# Motion Verbs in Learner Corpora
# Öğrenici Derleminde Devinim Eylemleri

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**Abstract**

Motions verbs differ across languages in respect of spatial relations and syntactic/semantic conceptualization. Languages have two typological groups for motion events: (a) verb-framed languages in which the main verb expresses the core information of the path of movement, and the manner information is expressed in a subordinate structure (e.g. a gerundive) and (b) satellite-framed languages where the main verb expresses information about manner of movement and a subordinate satellite element (e.g., a verb particle) to the verb conveys the path of movement (Talmy, 1985; Chen & Guo, 2009). In this corpus-based study, two learner corpora from two different native languages as Turkish as a verb-framed language and German as satellite-framed language are investigated in terms of motion verbs in English like move, fly, walk, go via frequency and statistical analysis for corpora comparison. The purpose of the study is to find out whether there is a statistical difference in the use of motion verbs by Turkish (as a verb-framed L1) and German (as a satellite-framed L1) learners in due of cross-linguistic difference between Turkish and German which may be a factor that influence learners essay writing in English (as a satellite-framed L2) in the use of motion verbs. Results indicated that German learners of English use especially manner of motion verbs in English statistically more frequent and lexically more diverse in their essays than Turkish learners of English.

**Keywords:** Motion verbs in English, Learner corpus, Language typology, Second language writing

**Öz**

Devinim eylemleri, uzamsal ilişki, sizdizimsel ve anlamsal kavramsallaştırma açısından dillere göre farklılık gösterir. Diller, devinim eylemlerinde iki gruba ayrılır: (a) eylem-çerçeveli diller, temel eylemin hareket yolunun öz bilgisini ifade ettiği ve tarz bilgisinin yan yapılarla (ortaç gibi) ifade edildiği diller, (b) uydu-çerçeveli diller, temel eylemin bilgiyi hareket tarzı ve yan uydu elementi (eylem takısı gibi) ile ifade ettiği diller (Talmy, 1985; Chen ve Guo, 2009). Derleme dayalı bu çalışamada, anadili eylem-çerçeveli bir dil olan Türk öğreniciler ile anadili bir uydu-çerçeveli bir dil olan Alman öğrenicilerin uydu-çerçeveli bir dil olan İngilizcedeki bazı devinim eylemlerini İngilizce komposizyonlarındaki kullanımları sıklık ve istatistik açıdan incelenmiştir. Çalışmanın ana amacı, İngilizceyi yabancı dil olarak öğrenen Türk ve Alman öğrenicilerin, İngilizce komposizyon yazarken diller arası farklılıklara dayalı etki olup olmadığını araştırmaktır. Sonuçlara göre, Alman öğreniciler istatistiksel açıdan özellikle tarz-devinim eylem türlerini, Türk öğrenicilere göre İngilizce komposizyonlarda daha sıklıkla ve sözcüksel olarak daha çeşitli kullanmaktadırlar.

**Anahtar Kelimeler:** İngilizce'de devinim eylemleri, Öğrenici derlemi, Dil tipolojisi, İkinci dilde yazma

## Introduction

Motion verbs have a high rate in many languages in the world because the movement is the simplest and indispensable event in daily life as we experience and express it in several ways. Being a universal concept, motion events involve an entity moving from one place to another along a path in a certain manner (Chen and Guo, 2009). Languages typologically vary in mapping lexical and semantic elements onto semantic domains, especially in the domain of spatial relations of motion events and their variations (Özyürek and Kita, 1998). Accordingly, languages have two typological groups in respect of motion events: verb-framed languages and satellite-framed languages (Talmy, 2000). In *Verb-framed languages* ("V-languages") path is expressed by the main verb in a clause ('enter', 'exit', 'ascend', etc.) such as Turkish, Spanish, Japanese whereas S*atellite-framed languages* ("S-languages") path is expressed by an element associated with the verb ('go in/out/up', etc.)"(Slobin, 2004, p.2) as English, German, French. Manner of motion specifies a manner carrying out an action and path of motion; the direction of the movement. Path verbs (enter, exit, pass, cross etc.) which are typical of verb-framed languages, require a syntactic pattern in which the manner of motion can optionally be expressed by an additional sentential component (most commonly an adverb). Levin (1993) identifies manner of motion verbs as "these verbs describe the motion that typically, though not

