Salience and Acceptability in Spanish Manner verbs:
A Preliminary View[1]

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ABSTRACT

It has been long noted that Spanish does not license the use of manner verbs when describing telic motion events, particularly when they involve boundary crossing (Aske, 1989; Slobin & Hoiting, 1994). The only exception to this constraint seems to be punctual acts, especially vertical boundary crossing situations, such as *tirarse a la piscina* (lit. 'throw oneself into the pool') (Naigles et al., 1998). Slobin (2004, 2006) has pointed out the low salience of manner in Spanish; the Spanish manner verb lexicon is not as extensive and frequently used as that of *high manner salient* languages like English, and as a result Spanish speakers are thought to attend less to manner than English speakers. In this study, we ask whether Spanish speakers would accept a manner verb in a boundary-crossing event, when manner of motion is made highly salient, either by *contextual* or by *cultural* means. Our research, though still preliminary, suggests both contextual manner salience and cultural manner salience increase the acceptability of Spanish manner verbs in boundary-crossing situations.

KEYWORDS: motion verbs; manner salience; boundary-crossing.

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1. INTRODUCTION

Motion is central to human experience. Even the most basic aspects of human life involve some small rudimentary movements (e.g. breathing, eating, blinking). But the kind of motion that concerns us here is the one found in motion events which entail some sort of displacement or movement along a path: e.g. *Mary ran towards the house.* The linguistic expression of this type of motion event, which also pervades most of our daily activities, has attracted a great deal of attention in recent years (e.g. Bowerman & Choi, 2001; Iawata, 2002; Naigles & Terrazas, 1998; Naigles et al., 1998; Slobin, 2000, 2004, 2006; Talmy, 1985, 2000).

The study of motion has in fact revealed interesting typological differences in the way languages encode motion events. Talmy's (1975, 1983, 1985, 2000) pioneering work distinguishes two different types of languages according to the way the different elements of a motion scene are mapped onto linguistic elements. Talmy (1975, 1983, 1985) originally established five basic elements which take part in the motion schema: FIGURE (the thing that moves), GROUND (the thing with respect to which the Figure moves), MOTION (the movement itself), PATH (the direction or trajectory of motion) and MANNER (how motion is carried out). By studying how different languages express these elements, he distinguished two different groups of languages: 'satellite-framed' languages and 'verb-framed' languages (Talmy, 1991, 2000). In satellite-framed languages like English or Russian, descriptions of motion events tend to use verbs which conflate MANNER and MOTION, while PATH is expressed via a 'satellite' (e.g. usually a preposition). In contrast, in verb-framed languages such as Spanish or Turkish, motion events tend to be described using verbs which incorporate PATH, while MANNER, if expressed, is done by means of adjuncts (adverbials, gerundive forms, etc).

These preferences for either path or manner verbs has been further investigated by a number of authors who have reported that, while Talmy's typology is not absolute, there are some restrictions on the use of manner verbs in Spanish. For example, Aske (1989) argued that Spanish does not license the use of manner verbs when describing telic motion events, which predicate the Figure's end state (e.g. **Bailó a casa vs. Llegó a casa*).

Looking further into the Spanish restriction against manner verbs for telic motion events, Slobin & Hoiting (1994) found that Spanish manner verbs are disallowed for events involving 'boundary-crossing'. When some type of 'boundary' is crossed in a motion event, Spanish does not license the use of a manner-conflating verb and speakers must use a path-conflating one (e.g. **La niña corrió hasta dentro del jardín* –lit. 'the girl ran into the garden– *vs. La niña entró corriendo en el jardín* –lit. 'the girl went running into the garden). On the other hand, when no boundary is crossed, a manner-of-motion verb can be used. This is the case of the example *La niña corrió hasta el jardín* [lit. 'the girl ran up to the garden'], which describes a telic event, but uses a manner-conflating verb (*correr* –'run') without boundary-crossing.

Naigles *et al* (1998) reported a further specification on the Spanish use of manner verbs. In their study, they found that Spanish speakers predominantly used path verbs for boundary-crossing events – but only when the boundary traversed was horizontal. In vertical boundary crossing situations (e.g. *tirarse a la piscina* –'throw oneself into the pool'), Spanish

speakers would tend to use a manner-conflating verb. Their data revealed that Spanish licenses the use of manner verbs in punctual events, in which the path is shortened and the boundary-crossing itself is outside the locus of the actor's control, particularly with vertical paths.

