US-China Foreign Language, ISSN 1539-8080
October 2013, Vol. 11, No. 10, 738-750

Motion Events in L2 Acquisition: The Boundary-Crossing Constraint in English and Spanish

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L2 (second language) learners tend not to be aware of the differences in Motion events across languages. Slobin's (1996) TFSH (thinking for speaking hypothesis) deals with the effects of language on the kind of thinking that takes place in the process of using a language. Languages vary in the way Motion events are verbalized. The boundary-crossing constraint refers to whether a Path does or does not involve the crossing of a spatial boundary. Following the S-framed (satellite-framed) and V-framed (verb-framed) languages typology and the TFSH, an analysis of the boundary-crossing constraint is carried out with a group of L1 (first language) Spanish-L2 English learners in order to determine whether Spanish L1 speakers show a tendency not to allow conflation of Motion and Manner in the main verb in English as an L2 in boundary-crossing situations, as this is the preferred pattern in their L1 and to non-boundary-crossing situations to a minor extent, since this structure is possible in both languages. The results show that there is a preference not to use conflation of Motion and Manner in the main verb both in boundary and non-boundary-crossing situations.

Keywords: Motion, boundary-crossing, cross-linguistic influence, TFS (thinking for speaking), acquisition

Introduction

The typological classification of languages proposed by Talmy (1985, 1991, 2000) into S-framed (satellite-framed) and V-framed (verb-framed) establishes that the semantic components of Motion events are expressed in different ways depending on the lexicalization patterns of the different languages. In S-framed languages Motion and a co-event, generally Manner or Cause of Motion is expressed in the verb while Path is expressed in a satellite. In V-framed languages, the verb expresses Motion and the Path while the co-event is expressed in a separate constituent, typically an adverbial or gerund. Spanish is characterized as a V-language and English as a S-language. This implies differences in the expression of Path and Manner in both languages. The "thinking for speaking hypothesis" (henceforth TFSH) (Slobin, 1996) has proved to be an effective framework to analyze Motion events across languages. In the present paper, we analyze whether Spanish first language (henceforth L1) speakers show a tendency not to allow conflation of Motion and Manner in the main verb in English as a second language (henceforth L2) in boundary-crossing situations, and whether conflation of Motion and Manner is also not allowed in non-boundary-crossing situations to a minor extent. The former is the typical structure in the L1 while the latter is possible both in the L1 and L2. This study aims at determining

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whether Spanish-English translation students are aware of the different lexicalization patterns in both languages, and therefore produce the target-like translation of sentences containing boundary and non-boundary-crossing situations or whether they follow the L1 pattern of thought, thus violating the boundary-crossing constraint. The following sections develop the theoretical and empirical aspects of the study carried out with a group of 14 subjects who study English as an L2 for a degree in Translation Studies in a Spanish University.

Talmy's Typology

Motion indicates the movement of an entity with respect to another entity. It is generally divided into four components: Figure, Ground, Path, and Motion, and two external co-events: Manner and Cause. Talmy's (2000) typology of V-framed and S-framed languages characterizes lexicalization patterns. It deals with the expression of Path of Motion. In V-framed languages, Path is expressed in the main verb (such as "enter" or "exit") while in S-framed languages Path is typically expressed by a preposition or prepositional phrase (as in "go in" or "into the cave"). This distinction has been the basis for many studies on Motion, although as Slobin (2004) acknowledged that "the typology alone cannot account for discourse structures that define individual languages" (p. 2). English belongs to the group of S-framed languages as it typically indicates the Path or trajectory of the Motion in verb particles (prepositions, prepositional phrases) whereas Manner is expressed in the main verb. Spanish is a V-framed language where Path is expressed in the main verb and Manner appears in a separate constituent. A classical example by Talmy (2000, pp. 49-51) illustrated this issue. In English, Manner is indicated in the verb while Path appears in the particle "into" while in Spanish Manner is indicated in the gerund and Path is expressed in the verb (see Example 1):

Example (1) La botella entró en la cueva flotando

The bottle MOVED-in to the cave (floating)

The bottle floated into the cave (Talmy, 2000, pp. 49-51).