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Babanoğlu, M. P, (2018). Motion Verbs in Learner Corpora, *Gaziantep University Journal of Social Sciences*, 17 (1), 221-228, DOI:10.21547/jss.372590, Submission Date: 29-12-2017, Acceptance Date: 29-12-2017.
Araştırma Makalesi.

necessarily, involves displacement, but none of them specifies an inherent directions part of its meaning" (p. 264) and indicates that they include a notion of manner or means of motions. Manner verbs (*fly, run, walk,..*), which are typical of satellite-framed languages, require a syntactic pattern in which the path of motion is expressed in a sentential element that Talmy (1991) calls the 'satellite' such as *run into* or *fly away*.

In respect of manner, path, ground and rhetorical style, Slobin (1997) suggests distinctive proposals regarding motion event descriptions in S- versus V-languages:

*regarding manner:*

a. V-language users express manner only when it is absolutely needed, and typically, translational motion takes

precedence.

b. S-languages have a larger and more diverse lexicon of manner verbs than V-languages.

c. Manner verbs in S-languages are more expressive than those in V-languages.

*regarding path :*

d. V-language users mention fewer path segments than S-language users do when describing comparable motion events.

*regarding ground:*

e. V-language users use fewer ground elements per clause than S-language users do.

f. V-language users are more likely to use motion verbs without any ground information in the clause than S-language users.

*regarding rhetorical style:*

g. V-language users devote more attention to describing aspects of the static scene which provides the physical context for a motion event, whereas S-language users devote more attention to descriptions of the process of motion (in Chen and Guo, p. 1752).

Table 1 shows the characteristic features of V-languages and S-languages:

**Table 1:** Features of V-languages and S-languages (adapted from Vasanta, 2011, p.160)

| **Language type** | **Preferred means of expressions** | **Examples of Granularity in event descriptions** | **Example Language** |
|---|---|---|---|
| Verb framed | PATH by finite verb with MANNER syntactically subordinated | The frog exited the jar, passed through the window and entered the woods | Spanish, French, Italian, Turkish, Hebrew, Japanese, Korean |
| Satellite framed | MANNER in the main verb, PATH outside the verb in prepositions, postpositions, verb affixes, particles etc | The frog crawled out of the jar and through the window into the woods | English, German, Dutch, Russian, Mandarin, Finnish |

The difference between a V-language (Turkish) and two S-Languages (English and German) can be seen in the example (1) below, in which the verb fly out and exit are used in the sentences:

1. Example of motion verbs fly (manner) and exit (path) in three languages:

(a) English (S-language): The bird **flew out** of the window.

(b)Turkish (V-language): Kuş pencereden **uçarak çıktı.** (The bird **exit** from the window, **flying**)

(c) German (S-language): Der Vogel **flog aus** dem Fenster. (The bird flew out of/from the window)

In German and English as two S-languages, a manner verb 'fly' with a path satellite 'out' is used whereas in Turkish as a V-language, a path verb 'exit' used containing manner itself with adverb of manner 'koşarak' derived from verb 'run' which is typical in Turkish language.

Slobin (1987) suggests 'thinking for speaking' hypothesis based on two dynamic entities 'thinking and speaking' and claims that 'there is a special kind of thinking that is intimately tied to language-namely the thinking is carried, out online, in the process of speaking (p. 75). Language and thought are closely linked and native speakers of each language have a unique conceptualization of the world but any given L2 is subject to conceptual transfer from a learner's L1 due to conceptual parameters of each language (Sharpen, 2016). That is, individuals, learning a foreign language of a different typological category than their first language may face a conceptual transfer in the production of L2 motion events.

