

## **The Classification of Manner Verbs of Motion in Persian [In English]**

**Marziyeh Badiie<sup>1</sup>, Zolfa Imani<sup>2\*</sup>**

1 PhD in Linguistics, Department of Linguistics, University of Isfahan

2 PhD in Linguistics, Department of Linguistics, University of Isfahan

\*Corresponding author: zolfa.imani.1985@gmail.com

DOI: 10.22034/JLTLL.2021.528521.0

*Received: 30 Nov, 2020*

*Revised: 28 Apr, 2021*

*Accepted: 17 May, 2021*

### **ABSTRACT**

Taking the theory of motion event introduced by Talmy (2000a&b) into account as well as adopting the classification of motion verbs of English proposed by Ibarretxe-Antunano (2006), approved by Ozcaliskan (2004) and Slobin (2000), all of which cited in Cifuentes Ferez (2007), we made an attempt to examine motion verbs of Persian to see whether the classification can justify the motion verbs in the language. In pursuit of this goal, we primarily checked what the aforementioned scholars proposed and then tried to find the motion verbs. As the aforesaid proposal includes manner verbs, we made a corpus of 100 manner verbs in Persian by extracting them from multiple electronic sources such as Persian articles in which motion verbs have been categorized as well as Persian corpora. Having collected the data and semantically investigating them, we put each verb into its relevant class. Ultimately, such a conclusion was drawn that there are 16 groups of manner verbs in Persian for two of which Manner is expressed through satellites, whereas for 13 others, it is stated by verb and for 1 of them, Manner is expressed by a complex predicate the semantic nature of which is an indication of Manner along with direction and speed, that is to say Vehicle crash, not specified among the proposed classification.

**Key words:** Persian, Motion verbs, Motion event, Manner, Classification

## 1. Introduction

Motion, in physics, refers to the displacement of an object with respect to time. It is, indeed, the result of force which is in relation to such variables as speed, velocity, displacement as well as time. Motion is always examined based on a referential point. In fact, providing no fixed reference does exist, motion cannot be observed. It should be noted that the way motion is defined in linguistics especially in semantics and typology is to a great extent similar to what physics presents of the notion. In linguistics, the notion of motion is looked into from the typological perspective proposed by Talmy (2000a&b) in which he classifies the languages throughout the world into two broad types such as verb-framed and satellite-framed languages. As stated by Talmy, every motion event is composed of four major as well as two minor components among which Path is considered as the most important one on the basis of which the languages all over the world are classified. To put it another way, if Path is encoded on verbs, the language will be regarded as verb-framed, whereas if the same component is encoded on verb particles or any element other than the verb, the language will be categorized as satellite-framed (Talmy, 2000b).

There is also a third type introduced by Slobin in 2004, namely equipollently-framed languages, to refer to those languages which encode Manner and Path equally. Examples of such languages are Niger-Congo Languages Family, Khmer, Jaminungan and Hokan.

As mentioned earlier, for motion events, there are four core and two subordinate components. The core components are Figure, Ground, Path and Motion while the subordinate components are Cause and Manner. By Figure it is meant the entity that moves with respect to Ground; Ground itself is the entity which Figure is in contact with; Path is the route passed through by the Figure, and Motion refers to the fact of movement which is typically reflected in the motion verb. The following example can best illustrate a motion event where the four abovementioned components have been involved:

(1) The boy made the ball fall into the hole slowly.

According to the definitions of each component, it is obvious that in (1), *the ball*, *the hole*, *into*, and *fall* point to Figure, Ground, Path and Motion respectively. Additionally, there are two other elements in (1)—*the boy* and *slowly*—which respectively refer to the Cause and Manner in a way that it is *the boy* that causes *the ball* to *fall*. Additionally, the way of movement of *the ball* into the hole is shown by *slowly*.

It should also be mentioned that Manner is not only expressed through adverbs but it is also indicated by the verb itself, as stated earlier about the satellite-framed languages. For instance, such verbs as *jump*, *crawl*, *straddle* and *escape* in English are grouped among the manner verbs of motion. Example 2 displays a motion event where the motion verb is a combination of two components (Motion + Manner):

(2) The boy jumped over the gutter.