The Expression of Motion in TFS (Thinking for Speaking) in the L1

Evidence for studies of TFS comes mainly from research on the different languages of the world. The domain of Motion in these studies has been analyzed both in children and adults (Berman & Slobin, 1994, Slobin, 1996, 2004). Slobin (1996) replaced this idea of thought and language by the notion of thinking and speaking, focusing on the processes involved at the moment of verbalization. This author considers that language filters experiences into verbalized events and the verbalized event is constructed in the process of speaking. In the analysis of TFS in the L1, three main issues can be considered, as Cadierno (2012) pointed out: (1) focus on different aspects of Motion events; (2) the expression of Manner of Motion; and (3) speech and gesture.

As regards the first, Slobin (2004) analyzed Manner of Motion, Path of Motion, and Grounds (landmarks). S-framed languages tend to use more detailed description of Path in the clause and a greater specification of Manner. In S-framed languages, a common structure is to use a Manner verb and a Path satellite; on the other hand, they tend to break up events in smaller components, i.e., they segment an event into Path components, as in the following example where we have a Manner verb and Path expressed in three components: out, through, and into (see Example 2):

Example (2) The frog crawled <u>out</u> of the jar and <u>through</u> the window <u>into</u> the woods (Slobin, 2004, p. 238).

However, V-framed languages tend to use separate Path verbs, as in Example (3):

Example (3) The frog exited the jar, passed through the window, and entered the woods (Slobin, 2004, p. 338).

Besides, V-framed languages tend to leave locative states to be inferred whereas S-framed languages leave trajectories to be inferred, as happens in Spanish and English:

> This is a systematic difference between the two languages, English tends to assert trajectories, leaving resultant locative states to be inferred; Spanish tends to assert locations and directions, leaving trajectories to be inferred. This systematic difference has effects on the grammar of discourse. (Slobin, 1996, p. 84)

With reference to Manner, differences can be found regarding the way S-framed and V-framed languages express Manner of Motion. S-framed languages have a greater variety of Manner of Motion verbs (Slobin, 1996). Speakers of S-framed languages generally provide more varied Manner of Motion information in the description of Motion events than speakers of V-framed languages. For example, in the "owl scene" of the picture story "Frog: Where Are You", narrators of V-framed languages use a single Path verb to describe the appearance of the owl, such as in Spanish "Sale un buho" (Exits an owl) (Slobin, 2004, p. 224). However, in S-framed languages, such as English, the combination Manner verb and Path satellite is preferred: "An owl popped out". As Slobin (2004) stated: "Perhaps the most salient characteristic of V-framed languages is the preference to mark a *change of state* with a verb, rather than by some other device" (p. 226).

Finally, gestural depictions of Manner have been studied by McNeill and Duncan (2000), and Özyürek and Kita (1999), among others, through the analysis of co-speech gestures in narratives. These studies focus on the gestures that may appear in the expression of Path and Manner. The results indicated that in three V-framed languages (Spanish, Turkish, and Japanese) gestures often occur depicting only Path or only Manner and Path-Manner conflations. Apparently, these speakers see Manner as a separate element that can augment directed Motion (as cited in Slobin, 2004) while S-language speakers see Manner as "an inherent component of directed motion" (p. 235).

The Expression of Motion in TFS in the L2

Slobin's TFSH has been applied to the study of L2 acquisition, to be more precise, the fact of learning a new language implies learning a new way of TFS, which has been analyzed by Stam (1998) and Cadierno (2004, 2012). When this is applied to the analysis of Motion events, as Cadierno (2012) stated:

> This involves (a) learning which particular details of a motion event must be attended to in the input and expressed in the L2 (e.g., online attention to trajectories vs. static descriptions, and varying online attention to manner of motion); and (b) learning how the semantic components of a motion event (e.g., path and manner) are mapped into L2 surface forms. (p. 3)

Research into TFS and L2 acquisition has focused on "whether and to what extent adult language learners are able to learn the appropriate L2 TFS patterns and whether and to what extent this learning is influenced by the specific verbalized orientation of their mother tongue" (Cadierno, 2012, p. 4). From the different research studies carried out so far such as Özyürek (2002), von Stutterheim (2003), Ekiert (2010), Hasko (2010), or Han and Cadierno (2010), recent developments in this area can be divided into three main points, the development of TFS patterns in the course of time, L1 influence of gesture patterns in the L2 and the development of L2 TFS patterns in the expression of grammatical distinctions which are not coded in the L1. These three issues are briefly explained below.