**Previous Studies**

Motion events have always been a focus of research in cognitive linguistics because they have a significant place in language typologies as each language has a way to express objects and their motion. Most research about motion verbs focused on cross-linguistic differences of languages and comparison between languages of typological groups in respect of motion verbs. Özyürek and Kita (1999) investigated how speakers of Turkish and English as typologically two different languages express motion events in their speech and with their gestures and concluded that speakers of typologically different languages conceptualize motion events in different ways during online speaking. Özçalışkan and Slobin (2003) compared manner of motion in Turkish and English novels and found that English speaker/writers encode manner of motion at a higher rate than Turkish speakers/writers. Oh (2003) conducted a study on manner verbs in novels in English and Korean and found that manner verbs were used quite more in novels in English (S-language) than in novels in Korean (V-language). Pasanen and Pakkala-Weckström (2008) examined the use of motion verbs in Finnish frog story narrative and demonstrated that Finnish language behaves like a typical satellite-frame language Chen and Guo (2009) studied motion events in Mandarin Chinese and their study suggested that Chinese writers did not express motion events either as writers of V-languages such as Spanish and Turkish or S-languages such as English, rather Chinese belongs to a third language type (equipollently-framed) in terms of motion events. So far motion verbs and learner language relation has not been the main focus as much as typological differences among language.

In terms of second/foreign learning and motion events relationship, Cadierno (2004) examined motion events in the second language with Spanish and Danish learners regarding Slobin's thinking for speaking hypothesis (1987). Cadierno's results confirmed, to some extent, thinking for speaking hypothesis for adult language learners whose L1 and L2 belong to two different typological categories. Sharpen (2016) studied motion events in L2 with native

speakers of English learning Spanish and native speakers of Spanish learning English and concluded cognitive parameters of participants affected the production of motion events in L2 and supported Slobin's 'thinking for speaking hypothesis. Kilimci (2017) investigated the influence of the cross-linguistic variation on the construction of motion events in L2 written productions of Turkish learners of English and found that explicit instruction helps to raise awareness of the problems that might occur due to the typological differences between L1 and L2 and also can lead positive learning outcomes.

This study attempts to examine motion verbs in essays (in English, as an S-language) of learners whose native languages are in different typological categories as V-language (Turkish) and S-language (German). The major aim is to see whether there is a statistical difference between Turkish and German learners of English in the use of motion verbs in their argumentative essays.

## Methodology

The present study is a corpus-based analysis of motion verbs usage, therefore, two English as a Foreign Language (EFL) learner corpora from two different native languages as Turkish as a verb-framed language and German as satellite-framed language are investigated in terms of motion verbs like move, fly, walk, go via frequency and statistical analysis for corpora comparison. Learner corpora were taken from International Corpus of Learner English (ICLE) :

ICLE (International Corpus of Learner English); the corpus of 3.7 million words including the essays of learners of English from 16 language backgrounds (Granger, et.al., 2002).

Turkish sub-corpus (TICLE) essays of Turkish learners in English (Can, 2009; Kilimci and Can, 2009).

German sub-corpus (GICLE) essays of German learners in English .

Table 2 shows the corpus data used in the study:

**Table 2:** Distribution of two corpora

| Corpus | Number of texts | Number of words |
|---|---|---|
| TICLE | 280 | 223.960 |
| GICLE | 265 | 256.151 |

In the study, a set of selected motion verbs (manner verbs like walk, run, fly and path verbs like enter, pass, arrive) was identified in two learner corpora. Skecthengine software (Kilgariff, et.al., 2014) was utilized to identify each motion verbs in corpora. Frequency calculations and log-likelihood measurement applied to find out statistical differences (overuse/underuse) between groups. The Log-likelihood ratio (http://ucrel.lancs.ac.uk/llwizard.html) is a useful tool for corpus comparison as it calculates the frequencies and number of all words in a corpus.