More recently, Slobin (2004) has revisited Talmy's typology, suggesting cross-linguistic differences in the salience of manner. According to Slobin (2004: 237), speakers are more likely to focus on manner if they use a language with high codability in this domain, as evidenced by the presence of an easily accessible slot for providing information about manner of motion. As a result of its high codability, the semantic component of manner in these languages is more accessible and salient. From this point of view, languages can be placed alongside a continuum which ranges from 'high-manner salience' to 'low-manner salience'. Spanish and English would belong to opposite ends of Slobin's cline of manner salience with Spanish being a low-manner-salient language and English a high-manner-salient one. Accordingly, Spanish has less and lower frequency manner of motion verbs and Spanish speakers are thought to attend less automatically to manner, whereas English has more and higher frequency manner of motion verbs and English speakers are thought to attend more automatically to manner.

In this paper, we attempt to bring together these two lines of research on the lexicalization of motion events. Considering that Spanish, which is a low-manner-salient language, does not license the use of manner verbs in boundary-crossing situations, the questions are: could low salience of manner account for the unacceptability of manner verbs in boundary-crossing situations in Spanish? If so, could an increase in the salience of manner increase the acceptability of Spanish manner verbs in boundary-crossing situations?

II. OUR STUDY

In this study, we ask whether Spanish speakers would accept a manner verb in a boundary-crossing event when manner of motion is highly salient. Our prediction was that Spanish speakers will be more likely to accept manner verb sentences when manner of motion is made highly salient, either by *contextual* or by *cultural* means. To this purpose, we carried out two experiments: in Experiment 1, the salience of manner was manipulated by contextual means; in Experiment 2, we examined speakers' responses to culturally salient manners of motion.

The logic of the experiments was as follows: we showed native Spanish and English speakers a number of video clips of non-punctual boundary crossing events using salient, lexicalized manners (e.g., *andar* –'walk', *gatear* –'crawl', *saltar* –'hop/skip'). Then, participants viewed a photograph of one of the actors and were asked to verify the truth of a sentence containing the manner verb and describing the boundary-crossing event (e.g. Spanish version *La mujer saltó hasta dentro de la habitación*; English version *The woman jumped into the room*). The critical manipulation was that participants were randomly assigned to one of two conditions: High Manner Salience (HMS) and Low Manner Salience (LMS). HMS participants saw three video clips per trial, whereas LMS participants saw only one clip per trial. Our reasoning was that manner of motion would be made salient through contrast:

while all of the videos depicted the same path, they each depicted a different manner. By showing more video clips, manner was made contextually salient to our Spanish participants.

II.1. Experiment 1: Contextual Salience of Manner

In Experiment 1 our prediction was that when Spanish speakers were exposed to a context in which manner of motion is highly salient, that is, when viewing several figures moving into a room in different ways, they would be more likely to accept manner verb sentences which describe the events. We expected this greater acceptability of the manner-verb sentences to be reflected in faster response times in the HMS condition than in the LMS condition.

As a baseline, we ran the same experiment with speakers of a high-manner-salient language, namely English. Because manner is already highly salient for English speakers, we predicted no difference in reaction times across the two conditions (furthermore, English manner verbs are always acceptable in boundary crossing events).

Participants

A total of 87 Spanish undergraduate students from the University of Murcia (Spain) and 115 English undergraduate students from the University of Louisiana at Lafayette volunteered or were given course credit for their participation in this study.

Out of the 87 Spanish students, 46 took part in the HMS condition and 41 in the LMS condition. As for the English students, 58 took part in the HMS condition and 57 in the LMS condition.

Materials

Our materials consisted of a total of 6 video clips grouped into 2 sets or trials depicting the same path (*down a hallway and into a room*) but different manners of motion:

-       Set 1: walking, skipping, jogging

-       Set 2: hopping, crawling, twirling

The setting was identical for all six clips (a university hall). Each video clip showed a different actor. Within each set of clips, a target clip was selected, and a photograph of the actor in the target clip was shown at test along with a sentence describing the boundary-crossing event. For the ease of illustration, see below:

English: *The woman jumped into the next room*
Spanish: *La mujer saltó hasta dentro de la habitación*

O True   O False

While in English the description of the path was somehow more detailed (*'into the next room'*), the description of the same path in Spanish was longer and sounded too elaborate, so we decided to simplify it for the sake of clarity and stylistic naturalness.