In (2), *the boy* is Figure, *over* indicates Path, *the gutter* is Ground and *jumped* simultaneously shows both Motion and Manner of movement.

As the present study focuses on Persian, it is worth remarking that the language belongs to neither classification, as Hamedei Shirvan and Sharifi (2013) say; however, it does not mean that it exhibits no such components as Path and Manner. Instead, it shows, in some cases, the features of verb-framed languages while in some others, those of satellite-framed languages, according to them (Ibid).

In addition to the work done by Hamedei Shirvan and Sharifi (2013), there are a number of other studies carried out in this respect which the next section will refer to.

Now, given the theoretical framework adopted in this research, that is to say Talmy's motion event theory (2000a&b) and more the classification proposed by Ibarretxe-Antunano (2006), the following question would be considerable:

*What are the classifications of manner verbs of motion in Persian?*

From this part onward, the paper will be organized as follows: The next section will point to the most remarkable and recent surveys around the motion events in Persian. In the third section, the method through which the data have been collected and analyzed will be described. Section four will be allocated to the analysis of data as well as discussion relevant to them. And finally, the last section will state the concluding remarks particularly with respect to answering the research question.

## **2. Literature Review**

As specified in the previous section, there are multiple works devoted to the study of motion events in Persian. Here the most outstanding pieces of research which have recently been conducted are pointed out.

With regard to the lexicalization of verbs, Azkia and Sasani (2012) have done a piece of research focusing on the shortcomings of Talmy's lexicalization patterns (1985). By analyzing their data, they have concluded that in motion events, two separate approaches are assumed. One refers to the generic approach which combines core conceptual constituents in motion verbs and the other refers to the specific approach in which the periphery conceptual constituents have an effective role in the combination within the motion verbs.

In an article by Eslamipour and Sharafzadeh (2018), motion verbs are comparatively studied in both Persian and English. They have used a 360-word corpus including 180 English and 180 Persian motion verbs. Through data analysis, they concluded that like English, Persian has a great tendency towards satellite-framed languages category. Indeed, satellite in Persian is Manner, whereas the same constituent is Direction in English.

Shah Hosseini et al (2017) have studied the transitivity of Persian motion verbs from the cognitive linguistics perspective. In fact, they have tried to find answers to the question saying what the difference is between Figure and Ground with regard to both transitive and intransitive events. They have finally reached such a conclusion that the object, in transitive clauses, is typically the reflection of Ground. Moreover, in the causative constructions, it is the Figure that is displaced. By contrast, in intransitive constructions, subject is the same as Figure and the intransitive verb depicts the displacement.

Mesgarkhooei (2014) has made an attempt to find some information about Manner which is reflected in Persian motion verbs. To reach her goal, she has gathered Persian motion verbs from one of the major Persian dictionaries to analyze them. Her findings have shown that Persian motion verbs include 26 types of information about the manner of motion.

There are also a number of other works in which motion events in Persian have been looked into from the cognitive linguistic perspective: Seyedan (2019), Akhavan et al. (2017), Poshtvan et al. (2015), Golfam et al. (2012), Feizabadi and Pado (2012), Babai (2011) as well as Amouzadeh and Soltani (2011).

In a recent study by Khorvash and Lotfi (2020), the way through which motion events in Persian are lexicalized by Persian native speakers as well as the model used by them to encode spatial manner was put forth for discussion. Asking 25 individuals to describe their observations of optional movements relevant to human and animal on a short film, they have finally reached such a conclusion that the native speakers of Persian follow a binary model to describe motion events as a result of which the Persian language can be put into both verb-framed and satellite-framed language types.

The most recent studies with respect to the examination of motion verbs in Persian are two works by Imani and Motavallian in 2020. They have studied the manner verbs within the theoretical framework of frame semantics (2020a, b). It is worth noting that the two pieces of research carried out by them have focused on specifying the semantic frames of the motion verbs in Persian.