## Results

In the first phase, the overall frequency of motion verbs (path and manner) were identified in two learner corpora to examine a possibility of a statistical difference in the use of motion verbs by two learner groups. Figure 1 shows overall frequencies of path and manner verbs in two learner corpora:

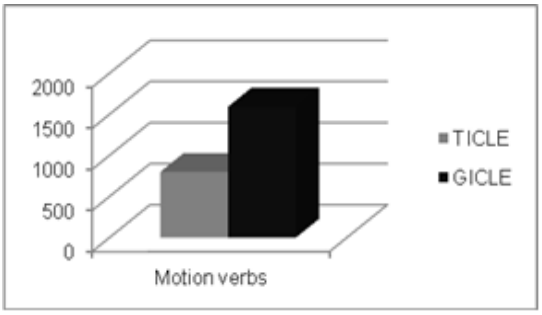



**Figure 1:** Overall frequency of motion verbs in two learner corpora

According to frequencies of motion verbs identified in Turkish and German learner corpora, both manner and path verbs are higher in number in learners whose first language is German which is a satellite-framed language. Although there is a clear difference in number between two corpora, it is needed to be a statistical measurement to test this difference whether it is significant, regarding the total word numbers in each corpus. Therefore, the log-likelihood ratio of frequencies is measured since it identifies the differences between two corpora and determines whether that difference is significant and also specifies in which the overuse and underuse take place. Table 3 presents the log-likelihood comparison of frequencies of motion verbs in two corpora :

**Table 3:** Log-likelihood results in comparing total of motion verbs in two learner corpora

| Item | O1 | %1 | O2 | %2 | LL |
|---|---|---|---|---|---|
| **Word** | 800 | 0.36 | 1594 | 0.62 - | 172.55 |

O1 : observed frequency in Corpus 1 (TICLE), O2: observed frequency in Corpus 2 (GICLE), %1 and %2 values show relative frequencies in the texts, (+) indicates overuse in O1 relative to O2, (-) indicates underuse in O1 relative to O2

According to these results, the log-likelihood value of motion verbs identified in TICLE corpus is significantly low (LL value is -172.55) with a minus degree than in GICLE which means Turkish learners of English used significantly fewer motion verbs in their essays in English than German learners of English. In other words, Turkish learners whose first language is verb-framed both underused (or vice-versa, German learners overused) manner and path verbs than German learners whose first language is a satellite-framed language. This may due to the fact that manner verbs are typical of satellite-languages like English and German in which speakers express the manner in the verb so German learners outperformed Turkish learners in the use of manner verbs. Path verbs are obligatory in motion events (Slobin, 2004) and are typical of verb-framed languages, however, they were underused by Turkish learners in their essays in English although verb-framed languages like Turkish does not need a satellite for path verbs such as in satellite-framed languages. This situation is also shown in Figure 2:

