agarrando fruta.

2c. IAA agarrar (imperfect, no adverb, *to grab*)

[Video: Tigger and Pooh repeatedly grab potato chips from a plate and are still grabbing them when the video ends.]

a. Tigger y Pooh agarraron papas fritas.

b. Tigger y Pooh agarraban papas fritas.

c. Tigger y Pooh estaban agarrando papas fritas.

d. Tigger y Pooh estuvieron agarrando papas fritas.

2d. IAP agarrar (imperfect, adverb cue, *to grab*)

[Video: Ernie and Grover repeatedly grab french fries from a plate and are still grabbing them when the video ends.]

a. Todos los días, Ernie y Grover agarraron papas fritas.

b. Todos los días, Ernie y Grover agarraban papas fritas.

c. Todos los días, Ernie y Grover estaban agarrando papas fritas.

d. Todos los días, Ernie y Grover estuvieron agarrando papas fritas.

3a. PAA beber (preterit, no adverb, *to drink*)

[Video: Squidward and Spongebob drink a can of pop and then throw the can in a recycling bin.]

a. Squidward y Spongebob bebieron un refresco.

b. Squidward y Spongebob bebían un refresco.

c. Squidward y Spongebob estaban bebiendo un refresco.

d. Squidward y Spongebob estuvieron bebiendo un refresco.

3b. PAP beber (preterit, adverb cue, *to drink*)

[Video: Grover and Ernie drink a can of pop and then throw the can in a recycling bin.]

a. Anoche, Grover y Ernie bebieron un refresco.

b. Anoche, Grover y Ernie bebían un refresco.

c. Anoche, Grover y Ernie estaban bebiendo un refresco.

d. Anoche, Grover y Ernie estuvieron bebiendo un refresco.

3c. IAA beber (imperfect, no adverb, *to drink*)

[Video: Grover and Ernie continuously drink a cup of coffee and are still holding it up to their mouths when the video ends.]

a. Grover y Ernie bebieron un café.

b. Grover y Ernie bebían un café.

c. Grover y Ernie estaban bebiendo un café.

d. Grover y Ernie estuvieron bebiendo un café.

3d. IAP beber (imperfect, adverb cue, *to drink*)

[Video: Spongebob and Squidward continuously drink a cup of tea and are still holding it up to their mouths when the video ends.]

- a. Squidward y Spongebob siempre bebieron te.
- b. Squidward y Spongebob siempre bebían te.
- c. Squidward y Spongebob siempre estaban bebiendo te.
- d. Squidward y Spongebob siempre estuvieron bebiendo te.

4a. PAA montar (preterit, no adverb, *to ride*)

[Video: Piglet and Tigger get on a motorcycle at one house, ride to another house, and get off their bikes at the second house.]

- a. Piglet y Tigger montaron en moto de su casa hasta la casa de Pooh.
- b. Piglet y Tigger montaban en moto de su casa hasta la casa de Pooh.
- c. Piglet y Tigger estaban montando en moto de su casa hasta la casa de Pooh.
- d. Piglet y Tigger estuvieron montando en moto de su casa hasta la casa de Pooh.

4b. PAP montar (preterit, adverb cue, *to ride*)

[Video: Ernie and Grover get on a horse at a house, ride to a restaurant, and get off their horses at the restaurant.]

- a. Ayer, Ernie y Grover montaron a caballo de su casa hasta el restaurante.
- b. Ayer, Ernie y Grover montaban a caballo de su casa hasta el restaurante.
- c. Ayer, Ernie y Grover estaban montando a caballo de su casa hasta el restaurante.
- d. Ayer, Ernie y Grover estuvieron montando a caballo de su casa hasta el restaurante.

4c. IAA montar (imperfect, no adverb, *to ride*)

[Video: Pooh and Tigger ride around in circles on horses in the park.]