Procedure
Participants were randomly assigned to one of two conditions: High Manner Salience (HMS) and Low Manner Salience (LMS). For both conditions, participants were given 3 trials: 2 trials for Experiment 1 and 1 trial for Experiment 2. For each trial, HMS participants saw 3 videos, whereas LMS saw only 1 (the target). We were limited to this small number of trials in order to avoid making manner salient to the LMS participants.

After viewing each (set of) video(s), all participants viewed the photo of the actor in the target clip along with a sentence which was either a true or false description of the event; the false sentences employed an inappropriate manner verb. All participants were told to indicate whether or not the sentence was true as quickly and accurately as possible, and their response time was measured. Note that the photo and the sentence were identical for the two conditions.

To forestall carry over effects, the order of video clips and trials were randomized across subjects. In addition, for each trial, the true or false sentence was randomly selected for presentation by the computer.

The experiment was run in a quiet room. No time limit was given to accomplish the task.

Design
Manner Salience Condition (HMS or LMS) was a between-subject factor. Our dependent variable was response time, defined as the time in seconds which participants took to answer whether a sentence was true or false.

Our experimental subjects were the Spanish participants. English participants were used as a baseline or control.

Results

On average, English participants answered faster in the LMS condition (*M* = 0 3.12 s) than in the HMS condition (*M* = 4.73s), *t*(111) = 5.07, *p* < .0001 (Figure 1), which suggests that the LMS condition, with its lower memory load, presented speakers with an easier task.

In contrast, Spanish participants responded equally quickly in the two conditions, *t*(81) = .35, *p* = .73 (Figure 2), suggesting that the increased salience of manner in the HMS condition counteracted the increased difficulty, cancelling out its effect on reaction time.
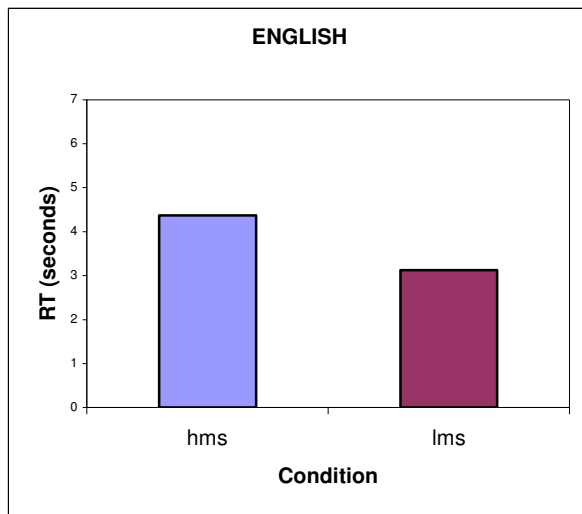
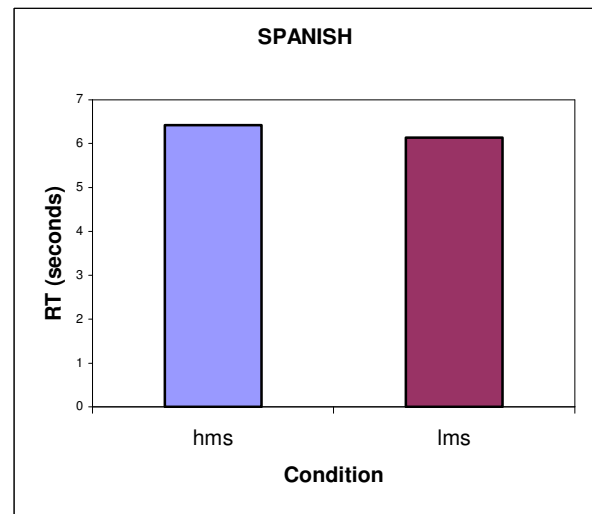Figure 1. English reaction times for HMS and LMS conditions

Figure 2. Spanish reaction times for HMS and LMS conditions

Further analysis in terms of accuracy was also carried out to assess whether the task was equally difficult for both language groups, as the equal reaction times for the two conditions for Spanish speakers could be due to consciously slowing their response in order to improve accuracy in a difficult task. In this case, we might expect high accuracy – indeed, equally high for the two conditions – from the Spanish speakers.