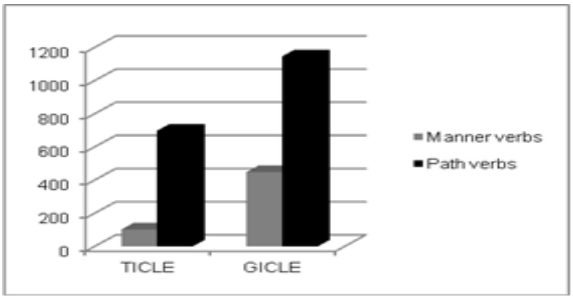
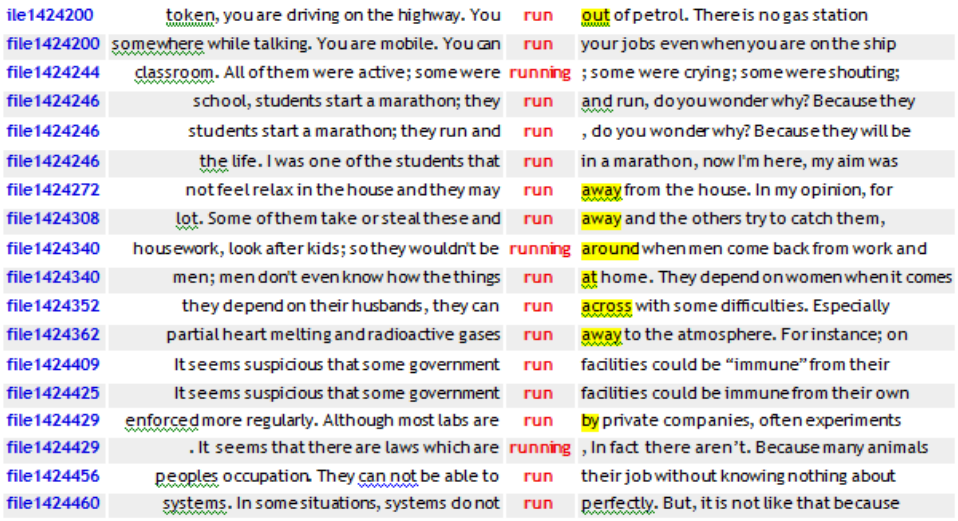



**Figure 2:** Frequencies of manner and path verbs in two learner corpora

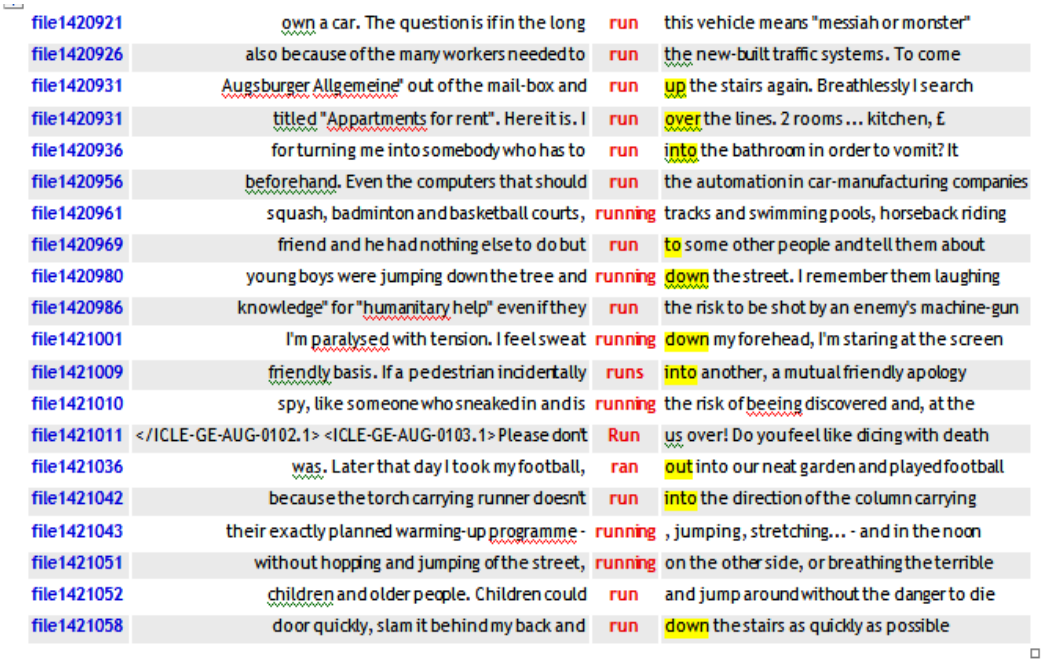
When manner verb ‘run’, identified by concordancing method in two learner corpora and examined closely, it can be seen that it was used by the German learners with several

satellites when compared to Turkish learners. Figure 3 and Figure 4 illustrate a sequence of ‘run’ in Turkish and German learner corpora :

