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THE CROSSLINGUISTIC EFFECT IN MOTION EVENT AND JUDGEMENT OF TYPOLOGICALLY DIFFERENT CONCEPTUALIZATION PATTERNS BY TURKISH PROSPECTIVE TEACHERS AND NATIVE SPEAKERS OF ENGLISH

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Abstract:
This study aimed to reveal the bidirectional crosslinguistic effect between L1 and L2 in description of motion event, which has been a basis of comparison of different types of languages for many decades since Talmy (1991; 2000) proposed his two-way typology of languages as v-framed and s-framed, and Slobin (1996) showed the relation between language and thought with thinking for speaking hypothesis. Turkish prospective language teachers of English described motion events in L1 and L2 in the present study. Boundary-crossing motion events were used as stimuli since this kind of motion event has been found to be eliciting the difference between language types more than other types of motion event. We have also looked for the language mode effect between spoken and written English because written language descriptions were found to be more similar with native speaker conceptualization patterns (Hohenstein et al., 2006; Isler, 2014). To add a new perspective to the current field, the frequent conceptualization patterns in these L2 descriptions were judged by the same participants and native speakers of English. In fact, it was purposed to find out the receptive knowledge of Turkish participants in addition to productive one and to what extent English native speakers find the most frequent patterns natural or intelligible.

Keywords: motion event, boundary-crossing path, crosslinguistic effect, conceptualization patterns, language transfer

1. Introduction

Countless studies used motion event to reveal how language speakers show conceptual and linguistic variation in understanding the reality (Jarvis & Pavlenko, 2008; Bylund et al., 2015). It has been shown that the components of motion event that are taken into

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account for description can be different in different types of languages. Even though the same components are used by different language speakers, the lexicalization patterns might show difference according to Talmy's two-way typology (1991; 2000). This typology suggests that languages are categorized as s-framed (satellite-framed) or v-framed (verb-framed). These divergences between different types may unsurprisingly cause difficulties in learning a language typologically different from the L1 of speakers because Slobin's thinking for speaking hypothesis (Slobin, 1996; 2004) claims that language speakers develop automatic conceptualization mechanism which drives them to think in specific patterns (Cadierno, 2010; Hohenstein, Eisenberg & Naigles, 2006; Hendriks & Hickmann; 2015; Larranaga, Traffers-Daller, Tidball & Ortega, 2012). In addition, some studies investigating bidirectional crosslinguistic effect revealed that not only might the descriptions in L2 be influenced by the L1 but also the descriptions in L1 of speakers might change under the effect of L2 conceptualization patterns (Brown & Gullberg, 2010; 2011; 2013; Brown, 2015). On the other side, language learners may use more target-like patterns, especially choosing appropriate verb types, if they learn a language within the same category of their L1 (Römer et al., 2014).

However, it has been found that some types of motion event, as explained below, may not stimulate these typologically different lexicalization patterns because many languages, regardless of their typology, have similar kinds of linguistic structures to conceptualize the components of motion event (Slobin, 2004). Therefore, speakers of different types of languages may show similarities in constructing language patterns if the motion event type does not force them to do the contrary. The effect of thinking for speaking on foreign or second language was found to be stronger for specific types of events, namely boundary-crossing motions as explained below (Ozcaliskan, 2009).

In this study, it was aimed to show to what extent language learners can acquire the typologically different linguistic patterns in their foreign language for boundary-crossing motion events that have to be described in different ways in their native (Turkish v-framed) and foreign (English as s-framed) languages. PTTE (Prospective Turkish Teachers of English) were chosen as participants for the description task since, to our knowledge, the studies in motion event have never focused on the prospective language teachers for boundary-crossing motions. Apart from the productive conceptualizations of learners, none of the studies in literature shed light on how English native speakers might judge the idiosyncratic or typologically different conceptualization patterns used by learners with v-framed L1 (PTTE in this study) for this type of motions. In addition, it is not known whether PTTE would agree with s-framed conceptualization patterns of English, or still stand by the v-framed or Turkish-like patterns in English when they encounter with them. Therefore, ENS (English native speakers) and PTTE were asked to judge different conceptualization patterns for different types of boundary-crossing motions in this study.

2. Literature Review

2.1. Motion Event

Talmy (1991; 2000) described motion event as displacement or stationariness of an object in space and it is expressed universally by all human beings. The motion type investigated in this study is displacement of entities, called as translational motion by Talmy. The components of motion event are figure (one object moving), ground (the object in relation to which figure is moving), path (the trajectory followed by the figure), and motion as activating process (changing location). In addition to these, there are two additional elements: manner and cause of motion as to provide more semantic information about motion. "*Manner refers to factors such as motor pattern, rate, and degree of effort of the figure's movement"* such as running, swimming, climbing or rolling (Ozcaliskan & Slobin, 2003, p. 10) while cause encodes that the application of a force by another entity (Agent) induces the motion, for instance; kicking or pushing something (Navarro & Nicoladis, 2005). The motions in which a figure moves voluntarily are called as voluntary motions while the motions including a cause by an agent is termed caused motions. The sentences (1) and (2) are the examples of each motion respectively;

(1) The man ran to the building.
Figure motion-manner path ground
(2) The man pushed the box to the building.
Agent motion-cause figure path ground

Different lexicalizations are developed to explain motion across different languages. Accordingly, languages are divided into two categories relating to how they conflate these components because they express path and manner in different syntactic frames. According to Talmy (1991), s-framed languages mostly encode manner in main verb and path in adverbials (satellites in his term) which includes prepositions and verb particles associated with the main verb showing the trajectory of the figure (e.g., out, down, or into). On the other hand, v-framed languages mainly encode path in main verbs and generally prefer to leave manner out in motion expressions. If the manner is salient and needs to be encoded, it is generally encoded in adverbial subordinate constituents such as converbs, gerunds or another clause. Two examples show these two framings: (3) as an s-framed English sentence and (4) as a v-framed Turkish sentence;

(3) The ball rolls down.
(4) Top yuvarlanarak aşağı iniyor.
'While rotating, the ball descends'

As seen in the examples, the English motion expression (3) includes manner in the main verb (roll) and path in the adverbial (down) while path is encoded in the main verb

(descend) and manner in a subordinate adverbial constituent (while rotating) in Turkish (4).

2.2. Slobin's Thinking for Speaking Hypothesis

Slobin (2004) did not find it true to divide languages into categories because s-framed language speakers do not always express manner in motion events. For instance, it was pointed out by Slobin (2004) and Pavlenko and Volynsky (2015) that English, Dutch and German speakers do not encode manner as much as Russian speakers, and they show tendency to use deictic verbs such as *go* or *come*. Likewise, some researchers (Hendriks & Hickmann, 2015; Ibarratxe-Antunano, 2009; Slobin, 2004) stated that v-framed language speakers might express path outside the main verbs thanks to some morpho-syntactic structures such as nominal case suffixes, some adverbial phrases, or pre/postpositional phrases. Therefore, it seems to be that the main difference between v- and s-framed languages is how or to what extent they encode manner (Cadierno, 2008; Slobin, 2004). For this reason, Slobin (2004) claimed for a cline for manner salience to put languages on rather than separating them into two or three categories. According to this salience hypothesis, speakers of some languages focus on manner more than others because of the codability effect which means that some linguistic factors make encoding manner easier (Slobin, 2004). These factors are:

- "Expression by a finite verb rather than a nonfinite verb,
- Expression by a high frequency rather than a low frequency lexical item,
- Expression by a single item rather than a phrase or clause"

(Slobin, 2004, p. 16)

Due to the opportunities of a great number of manner verbs (both first-tier and second-tier), and encoding manner in finite verbs within a single clause, children learning an s-framed language as their native tongue pay more attention to manner expression compared with children learning a v-framed language. Berman and Slobin (1995, p. 624) generalized that "*if a linguistic form is highly accessible, its functional development may be accelerated."* By this way, they develop a conceptual space for manner and pass it to new generations (Slobin, 2004). Even children at the age of 3 show the same patterns with monolingual adults in their L1 (Allen et al., 2007).

From this point of view, thinking for speaking hypothesis was developed by Slobin (1996) to show the relation between language and thought. It suggests that a speaker gives attention to and verbalizes those aspects of reality that are readily encodable in his/her language. That is, people choose the particular domains of spatial concepts to express while preparing for speaking, a stage called as conceptualization process by Levelt (1989). For this reason, many studies looked for the effect of conceptualization patterns of L1 on L2 expressions of motion event in second language learners.