(1) Adult learners can develop appropriate L2 TFS patterns in the course of time, yet not all aspects of Motion are equally developed, for example, the expression of Path and Manner. The studies by Cadierno (2004), and Cadierno and Ruiz (2006) with intermediate and advanced learners with L1 Danish and L2 Spanish have provided evidence that the L2 learners they analyzed could adopt the L2 TFS patterns in some aspects, for example, Manner of Motion in L2 Spanish. However, when it came to Path descriptions, L1 TFS patterns could be observed, Path appeared to be more elaborated than it really is in Spanish.

(2) The L1 influences gesture patterns, as has been shown by studies on speech and gesture in the L2. Research by Özyürek (2002), Kellerman and van Hoof (2003), or Brown and Gullberg (2008) indicated that L2-based TFS patterns are found in speech and gesture, for example, in the case of Turkish speakers learning English as a L2, the expression of Path and Manner in separate clauses was accompanied by separate Path and Manner gestures.

(3) Developing L2 TFS patterns seems to be difficult when dealing with the expression of grammatical distinctions that are not coded in the L1. For example, Hasko (2010) analyzed the case of (non) unidirectionality encoding by American learners of Russian. The author found out that advanced language learners show difficulties when they must learn to encode semantic distinctions that do not exist in their L1 but that are obligatory in the L2. Apparently, this can happen in languages which are typologically similar or different; intra-typologic differences have also been found (as cited in Ibarretxe-Antuñano, 2004).

Motion in Spanish and English: The Boundary-Crossing Constraint

Cross-linguistic differences can be observed in the way the different languages of the world express Motion events. This lead Talmy (1985, 1991, 2000) to identify two main typological patterns: S-framed languages where there is a conflation of Motion and Manner in the verb while Path is expressed by means of a satellite. This includes Chinese as well as all branches of the Indo-European family except Romance languages and V-framed languages where the main verb conflates Motion and Path while Manner is expressed separately by resorting to an adverbial or a gerundive. Spanish, together with the rest of Romance languages, Semitic and Polynesian languages, belongs to the V-framed typology whereas English belongs to the S-framed one.

Speakers of S-framed languages, such as English, as Berman and Slobin (1994) indicated in their study about language acquisition and development, tend to use a greater variety of Motion verbs, a high degree of elaboration in the description of Path is observed, event conflation is used more often and they tend to specify the details of trajectories and provide more Manner information. Talmy's typology is based on the different lexicalization patterns that can happen in the ways speakers of different languages map the semantic components of a Motion event. Nevertheless, as stated by Aske (1989), Slobin and Hoiting (1994), and Slobin (1996), there is an issue which needs to be considered in order to explain the different lexicalization patterns of Manner of Motion: the boundary-crossing constraint, a notion that focuses on whether Motion implies the crossing of a conceptual boundary (Motion into/out of). When the Path involves crossing a boundary, Manner verbs tend not to be used in V-framed languages. If no boundary-crossing takes place, the use of a Manner verb as the main verb in a Path expression is allowed. In a later study, Slobin (2004, p. 7) pointed out that verbs which indicate instantaneous, punctual acts, such as "plunge", constitute an exception and they can occur with boundary-crossing in V-framed languages. In S-framed languages such as English, Motion and Manner are conflated in the verb. In English, this conflation can happen in boundary and

non-boundary-crossing situations. V-framed languages such as Spanish allow conflation only in non-boundary-crossing situations. As Slobin (2004) stated:

> Thus it is possible, across a range of V-languages, to say the equivalent of "fly to/ from the tree" but not "fly out of the hole". Perhaps the most salient characteristic of V-languages is the preference to mark a change of state with a verb, rather than by some other device. With regard to motion events, changes of state are boundary-crossing events: enter, exit, cross. (pp. 226-227)

Consequently, in Spanish, Manner of Motion is mapped onto the verb when there is no boundary-crossing, as in "El niño corrió hasta la casa" (The boy ran up to the house), meaning that the boy did not actually enter the house. However, when boundary-crossing is involved, Manner of Motion is expressed in a separate constituent "El niño entró en la casa corriendo" (The boy entered the house running). This form-meaning mapping of S and V-framed languages leads to S-framed languages containing more Manner of Motion verbs than V-framed languages (as cited in Slobin, 2000). Therefore, Manner information is included more often in S-framed languages and finer Manner distinctions are made.