**Figure 3:** Concordance screenshot of ‘run’ in TICLE corpus



| | | | |
|---|---|---|---|
| ile1424200 | token, you are driving on the highway. You | run | out of petrol. There is no gas station |
| file1424200 | somewhere while talking. You are mobile. You can | run | your jobs even when you are on the ship |
| file1424244 | classroom. All of them were active; some were | running | ; some were crying; some were shouting; |
| file1424246 | school, students start a marathon; they | run | and run, do you wonder why? Because they |
| file1424246 | students start a marathon; they run and | run | , do you wonder why? Because they will be |
| file1424246 | the life. I was one of the students that | run | in a marathon, now I'm here, my aim was |
| file1424272 | not feel relax in the house and they may | run | away from the house. In my opinion, for |
| file1424308 | lot. Some of them take or steal these and | run | away and the others try to catch them, |
| file1424340 | housework, look after kids; so they wouldn't be | running | around when men come back from work and |
| file1424340 | men; men don't even know how the things | run | at home. They depend on women when it comes |
| file1424352 | they depend on their husbands, they can | run | across with some difficulties. Especially |
| file1424362 | partial heart melting and radioactive gases | run | away to the atmosphere. For instance; on |
| file1424409 | It seems suspicious that some government | run | facilities could be “immune” from their |
| file1424425 | It seems suspicious that some government | run | facilities could be immune from their own |
| file1424429 | enforced more regularly. Although most labs are | run | by private companies, often experiments |
| file1424429 | . It seems that there are laws which are | running | , In fact there aren’t. Because many animals |
| file1424456 | peoples occupation. They can not be able to | run | their job without knowing nothing about |
| file1424460 | systems. In some situations, systems do not | run | perfectly. But, it is not like that because |



| | | | |
|---|---|---|---|
| file1420921 | own a car. The question is if in the long | run | this vehicle means "messiah or monster" |
| file1420926 | also because of the many workers needed to | run | the new-built traffic systems. To come |
| file1420931 | Augsburger Allgemeine" out of the mail-box and | run | up the stairs again. Breathlessly I search |
| file1420931 | titled "Appartments for rent". Here it is. I | run | over the lines. 2 rooms ... kitchen, £ |
| file1420936 | for turning me into somebody who has to | run | into the bathroom in order to vomit? It |
| file1420956 | beforehand. Even the computers that should | run | the automation in car-manufacturing companies |
| file1420961 | squash, badminton and basketball courts, | running | tracks and swimming pools, horseback riding |
| file1420969 | friend and he had nothing else to do but | run | to some other people and tell them about |
| file1420980 | young boys were jumping down the tree and | running | down the street. I remember them laughing |
| file1420986 | knowledge" for "humanitary help" even if they | run | the risk to be shot by an enemy's machine-gun |
| file1421001 | I'm paralysed with tension. I feel sweat | running | down my forehead, I'm staring at the screen |
| file1421009 | friendly basis. If a pedestrian incidentally | runs | into another, a mutual friendly apology |
| file1421010 | spy, like someone who sneaked in and is | running | the risk of beeing discovered and, at the |
| file1421011 | </ICLE-GE-AUG-0102.1> <ICLE-GE-AUG-0103.1> Please don't | Run | us over! Do you feel like dicing with death |
| file1421036 | was. Later that day I took my football, | ran | out into our neat garden and played football |
| file1421042 | because the torch carrying runner doesn't | run | into the direction of the column carrying |
| file1421043 | their exactly planned warming-up programme - | running | , jumping, stretching... - and in the noon |
| file1421051 | without hopping and jumping of the street, | running | on the other side, or breathing the terrible |
| file1421052 | children and older people. Children could | run | and jump around without the danger to die |
| file1421058 | door quickly, slam it behind my back and | run | down the stairs as quickly as possible |

**Figure 4:** Concordance screenshot of ‘run’ GICLE corpus

In the argumentative essays, German learners of English use ‘run’ with different satellites as ‘run up’, run into’, ‘run down’, ‘run over’ and ‘run on’ in order to indicate the path of motion verb. In TICLE, Turkish learners’ use of ‘run’ as motion verb can be seen as Turkish learners seem to use motion verb ‘run’ only as ‘run away’ and ‘run around’ in order to express movement. That is, German learners of English, whose first language is an S-language, tend to encode motion verbs with various satellites which might support Slobin’s (1997) one of the proposals about manner and S- and V-languages indicating that S-language users have a larger and more diverse lexicon of manner verbs than V-languages.