### **3. Method**

The current research has been carried out in several phases. In the first phase, the classification of motion verbs in English, proposed by Ibaretxe-Antunano (2006), was checked and then, the manner verbs were extracted. The elicited verbs were then looked up through a couple of English to Persian dictionaries (*both in printed and electronic versions*) so that they can be capable of being searched amongst other manner verbs to avoid repetition. Thereafter, a number of electronic sources such as the Persian Corpus of Bijankhan were also examined to see if there is any manner verb not included among the classifications. At the ultimate phase of research conduction, the manner verbs in Persian were categorized on the basis of their semantic as well as pragmatic aspects to be put into the classes mentioned earlier.

### **4. Discussion**

In this section, first the classification proposed by Ibaretxe-Antunano (2006) will be introduced and then, the Persian verbs belonging to each class along with their English equivalents will be tabulated.

Table 1. Motion verbs classifications (Ibaretxe-Antunano, 2006)

Categories	English Examples	Categories	English Examples
<b>Motor pattern</b>	ways of walking; ways of running; ways of jumping	<b>Violent motion</b>	charge; dash
<b>Forced motion</b>	drag; trudge	<b>Unsteady motion</b>	totter; stagger
<b>Furtive motion</b>	crawl; creep	<b>Rate</b>	hurry; dash; zoom
<b>Obstructed motion</b>	stumble; trip	<b>State of Figure</b>	limp; stroll
<b>Smooth motion</b>	glide; slide	<b>Length of steps</b>	stride; scurry
<b>Leisurely motion</b>	hike; trek	<b>Shape of legs</b>	goosesteps
<b>No aim in motion</b>	roam; saunter	<b>Use of Figure's hands</b>	crawl; climb
<b>Joyful, playful motion</b>	scamper; frolic		

Now, a brief description relevant to each category is provided so that the concept of each verb will become more tangible.

As can be seen, the first category refers to *Motor pattern*, by which it is meant the ways of walking, running, and jumping. It is obvious that every verb that indicates any form of walking, running as well as jumping is included in this class. As an example, a situation can be referred to where the Figure jumps over a gutter or jumps up and down in its place. In both cases, Figure's motion is regarded as *Motor pattern*.

The second category is *Forced motion*. As the name of the category suggests, the verbs here points out any displacement requiring some force to be moved forward or backward. As a result, such verbs as *drag* and *trudge* are included in this class.

Clearly, *Furtive motion* refers to any movement done in a stealthy manner, that is to say without being seen or heard. Accordingly, such verbs as *crawl* and *creep* are to be put into this category.

By *Obstructed motion*, it is meant moving in an unsteady way, hitting one's foot against something or putting one's foot down awkwardly while one is walking or running. Thus, such verbs as *stumble* and *trip* would be considered as the best examples of this sort.

In the fifth category, we face *Smooth motion*, by which it is meant a kind of movement softly displaced along a path. Indeed, the motion is most probably without creating sound. However, it ought to be mentioned that *Smooth motion* is not necessarily *Furtive motion* because the former indicates a soft movement, whereas the latter refers to both soft and

secret displacement. On that account, such verbs as *glide and slide* are subsumed in this type.

In the category called *Leisurely motion*, the Figure moves in an unhurried, relaxed and comfortable way. Thus, such verbs as *hike and trek* are embraced in this category.

No category description is as most conspicuous as *No aim in motion*, as it appears the name itself is the best depiction of what the category denotes. The most prominent example in this case refers to *roam*, which means the Figure walks with no aim.

The *Joyful, playful motion* refers to any movement hastily or joyfully done such as *scamper and frolic*.

The category named *Violent motion* comprises any motion with violence, as it suggests. Therefore, *charge and dash* are among the verbs in this class.

The *Unsteady motion* category pertains to shaking or moving in a way over which the Figure has no control. In this manner, the verb *totter*, mentioned earlier as an example of *Obstructed motion*, can be the best illustration in this type.

By the *Rate*, we are immediately reminded of speed. Hence, every verb denoting speed could be put in it. It is worth stating that there are a considerable number of verbs whose meaning alludes to the rapidity of motion. To name a few, such verbs as *hurry, dash, and zoom* can be depicted.