Cadierno and Lund (2004) in a study with Danish and Spanish speakers indicated, following Aske (1989) and Slobin and Hoiting (1994), that Manner of Motion in languages such as Danish can be encoded onto the verb both in boundary and non-boundary-crossing situations. In a later study, Cadierno and Ruiz (2006) analyzed the expression of the semantic components of Path and Manner by Danish learners of Spanish, Italian learners of Spanish and Spanish native speakers. The authors expected the Danish learners to produce expressions where the semantic component of Manner would map onto the verb both in boundary and non-boundary-crossing situations. The results indicated that the Danish learners of Spanish violated the boundary-crossing constraint in the L2. To the best of our knowledge, no study has analyzed the boundary-crossing constraint in the acquisition of English by Spanish speakers using a sentence translation task as the research instrument, since most studies use narratives, picture description, or film description tasks. A sentence translation task will help us determine whether the students are aware and understand the L1 lexicalization patterns that do not apply in the L2. This awareness is especially relevant in the case of future translators.

Hypotheses

As Spanish is a V-language and English is a S-language (Talmy, 1985, 1991, 2000), differences in the expression of Motion events are expected, besides the boundary-crossing constraint (Aske, 1989; Slobin & Hoiting, 1994) seems to affect the crossing of a conceptual boundary. Spanish L2 learners generally show difficulties in becoming aware of the distinction that is made in the L2 between boundary and non-boundary-crossing situations. Therefore, the differences in the way speakers of English and Spanish verbalize Motion events influences L2 production. We aim at analyzing whether theses L2 learners are aware of the different lexicalization patterns used in the L1 and the L2. In this paper, it is hypothesized that the L1 TFS patterns will influence the production of the L2 as regards the expression of spatial boundaries in both languages. It is expected that Spanish speakers will prefer the L1 lexicalization pattern which does not allow conflation of Motion and Manner in boundary-crossing situations and translate it to the L2. Moreover, it is expected that since conflation of Motion and Manner in the main verb in non-boundary-crossing situations is allowed in both languages, L1 Spanish speakers will prefer to use the native language structure and will not allow conflation of

Motion and Manner in non-boundary-crossing situations. Therefore, the following research hypotheses are addressed: (1) Spanish L1 speakers will show a tendency not to allow conflation of Motion and Manner in the main verb in their translations in English as a L2 in boundary-crossing situations; and (2) Spanish L1 speakers will show a tendency not to allow conflation Motion and Manner in the main verb in non-boundary-crossing situations in the translations of English as a L2, but to a minor extent since the target language allows this structure, but it is not the preferred structure in Spanish.

The Study

Subjects

Fourteen native speakers of Spanish took part in the study. Their level is C1 according to the European Framework of Reference for Languages. They had all passed a C1 English test, which certifies their language level. There were 20 students in the class, but those who had not passed this test were not included in the study since their level of English was lower than the level exhibited by the students who had passed the test, therefore, a total of 14 subjects participated in the study.

Materials

For the purpose of this study, 10 sentences were translated by the subjects from Spanish into English, half of them contain Motion verbs which do not imply the crossing of a boundary, the other half contain boundary-crossing constraint situations. The purpose of these sentences was to analyze how Spanish L1 speakers dealt with the expression of Motion in English, i.e., whether the L1 lexicalization pattern would affect their performance in the L2 and whether they would conflate Motion and Manner only in non-boundary-crossing situations as it is done in their L1. It could be argued that the translation from Spanish into English may influence the subjects to produce the L1 TFS patterns as the source language can influence the target language in the translation. Nevertheless, the subjects in the study are studying the final year of their degree in translation and are used to translating texts and sentences both from Spanish into English, and viceversa. They are well aware of the structural differences between both languages and familiar with the phenomenon of language transfer. This fact makes them ideal for the analysis of L1 TFS patterns, besides, they have been trained in translation techniques between both languages.

As mentioned above, five sentences containing boundary-crossing situations and five examples showing non-boundary-crossing situations were included. All the boundary-crossings sentences in Spanish show a boundary-crossing situation and a Manner adverbial or gerund at the end, which constitutes the typical lexicalization pattern in their L1, i.e., non-manner verb and Manner in a satellite. The non-boundary-crossing examples show non-manner verbs where there is no crossing of a spatial boundary (see Examples 4-13).

Boundary-crossing situations:

Example (4) Entró en la cocina de un salto: He jumped into the kitchen.

Example (5) Salimos de la piscina nadando: We swam out of the swimming pool.

Example (6) Se metio en la oficina corriendo: He ran into the office.

Example (7) Entraron en casa arrastrándose: They crawled into the house.