## Conclusion and Discussion

Languages typologically vary in mapping lexical and syntactic elements onto semantic

domains and this fact is very prominent in expressing motion events. Cross-linguistic similarities and differences between languages have an effect on language learning to some extent as it is claimed that, especially similarities play an important role in L2 comprehension (Ringbom, 2007). Thus, L1 cross-linguistic influence may interact with L2 learners in several ways as errors, avoidance, overuse of certain linguistic forms, and/or constrained by learners' general development and perceptions about similarities and differences between L1 and L2 (Ellis, 1994, cited in Cadierno, 2004). The study results showed that such influence exists to some extent in learners' written productions, namely German EFL learners' the frequency and the way of use of motion events in a language of a same typological category as their L1. In the same way, Turkish EFL learners' performance in the use of motion events (especially manner verbs) might be a sign of such interaction. Although L2 productions are in written language, as Slobin's (1987) thinking-for-speaking hypothesis suggests, learners may face a conceptual transfer when they produce motion events in an L2 which is typologically different from their L1. As the study is limited to corpus data only consists of written productions of learners and mostly frequency-based analysis, the study does not present a clear-cut conclusion in respect of the use of motion events in a foreign language. A wide range of learner data (written and spoken, different L1 backgrounds) and various analytic approaches might yield more generalizable claims in respect of learner language and typological differences relationship. In addition, since the study is based on learner language (L2 written production of learners) investigation, some pedagogical implications can be inferred from the findings. That is, motion verbs and their cross-linguistic distinctive features can be highlighted by instructors/teachers for the learners from different L1 backgrounds where motion verbs processed differently in terms of verb framing. Thus, as stated by Kilimci (2017) metalinguistic awareness is a significant notion for motion verbs in L2, namely, if learners are aware of the nature of motion events, they can have the opportunity to analyze the motion verbs' distinguishing features between L1 and L2 in order to process them easily in interlanguage.

## References

Cadierno, T. (2004). Expressing motion events in a second language: a cognitive typological perspective. In M. Achard and S. Niemeier (Eds), *Cognitive Linguistics, Second Language Acquisition, and Foreign Language Teaching,* (pp:13-49). Berlin: Mouton de Gruyter.

Cadierno, T. & Ruiz, L. (2006). Motion events in Spanish L2 acquisition. In *Annual Review of Cognitive Linguistics* 4. Amsterdam: John Benjamins Publishing Company.

Can, C. (2009). İkinci dil Edinimi Çalışmalarında Bilgisayar Destekli Bir Türk Öğrenici İngilizcesi Derlemi: ICLE'nin Bir Altderlemi Olarak TICLE. *Dil Dergisi*, (144), 16–34.

Chen, L. & Guo. J. (2009). Motion events in Chinese novels: evidence for an equipollently-framed language. *Journal of Pragmatics*, 41, 1749-1766.

Granger, S., Dagneaux, E. & Meunier, F. (2002). International Corpus of Learner English, Louvain:UCL.

Kilgarriff, A., Baisa, V., Bušta, J., Jakubíček,M., Kovvář,V., Michelfeit, J., Rychlý, P., Suchomel, V. (2014). The Sketch Engine: ten years on. *Lexicography*, Vol:1, pp. 7-36. Retrieved from: http://www.sketchengine.co.uk/.