The analysis revealed that speakers of both languages responded more accurately in the LMS condition than in the HMS condition, contrary to what would be expected if the equal reaction times in the two conditions for Spanish speakers had resulted from a slowing of responses in order to improve accuracy (note that the task of verifying sentences itself is not a difficult one). On average, English speakers were more accurate in the LMS (*M* = .97) than in the HMS (*M* = .90), *t*(113) = 2.17, *p* < .05 (Figure 3). Spanish speakers also answered more accurately in the LMS condition (*M* = .89) than in the HMS condition (*M* = .78), but this yielded a marginal significance, *t*(84) = 1.80, *p* = .07 (Figure 4).
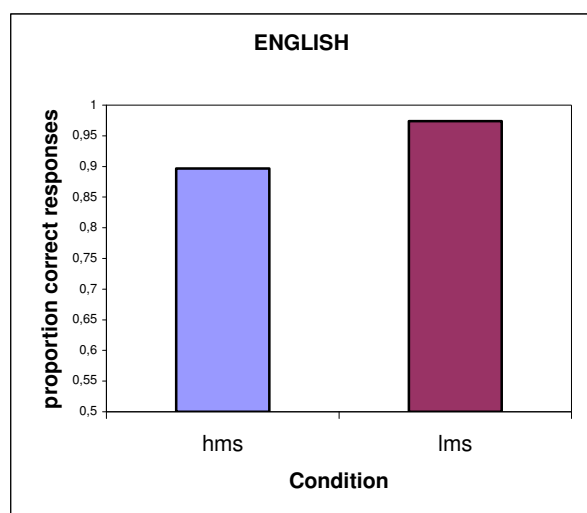
Figure 3. Proportion of correct responses in English

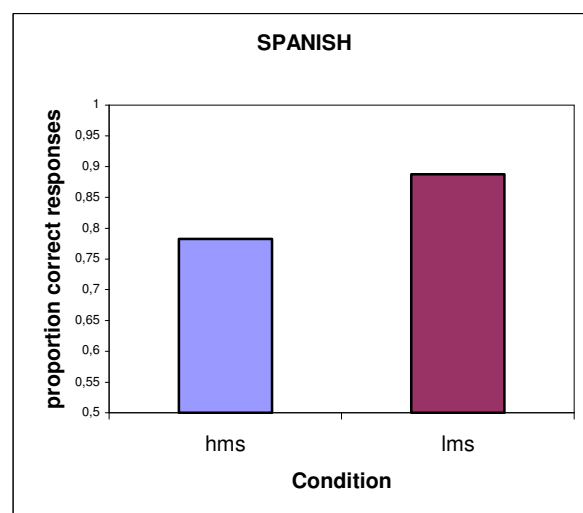
Figure 4. Proportions of correct responses in Spanish

Discussion

Our prediction was that when Spanish speakers were exposed to a context in which manner of motion is highly salient, they would be more likely to accept manner verb sentences to describe motion events, even in situations where those verbs would normally be unacceptable. To test this, we asked speakers of English (a high-manner-salient language) and Spanish (a low-manner-salient language) to watch videos of boundary-crossing events and verify whether a manner-verb sentence presented a true description of the event.

We observed a difference in response times in English, indicating that the memory load of the HMS condition was sufficiently higher than in the LMS condition to impair English speakers' ability to efficiently verify the sentences, leading to slowed reaction times. This difference did not appear in Spanish speakers' reaction times. Rather, the increased salience of manner in the HMS condition counteracted the increased difficulty of the task, leading to a lack of difference in response times for the two conditions in Spanish. This lack of difference in reaction times in Spanish cannot be explained by the possibility that the task was particularly difficult for Spanish speakers, as both English and Spanish speakers were shown to be able to accurately access the verbs tested, with about the same effect on this ability of having a harder task. As such, we preliminarily conclude that the increase in salience of HMS helped the Spanish speakers to access the verbs more efficiently, thereby counteracting the increased memory load in the HMS condition. As expected, no effect of this salience was found in English, in which manner is already highly salient.