Example (8) Salió de casa corriendo precipitadamente: He dashed out of the house.

Non-boundary-crossing situations:

Example (9) Se apartaron del perro: They moved away from the dog.

Example (10) Avanzamos hacia el enemigo: We moved towards the enemy.

Example (11) Al ratón le perseguía un gato: The mouse was being chased by a cat.

Example (12) El barco partió de Vigo: The boat left Vigo.

Example (13) Levantó la silla del suelo: He lifted the chair from the floor.

Procedures

This task was carried out during class time. The task was completed in 30 minutes. In order not to bias the data, boundary and non-boundary-crossing situations were mixed, i.e., the first sentence contains a boundary-crossing situation, the second contains a non-boundary one and so on and so forth.

Data Analysis

The examples were divided into four types (boundary-crossing with conflation of Motion and Manner, boundary-crossing without conflation of Motion and Manner, non-boundary-crossing with conflation of Motion and Manner, and finally, non-motion verbs). These four types of examples are not based on the structure in the source language but on the translations produced by the subjects. Some of these sentences, such as "We moved towards the enemy" do not express Manner in the source language, therefore, it is not expected that they will produce Manner in the target language. The purpose of our analysis is to determine whether Spanish L1 speakers show a tendency not to allow conflation of Motion and Manner in the main verb in English as a L2 in boundary-crossing situations, as this is the preferred pattern in their L1 and to non-boundary-crossing situations to a minor extent, since this structure is possible in both languages, irrespective of whether the example in the L1 does or does not express Manner. The classification of the examples provided the following typology:

(1) Boundary-crossing without conflation of Motion and Manner: This category included examples where the subjects do not conflate Motion and Manner information in the main verb, which is the typical structure in Spanish. We find instances such as "He came out from home by running" (Subject 1) or "He left the swimming pool by swimming" (Subject 8). In both examples, Motion is expressed in the non-manner verb (come, leave) and Manner in a separate constituent (by running, by swimming) in boundary-crossing situations.

(2) Boundary-crossing with conflation of Motion and Manner: This includes the examples produced by the subjects where there is conflation of Motion and Manner in the verb in boundary-crossing situations. This structure is allowed in English. Examples such as "He jumped into the kitchen" (Subject 1) or "He ran into the office" (Subject 5) belong to this category. The former shows a boundary-crossing situation where Motion and Manner are conflated in the verb. The same applies to the second example, although in this sentence the verb is not target-like, since "ran" would be used in the L2. It must be said that in the classification of the examples attention was paid to verb conflation in boundary or non-boundary-crossing situations irrespective of whether the subject produced a target or a non-target-like sentence.

(3) Non-boundary-crossing with conflation of Motion and Manner: This category is devoted to those examples where there is conflation of Motion and Manner in the main verb in non-boundary-crossing situations. This structure is allowed in L1 Spanish and in L2 English, both Manner and non-manner verbs can be used. The following example shows this pattern: "He ran away from the dog" (Subject 9) according to Slobin, Spanish allows conflation of Motion and Manner in the main verb only in non-boundary-crossing situations. In other words, Manner of Motion is mapped onto the verb only in non-boundary-crossing situations.

(4) Non-boundary-crossing without conflation of Motion and Manner: This includes those sentences produced by the subjects in non-boundary-crossing situations where there is no conflation of Motion and Manner. This structure is also possible in English and Spanish, both Manner and non-manner verbs can be used. Instances such as "We advanced towards the enemy" (Subject 8) or "We come towards the enemy" (Subject 9) constitute instances which involve non-boundary-crossing situations where Motion and Manner are not conflated in the verb.

(5) Non-motion verbs: This category includes the cases where the subjects did not use any Motion verb, therefore it was not possible to assign the translation to any of the categories explained above. This includes the following examples: "The boat did its start from Vigo" (Subject 4), "The boat started from Vigo" (Subject 10), "He gave up the chair from the floor" (Subject 1), "He got up the chair from the floor" (Subject 10), "He up the chair from the ground" (Subject 13), and "He got apart from the dog" (Subject 2).

Results and Discussion

The data analysis gave the following results: boundary-crossing with conflation of Motion and Manner, 17 (14%); boundary-crossing without conflation of Motion and Manner, 32 (86%); non-boundary-crossing with conflation of Motion and Manner, 14 (19%); non-boundary-crossing without conflation of Motion and Manner 31 (43%); finally, non-motion verbs 4 (29%). These percentages are represented in Figure 1.