- a. Pooh y Tigger montaron a caballo.
- b. Pooh y Tigger montaban a caballo.
- c. Pooh y Tigger estaban montando a caballo.
- d. Pooh y Tigger estuvieron montando a caballo.

4d. IAP montar (imperfect, adverb cue, *to ride*)

[Video: Pooh and Tigger ride around in circles on motorcycles in the park.]

- a. Pooh y Tigger siempre montaron en moto.
- b. Pooh y Tigger siempre montaban en moto.
- c. Pooh y Tigger siempre estaban montando en moto.
- d. Pooh y Tigger siempre estuvieron montando en moto.

5a. PAA saltar (preterit, no adverb, *to jump*)

[Video: Spongebob and Patrick jump off a box.]

- a. Spongebob y Patrick saltaron de la caja.
- b. Spongebob y Patrick saltaban de la caja.
- c. Spongebob y Patrick estaban saltando de la caja.
- d. Spongebob y Patrick estuvieron saltando de la caja.

5b. PAP saltar (preterit, adverb cue, *to jump*)

[Video: Pooh and Piglet each jump off a chair]

- a. Ayer, Pooh y Piglet saltaron de las sillas.
- b. Ayer, Pooh y Piglet saltaban de las sillas.
- c. Ayer, Pooh y Piglet estaban saltando de las sillas.
- d. Ayer, Pooh y Piglet estuvieron saltando de las sillas.

5c. IAA saltar (imperfect, no adverb, *to jump*)

[Video: Tigger and Pooh repeatedly jump up and down on a bed and continue to do so when the video ends.]

- a. Tigger y Pooh saltaron en la cama.
- b. Tigger y Pooh saltaban en la cama.
- c. Tigger y Pooh estaban saltando en la cama.
- d. Tigger y Pooh estuvieron saltando en la cama.

5d. IAP saltar (imperfect, adverb cue, *to jump*)

[Video: Tigger and Pooh repeatedly jump up and down on a couch and continue to do so when the video ends.]

- a. Todo el tiempo, Tigger y Pooh saltaron en la sofá.
- b. Todo el tiempo, Tigger y Pooh saltaban en la sofá.
- c. Todo el tiempo, Tigger y Pooh estaban saltando en la sofá.
- d. Todo el tiempo, Tigger y Pooh estuvieron saltando en el sofá.

6a. PAA bailar (preterit, no adverb, *to dance*)

[Video: Ernie and Grover dance to a song. When the song ends, they stop dancing and take a bow.]

- a. Ernie y Grover bailaron.
- b. Ernie y Grover bailaban.
- c. Ernie y Grover estaban bailando.
- d. Ernie y Grover estuvieron bailando.

6b. PAP bailar (preterit, adverb cue, *to dance*)

[Video: Spongebob and Patrick dance to a song. When the song ends, they stop dancing and take a bow.]

- a. Anoche, Spongebob y Patrick bailaron.
- b. Anoche, Spongebob y Patrick bailaban.
- c. Anoche, Spongebob y Patrick estaban bailando.
- d. Anoche, Spongebob y Patrick estuvieron bailando.

6c. IAA bailar (imperfect, no adverb, *to dance*)

[Video: Tigger and Piglet dance to a song and continue dancing when the video ends.]

- a. Tigger y Piglet bailaron.
- b. Tigger y Piglet bailaban.
- c. Tigger y Piglet estaban bailando.
- d. Tigger y Piglet estuvieron bailando.

6d. IAP bailar (imperfect, adverb cue, *to dance*)

[Video: Spongebob and Squidward dance to a song and continue dancing when the video ends.]

- a. Todos los días, Spongebob y Squidward bailaron.
- b. Todos los días, Spongebob y Squidward bailaban.
- c. Todos los días, Spongebob y Squidward estaban bailando.
- d. Todos los días, Spongebob y Squidward estuvieron bailando.

7a. PAA cortar (preterit, no adverb, *to cut*)

[Video: Squidward and Spongebob cut a square out of a piece of paper and hold it up to the camera.]