II.2. Experiment 2: Cultural Salience of Manner

In our second experiment we reasoned that *culturally salient* manners of motion would be easily accessible for Spanish speakers, much like manner (in general) is easily accessible for speakers of high-manner-salient languages (i.e., English). As a result, we predicted that

Spanish speakers presented with culturally salient manners of motion would react like speakers of high-manner-salient languages, with the effect that the manipulation of contextual salience would not counteract the task difficulty of the HMS condition (as with the English speakers in Experiment 1). This would be reflected in Spanish speakers' faster responses in the LMS condition than in the HMS condition.

Participants
The participants were the same as those in Experiment 1

Materials
Our materials consisted of 3 video clips which, as in Experiment 1, depicted a single path (*down a hallway and into a room*) but different manners of motion:

> zapatear (*shoe-tapping*), taconear (*heel-tapping*), chancletear (*flip-flop-tapping*)

The setting for the Experiment 2 videos was different from the one used in Experiment 1: the video clips were recorded in a house hall and depicted manners of motion deeply rooted in Spanish culture[2]. We should point out that these manners of motion are not lexicalized in English motion verbs. As in Experiment 1, a target clip was selected, and a photograph of the actor in the target clip was shown at test along with a sentence describing the boundary-crossing event:

> English: *The woman danced into the next room*
> Spanish: *La mujer zapateó hasta dentro de la habitación*

Note that we used the verb 'dance' instead of 'shoe-tap' in English as we wanted to use a lexicalised manner of motion.

Procedure
The procedure was the same as in Experiment 1.

Results
As in Experiment 1, English-speaking participants were faster in LMS ($M = 3.36$ s) than in HMS ($M = 5.99$ s), $t(89) = 6.64$, $p < .0001$ (Figure 5). However, in contrast to the results of Experiment 1 (and in line with our predictions), we found the same pattern in Spanish, although the significance was marginal: LMS ($M = 4.95$), HMS ($M = 6.85$), $t(70) = 1.82$, $p = .07$ (Figure 6).
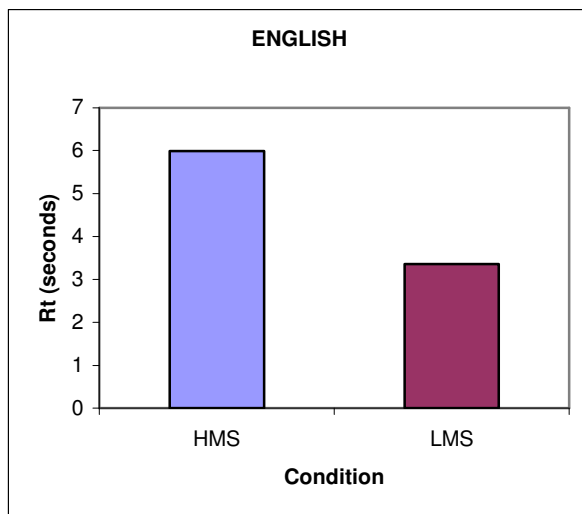
Figure 5. English reaction times for HMS and LMS
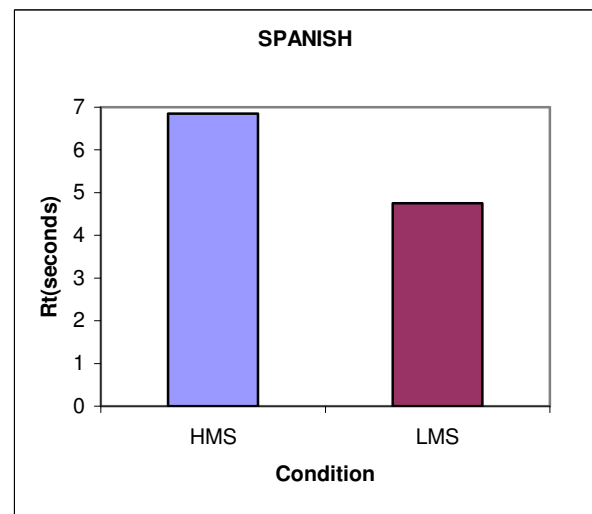conditions