2.3. Boundary-Crossing Motions

Boundary-crossing is a motion event in which a figure crosses a boundary separating the ground object from other parts of the space and changes the location such as entering a room, exiting a building or crossing a lake compared with locative path phrases. The phrases encoding boundary-crossing situations are called as telic path phrases by Aske (1989) and express the end of location beyond the boundary (e.g., run into/out of somewhere). On the other hand, locative path phrases are defined as atelic path phrases and express the location in which the event takes place (non-boundary-crossing), for example, *run in/outside somewhere*. It sounds quite normal for s-framed language speakers to encode manner in main verb and path in adverbials for boundary-crossing situations. However, manner verbs as predicates are restricted to be used for non-boundary-crossing situations in v-framed languages. As seen in the examples shown by Ozcaliskan (2013), Turkish speakers prefer to encode manner in an adverbial gerund constituent (i.e., *sürünerek* 'by crawling') rather than the main verb which is reserved for path (i.e., *girdi* 'entered') in (8) while English speakers encode manner in the main verb (i.e., crawled) and path in an adverbial (i.e., into) in (7);

(7) Bebek odaya sürünerek girdi.
'The baby entered the room by crawling'
(8) The baby crawled into the room.

Due to the restriction of v-framed languages for boundary-crossing situations, speakers have to express different paths within different verbs or multiple clauses as it is not possible to express multiple boundary-crossing paths in the same clause like in s-framed languages. Based on codability hypothesis of Slobin (2004), the expression of manner in adverbials or producing multiple finite clauses may be heavy structures to encode for v-framed language speakers, and this may be the reason why they avoid expressing manner as frequently as s-framed language speakers (Ozcaliskan & Slobin, 2003).

Exceptionally, v-framed language speakers may encode manner in boundary-crossing situations if the motion is instantaneous. It means that motion events including sudden and high energy motor patterns (e.g., dive/jump into somewhere) can be described with manner verbs in v-framed languages (Ozcaliskan, 2013). For situations including extended motion of a figure rather than an instantaneous action speakers of a v-framed language need to encode manner outside the main verb as seen in (7).

2.4. Descriptions of Boundary-crossing Motions by Language Learners

In terms of second language learning, many studies showed the difficulty of learning conceptualization patterns for boundary-crossing motion events in an L2 either in s- or v-framed languages for learners. The learners followed different ways to deal with these situations. Learners of a language typologically different from their L1 occasionally used different clauses to express both path and manner (Hendriks &

Hickmann, 2015). When v-framed language learners with a native s-framed language encoded both components in the same clause, they occasionally used some idiosyncratic or ungrammatical structures because of their tendency to follow L1 patterns (Cadierno & Ruiz, 2006; Hendriks & Hickmann, 2011; 2015; Larranaga et al., 2012). In terms of learning an s-framed language for learners with a native v-framed language, learners may maintain their v-framed pattern by omitting manner (Cadierno, 2010; Filipovic & Vidakovic, 2010) or encoding it in adverbial adjunct especially at lower proficiency levels (Filipovic & Vidakovic, 2010) or if they do not live in an L2 society (Daller, et al., 2011).

Cadierno and Ruiz (2006) compared the written narrations by Spanish natives and advanced learners of Spanish with two typologically different L1 languages: Danish as an s-framed language and Italian as a v-framed language like Spanish. The results indicated that Danish learners did not differ from Italian learners in terms of motion and manner verb usages or alternative ways to express manner in motion events such as subordinated clauses, or explaining internal states of figures in motion. However, L1 effect was found in terms of path expressions as Danish learners showed more complex path adverbials than both Italian learners and Spanish natives by encoding more spatial components in the same clause. Furthermore, they produced ungrammatical constructions in path expressions and also violated the boundary-crossing constraint in Spanish by encoding path in adverbials with manner verbs, unlike in the productions of Italian learners.

Cadierno (2010) extended the study by including Spanish, German, and Russian low-intermediate learners of Danish. The participants described pictures of boundary-crossing situations, and produced and recognized deictic and manner verbs. As German and Russian belong to s-framed category like Danish, they showed preferences to encode manner in main verb and path in adverbials more frequently than Spanish learners who encoded mostly deictic motion verbs with path adverbials. This evidence indicated that Spanish learners acquired to use path adverbials in the L2; however, they could not use manner verbs with them. Unexpectedly from v-framed language speakers, Spanish participants rarely used manner adjuncts like other groups even though manner was salient in pictures. Furthermore, it was pointed out that Spanish learners showed overgeneralization of using *gå* 'walk' for other manner situations (e.g., running or crawling) as if it were equivalent of *go*. In terms of manner verb types and frequency, German and Russian learners used more fine-grained manner verbs in picture description, vocabulary production and recognition tasks than Spanish learners even though all of the learner groups showed similar proportions of deictic motion verbs in the tasks. Furthermore, the fine-grained manner verbs of German and Russian learners were as frequent as Danish native speakers; however, Danish native speakers used more variant manner verbs in recognition and production tasks than German and Russian learners because of their L2 proficiency. This study revealed the difficulty of learning manner verbs and using them with path adverbials for learners with L1

Spanish as a v-framed language compared with learners with L1 German and Russian as s-framed languages.

Filipovic & Vidakovic (2010) examined lexicalization patterns of native Serbian and English speakers, and Serbian and English learners of these languages in boundary-crossing motion event expressions. English and Serbian language learners of each language were at the lower intermediate, upper intermediate and advanced levels, and gave narrations in L2. Although Serbian and English languages are in the same category as s-framed languages, Serbian differs from English as native speakers of Serbian frequently encoded path in both main verb and adverbial, and manner in adverbial like v-framed language speakers. In regard to path expression, lower level learners of both languages relatively showed L1 patterns. English learners of Serbian frequently encoded path only in adverbials at the lower level while upper level learners used path verbs more frequently. Serbian low intermediate level learners of English showed preference for encoding path both in verbs and adverbials while upper level learners comparatively relied on only path adverbials. As for the manner expression, they argued that economy of form strategy (encoding manner in the main verb rather than adverbial) was both shown by two different language learners as Serbian learners used L2 patterns (Manner verb+Path Adjuncts), and English learners used their own lexicalization patterns in Serbian instead of encoding path in the main verb. However, lower level Serbian learners of English partly maintained their L1 pattern by encoding manner in adverbials or omitting it at all.

The transfer evidence of thinking for speaking and conceptualization patterns were provided for also bilingual speakers of L2 German (an s-framed language) and L1 Turkish by Daller et al. (2011). The participants were divided into two groups as bilinguals living in Germany and Turkey. The effect of dominant language was shown on speakers' narrations of motion events with boundary-crossing paths in terms of verb selection and the use of path adverbials. None of the bilinguals used any manner verbs in Turkish narratives as they are not grammatical in a v-framed language for boundary-crossing situations. With respect to path adverbials, bilinguals in Turkey followed monolingual Turks by using less path adverbials in Turkish narratives than in Turkish narratives by the bilinguals in Germany and German narratives by monolingual Germans. As for the German productions, the narratives by the bilinguals in Germany were closer to monolingual German speakers than the bilinguals in Turkey in terms of manner verb usage. Furthermore, some of the bilinguals living in Turkey preferred to express manner in adverbial forms such as a gerund or participle (e.g., *rennend* 'running'). These findings pointed to the influence of dominant language in society as the bilinguals in Turkey followed patterns similar to Turkish monolinguals while speaking in German; and the German resident bilinguals showed tendency to follow German monolinguals.

Similarly, Larranaga et al. (2012) showed that even advanced level L2 learners having lived abroad have serious problems with boundary-crossing situations. They looked for the expressions of a boundary-crossing motion event by English learners of

Spanish at three different levels. It was found that learners at all levels frequently encoded manner in main verb in contrast to Spanish natives who use adverbial adjuncts, and only advanced level learners used few adjuncts encoding manner. Furthermore, significant differences were not found among the levels with respect to their usage of path verbs. Interestingly, advanced level participants produced path verbs less frequently than lower level learners, and Larranaga et al. (2012) stated that teaching initially path verbs according to the syllabus at lower levels rather than manner verbs could have caused this difference. In addition, it must be stated that Latinate verbs (enter, ascend or descend) in English might have facilitated learning Spanish path verbs. However, learners at all levels were inclined to use s-framed patterns by encoding manner in main verbs and path in adverbials, even though it is not possible to map path onto adverbials for boundary-crossing situations in Spanish. Larranaga et al. (2012) referred to Inagaki (2001) to assert the main reason for this mistake that English learners of Spanish lack negative evidence showing the constraint of boundary-crossing in v-framed languages. In fact, they cannot be aware of the facts that it is not allowed in Spanish to map path onto adverbials for boundary-crossing situations; and low frequent manner verbs can be accompanied with directional goal adverbials for non-boundary-crossing situations because the input inside or outside the classroom does not teach them explicitly. As manner expressions are occasionally not salient in Spanish, they also lack positive evidence to realize the differences between the two languages in terms of motion expressions. Therefore, they continue to use their own L1 patterns and produce non-target like expressions which cause them to be considered as nonnative usages or "sound funny" by native speakers of Spanish as Larranaga et al. (2012, p.19) claimed.