- a. Squidward y Spongebob cortaron un cuadrado.
- b. Squidward y Spongebob cortaban un cuadrado.
- c. Squidward y Spongebob estaban cortando un cuadrado.
- d. Squidward y Spongebob estuvieron cortando un cuadrado.

7b. PAP cortar (preterit, adverb cue, *to cut*)

[Video: Ernie and Grover cut a square out of a piece of paper and hold it up to the camera.]

- a. Un día, Grover y Ernie cortaron un cuadrado.
- b. Un día, Grover y Ernie cortaban un cuadrado.
- c. Un día, Grover y Ernie estaban cortando un cuadrado.
- d. Un día, Grover y Ernie estuvieron cortando un cuadrado.

7c. IAA cortar (imperfect, no adverb, *to cut*)

[Video: Grover and Ernie repeatedly make cuts in a piece of paper and continue when the video ends.]

- a. Grover y Ernie cortaron papel.
- b. Grover y Ernie cortaban papel.
- c. Grover y Ernie estaban cortando papel.
- d. Grover y Ernie estuvieron cortando papel.

7d. IAP cortar (imperfect, no adverb, *to cut*)

[Video: Squidward and Spongebob repeatedly make cuts in a piece of paper and continue when the video ends.]

- a. Squidward y Spongebob siempre cortaron papel.
- b. Squidward y Spongebob siempre cortaban papel.
- c. Squidward y Spongebob siempre estaban cortando papel.
- d. Squidward y Spongebob siempre estuvieron cortando papel.

8a. PAA nadar (preterit, no adverb, *to swim*)

[Video: Pooh and Tigger swim from one side of the pool to another, then get out.]

- a. Pooh y Tigger nadaron de un lado de la piscina hasta el otro.
- b. Pooh y Tigger nadaban de un lado de la piscina hasta el otro.
- c. Pooh y Tigger estaban nadando de un lado de la piscina hasta el otro.

d. Pooh y Tigger estuvieron nadando de un lado de la piscina hasta el otro.

8b. PAP nadar (preterit, adverb cue, *to swim*)

[Video: Pooh and Tigger swim from one side of the pool to another, then get out.]

- a. Un día, Pooh y Tigger nadaron de un lado de la piscina hasta el otro.
- b. Un día, Pooh y Tigger nadaban de un lado de la piscina hasta el otro.
- c. Un día, Pooh y Tigger estaban nadando de un lado de la piscina hasta el otro.
- d. Un día, Pooh y Tigger estuvieron nadando de un lado de la piscina hasta el otro.

8c. IAA nadar (imperfect, no adverb, *to swim*)

[Video: Pooh and Tigger swim back and forth in the pool. The video ends while they are swimming in the middle of the pool.]

- a. Pooh y Tigger nadaron.
- b. Pooh y Tigger nadaban.
- c. Pooh y Tigger estaban nadando.
- d. Pooh y Tigger estuvieron nadando.

8d. IAP nadar (imperfect, adverb cue, *to swim*)

[Video: Pooh and Tigger swim back and forth in the pool. The video ends while they are swimming in the middle of the pool.]

- a. Todos los días, Pooh y Tigger nadaron.
- b. Todos los días, Pooh y Tigger nadaban.
- c. Todos los días, Pooh y Tigger estaban nadando.
- d. Todos los días, Pooh y Tigger estuvieron nadando.

9a. PAA mezclar (preterit, no adverb, *to mix*)

[Video: Tigger and Pooh each dump a package of hot chocolate mix into two clear bowls of water, mix the chocolate with a spoon, and then hold up their spoons to show they are finished.]

- a. Tigger y Pooh mezclaron chocolate.
- b. Tigger y Pooh mezclaban chocolate.
- c. Tigger y Pooh estaban mezclando chocolate.
- d. Tigger y Pooh estuvieron mezclando chocolate.