Figure 6. Spanish reaction times for HMS and LMS
conditions

Furthermore, as in Experiment 1, we checked whether this task was as difficult for Spanish speakers as for English speakers. In the case of English, accuracy was much lower for the HMS group ($M = .66$) than for the LMS group ($M = .93$), $t(113) = 3.82$, $p < .0005$, mirroring the results of Experiment 1 (Figure 7). In contrast, and in line with the increased cultural salience of the manners depicted for speakers of Spanish, there was no accuracy difference in Spanish: HMS ($M = .85$), LMS ($M = .83$), $t(84) = .28$, $p = .79$ (Figure 8).
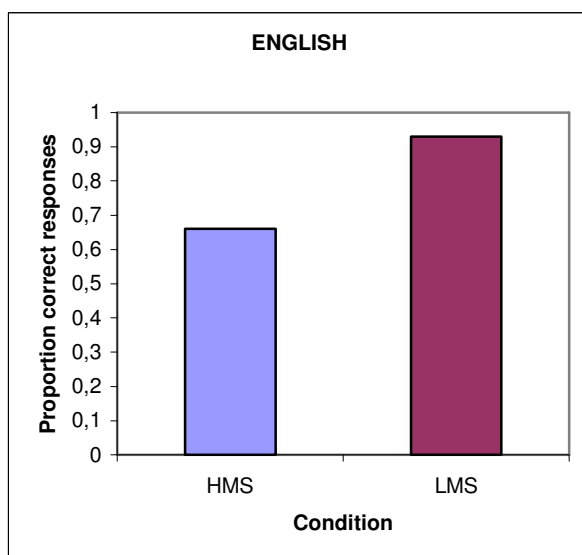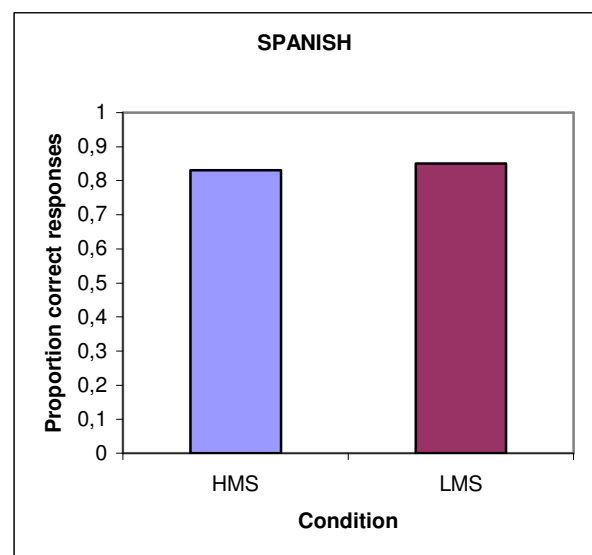

Figure 7. Proportion of correct responses in English

Figure 8. Proportion of correct responses in Spanish

Discussion

On the whole, our results indicate that for culturally salient manners of motion, Spanish speakers behaved like speakers of high-manner-salient languages. English speakers responded faster in the LMS condition (that is, in the easier task) than in the HMS (as they also did in Experiment 1). Similarly, Spanish speakers also responded faster in the LMS condition than in the HMS, which suggests that for culturally salient manners of motion, Spanish speakers access manner verbs similarly to English.

Unlike in Experiment 1, the increase in salience of manner in the HMS condition did not add to the already high salience of manner (present in both LMS and HMS). As a result, Spanish speakers experienced longer reaction times with increased memory load (in the HMS condition), as did their English-speaking counterparts.

Further evidence regarding high salience of the manners depicted in these videos can be found in the accuracy data. Although English speakers responded more accurately in the LMS condition than in the HMS, as they had in Experiment 1, Spanish speakers were equally accurate in the two conditions.

III. CONCLUSION

We started this paper outlining the centrality of motion to human experience. Motion is certainly lexicalized in every language, although there is now evidence of differences in the way different languages codify motion. One such difference which has been discussed in the literature is a difference in attention to manner of motion when describing motion events. It has been noted that Spanish places restrictions on the use of manner verbs to describe boundary-crossing events (Aske, 1989; Naigles et al., 1998; Slobin & Hoiting, 1994), and, further, that manner of motion may be less salient to Spanish speakers (Slobin 2004, 2006). The current paper sought to connect these two observations. Our evidence preliminarily suggests that a non-linguistic increase in the salience of manner can increase the acceptability of Spanish manner verbs in boundary-crossing events, although clearly further work will be required to strengthen this conclusion.