Jessen (2014) looked for the descriptions of a boundary-crossing situation by Turkish and German advanced learners of Danish. Turkish learners encoded only goal component (e.g., *A crocodile goes towards the sea*) while German and Danish groups mostly encoded boundary-crossing component of path (e.g., *The crocodile goes into the water*). These findings indicated that learners acquired to encode path in correct syntactical forms. However, they had problems in using target-like complexity and same path components. Therefore, Jessen (2014) suggested not stopping at the examination of lexicalization patterns but to go further and examine the spatial meanings of path.

Hendriks and Hickmann (2015) compared lexicalization patterns of French and English native speakers, and English language learners of French at low intermediate, high intermediate and advanced levels in terms of different form-function mappings of the languages. In fact, they investigated what constructions are used by speakers to describe different boundary-crossing situations, and how English learners of French are resistant to L2 patterns. The stimuli included voluntary (a human or an agent doing some action) *across*, and caused (a human is causing an object to move) *across* and *into* motion events. They claimed that French is not a completely v-framed language for caused motions compared with voluntary motions because French native speakers

frequently used not only v-framed but also s-framed patterns with manner verbs (cause + manner) such as *push* for caused motion events. However, they mostly encoded path in main verbs as a v-framed pattern for voluntary motion events. On the other hand, English is a typical of s-framed language mostly encoding manner in main verb for both voluntary and caused motions. The data of English learners of French showed that they acquired construction type of the voluntary motion events better than caused events because their form-function mappings are less variable than caused situations. Even though voluntary motions are mostly described in v-framed patterns in French, differently from English, learners mostly acquired using such patterns with path verbs. Consequently, Hendriks and Hickmann (2015) concluded that examining a wide variety of motion situations and using a scalar view of event expressions are much more beneficial to understand possible language acquisition problems confronting learners, and they would help us to understand the variations within and across the languages in detail.

2.5. Turkish Learners of English

With respect to motion expressions by Turkish advanced learners of English, Demirtas (2009) elicited written description, narration, and translation data in both Turkish and English from EFL instructors living in Turkey (referred as bilinguals in the study), by comparing them with monolingual English and Turkish speakers. It was revealed that Turkish instructors at advanced level showed high frequency of manner verb usage in L2 similar to the monolingual English participants and high path verb frequency in L1 like Turkish monolinguals. However, it was detected that there was a small amount of convergence in the manner verb usages of Turkish bilinguals as they used manner verbs slightly more frequently in Turkish than Turkish monolinguals, especially within the translation task, and less frequently in English compared with English monolinguals. In addition, there was not seen any significant qualitative difference of manner verb usage between their Turkish and English narratives while there was a clear path verb divergence between these two data. Relating to this evidence, qualitative item-based analysis showed that some motion event situations could be narrated with manner verbs in both Turkish and English for instantaneous voluntary (e.g., *jump over a table*) or caused motions (e.g., *throw boxes out of window*, *hit a baseball across*, etc.) while temporally extended boundary-crossing motions were frequently described by using path verbs in Turkish rather than manner verbs for voluntary (e.g., *fly across the garden*) and caused situations (e.g., *pour milk into a pitcher*) compared with the English data of the participants. However, some bilingual participants still used manner verbs for these temporally extended boundary-crossing motions in Turkish despite the claim that it is not possible in v-framed languages. In terms of path adverbial usage, it was stated that English narratives by the bilinguals included more usage of path adverbials than Turkish narratives, albeit not significantly. Additionally, the bilingual group used adverbial syntactical forms to encode manner in Turkish relatively more than English participants.

As for the shortcomings of this study, path adverbials were not compared in terms of their conceptual spatial differences, but only their frequencies. Even though main verbs were analyzed in detail by comparing bilinguals' narratives in two languages, the motions were not specifically categorized as caused/voluntary or instantaneous/temporally extended motion situations. While comparing the manner and path verb usages in Turkish and English, the verbs were incorporated into the same pool data for all of the motion types. This hindered to reveal the divergences from monolingual patterns for specific motion types. Also, the elicitations were completely in written form rather than oral. Participants might have showed different performance in oral language from the written tasks (Hohenstien, et al., 2006; Isler, 2014).

In another study, Isler (2014) used both oral and written data to investigate pre-intermediate and upper-intermediate level learners' expressions of path adverbials for boundary-crossing motions linguistically and gesturally. The majority of the pre-intermediate group and almost half of the upper-intermediate group did not use the expected forms (motion verb + path adverbial) in both written and oral tasks linguistically. As for gestural expressions, both groups mostly used them to encode path with motion verbs without expressing path adverbials linguistically. This showed the tendency of the participants to encode path cognitively, but inability to find correct linguistic path adverbial. As for language proficiency effect, upper-intermediate group showed better performance than pre-intermediate group significantly in written task and slightly in oral task. It might be because they were exposed to written language in the classroom more than oral language, as stated by Isler (2014). It means that language learners in this study might have had more chance to improve themselves in written language compared with spoken language in the classroom. In addition to experimental data, the results of the interviews with the instructors of the learners showed that the usage of motion events in English was not taught separately in classroom.

However, narratives were not analyzed in detail to reveal what inappropriate path components they used in tasks. Furthermore, there was not exact crosslinguistic comparison as the participants narrated the events only in English rather than Turkish. Turkish narratives might have revealed the effect of L2 English on L1 Turkish or convergence of two languages, if any. In addition, manner encoding by the participants or conceptual types of verbs were not analyzed in this study.

2.6. The Purpose and Significance of the Study

Differently from other studies, the focus was on prospective language teachers in this study which has been unexamined so far for boundary-crossing motions. The type of motion event in this study is boundary-crossing voluntary motions with extended manners which were found to be trouble-maker for learners. In addition, the descriptions of motions were elicited in spoken and written English separately as written language might help the participants to give more elaborate responses than in spoken English (Hohenstein et al., 2006; Isler, 2014). The possible effect of L1 or L2 on each other, or the crosslinguistic convergence (the differentiation of conceptualization

patterns from monolingual patterns of each language, defined as "in-between performance" by Pavlenko [2011, p. 247]) was investigated by making a comparison between Turkish and English descriptions in terms of path and manner encoding. Apart from the other studies, the frequent patterns used by PTTE were asked on a survey to be judged by PTTE themselves and NSE on a scale of totally unnatural to totally natural. It enabled us to see the interpretation of these linguistic patterns by both groups. Thus, it would help us to find out whether different kinds of patterns are acceptable or understandable for NSE or not. This would also show the relation between receptive (judgement) and productive (description) conceptualization of PTTE.

3. Methodology

3.1. Participants

25 PTTE and 32 NSE participated in this study. The numbers of males and females in each group were almost even. PTTE were senior students at an English language teaching program in Turkey. They all took a national university entrance exam after high school to be accepted to the program. Almost all of them started learning English as a foreign language at the fourth year of elementary school which means that they learned English for at least 13 years. Therefore, they were considered to be advanced level speakers. NSE were at different ages from of 23 to 79. They all had BA degrees in different professions and some of them were holding MA as well. As NSE did not have a second or third language typologically different from English at a level higher than pre-intermediate, we assumed that NSE's L1 conceptualization patterns were not affected by another language because the minimum level at which language learners show differentiation from their L1 conceptualization patterns was shown to be intermediate (Brown & Gullberg, 2010; 2011; 2013). Similarly, PTTE's L1 conceptualization patterns could not have been affected by another language other than English as their third languages were mostly at pre-intermediate level or below.

3.2. Stimuli

There are 9 boundary-crossing motion videos including an end-state location beyond a spatial boundary of the ground object. The figures cross the boundary and arrive at the end-state in three different paths; by entering somewhere (called as *into* situations), exiting somewhere (called as *out of* situations), and getting to other side of the ground (called as *across* situations). For each path, there are three videos with voluntary motions in which a figure moves alone.