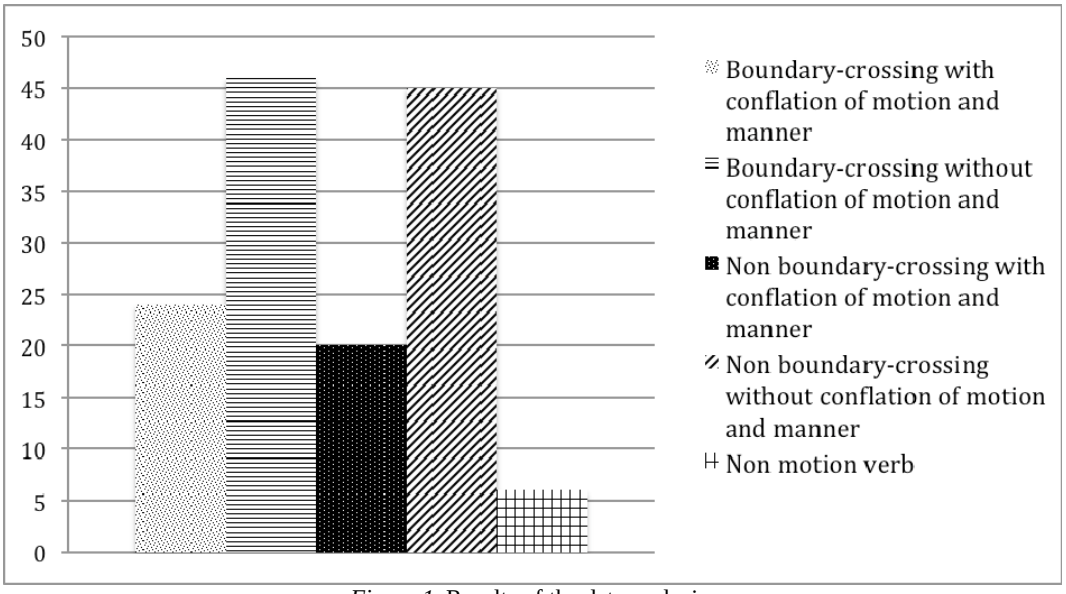

Figure 1. Results of the data analysis.

A likelihood ratio test was carried out for the statistical processing of the data. Firstly, a *p*-value of much less than 0.001 was obtained, so the equality of probabilities is rejected. Secondly, boundary-crossing without conflation of Motion and Manner and non-boundary-crossing without conflation of Motion and Manner gave similar results, and a *p*-value of 0.833 confirms that the data do not contradict the fact that the two probabilities can be considered equal. Thirdly, a *p*-value of 0.008 indicates that boundary-crossing with conflation of Motion and Manner occurs much less frequently than boundary-crossing without conflation of Motion and Manner. A fourth point refers to the test between boundary-crossing without conflation of Motion and Manner and non-boundary-crossing with conflation of Motion and Manner, the *p*-value is 0.001, similar to the previous cases, therefore, boundary-crossing without conflation of Motion and Manner is the preferred option. Finally, the

comparison between the category boundary-crossing without conflation of Motion and Manner and that of non-Motion verbs gives a *p*-value of much less than 0.001, which shows that the preferred option is the category boundary-crossing without conflation of Motion and Manner.

Individual variation was also found in the data. Subjects 13, 11, and 3 produce more translations involving conflation of Motion and Manner, while Subjects 1, 2, and 14 produce no examples of this category. In fact, most subjects produce examples of boundary-crossing without conflation of Motion and Manner. Most of the subjects also produce examples of non-boundary-crossing without conflation of Motion and Manner. In spite of individual variation, the translations provided by the subjects show a clear preference for those categories which do not involve conflation of Motion and Manner in the main verb. The preferred lexicalization pattern is the one provided by their L1 where Manner is indicated in a separate constituent so there is no conflation of Motion and Manner in the main verb.

The second category the most used corresponds to non-boundary-crossing situations where there is no conflation of Motion and Manner. As opposed to the first category, this one can be used both in English and Spanish, the same happens to the category corresponding to non-boundary-crossing situations with conflation of Motion and Manner; yet the subjects show a clear preference not to indicate Motion and Manner in the main verb, both in boundary and non-boundary-crossing situations.