The fact that an increase in the salience of manner (either by contextual or cultural means) did not affect the performance of English speakers but did have an impact on that of Spanish participants supports that the notion that boundary-crossing on its own is not enough to explain the constraints on the use of manner verbs in Spanish. The finding that salience of manner played a role in the acceptability of manner verbs in Spanish suggests that the relative prominence of manner information may be an additional factor that contributes to Spanish speakers' acceptance of manner verbs with punctual actions.

English and Spanish undergraduate students for taking part in the study as well as to our actors and actresses.

NOTES:

[1] This study is part of an on-going research project on the expression of motion in English and Spanish.

[2]See Cifuentes-Férez (in this volume) for a brief discussion on culturally salient manners of motion in Spanish.

REFERENCES

Aske, J. (1989). Path predicates in English and Spanish: a closer look. *Proceedings of the Berkeley Linguistics Society* 15, 1-14.

Bowerman, M. & Choi, S. (2001). Shaping meanings for language: universal and language specific in the acquisition of spatial semantic categories. In M. Bowerman & S. Levinson (Eds), *Language acquisition and conceptual development* (pp. 475-511) Cambridge: CUP.

Iwata, S. (2002). Does MANNER count or not? Manner-of-motion verbs revisited. *Linguistics,* 40:1, 61-110.

Naigles, L. et al. (1998). Speaking of Motion: Verb use in English and Spanish. *Language and Cognitive Processes*, 13: 5, 521-549.

Naigles, L. R., & Terrazas, P. (1998). Motion-verb generalizations in English and Spanish: Influences of language and syntax. *Psychological Science*, 9, 363-369.

Slobin, D. I. (1996a). Two ways to travel: Verbs of motion in English and Spanish. In M. Shibatani & S. A. Thompson (Eds.), *Essays in semantics* (pp. 195-317). Oxford: Oxford University Press.

Slobin, D. I. (1996b). From 'thought and language' to 'thinking for speaking'. In J. J. Gumperz & S. C. Levinson (Eds.), *Rethinking Linguistic Relativity* (pp. 195-217). Cambridge, Cambridge University Press.

Slobin, D. I. (2000). Verbalized events: A dynamic approach to linguistic relativity and determinism. In S. Niemeier & R. Dirven (Eds.), *Evidence for linguistic relativity* (pp. 107-138). Berlin: Mouton de Gruyter.

Slobin, D. I. (2004). The many ways to search for a frog: Linguistic typology and the expression of motion events. In S. Strömqvist & L. Verhoeven (Eds.), *Relating events in narrative: Vol. 2: Typological and contextual perspectives* (pp. 219-257).

Slobin, D. I. (2006). *Typology and usage: Explorations of motion events across languages*. Paper given at the V International Conference of the Spanish Cognitive Linguistics Association, Universidad de Murcia, Spain, October.

Slobin, D. I., & Hoiting, N. (1994). Reference to movement in spoken and signed language: Typological considerations. In *Proceedings of the Twentieth Annual Meeting of the Berkeley Linguistic Society* (pp. 487-505). Berkeley: Berkeley Linguistics Society.

Talmy, L. (1975). Semantics and syntax of motion. In J. P. Kimbal (Ed.), *Syntax and semantics (vol. 4).* New York: Academic Press.

Talmy, L. (1983). How Language Structures Space. In H. L. Pick, Jr. & L. P. Acredolo (Eds.), *Spatial Orientation: Theory, Research and Application* (pp. 225-282). NY: Plenum Press.

Talmy, L. (1996). Fictive Motion in Language and 'Ception'. In P. Bloom, M. A. Peterson, L. Nadel, & M. F. Garrett (Eds.), *Language and Space* (pp. 211-276). Cambridge (MA): MIT Press.

Talmy, L. (2000). *Toward a Cognitive Semantics. Vol I&II.* Cambridge (Mass): MIT Press.