Additionally, the manners are so salient to show how PTTE encode them rather than omitting at all (Ozcaliskan, 2013). The manners are temporally long and extended, which are mostly described in v-framed patterns by Turkish native speakers, rather than instantaneous manners, which Turkish language also allows to describe in s-framed patterns (Ozcaliskan, 2013). To order the videos, Ozcaliskan (2013) was followed in the present study by listing the videos in blocks. There are one *across*, one

into and one *out of* situations in each block. The presentation of the videos and type of motion events are seen in Table 1:

Table 1: The List and Order of the Voluntary Motions

The Order	Path	Manner
1	Across	Jump
2	Into	Run
3	Out of	Crawl
4	Across	Run
5	Into	Crawl
6	Out of	Jump
7	Across	Swim
8	Into	Jump
9	Out of	Run

3.3. Procedure

The data collection consisted of two sections: description and judgment tasks. In description task, only PTTE watched and described the boundary-crossing motions. The descriptions were collected in spoken and written English, and spoken Turkish. It was aimed to find out the effect of spoken and written language modes on L2. It was hypothesized that there would not be found such language mode effect for Turkish as it is their L1. Therefore, written Turkish data was not collected from PTTE. The descriptions were elicited with one-week intervals for each language mode so as to prevent language effect on each other.

Each PTTE gave descriptions of the motion events individually in a private room. They were given specific instructions about the description task at first by an interviewer either in English or Turkish based on the language of the task. PTTE were told to focus on the motion in the videos on a computer screen, wait until the end of the video, and describe the motion that they saw without giving details about the context or objects in the motion. They were shown an exercise video at the beginning to make them familiarize with the task.

As the monolingual Turkish and English speakers' conceptualization patterns have already been revealed in literature as seen in Introduction, we did not involve any monolingual Turkish or English speaker in this study. Rather, we took the conceptualization patterns of these speakers from previous studies to make comparison and analyze the descriptions of PTTE. The quantitative results of the description task were given in tables in Appendix A.

For the judgment task of the study, the most frequent four patterns from the spoken English data of PTTE were used for each video to create a survey (See Appendix C). As the probability of L1 effect on spoken English was assumed to be higher than on written English, the survey patterns were chosen from spoken English. Both PTTE and NSE were asked to judge how natural each pattern seemed to be for the video they are describing. Each description was judged on a scale which has five anchors from *totally*

unnatural to *totally natural*. The survey was filled out on computer by both groups several weeks after the description task. The results of the survey was shown on figures in Appendix B.

Not any statistical test was used in this study as there were too many variables (patterns) and the frequencies of some of the variables were less than five which is the limit to be able to get reasonable results in non-homogeneous tests. Also, the number of the participants was not high enough in the present study.

3.4. Coding

3.4.1. General Classification

The descriptions in spoken English and Turkish were transcribed for the analysis. The lexicalization patterns in spoken English, written English, and spoken Turkish were determined, and their frequencies and percentages were compared. The descriptions were first classified as grammatical (those having grammatical linguistic structures and appropriate motion components), unclear (those having grammatical linguistic structures but not encoding boundary-crossing of the subject), and unsuitable (those having ungrammatical linguistic structures or motion event components unrelated to the motion) as seen in Table 2. Afterwards, the lexicalization patterns labeled as grammatical were categorized based on their typological features as explained below.

Table 2: Types of Description Patterns

Clear	*Unclear*	*Unsuitable*
He ran into the classroom	*He ran to the classroom*	*He ran through the classroom*

The syntactical forms as a constituent of main clause rather than the main verb are accepted as adverbials as explained in the following syntactical devices: path devices in Turkish (Aksu-Koç, 1994): adverbial nouns and postpositional or demonstrative phrases inflected with nominal case markers/suffixes (i.e., Dative: -e/a, Locative: -de/da, Ablative: -den/dan), directional adverbs or postpositions (e.g., *içeri* 'inside', *dışarı* 'outside', *karşı* 'across'), locative or directional demonstratives (e.g., *ora* 'there', *bura* 'here'); path satellites in English (Brown & Gullberg, 2010): verb particles (e.g., *out*) and prepositions (e.g., *out of the room*); manner devices in Turkish: converbs (e.g., *koşarak gitti*: 'went running') and adverbs (e.g., *yavaşça* 'slowly'); manner devices in English: prepositional phrases (e.g., *go along the road by running*), adverbs (e.g., *go along the road hastily*) or participles (e.g., *go walking down the road*).

3.4.2. Typological Classification

According to Talmy's typology (1985; 1991; 2000), s-framed language speakers encode manner in main verbs and path in adverbials (satellite in his term) to describe a motion event. However, Slobin (2004) stated that s-framed language speakers, Germanic languages in particular such as English, do not always choose manner verbs, and occasionally use neutral or deictic motion verbs *go*, *get* or *come* (Pavlenko & Volynsky,

2015). Especially for boundary-crossing motions, it was found that English participants often use these neutral verbs (Slobin, 2004). On the other side, Ozcaliskan (2013) showed that English participants mostly use manner verbs when they are pretty salient or explicitly required. Therefore, it can be stated that the natural pattern is 'Manner verb + Path adverbial' for the motions with highly salient manners in English.

Similarly, Turkish language, like some other v-framed languages, allows using path adverbials with any kind of verbs for non-boundary-crossing motions. As for the voluntary boundary-crossing motions, Turkish speakers have to express path (change of state) mostly in main verbs while manner is given in subordinated adverbial adjuncts (in heavier or exhausting constructs in Slobin's terms, 2004) or in different clauses (Ozcaliskan, 2013). However, exceptions can be found as some Turkish descriptions of boundary-crossing situations by Turkish native speakers included s-framed patterns in this and Demirtas's (2009) studies. Additionally, it is obligatory in Turkish to express directional goal component of path for *into* and *across* situations, source component of path for *out of* situations, and possessive suffixes added to ground object nouns in adverbial noun phrases.

Depending on whether PTTE would maintain these L1 patterns of manner and path encoding in L2, there were possible s- or v-framed patterns to be used in English by Turkish participants for motions with highly salient manners. They could use the expected s-framed pattern encoding manner in main verbs and path in adverbials (e.g., *crawling into the building*); the v-framed pattern encoding path in main verbs and manner in adverbials (e.g., *entered the building by crawling*); the v-framed pattern encoding manner and path in the main verbs of different clauses (e.g., *crawled and went into/entered the classroom*). Moreover, the clear answers, either s- or v-framed, were thus classified as Turkish-like patterns when they redundantly included source (e.g., *exited from the classroom*) or directional goal path components (e.g., *to the other side of the road*), or possessive preposition of (e.g., *inside of the classroom*) as they are obligatorily used in Turkish.

Additionally, encoding path in adverbial does not make that pattern s-framed necessarily because manner might not be given in an easy-to-use construction, which is endemic in v-framed languages. According to Slobin's (2004) codability hypothesis, encoding manner in non-finite verbs causes extra processing load; therefore it is not chosen by s-framed language speakers. That is, v-framed language speakers force themselves to use these constructions, in a manner of speaking. In this regard, PTTE might encode path in the appropriate place (adverbial) after deictic or neutral verbs (e.g., *go*, *come* or *get*), as also observed in native speakers of English without expressing manner for non-salient manner motions (Slobin, 2004); however, PTTE might still feel the need to encode manner in subordinated forms (e.g., *went into the building by crawling*). Since these patterns, other than those encoding manner in main verbs, mostly belong to v-framed language speakers, they were categorized under v-framed patterns in this study. Also, it is stated to what extent path was encoded in verbs or adverbials, and in the same or different clauses in Discussion.

4. Results

As seen in Table A1, the Turkish data includes clear answers more frequently than the narratives in English for *across* and *into* motions while the percentages of clear answers in Turkish and English descriptions are mostly similar to each other for *out of* motions. As for the English descriptions, clear answer percentages of spoken and written language modes are similar to each other for two *across* and all of the *out of* motions. The percentage of clear answers is slightly lower in written English for the last *across* motion as the percentage of unclear answers is higher than in spoken English. The percentages of unsuitable answers for the first *into* motion and unclear answers for the third *into* motion are higher in spoken English compared with written English. Nevertheless, it must be pointed out that the differences between language modes are not much clear-cut. In regard to unclear descriptions percentages, they are mostly similar in both Turkish and English for the *across* and *into* motions. However, none of the English narratives include such answers while small percentages of PTTE showed tendency to give these answers in Turkish for *out of* motions. Regarding the unsuitable answers, almost none of PTTE used irrelevant path adverbials or ungrammatical patterns in Turkish while several participants used this sort of answers for all of the videos in English. Additionally, there are not seen consistent differences between spoken and written English language modes in terms of this kind of answers.