We will now focus on each of the four categories in the typology produced by the subjects in the study, which has been explained in the "Data Analysis" section:

(1) Boundary-crossing without conflation of Motion and Manner.

The examples produced by the subjects in the case no conflation of Motion and Manner in boundary-crossing situations confirm our first hypothesis, i.e., Spanish L1 speakers will show a tendency not to allow conflation of Motion and Manner in the main verb in English as an L2 in boundary-crossing situations, as this is the preferred pattern in their L1. It must be recalled that all the sentences produced by the subjects were analyzed irrespective of whether they resulted in target-like of non-target like sentences. There is a general tendency to use it, in fact, Subjects 1, 2, 9, 12, and 14 use this category to a high extent.

Example (14) Subject 1: left the swimming pool by swimming

Example (15) Subject 2: got out of the swimming pool swimming

Example (16) Subject 6: went out of the pool swimming

Example (17) Subject 8: got out of the pool by swimming

Example (18) Subject 9: leave swimming of the pool

Example (19) Subject 10: left the swimming pool swimming

Example (20) Subject 11: went out swimming from the swimming pool

Example (21) Subject 14: went out from the swimming pool swimming

As can be seen in the above examples, Examples (14)-(21) involve the crossing of a boundary yet the subjects do not use the expected target-like construction of conflation of Motion and Manner in the verb. Instead, they indicate Motion in the verb and Manner in a separate constituent, the gerundive "swimming". This lexicalization pattern of non-manner "verb + Manner" in a satellite is typical of V-framed languages, so the subjects are using their L1 lexicalization pattern. This shows that English as an L2 Manner of Motion can be indicated in a separate constituent by speakers of Spanish as a L1, although it results in a non-target-like

sentence in the L2. Their L1 lexicalization pattern prevails and the subjects show a tendency not to allow conflation of Motion and Manner in boundary-crossing situations when it is allowed in the L2. It seems that the lexicalization pattern of their L1 influences their TFS pattern when they verbalize in the L2, which supports Slobin's (1996) hypothesis.

(2) Boundary-crossing with conflation of Motion and Manner.

Expressions of boundary-crossing with conflation of Motion and Manner can be observed in Examples (22)-(27):

Example (22) Subject 6: swam out of the swimming pool

Example (23) Subject 3: got out of the swimming pool

Example (24) Subject 4: swam out of the swimming pool

Example (25) Subject 5: swam out of the pool

Example (26) Subject 11: swam out of the swimming pool

Example (27) Subject 13: swam out of the swimming pool

There is a general tendency not to use this category, in fact, Subjects 1, 2, 9, 12, and 14 do not use it at all. Only Subject 11 resorts to it in all the sentences he produced, however, this is not related to his proficiency level in the L2, as all the subjects passed the same test and indicated the same level. In the examples above, except the one provided by Subject 3, the informants produce the target-like verb "swim out" which indicates the crossing of a boundary and they resort to the L2 lexicalization pattern Manner "verb + Path" expression; this is the preferred structure in S-framed languages, therefore it constitutes the correct lexicalization pattern in English. As regards Subject 3, he resorts to the verb "get out" which is a less precise expression to indicate "swimming" yet the subject manages to indicate movement away from, i.e., there is indication of boundary-crossing although the translation provided does not coincide with the original sentence being translated.

(3) Non-boundary-crossing with conflation of Motion and Manner.

Non-boundary-crossing situations with conflation of Motion and Manner are allowed both in Spanish and English. There is a general tendency not to use this category, in fact, Subject 1 does not use it at all. As can be observed in Examples (28)-(38), the subjects use both Manner and non-manner verbs. In all these cases there is no boundary-crossing so their L1 lexicalization pattern is compatible with the pattern in the L2. Although most of the subjects do not use the L2 sentence "He lifted the chair from the floor", they try to approximate the L2 form by using verbs with a similar meaning such as elevate, put up, or raise. It is important to point out that the synonyms they resort to constitute verbs which indicate non-boundary-crossing, i.e., there is no reference to a Path involving the crossing of a boundary. In these examples, the subjects respect the L2 structure and use prepositions (from, up, and of) which do not code boundary-crossing. Subjects 1, 5, 6, and 14 use this category to a higher extent, but it seems to be a general tendency, rather than an individual one.