9b. PAP mezclar (preterit, adverb cue, *to mix*)

[Video: Tigger and Pooh each dump a package of cake mix into two clear bowls of water, mix the cake mix with a spoon, and then hold up their spoons to show they are finished.]

- a. Un día, Tigger y Pooh mezclaron un pastel.
- b. Un día, Tigger y Pooh mezclaban un pastel.
- c. Un día, Tigger y Pooh estaban mezclando un pastel.
- d. Un día, Tigger y Pooh estuvieron mezclando un pastel.

9c. IAA mezclar (imperfect, no adverb, *to mix*)

[Video: Tigger and Pooh mix a bowl of vegetables and continue to mix when the video ends.]

- a. Tigger y Pooh mezclaron una ensalada.

- b. Tigger y Pooh mezclaban una ensalada.
- c. Tigger y Pooh estaban mezclando una ensalada.
- d. Tigger y Pooh estuvieron mezclando una ensalada.

9d. IAP mezclar (imperfect, adverb cue, *to mix*)

[Video: Tigger and Pooh mix a bowl of fruit and continue to mix when the video ends.]

- a. Todo el tiempo, Tigger y Pooh mezclaron una ensalada de fruta.
- b. Todo el tiempo, Tigger y Pooh mezclaban una ensalada de fruta.
- c. Todo el tiempo, Tigger y Pooh estaban mezclando una ensalada de fruta.
- d. Todo el tiempo, Tigger y Pooh estuvieron mezclando una ensalada de fruta.

10a. PAA cantar (preterit, no adverb, *to sing*)

[Video: A frog and a bug sing a song, then close their mouths when the music ends.]

- a. La rana y el insecto cantaron una canción.
- b. La rana y el insecto cantaban una canción.
- c. La rana y el insecto estaban cantando una canción.
- d. La rana y el insecto estuvieron cantando una canción.

10b. PAP cantar (preterit, adverb cue, *to sing*)

[Video: A shark and a hippo sing a song, then close their mouths when the music ends.]

- a. Ayer, el tiburón y el hipopótamo cantaron una canción.
- b. Ayer, el tiburón y el hipopótamo cantaban una canción.
- c. Ayer, el tiburón y el hipopótamo estaban cantando una canción.
- d. Ayer, el tiburón y el hipopótamo estuvieron cantando una canción.

10c. IAA cantar (imperfect, no adverb, *to sing*)

[Video: A shark and a hippo sing and continue singing when the video ends.]

- a. El tiburón y el hipopótamo cantaron.
- b. El tiburón y el hipopótamo cantaban.
- c. El tiburón y el hipopótamo estaban cantando.
- d. El tiburón y el hipopótamo estuvieron cantando.

10d. IAP cantar (imperfect, adverb cue, *to sing*)

[Video: A frog and a bug sing and continue singing when the video ends.]

- a. La rana y el insecto siempre cantaron.
- b. La rana y el insecto siempre cantaban.
- c. La rana y el insecto siempre estaban cantando.
- d. La rana y el insecto siempre estuvieron cantando.

APPENDIX C

TASK 2 STIMULI

Target Items

(Target responses are in brackets.)

1. Dibujar**Response choices: dibujaron, dibujaban**

A. unbounded

Tigger y Pooh son mejores amigos y suelen pasar mucho tiempo juntos. Durante su niñez, (dibujar) diariamente. [dibujaban]

B. bounded

Tigger y Pooh son mejores amigos y suelen pasar mucho tiempo juntos. El lunes de la semana pasada (dibujar) tres paisajes. [dibujaron]

C. bounded with seeming repetition

Tigger y Pooh son mejores amigos y suelen pasar mucho tiempo juntos. Durante sus años de adolescencia, (dibujar) mucho. [dibujaron]