Regarding the unclear answers, they do not encode the boundary-crossing component of the path in adverbials while the main verbs of these clauses encode the manner component as s-framed patterns. In these patterns, PTTE gave the goal component of path within adverbials both in Turkish and English rather than the boundary-crossing component of path clearly (e.g., *Sınıfa doğru koştu* 'He ran towards the classroom'). PTTE also used source path locative postpositions *karşı* 'opposite' for *across* motions, *içi* 'inside' for *into* motions, and *dışarı* 'outside' for *out of* motions inflected with goal path suffix *–a* 'to' in Turkish (e.g., *Yolun karşısına doğru koştu* 'He ran towards the opposite side of the road'). *Karşı* 'opposite' and *içi* 'inside' were also inflected with possessive suffix *–n* 'of'. For *out of* motions, they also added source path suffix *-den* 'from' to the ground nouns (e.g., *Sınıftan dışarıya doğru zıpladı* 'He jumped from the classroom towards the outside'). Contrarily, these complex usages were not followed in English as the participants opted for the simple versions with only directional goal adverbial *toward* (e.g., *toward the classroom*) or locative path adverbials with manner verbs (e.g., *on the road*). They might have chosen this simple pattern just to avoid complex Turkish-like structures encoding goal component with end-state. These descriptions in Turkish and English incorporate manner verbs as predicates, in s-framed patterns. However, it is seen that these participants still obeyed the rule of v-framed languages restraining from encoding boundary-crossing in adverbials.

According to Figure B1, NSE do not seem to agree with PTTE for the first two *across* videos as they mostly rated unclear patterns as unnatural compared with PTTE who chose *natural* more frequently. However, quite a number of PTTE also rated them

to be unnatural. That is, these PTTE were not completely in favor of these unclear patterns, which they also used infrequently in their narratives. On the other hand, as for the last *across* video, PTTE expressed locative component of the path (e.g., *She swam in the pool*) in both Turkish and English. Similarly, both NSE and PTTE mostly rated this pattern as natural in the survey. This might be attributed to the ground knowledge of the video (pool) which might be perceived to be a location to be "in" rather than crossing it. However, it can be claimed that the participants were not fully content with it as the frequencies of *totally natural* are relatively low in both groups.

In regard to the unclear patterns for *into motions* in judgement task (Figure B1), both NSE and PTTE were relatively compatible with path adverbial *towards* for the first and third videos to a certain extent although the percentages of *undecided* and *unnatural* are moderately high, especially for the first pattern. Differently from other adverbials, both groups seem to be in agreement with the fact that the preposition *to* is not a natural adverbial for the second motion. It is possible that the participants of both groups directly compared it with *into* to rate as they are quite similar morphologically; and they might have rated them as poles apart. Besides, it is clear that the percentages of *totally natural* or *totally unnatural* are pretty low in the ratings by both groups for all of the patterns. Furthermore, considerable percentages of both groups preferred contrary options or *undecided* for all of the patterns. For these reasons, it could be stated that the participants were not much certain about the unclear patterns or consistent in their judgments.

Regarding the patterns in clear descriptions, in accordance with the typological difference between English and Turkish, PTTE infrequently used s-framed patterns (e.g., *Sınıfın içine zıpladı* "He jumped into the classroom") for all of the videos in Turkish while the percentages of s-framed patterns are pretty high in English (Table A2). Accordingly, the high percentages of v-framed patterns in Turkish (e.g., *Emekleyerek sınıftan dışarı çıktı* 'He exited the classroom by crawling') are inversely proportional to those in English narratives in which the participants used these patterns less frequently. On the other hand, the percentages of v-framed patterns seem to be still notable in English data (e.g., *He entered the classroom by jumping*). It can be generalized that PTTE to some extent used L2 conceptualization patterns appropriately in English while they followed the v-framed conceptualization in their L1.

With respect to the differences between spoken and written English, the percentages of the s-framed patterns are slightly higher in written English for most of the videos (e.g., *He ran out of the classroom*) while v-framed patterns were slightly more preferred in spoken English (e.g., *He went across the road by jumping*). Also, some PTTE who produced manner verbs rather than path verbs for the first and second *into* motions in written English could not express the boundary-crossing component appropriately; they either used non-grammatical or locative adverbials (e.g., *swim in the pool*).

The results of the survey show that both groups rated s-framed patterns to be natural for all of the videos; however, NSE were surer of their ratings with higher rates

of *totally natural* compared with PTTE who mostly preferred *natural* (Figure B2). As for the v-framed patterns, NSE mostly chose *unnatural* in the survey while the rates of *natural* are pretty high in PTTE (Figure B3). However, these differences between the groups are not so clear-cut because PTTE rated v-framed patterns as unnatural to some extent. Additionally, the percentages of *totally unnatural* are not so high in NSE which means that they are not totally displeased with these patterns.

Regarding the Turkish-like s-framed patterns, very few of PTTE used these patterns for *across* and *out of* motions. None of PTTE used any Turkish-like patterns for *into* motions. As the adverbial *into* already includes directional goal preposition *to*, PTTE did not need to use another adverbial to encode the directional goal component, which is obligatory in Turkish language. For the first *across* video, these few descriptions were created within v-framed pattern, in which manner is encoded in an adverbial adjunct, differently from the other motions (i.e., *get to the other side of the road by jumping*). For the last two *across* videos, PTTE used a manner verb (e.g., *run*/*swim*) and expressed the endpoint with directional and genitive prepositions such as *to the other side of the road*. Similarly, some Turkish-like patterns were in s-framed patterns for *out of* motions because manner was encoded in main verbs in these descriptions while some of them were used in v-framed patterns since manner was encoded in adverbial adjuncts. Some of s-framed Turkish-like patterns include possessive preposition *of* with locative source adverbial *outside* in English (e.g., *outside of the classroom*) while some of them also incorporate directional goal component of path overtly (e.g., *towards the outside of the classroom*), similarly with Turkish adverbial noun phrases. In v-framed Turkish-like clauses, source path adverbial *from*, which is obligatory in Turkish, was used with boundary-crossing adverbial *out* or path verb *exit* in the same clause (e.g., *A man exited from the classroom by crawling*), just like in Turkish descriptions. The percentages of PTTE using Turkish-like s-framed patterns is slightly higher in written English than in spoken English for *out of* motions while the percentages of v-framed ones are moderately higher in spoken English.

In Figure B4, it is seen that PTTE were relatively certain that Turkish-like patterns are natural for *across* motions, especially the v-framed one. However, NSE tended to choose *natural* or *unnatural* almost equally for these patterns. As for the s-framed one, some NSE seem to be undecided. Turkish-like patterns for the last *across* video were not involved in the survey as there is not any specific and consistently used pattern. They were variously produced by PTTE, and thus less frequent than other patterns in the descriptions. Turkish-like v-framed patterns rather than s-framed ones were incorporated into the survey for *out of* motions because these patterns were selected according to spoken English data which mostly includes v-framed Turkish-like patterns. It is very obvious that NSE were dissatisfied with these patterns. On the other hand, PTTE seem to be on the positive side of the spectrum to some extent while the negative evaluations are also moderately high. It means that PTTE were not much decided, and showed similarities with NSE to a limited extent.

Additionally, few of PTTE ungrammatically used some L1 transferred overt prepositions for all of the motion events. They used directional preposition *to* with *across* for *across* motions (e.g., *He ran to the across the road/ He ran to the across of the road*). Furthermore, one participant also used locative path preposition *on* after *across* for the second video just like it is allowed with *across* situations in Turkish (i.e., *Yolda karşıdan karşıya geçti* 'He crossed on the road'). Regarding the L1 transferred unsuitable patterns for *into* motions, very few of PTTE overtly expressed directional goal adverbials *to* or *towards* with locative preposition *inside* (e.g., *He ran to inside the classroom*) or path verb *enter* (e.g., *He entered to classroom*). Turkish structures do not seem to have a considerable effect on L2 narratives for these motions because PTTE predominantly used clear adverbial *into*, which already consists of goal path adverbial *to*. The tendency to use L1 transferred items is almost never seen in English for *out of* boundary-crossing-situation. The only such kind of pattern included directional goal path adverbial *to* with boundary-crossing adverbial *out of* in written English (i.e., *The man ran to out of the classroom*) for the last motion. The patterns including source path adverbial *from* after *out* (e.g., *He ran out from the classroom*) or possessive preposition *of* with locative path adverbial *outside* (e.g., *He jumped outside of the classroom*) were categorized into the clear Turkish-like patterns since these sorts of usages can be seen in American English. Similarly, directional goal adverbials *to*/*towards* before *outside* (e.g., *He ran to the outside of the classroom*) were accepted to be clear Turkish-like even though they are not common patterns in English. The only clear difference between language modes are seen for *across* motions as these unsuitable patterns are seen only in written English narratives. As these descriptions were structured in s-framed patterns, it can be stated that they appropriately located the manner in written English compared with spoken English. However, they failed to choose a grammatical English path adverbial because of the mistake of using L1 transferred items.