Example (28) Subject 2: got up the chair from the floor

Example (29) Subject 3: picked the chair up from the floor

Example (30) Subject 4: put up the chair from the floor

Example (31) Subject 5: elevated the chair from the floor

Example (32) Subject 6: left the chair out floor

Example (33) Subject 7: raised the chair up from the ground

Example (34) Subject 8: lifted the chair from the ground

Example (35) Subject 9: catches the chair of the floor and puts it in the air

Example (36) Subject 11: lifted the chair from the ground

Example (37) Subject 12: rose the chair from the floor

Example (38) Subject 14: arose the chair from the floor

(4) Non-boundary-crossing without conflation of Motion and Manner.

Non-boundary-crossing situations without conflation of Motion and Manner are also allowed in both languages. Although Subjects 1, 5, 6, 11, and 14 use it more than the others, this category is used by all subjects. This seems to be a general tendency. As happened in the category mentioned above, this is a category where the subjects do not have a different structure in their L1 and L2, therefore, they use prepositions which do not show the crossing of a boundary (to, of, apart, away) as they would do in their L1 (Se escapó del perro). Our second hypothesis is partly confirmed, no conflation of Motion and Manner also happens in non-boundary-crossing situations, yet the frequency of occurrence is higher than expected, especially in the example "moved away from the dog" and in the example "the mouse was being chased by a cat". An interesting point arises in these examples, as this structure is allowed in both languages, native speakers and non-native speakers can use both Manner and Path verbs. It seems that since this structure is also allowed in Spanish, the subjects also follow the L1. It would be useful to carry out a further study comparing the performance of native and non-native speakers in cases of no conflation of Motion and Manner in non-boundary-crossing situations in order to see if these results are replicated (see Examples 39-44).

Example (39) Subject 1: scape to the dog

Example (40) Subject 5: left the dog

Example (41) Subject 6: came out of the dog

Example (42) Subject 8: stayed apart from the dog

Example (43) Subject 9: stayed away from the dog

Example (44) Subject 14: left the dog

Conclusions

Manner of Motion in a V-language, such as Spanish is mapped onto the main verb when there is no boundary-crossing, as Slobin (2004) mentioned, however, when there is boundary-crossing, a preference is observed to show Manner of Motion in a separate constituent, a gerund in most cases. The translations provided by the subjects in this study show that when the Spanish subjects translate the sentences provided into English, the lexicalization pattern non-manner "verb + Manner" in a separate constituent is the preferred structure in boundary-crossing situations. In other words, they use their L1 lexicalization pattern in the L2. The subjects do not seem to be aware of the different lexicalization patterns between the L1 and the L2, however, this is a relevant distinction since they are going to become translator, in fact, they are doing their final year of translation studies.

Slobin's boundary-crossing constraint applies not only to the L1 but also to the L2. Our study also supports the results obtained in Cadierno (2004). Moreover, the tendency not to code Manner and Motion in the main verb can also be observed in non-boundary-crossing situations. It seems to be the case that transfer from Spanish as an L1 constrains the conflation of Motion and Manner in the main verb both in boundary and non-boundary-crossing

situations. However, we cannot forget that this study is limited to the analysis of the translations provided by 14 subjects. Further studies with a larger number of subjects comparing boundary and non-boundary-crossing situations should be carried out. As indicated in the study, it would also be interesting to undertake a further study comparing the performance of native and non-native speakers in cases of no conflation of Motion and Manner in non-boundary-crossing situations. Finally, our results indicate that in the Spanish speakers' production in English, the spatial domain of a S-framed language, English, and a V-framed language, Spanish, differs in the way Motion events are coded. They also support the more general idea that typologically different languages verbalize Motion events in different ways depending on their native languages. Some implications for the teaching of translation can be derived from this study. Firstly, students should be made aware of the difference that exists between both languages in the expression of Motion events. Teachers could design specific tasks where students are faced with the real differences in the use of Motion events between both languages. Secondly, although the subjects in this study have passed their C1 test in English, the proficiency level they exhibit in some of these sentences does not correspond to C1 level as stated by the European Framework of Reference for languages and they show superficial book learning rather than proficient L2 use. It seems that a deep analysis of the assessment system used for testing the proficiency of English as an L2 at University level is needed and it appears that if learners are not taught the prevalence of the S-framed typology in English, they will follow their L1 TFS pattern even if they have been trained in translation techniques and in the effect of transfer from the L1. On the other hand, one might wonder whether the use of textbooks rather than authentic material is the best option for students at this level, but this implication falls beyond the purpose of this study, although it is relevant for the teaching of Motion verbs in L2 acquisition.

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