The last four categories, that is to say *State of Figure, Length of steps, Shape of legs* as well as *Use of Figure's hands* point to the way through which some of the parts of the body play the role of Cause or any other agent that facilitates the process of movement. For instance, in the category of *State of Figure*, such a verb as *limp* is regarded as one of the best illustrations, as it well shows in what state or position the Figure is or moves.

In *Length of steps*, as by length it is meant the distance between the two legs, the expression *stride* can best reveal what the category describes and comprises.

It is obvious that by state, in the category of *State of Figure*, it is meant the physical state of the Figure. Indeed, such a complex predicate as *gidž rāftān (=reel)* in Persian can be put into this class, as it points out a physical status in which the Figure loses its balance, as a result of which it may totter or fall down.

When it is said *Shape of legs*, it may mean that the manner of motion is highly dependent upon the change of the form of the legs while moving. According to Aryanpur Kashani (1999), the Persian equivalent for goosestep is *reze rāftān bedun-e xām kārđān-e zānu* which means to march without bending knees.

It should be mentioned that the expression *redže rāftān (=parade)* is a complex predicate followed by another expression—*bedun-e xām kārđān-e zānu (=without bending knees)*—to indicate the shape of legs. Indeed, the latter expression is considered a type of adverb of manner indicating the manner of movement while parading. Therefore, for *Shape of legs*, no lexical item at least as far as the authors of the current article know, does exist. Nevertheless, the Persian version of *goosestep* which is a combination of a compound verb together with an adverb of manner can be regarded as a verb included by this class.

The current research findings are composed of motion verbs in Persian which are going to be looked into on the basis of what stated earlier.

The following table shows each category with the relevant motion verbs in Persian:

Table 2. Persian motion verbs classifications

Categories	Persian Verbs	English Equivalents	Categories	Persian Verbs	English Equivalents
<b>Motor pattern</b>	rah ræftæn; dævidæn; pæridæn	walk; run; jump	<b>Violent motion</b>	hæmle kærdæn	assail
<b>Forced motion</b>	keʃidæn	pull; haul; drag	<b>Unsteady motion</b>	længidæn	limp
<b>Furtive motion</b>	χæzidæn	crawl	<b>Rate</b>	dævidæn	run
<b>Obstructed motion</b>	sekændæ ri χordæn	stumble	<b>State of Figure</b>	gidʒ ræftæn	reel
<b>Smooth motion</b>	qæltidæn	slither	<b>Length of steps</b>	goʃad goʃad rah ræftæn reze ræftæn	straddle
<b>Leisurely motion</b>	ʃena kærdæn	swim	<b>Shape of legs</b>	bedun-e xæm kærdæn-e zanu	goosestep
<b>No aim in motion</b>	pærse zædæn	wander	<b>Use of Figure's hands</b>	χæzidæn	crawl
<b>Joyful, playful motion</b>	ræqsidæn	dance			

As shown by Tables 1 and 2, there are 15 categories specified for the motion verbs all of which are of manner type. According to them, for each category, at least one verb in the two languages was inserted. However, for one category, namely *Shape of legs*, no lexical verb could be found in Persian or at least it might be claimed that as far as the authors know, there was no lexical verb of manner to be matched with its English pair that is to say *goosestep*, mentioned in Table 1. It is also worth saying that not every manner of movement is expressed via verbs in Persian either. Indeed, there are some adverbs or phrasal structures

which describe the manner of motion events. As an example, the same verb, i.e. *goosestep* in English can be referred to whose equivalents in Persian are not a manner verb but a combination of a motion verb together with an adverb of manner: *aheste qædæm zædæn* (=to walk slowly) as well as *redʒe ræftæn bedun-e xæm kærdæn-e zanu* (=to march without bending knees).