5. Discussion

For all of the motions, it was seen that PTTE predominantly showed the expected v-framed patterns in Turkish. On the other side, v-framed patterns were less frequent than s-framed patterns in English. However, the difference is not so clear because v-framed patterns were still chosen to some extent in English. These evidences prove that PTTE mostly acquired the expected pattern (Verb: Manner + Adverbial: Path) in English (Demirtas, 2009), but still the typological "thinking for speaking" effect of Turkish is partially seen in English descriptions (Slobin**,** 2004). In the v-framed patterns, path was comparatively encoded in adverbials for *across* and *out of* motions as s-framed language speakers do while manner was also expressed within adverbials rather than the main verbs. That is, PTTE had more difficulty in encoding manner compared with path in line with many studies in the literature (Brown & Gulberg, 2011; Cadierno, 2010; Choi & Lantolf, 2008; Daller et al., 2011; Li et al., 2014; Stam, 2015).

It must be added that some descriptions showed convergence of linguistic conceptualization patterns in Turkish and English, and thus included some unclear patterns. In both languages, it was found that these PTTE encoded manner in main verbs as an s-framed pattern. However, path adverbials did not encode boundary-crossing component of path in these patterns, as not allowed in v-framed languages, just like the Turkish learners of Danish (Jessen, 2014). Rather, these participants encoded only unclear locative (e.g., *yolda* 'on the road'), goal (e.g., *sınıfa doğru* 'towards the classroom') or source (e.g., *sınıftan* 'from the classroom') components of path. Therefore, it can be claimed that Turkish might have forced PTTE not to encode boundary-crossing of the figure in path adverbials in English. On the other side, it is possible that these participants encoded manner rather than path in main verbs in Turkish under the effect of English. They might also have avoided the cognitive load of constructing another clause to encode boundary-crossing appropriately (Slobin, 2004). Additionally, some PTTE used simple path adverbials, as a simplification strategy, in English encoding only one component (e.g., *towards the classroom*) while they preferred more complex path adverbials in Turkish (e.g., *sınıfın içine doğru* 'towards the inside of the classroom').

In addition, almost 8% of PTTE made use of divided clauses (e.g., *crawled and entered/went into the classroom*) or infinitives (e.g., *jumped to go out of the room*) to encode manner and path in English. These findings are similar to the propensity of Japanese learners of English in Brown and Gullberg (2013) not to encode path with manner verbs in the same clause in L2 English. They similarly found that Japanese participants showed tendency to use more than one clause to encode manner and path separately in both Japanese and English.

Besides, some PTTE maintained Turkish obligatory adverbial path components in English within s-framed patterns by encoding manner in main verbs similarly with the descriptions of different language learners in some studies (Cadierno & Ruiz, 2006; Hendriks & Hickmann, 2011; 2015; Larranaga et al., 2012). They created Turkish-like path adverbials by overtly expressing goal component of path for *across* situations with *to/towards* (e.g., *He ran to the other side of the road*), source component of path for *out of* situations with *from* (e.g., *He ran from the classroom*) or possessiveness for *into* and *out of* situations with *of* (e.g., *He ran inside/outside of the classroom*). In addition, very few of the participants directly transferred these overt structures in ungrammatical ways (e.g., *He crawled to out of the classroom*) while they encoded manner in main verbs. These evidences might be the indication of a transitional process in learning an s-framed language.

In relation to the comparison of spoken and written English, it was found out that s-framed patterns were slightly more frequent in written English for all of the motions, as compatible with Hohenstein et al. (2006) and Isler (2014). PTTE inclined to show v-framed patterns, L1 transferred ungrammatical errors, divided v-framed clauses, unclear or Turkish-like path adverbials slightly more frequently in spoken English than in written English. Even though these differences are not so clear-cut

between spoken and written language modes, they are consistent for most of the motions. These are the evidences for the fact that PTTE might be under Turkish conceptualization effect in spoken language more than they are in written language.

When it comes to the survey results, it was found out that both PTTE and NSE were relatively inconsistent or undecided about the unclear patterns, which did not encode boundary-crossing situations in the videos, but they were to some degree on the negative side of the scale. This finding might suggest that both groups require the boundary-crossing of the path in the descriptions. That is, PTTE used unclear patterns in their narrations not because they found them sufficient for the boundary-crossing situations. Rather, they might have created these patterns under bidirectional crosslinguistic effect, as convergence, in both Turkish and English as seen in some other studies (Brown & Gullberg, 2010; 2011; 2013; Brown, 2015).

In regard to the clear answers, both groups approved of s-framed patterns for all of the motions. However, NSE were much surer about these patterns with high percentages of *totally natural* while PTTE were less certain due to their inclining toward *natural*. On the other side, it could be stated that PTTE and NSE showed divergence in rating v-framed patterns for all of the videos. PTTE relatively found these v-framed patterns to be natural while NSE mostly rated them as unnatural. However, the difference between the groups was not so clear since a considerable part of PTTE disapproves of v-framed patterns similarly with NSE. In addition, NSE were not "totally" dissatisfied with these v-framed patterns as the percentages of *totally unnatural* were less than those of *unnatural*.

As for the Turkish-like patterns including goal or source path components (e.g., *to/from*), or possessive preposition (i.e., *of*), the groups showed either compatible or different tendencies in rating each one. Relating to the goal adverbials *to/towards* for the *across* situations, both groups relatively agreed that they are natural patterns (e.g., *He jumped to the other side of the road*) while NSE were partly on the negative side of the scale. In regard to the source adverbial *from* for *out of* situations, NSE were sure that these patterns are unnatural for these boundary-crossing situations (e.g., *He jumped out from the classroom*). However, PTTE were not decided on judgment of these patterns because positive and negative ratings were almost equal in this group. These different tendencies of the groups for each path suggests for investigating judgments of different patterns for different situations separately.

All in all, it can be summarized that PTTE in the present study acquired the expected s-framed patterns in English to a large extent as seen in their descriptions and judgments. However, they were under the conceptual effect of their L1 to some degree for the voluntary motions because a considerable percentage of PTTE still used v-framed patterns in their L2 descriptions, and partly approved of them in the survey. Furthermore, it was claimed that some PTTE showed convergence of conceptualization patterns between Turkish and English. These participants avoided encoding boundary-crossing in path adverbials in both Turkish and English, as their L1 does not give permission for this while they also reserved main verbs for manner as an s-framed

pattern. Additionally, very few of PTTE created some Turkish-like grammatical or L1 transferred ungrammatical path adverbials with manner verbs. These findings probably point to the fact that PTTE were in a cognitively transitional process toward acquiring the expected English patterns. Lastly, it seems that Turkish participants were slightly better at using expected patterns in written English than spoken English.

The same transitional process can be seen in PTTE's judgments in comparison to NSE.

They found the s-framed patterns to be natural, but not to the same degree with NSE. They partly disapproved of v-framed patterns, but much less than NSE. In addition, it must be added that NSE were not totally dissatisfied with v-framed or some Turkish-like patterns. Therefore, it is substantially important to examine the judgements of patterns with different conceptual components.

6. Conclusion

Differently from the other studies based on Talmy's (1991) typology and Slobin's (2004) thinking for speaking hypothesis so far, the present study focused on the prospective language teachers' conceptualization patterns in L1 and L2. It was revealed that approximately half of PTTE managed to conceptualize three types of boundary crossing motion events in L2, which were found to be differently conceptualized in each language by native speakers, in the way English native speakers do. Most of PTTE were also in agreement with NSE for the clear s-framed patterns. However, it does not mean that prospective language teachers can easily acquire all the native speaker conceptualization patterns of English in such a context and overcome their native thinking for speaking patterns in English (Slobin, 2004) as high percentages of PTTE still preferred to use their L1 patterns, especially in spoken English (Hohenstein et al., 2006; Isler, 2014; Yilmaz, 2018), and they were partly in favor of such patterns in the judgement task.

According to these findings, considering that PTTE did not have much abroad experience in a country English is spoken daily, formal language education at school could be relatively regarded as an effective way to make the language learners acquire the target conceptualization patterns (Brown & Gullberg, 2013; Bylund & Athanasopoulos, 2015; Song, Pulverman, Pepe, Golinkoff & Hirsh-Pasek, 2016; Yilmaz, 2018). This is contrary to what some studies suggested for: being exposed to the L2 in an L2 spoken country (Flecken et al., 2015; Ozyurek, 2002; Stam, 2015). On the other side, the reason for Turkish effect on English descriptions might be that students may not be getting exposed to the L2 sufficiently outside the learning context (Daller et al. 2011; Bylund & Athanasopoulos, 2015; Larranaga et al. (2012) or the motion event input may not be enough to acquire the patterns (Filipovic & Vidakovic, 2010).