2. Agarrar**Response choices: agarraron, agarraban**

A. unbounded

Ernie y Grover son mejores amigos y suelen pasar mucho tiempo juntos. Les encantan las galletas. Durante su niñez, (agarrar) galletas de la cocina todos los días. [agarraban]

B. bounded

Ernie y Grover son mejores amigos y suelen pasar mucho tiempo juntos. Les encantan las galletas. El sábado de la semana pasada, (agarrar) diez galletas de la cocina. [agarraron]

C. bounded with seeming repetition

Ernie y Grover son mejores amigos y suelen pasar mucho tiempo juntos. Les encantan las galletas. Durante los 3 meses del verano de 1990, (agarrar) galletas de la cocina. [agarraron]

3. Beber**Response choices: bebieron, bebían**

A. unbounded

Spongebob y Squidward son colegas y suelen pasar mucho tiempo juntos en el restaurante. Durante las primeras semanas del trabajo hace mucho tiempo, (beber) agua diariamente. [bebían]

B. bounded

Spongebob y Squidward son colegas y suelen pasar mucho tiempo juntos en el restaurante. Suelen tener sed. El domingo de la semana pasada, (beber) 2 refrescos. [bebieron]

C. bounded with seeming repetition

Spongebob y Squidward son colegas y suelen pasar mucho tiempo juntos en el restaurante. Suelen tener sed. Durante todos los días de agosto de 2005, (beber) refrescos mucho. [bebieron]

4. Montar

Response choices: montaron, montaban

A. unbounded

Tigger y Pooh son mejores amigos y suelen pasar mucho tiempo juntos. Durante su niñez, (montar) la bicicleta diariamente. [montaban]

B. bounded

Tigger y Pooh son mejores amigos y suelen pasar mucho tiempo juntos. El viernes de la semana pasada, (montar) la bicicleta por 15 minutos. [montaron]

C. bounded with seeming repetition

Tigger y Pooh son mejores amigos y suelen pasar mucho tiempo juntos. Durante los 9 meses del 2002, (montar) mucho la bicicleta. [montaron]

5. Saltar

Response choices: saltaron, saltaban

A. unbounded

Spongebob y Patrick son mejores amigos y suelen pasar mucho tiempo juntos. Durante su niñez, (saltar) en la cama todas las mañanas. [saltaban]

B. bounded

Spongebob y Patrick son mejores amigos y suelen pasar mucho tiempo juntos. El martes de la semana pasada, (saltar) de la cama por 3 horas. [saltaron]

C. bounded with seeming repetition

Spongebob y Patrick son mejores amigos y suelen pasar mucho tiempo juntos. Durante los 9 meses del año escolar de 1999, (saltar) en su sofá mucho. [saltaron]

6. Bailar

Response choices: bailaron, bailaban

A. unbounded

Ernie y Grover son mejores amigos y suelen pasar mucho tiempo juntos. Durante su niñez, (bailar) diariamente. [bailaban]

B. bounded

Ernie y Grover son mejores amigos y suelen pasar mucho tiempo juntos. El sábado de la semana pasada, (bailar) por 30 minutos. [bailaron]

C. bounded with seeming repetition

Ernie y Grover son mejores amigos y suelen pasar mucho tiempo juntos. Durante los 9 meses del año escolar de 1995, siempre (bailar) después de la escuela. [bailaron]

7. Cortar

Response choices: cortaron, cortaban

A. unbounded

Tigger y Pooh son mejores amigos y suelen pasar mucho tiempo juntos. Durante su niñez, (cortar) papel diariamente. [cortaban]

B. bounded

Tigger y Pooh son mejores amigos y suelen pasar mucho tiempo juntos. El domingo del lunes pasado, (cortar) 30 círculos de papel. [cortaron]

C. bounded with seeming repetition

Tigger y Pooh son mejores amigos y suelen pasar mucho tiempo juntos. Durante los tres meses del verano del 2004, (cortar) mucho papel. [cortaron]