As to other categories, it ought to be stated that the number of the verbs in each class was much more than what has been listed in this paper, but for the sake of saving space and convenience, solely few verbs were selected to insert. Interestingly, it is worth noting that some verbs belong to more than one category such as *crawl* which is listed in the *Furtive motion* and *Use of Figure's hands* Classes both, as the verb enjoys the characteristics of motion events in the two aforementioned groups.

Taking the motion components introduced by Talmy (2000b) into consideration, it is observable that from among the 6 components mentioned in Section 1 almost all of them can be explicitly as well as implicitly observable in every category. For instance, the verb *hurry* in the Rate Class can be pointed to in which Figure is typically a human, Ground is the place at which Figure is in a hurry to arrive, Path is the way that the human passes through, Motion is the process of Figure's movement, Manner refers to the rate of Figure's movement, and Cause refers to the entity or agent which has made the Figure move in a rush.

Another point to note refers to the fact that the classification works for Persian manner verbs of motion as well, although there are no lexical verbs in Persian to fill in the specific space in Table 2 for *Shape of legs*. However, the space can be filled in by such phrases as *aheste qædæm zædæn* (=literally meaning slowly step hit) and *redʒe ræftæn bedun-e xæm kærdæn-e zanu* (=to march without bending knees) which equal *goosestep* in English. The same also holds true for the *Length of steps* where the manner of movement is indicated by the adverb *gofad gofad* (=loose loose) alongside the motion verb *rah ræftæn* (=walk) which as a whole means *straddle*.

Indeed, an example for this category, namely *Shape of legs*, the Manner component is encoded on satellite rather than the verb itself.

Additionally, it should be stated that some classifications are absent from what Ibaretxe-Antunano (2006) has introduced, as there are some verbs in Persian like *ʃæp kærdæn* (=.....) in which the manner of motion is to some extent the same as direction of motion. In fact, when a vehicle like a car crashes, it will indeed exit from the main path; as a result of which the car collides with another vehicle or with an object. Therefore, the movement of a car while crashing is an illustration of its manner of motion which is together with speed as well. By adopting this claim, a further category might be added to the 15 classes pointed out before: *Vehicle crash*.

And the last but not the least is a note on Manner in Persian: the component is expressed in three linguistic forms in this language: simple verbs like *χæzidæn* (=crawl) and *længidæn* (=limp), complex predicates like *hæmle kærdæn* (=assail) and adverbs of manner like *gofad*

*gofad rah rəftæn* (=straddle). In the case of the last form, adverb of manner is combined with the complex predicate, i.e. *gofad gofad* (=loose loose) + *rah* (=way) + *rəftæn* (=go).

Referring back to what has already been mentioned about Talmy's typology of the languages around the world as well as taking our Persian data into consideration, we can claim that as Manner in Persian is encoded on verbs and other elements than the verbs, language might be typologically classified as the one in between verb-framed and satellite-framed languages types with most tendency towards satellite-framed languages.

To sum up, it can be said that the classification proposed by Ibaretxe-Antunano (2006) works for Persian as well. In addition, there is one more category for Persian, to be precise *Vehicle crash* for a verb like *fəp kərdæn* which equals *crash (for car)* in English. Accordingly, the following table depicts the classification for the manner verbs of motion in Persian alongside the verbs pertaining to each class:

Table 3. Persian motion verbs classifications (The last version)

Categories	Persian Verbs	English Equivalents	Categories	Persian Verbs	English Equivalents
<b>Motor pattern</b>	rah rəftæn; dəvidæn; pəridæn	walk; run; jump	<b>Violent motion</b>	həmle kərdæn	assail
<b>Forced motion</b>	keʃidæn	pull; haul; drag	<b>Unsteady motion</b>	længidæn	limp
<b>Furtive</b>	χæzidæn	crawl	<b>Rate</b>	dəvidæn	run