For this reason, teaching the conceptualization patterns of the L2 explicitly might be better to make sure of the acquisition of these patterns for prospective language teachers as they will be the role-models of the L2 in class (Song et al., 2016: Stam, 2015; Ziyan, 2013). Prospective teachers or language learners might be shown clips or videos

in the classroom, and engaged in some productive activities based on these materials in which they can actively compare the different patterns between L1 and L2 (Hasko, 2009; Pavlenko, 2015). Furthermore, Cadierno (2008) stated that TPR activities, information-gap questions, or describing motion videos to classmates who cannot see them might be beneficial techniques to practice the expected patterns. In addition, future studies might show the effect of specifically designed language teaching plans or materials in this regard.

Besides, the idiosyncratic, converged conceptualization patterns due to the bidirectional conceptualization effect, like Turkish-like or unclear patterns in the present study, must be taken into account while preparing materials and language activities or evaluating students' performance (Brown, 2015; Brown & Gulberg, 2013). Language teaching materials, such as EFL or ESL textbooks, might also be beneficial to teach the natural patterns if they involve a specific section on motion event (Romer et al., 2014).

Last but not least, NSE did not totally disagreed with v-framed or some Turkish-like patterns. As these patterns grammatically include all the necessary parts of motion events, they were intelligible and partly acceptable to NSE. Therefore, it may be unnecessary to consider native speaker thinking for speaking patterns as a pre-requisite of language learning (Negueruela et al., 2004), which can be another question of debate in another paper.

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Appendix A

Table A1: The Frequencies (in Parentheses) and Percentages of Answer Types in the Descriptions of the Voluntary Motion Events by PTTE

Video No/Manner	Language Mode	Clear	Unclear	Unsuitable
Across Boundary-Crossing Motions with Manner Jumping				
	Spoken Turkish	80% (20)	16% (4)	4% (1)
Video 1	Spoken English	68% (17)	12% (3)	20% (5)
	Written English	72% (18)	12% (3)	16% (4)
Across Boundary-Crossing Motions with Manner Running				
	Spoken Turkish	96% (24)	4% (1)	-
Video 2	Spoken English	80% (20)	12% (3)	8% (2)
	Written English	72% (18)	8% (2)	20% (5)
Across Boundary-Crossing Motions with Manner Swimming				
	Spoken Turkish	64% (16)	36% (9)	-
Video 3	Spoken English	48% (12)	40% (10)	12% (3)
	Written English	32% (8)	60% (15)	8% (2)
Into Boundary-Crossing Motions with Manner Crawling				
	Spoken Turkish	72% (18)	28% (7)	-
Video 1	Spoken English	64% (16)	16% (4)	20% (5)
	Written English	76% (19)	16% (4)	8% (2)
Into Boundary-Crossing Motions with Manner Jumping				
	Spoken Turkish	84% (21)	16% (4)	-
Video 2	Spoken English	80% (20)	12% (3)	8% (2)
	Written English	84% (21)	12% (3)	4% (1)
Into Boundary-Crossing Motions with Manner Running				
	Spoken Turkish	88% (22)	12% (3)	-
Video 3	Spoken English	60% (15)	32% (8)	8% (2)
	Written English	76% (19)	8% (2)	16% (4)
Out of Boundary-Crossing Motions with Manner Crawling				
	Spoken Turkish	88% (22)	12% (3)	-
Video 1	Spoken English	96% (24)	-	4% (1)

	Written English	88% (22)	-	12% (3)
Out of Boundary-Crossing Motions with Manner Jumping				
	Spoken Turkish	88% (22)	12% (3)	-
Video 2	Spoken English	84% (21)	-	16% (4)
	Written English	92% (23)	-	8% (2)
Out of Boundary-Crossing Motions with Manner Running				
	Spoken Turkish	88% (22)	12% (3)	-
Video 3	Spoken English	84% (21)	-	16% (4)
	Written English	88% (22)	-	12% (3)

Note: PTTE = Prospective Turkish Teachers of English

Table A2: The Frequencies (in Parentheses) and Percentages of Clear Answer Patterns in the Descriptions of Voluntary Across Situations by PTTE

Video No	Language Mode	S-framed	V-framed	Turkish-like
Across Boundary-Crossing Motions with Manner Jumping				
	Spoken Turkish	15.0% (3)	85.0% (17)	-
Video 1	Spoken English	52.9% (9)	41.2% (7)	5.9% (1)
	Written English	61.1% (11)	33.3% (6)	5.6% (1)
Across Boundary-Crossing Motions with Manner Running				
	Spoken Turkish	20.8% (5)	79.2% (19)	-
Video 2	Spoken English	65.0% (13)	25.0% (5)	10.0% (2)
	Written English	72.0% (13)	20.0% (5)	-
Across Boundary-Crossing Motions with Manner Swimming				
	Spoken Turkish	25.0% (4)	75.0% (12)	-
Video 3	Spoken English	41.7% (5)	41.7% (5)	16.6% (2)
	Written English	62.5% (5)	-	37.5% (3)
Into Boundary-Crossing Motions with Manner Crawling				
	Spoken Turkish	5.5% (1)	94.5% (17)	-
Video 1	Spoken English	62.5% (10)	37.5% (6)	-
	Written English	68.5% (13)	31.5% (6)	-

Into Boundary-Crossing Motions with Manner Jumping				
	Spoken Turkish	-	100% (20)	-
Video 2	Spoken English	55.0% (11)	45.0% (9)	-
	Written English[a]	52.2% (11)	42.8% (9)	-
Into Boundary-Crossing Motions with Manner Running				
	Spoken Turkish	4.5% (1)	95.5% (21)	-
Video 3	Spoken English	40% (6)	60% (9)	-
	Written English	52.6% (10)	47.4% (9)	-
Out of Boundary-Crossing Motions with Manner Crawling				
	Spoken Turkish	4.5% (1)	95.5% (21)	-
Video 1	Spoken English	45.8% (11)	33.3% (8)	20.8% (5)
	Written English	50.0% (11)	36.3% (8)	13.6% (3)
Out of Boundary-Crossing Motions with Manner Jumping				
	Spoken Turkish	4.5% (1)	95.5% (21)	
Video 2	Spoken English	38.1% (8)	38.1% (8)	23.8% (5)
	Written English	39.1% (9)	34.8% (8)	26.0% (6)
Out of Boundary-Crossing Motions with Manner Running				
	Spoken Turkish	4.5% (1)	95.5% (21)	
Video 3	Spoken English	42.8% (9)	38.1% (8)	19.0% (4)
	Written English	50.0% (11)	27.3% (6)	22.7% (5)

Note: PTTE = Prospective Turkish Teachers of English

Appendix B

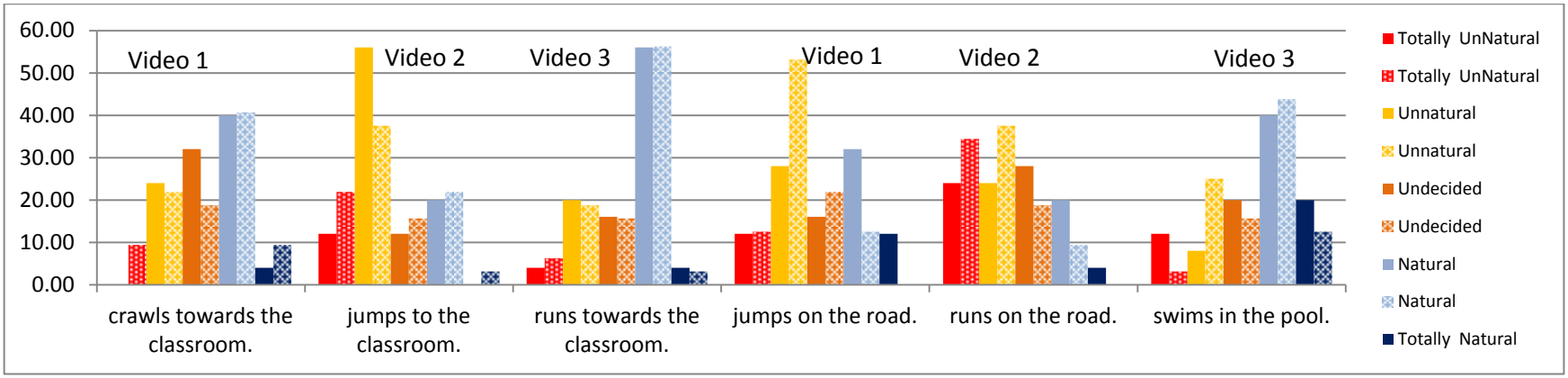

Figure B1: Bar graph of NSE and PTTE's ratings of unclear patterns frequently used in the descriptions of voluntary into and across situations