Kilimci, A., & Can, C. (2009). TICLE: Uluslararası Türk Öğrenici İngilizcesi Derlemi. In M. Sarıca, N. Sarıca, & A. Karaca (Eds.), *22. Ulusal Dilbilim Kurultayı Bildirileri* (pp. 1–11). Ankara: Yüzüncü Yıl Üniversitesi.

Kilimci, A. (2017). The Impact of Explicit Instruction and Metalinguistic Awareness on Cross-linguistic Interference: Path Framing in Motion Events. *Gaziantep University Journal of Social Sciences, 16*(4), 1119–1133. http://doi.org/10.21547/jss.336882

Levin, B. (1993). *English Verb Classes and Alternations*. University of Chicago Press.

Littlemore, J. (2009). *Applying Cognitive Linguistics to Second Language Learning and*

*Teaching*. Palgrave Macmillan, New York.

Log-Likelihood Tool. http://ucrel.lancs.ac.uk/tools.html. Lancaster University.

Özyurek, A. & Kita , S. (1998). Expressing manner and path in English and Turkish: Differences in speech, gesture, and conceptualization. In M. Hahn, and S. C. Stoness (Eds*.), Proceedings of the Twenty-first Annual Conference of the Cognitive Science Society*, 507-512. London: Erlbaum.

Özçalışkan, Ş. & Slobin, D.I. (2003). Codability Effects on the expression of manner of motion in Turkish and English. In A. S. Özsoy, D. Akar, M. Nakipoğlu-Demiralp, E. Erguvanlı-Taylan, & A. Aksu-Koç (Eds.) *Studies in Turkish linguistics*, 507-512. Istanbul: Boğaziçi University Press.

Pasanen, P. & Pakkala-Weckström, M. (2008). The Finnish way to travel: verbs og motion in Finnish frog story narratives. AFinLAn vuosikirja, [S.l.], 66, 311-331. Retreived from: file:///C:/Users/user/Downloads/59995-1-63545-1-10-20161202%20(1).pdf.

Ringbom, H. (2007). *Cross-linguistic Similarity in Foreign Language Learning*. Toronto: Multilingual Matters.

Sharpen, R. (2016). L1 Conceptual transfer in the acquisition of L2 motion events in Spanish and English: The thinking-for-speaking hypothesis. *Open Linguistics*, 2, 235-252. Retrieved from: https://www.degruyter.com/downloadpdf/j/opli.2016.2.issue-1/opli-2016-0011/opli-2016-0011.pdf.

Slobin, D. (1987). Thinking for Speaking. In Proceedings of the Thirteenth Annual Meeting of the Berkley Linguistics Society, (pp. 435-445). University of California.

Slobin, D. (2004). The many ways to search for a frog: linguistic typology and the expression of motion events. In Stro¨mqvist, S., Verhoeven, L. (Eds.), *Relating Events in Narrative: Typological and Contextual Perspectives* (pp: 219–257). Mahwah, NJ : Lawrence Erlbaum Associates.

Slobin, D. (2006). What makes manner of motion salient? Explorations in linguistic typology, discourse, and cognition In M. Hickmann & S. Robert (Eds.) *Space in languages: Linguistic systems and cognitive categories*, (pp:59-81). Amsterdam/Philadelphia: John Benjamins.

Talmy, L. (1985). Lexicalization patterns: semantic structure in lexical forms. In Shopen (Ed.) *Language Typology and Lexical Description: vol.3. Grammatical Categories and the Lexicon*, (pp:36-149). Cambridge: Cambridge University Press.

Talmy, L. (1991). Path to realization: A typology of event conflation. *Berkeley Working Papers in Linguistics*, 480-519.

Talmy, L. (2000). *Toward a Cognitive Semantics. Volume 1: Concept Structuring Systems. Volume 2: Typology and Process in Concept Structuring*. Cambridge, MA: MIT Press.

Vasanta, D. (2011). Verbs of motion and language use: reflections on research. Retrieved from: http://valrg.in/downloads/Publications/Vasanta's%20chapter%20on%20motion%20verbs.pdf.