The Classification of Manner Verbs of Motion in Persian [In English]

motion					
<b>Obstructed motion</b>	sekændæ ri χordæn	stumble	<b>State of Figure</b>	gidz ræftæn	reel
<b>Smooth motion</b>	qæltidæn	slither	<b>Length of steps</b>	gofad gofad rah ræftæn reze ræftæn	straddle
<b>Leisurely motion</b>	fena kærdæn	swim	<b>Shape of legs</b>	bedun-e xæm kærdæn-e zanu	goosestep
<b>No aim in motion</b>	pærse zædæn	wander	<b>Use of Figure's hands</b>	χæzidæn	crawl
<b>Joyful, playful motion</b>	ræqsidæn	dance	<b>Vehicle Crash</b>	fæp kærdæn	crash

### 5. Conclusion

The present research which has been carried out with regard to Talmy's theory of motion event (2000a&b) as well as adopting the classification of motion verbs in English proposed by Ibaretxe-Antunano (2006a) was a descriptive-analytic study whose findings were analyzed with the help of 100 motion verbs of manner, showing that for each category of the classification, there is at least one verb in Persian excluding two categories for which no verb was found. However, the language is not meant to fail to express motion events relevant to the two categories, but it is able to state them via descriptive phrases or adverbial elements. Moreover, like English, there were some verbs in Persian which belong to more than one category such as *χæzidæn* (=crawl) which belongs to both Furtive motion and Use of Figure's hands Classes. This way, the research question would be answered by claiming that there are 16 groups of manner verbs in Persian for two of which Manner is expressed through satellites, whereas for 13 others, it is stated by verb and for 1 of them, Manner is expressed by a complex predicate the semantic nature of which is an indication of Manner along with direction and speed. Indeed, it should be stated that according to the definitions of each class, the verb *fæp kærdæn* (=crash) fails to be compatible with any of them. In other words, no class can have such a verb inside. Moreover, given the research questions, it ought to be mentioned that the criterion distinguishing the manner verbs of motion in Persian from each other is the semantic nature of the verbs on the basis of which each verb can be put into a distinct class.

### Acknowledgements

I would like to express my thanks to reviewers for their valuable suggestions on an earlier version of this paper.

### Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

### Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

### REFERENCES

- Akhavan, N. et al. (2017). "Expression of motion events in Farsi". *Language Cognition and Neuroscience*. Vol. 32, 792-804. Doi: 10.1080/23273798.2016.1276607
- Amouzadeh, M. & Soltani, R., (2011). "Ruykārdi shenaxti be chand maw'navi: Motale-ye moredi-e fe'le harkāti-e Avārdān (In Persian): A cognitive approach to polysemy: A case study of motion verb "Avārdān"". The Series of Articles of the 3<sup>th</sup> Conference of Semantics, pp. 233-256. Teheran: Neviseh Parsi Publishing.
- Aryanpur Kashani, M., (1999). "The Aryanpur progressive English-Persian dictionary". 2<sup>th</sup> edition. One volume, companion by Manoochehr Aryanpur Kashani, M.A., Ph.D. Teheran: Jahan Rayaneh Publishing.
- Azkiā, N. & Sasani, F. (2012). "Vazhgani shodegi dār fel-ha-ye harkāti-e Farsi: Olguei tazeh (In Persian): Lexicalization in Persian motion verbs: a new model". *Mājāle-ye Zāban va Zāban Shenasi (Journal of Language and Linguistics in Persian)*. Spring & Summer 2012.
- Babai, H., (2011). "Lexicalization of motion event in Persian". *Theory and Practice in Language Studies*. Vol. 1. No 2. Doi:10.4304/tpls.1.2.157-162
- Cifuentes Ferez, P., (2008). "Motion in English and Spanish: A perspective from cognitive linguistics, typology and psycholinguistics", PhD Thesis, University de Murcia.
- Eslamipour, N., Sharafzadeh, M. (2019). "Comparison of motion verbs in Persian and English languages (A cognitive and typological approach)". *ZABANPAZHUI (Journal of Language Research)*, Vol 11, No 31, pp 223-246. Doi: 10.22051/jlr.2018.16183.1367.
- Feizabadi, P. S., & Pado, S., (2012). "Automatic identification of motion verbs in WordNet and FrameNet". Proceedings of KONVENS, Vienna, September 19.
- Golfam, A. et al. (2012). "Māfhum sazi-ye af'al harkāti-ye bāsit-e zāban-e Farsi: Ruykārdi shenaxti (In Persian): Coceptualization of simple motion verbs in Persian: A

*cognitive approach*". Fæslname-ye Motale'at va Guyeshha-ye Gharb-e Iran (Journal of Studies and Dialects of Western Parts of Iran in Persian). No. 1. Pp. 103-122.