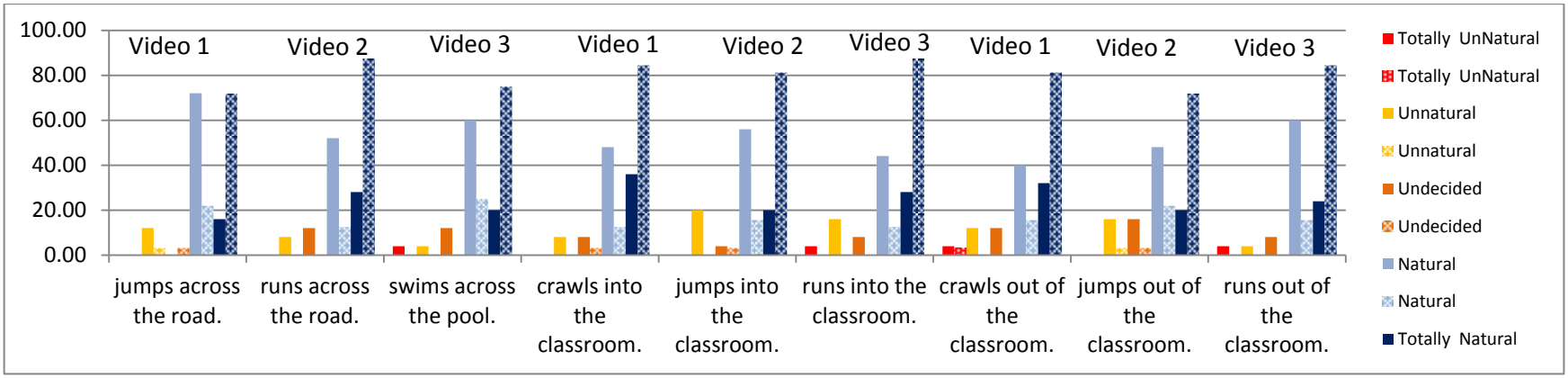

Figure B2: Bar graph of NSE and PTTE's ratings of clear s-framed patterns frequently used in the descriptions of voluntary situations

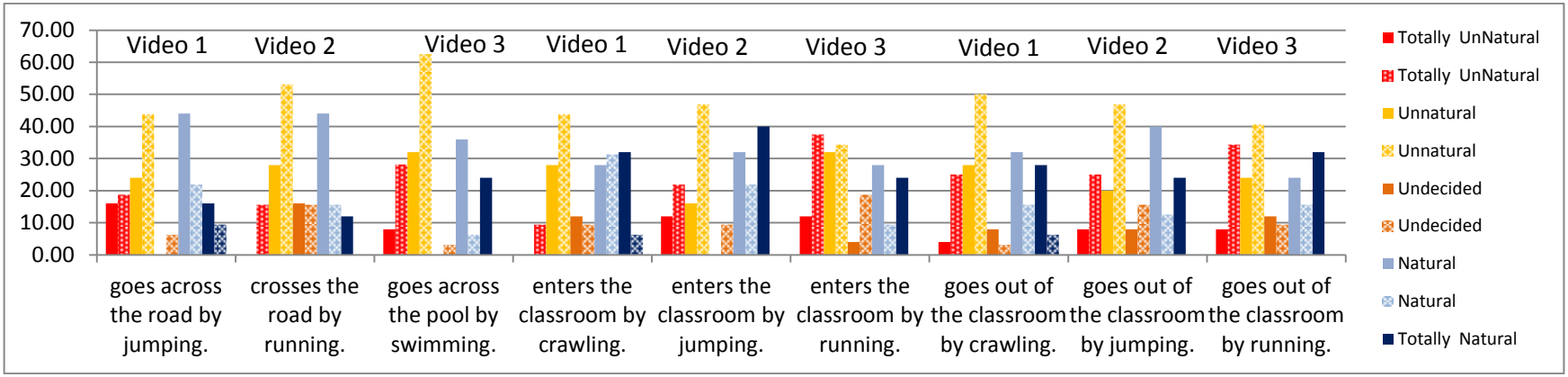

Figure B3: Bar graph of NSE and PTTE's ratings of clear v-framed patterns frequently used in the descriptions of voluntary situations

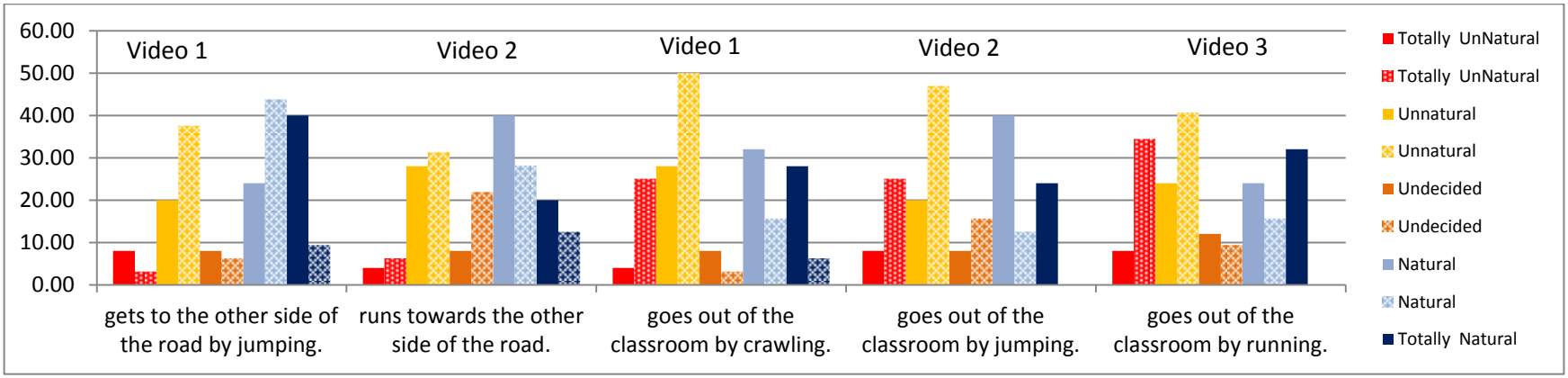

Figure B4: Bar graph of NSE and PTTE's ratings of clear Turkish-like patterns frequently used in the descriptions of voluntary *across* and *into* situations

Appendix C

Question: To what degree does each sentence seem natural as a description of the situation in the videos?

Video 1

A man	Totally Unnatural	Unnatural	Undecided	Natural	Totally Natural
jumps across the road.					
jumps on the road.					
goes across the road by jumping.					
gets to the other side of the road by jumping.					

Video 2

A man	Totally Unnatural	Unnatural	Undecided	Natural	Totally Natural
runs towards the classroom.					
runs into the classroom.					
runs and enters the classroom.					
enters the classroom by running.					

Video 3

A man	Totally Unnatural	Unnatural	Undecided	Natural	Totally Natural
goes out from the classroom by crawling.					
crawls outside the classroom.					
crawls out of the classroom.					
goes out of the classroom by crawling.					

Video 4

A man	Totally Unnatural	Unnatural	Undecided	Natural	Totally Natural
runs across the road.					
runs towards the other side of the road.					
crosses the road by running.					
runs on the road.					

Video 5

A man	Totally Unnatural	Unnatural	Undecided	Natural	Totally Natural
crawls in the classroom.					
crawls towards the classroom.					
enters the classroom by crawling.					
crawls into the classroom.					

Video 6

A man	Totally Unnatural	Unnatural	Undecided	Natural	Totally Natural
jumps out of the classroom.					
goes out of the classroom by jumping.					
jumps outside the classroom.					
goes out from the classroom by jumping.					

Video 7

A toddler	Totally Unnatural	Unnatural	Undecided	Natural	Totally Natural
swims across the pool.					
goes across the pool by swimming.					
swims in the pool.					
swims until the end of the pool.					

Video 8

A man	Totally Unnatural	Unnatural	Undecided	Natural	Totally Natural
jumps to the classroom.					
jumps into the classroom.					
jumps in the classroom.					
enters the classroom by jumping.					

Video 9

A man	Totally Unnatural	Unnatural	Undecided	Natural	Totally Natural
runs outside the classroom.					
goes out from the classroom by running.					
runs out of the classroom.					
goes out of the classroom by running.					