8. Nadar

Response choices: nadaron, nadaban

A. unbounded

Tigger y Pooh son mejores amigos y suelen pasar mucho tiempo juntos. Durante su niñez, (nadar) todos los días. [nadaban]

B. bounded

Tigger y Pooh son mejores amigos y suelen pasar mucho tiempo juntos. El domingo de la semana pasada, (nadar) por una hora. [nadaron]

C. bounded with seeming repetition

Tigger y Pooh son mejores amigos y suelen pasar mucho tiempo juntos. Durante los 31 días de julio, (nadar) mucho. [nadaron]

9. Mezclar

Response choices: mezclaron, mezclaban

A. unbounded

Ernie y Grover son mejores amigos y suelen pasar mucho tiempo juntos. Durante su niñez, (mezclar) una ensalada de fruta todos los días. [mezclaban]

B. bounded

Ernie y Grover son mejores amigos y suelen pasar mucho tiempo juntos. El sábado de la semana pasada, (mezclar) dos tazas de chocolate con leche. [mezclaron]

C. bounded with seeming repetition

Ernie y Grover son mejores amigos y suelen pasar mucho tiempo juntos. Durante los tres meses del invierno de 2007, (mezclar) mucho chocolate. [mezclaron]

10. Cantar

Response choices: cantaron, cantaban

A. unbounded

Spongebob y Patrick son mejores amigos y suelen pasar mucho tiempo juntos. Durante su niñez, (cantar) diariamente. [cantaban]

B. bounded

Spongebob y Patrick son mejores amigos y suelen pasar mucho tiempo juntos. El viernes de la semana pasada, (cantar) por 30 minutos. [cantaron]

C. bounded with seeming repetition

Spongebob y Patrick son mejores amigos y suelen pasar mucho tiempo juntos. Durante los 14 días de las vacaciones, (cantar) mucho. [cantaron]

Filler Items

(Target responses are in brackets.)

1. Dibujar

Response choices: dibujan, dibujen

A. bias present indicative

Tigger y Pooh son mejores amigos y suelen pasar mucho tiempo juntos. Les gusta hacer dibujos. Es cierto que Tigger y Pooh (dibujar) mucho. [dibujan]

B. bias present subjunctive

Tigger y Pooh son mejores amigos y les gusta hacer dibujos. A Piglet le encantan los cuadros. Piglet quiere que Tigger y Pooh (dibujar) cuadros para su casa. [dibujen]

C. unclear

Tigger y Pooh son mejores amigos y suelen pasar mucho tiempo juntos. Les gusta hacer dibujos y jugar en el parque. No es cierto que (dibujar) diariamente. [variable]

2. Agarrar

Response choices: agarran, agarren

A. bias present indicative

Ernie y Grover son mejores amigos y suelen pasar mucho tiempo juntos. Les encantan las galletas. Es verdad que (agarrar) las galletas de la cocina todos los días. [agarran]

B. bias present subjunctive

Ernie y Grover son mejores amigos y suelen pasar mucho tiempo juntos. Les encanta comer las galletas de la cocina. Dudo que (agarrar) la fruta de la cocina. [agarren]

C. unclear

Ernie y Grover son mejores amigos y suelen pasar mucho tiempo juntos. Les encantan las galletas, pero no creo que las (agarrar) de la cocina. [variable]

3. Beber

Response choices: beben, beban

a. bias present indicative

Spongebob y Squidward son mejores amigos y suelen pasar mucho tiempo juntos en el verano. Cuando hace calor, les gusta beber refrescos. Es cierto que (beber) refrescos todos los días. [beben]

b. bias present subjunctive

A Spongebob y Squidward les encanta el café, pero no lo toman mucho. No es necesario que (beber) café todos los días. [beban]

c. unclear

A Spongebob y Squidward les encanta la cafeína. Toman mucho café, pero es probable que (beber) té. [variable]

4. Montar

Response choices: montan, monten

a. bias present indicative

Tigger y Pooh tienen bicicletas. Les gusta pasar mucho tiempo en el parque. Es verdad que (montar) la bicicleta en el parque. (montan)

b. bias present subjunctive

A Tigger y a Pooh les gusta montar la bicicleta pero es peligroso hacerlo en la calle. Es necesario que (montar) su bicicleta en el parque. (monten)

c. unclear

Tigger y Pooh tienen motos. Les gusta ir a la escuela juntos, pero no es probable que (montar) la moto para ir a la escuela. [variable]

5. Saltar

Response choices: saltan, salten

a. bias present indicative

Spongebob y Patrick son mejores amigos y juegan juntos. Les gusta saltar en la cama. Es verdad que (saltar) en la cama después de la escuela. [saltan]

b. bias present subjunctive

Spongebob y Patrick pasan mucho tiempo juntos. Les gusta saltar, pero su mamá no permite que (saltar) en el sofá. [salten]

c. unclear

A Spongebob y Patrick les gusta saltar de las sillas, pero su mamá piensa que es peligroso. No creo que (saltar) de las sillas cuando la mamá está en la casa. [variable]

6. Bailar

Response choices: bailan, bailen

a. bias present indicative

Ernie y Grover son mejores amigos y suelen pasar mucho tiempo juntos. Les encanta bailar. Creo que (bailar) todos los días. [bailan]

b. bias present subjunctive

Ernie y Grover son mejores amigos y les encanta escuchar música. Sin embargo, no es verdad que (bailar) cuando la escuchan. [bailen]

c. unclear

Ernie y Grover son mejores amigos y les encanta bailar, pero no creo que (bailar) todos los fines de semana. [variable]

7. Cortar

Response choices: cortan, corten

a. bias present indicative

A Tigger y Pooh les gusta cortar papel. Tienen mucho papel. Es cierto que (cortar) papel todos los días. [cortan]

b. bias present subjunctive

A Tigger y Pooh les encanta cortar estrellas. Tienen que cortar 10 estrellas. Es necesario que las (cortar) hoy en la tarde. [corten]

c. unclear

A Tigger y Pooh les encanta cortar papel. Tienen que cortar mucho papel, pero no sé si lo (cortar) todos los días. [variable]

8. Nadar

Response choices: nadan, naden

a. bias present indicative

A Tigger y a Pooh les encanta nadar. Es cierto que (nadar) cuando hace calor. [nadan]

b. bias present subjunctive

A Tigger y a Pooh les encanta nadar. Tienen una piscina, pero su mamá no permite que (nadar) cuando llueve. [naden]

c. unclear

A Tigger y a Pooh les encanta nadar. Quieren nadar todos los días, pero no creo que (nadar) cuando llueve. [variable]

9. Mezclar**Response choices: mezclan, mezclen**

a. bias present indicative

A Ernie y Grover les encanta tomar chocolate. Lo toman todas las mañanas. Es cierto que (mezclar) el chocolate con leche antes de tomarlo. [mezclar]

b. bias present subjunctive

A Ernie y Grover les gusta comer una ensalada de fruta todos los días. Antes de comerla, es necesario que (mezclar) la fruta. [mezclen]

c. unclear

A Ernie y a Grover les gusta comer una ensalada todos los días. Creo que van a un restaurante para una ensalada allí. No creo que (mezclar) las verduras para la ensalada en casa. [variable]

10. Cantar**Response choices: cantan, canten**

a. bias present indicative

A Spongebob y Patrick les encanta cantar. Quieren cantar mucho. Es cierto que (cantar) todos los días. [cantan]

b. bias present subjunctive

A Spongebob y Patrick les encanta cantar, pero están ocupados y no tienen mucho tiempo libre. Dudo que (cantar) todos los días. [canten]

c. unclear

A Spongebob y a Patrick les gusta cantar, pero no tienen mucho tiempo libre. No sé si (cantar) todos los fines de semana. [variable]

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