Hamedishirvan, Z. & Sharifi, S. (2014). "*Bārresi-ye rādeshenaxti-ye māqule-ye qāmār dar saxt-e ruydadi-ye af'al-e hārkhāti dar zāban-e Farsi (In Persian): Typological study of satellite in event structure of motion verbs in Persian*". Fæslname-ye Jostarha-ye Zābani (Journal of Linguistic Inquiries in Persian), pp. 71-89.

Ibaretxe-Antunano, I., (2006). "*Sound symbolism and motion in Basque*". LINCOM Publishers, Munich: Lincoln Europa.

Imani, Z. & Motavallian, R. (2020 a) "*Motion verbs of manner in FrameNet: A comparison between Persian and English*". In Kervan International Journal of Afro-Asiatic Studies. No. 24, Vol. 1: pp 107-122. Doi: 10.13135/1825-263X/4106

----- (2020 b) "*Barresi-e qalebha-ye manayi va raveshha-ye bayaan-e jahat dar fe'l-ha-ye harkati-e farsi: amadan va raftan (In Persian): The study of the semantic frames and the way of expressing direction in Persian motion verbs: "Come" and "Go"*". In *Journal of Western Iranian Languages and Dialects*. Vol 8, No 3, pp 1-11. Doi: 10.22126/JLW.2020.4754.1380

Khorvash, Z. & Lotfi, A. (2020). "*Ramz gozari-e fazayi dar zaban-e farsi: Tosif-e ruydad-ha-ye harkati tavasot-e farsi zabanān (In Persian): Spatial encoding in Persian: The expression of motion events by Persian native speakers*". In *Journal of Language Science*. DOI: 10.22054/Is.2020.44697.1253.

Mesgarkhooei, M. (2014). "*Baznemud-e māsir dār af'al-e hārkhāti-e Farsi (In Persian): The representation of path in Persian motion verbs*". In *Vizhe Name-ye Name-ye Farhangestan*. No. 9, pp. 74-92.

Ozaliskan, S., (2004). "*Encoding the manner, path and ground components of a metaphorical motion event*". *Annual Review of Cognitive Linguistics*, Vol 2: pp 73-102. Doi: 10.1075/arcl.2.03ozc

Poshtvan, H. et al. (2015). "*Baznemud-e ruydad-ha-ye harkati dar goftar-e ravayi-e kudakan-e farsi zaban dar negaresh-e shenaxti (In Persian): Representation of motion events in Persian-speaking children's narratives; a cognitive approach*". In *Journal of Language Related Research*, Vol. 6, No. 3: 19-43.

Seyedan, E. (2019). "*Barresi-e afaal-e harkati dar sharh-e shathiyat-e ruzbehan baqli ba ruykardi shenakhti (In Persian): A cognitive approach to motion verbs in Ruzbihan Baqli's sharhe-shathiyat*". In *Matn Shenasi-e Adab-e Farsi (In Persian): Journal of Persian Text and Literature*, pp 109-125. Doi: 10.22108/RPLL.2018.110400.1317

Shah Hosseini, F. et al. (2017). "*Bārresi-ye gozārai-ye fe'l-ha-ye hārkhāti dār zāban-e Farsi (In Persian): Study of transitivity of motion verbs in Persian*". *Do Mahname-ye Elmi-Pazhuheshi-ye Jostarha-ye Zābani (Journal of Linguistic Inquiries in Persian)*. No. 7, pp. 117-136. Doi: 20.1001.1.23223081.1396.8.7.1.1

Slobin, D. I., (2000). "*Verbalized events: A dynamic approach to linguistic relativity and determinant*". In S. Niemeier & R. Dirven (Eds.), *Evidence for Linguistic Relativity*. Berlin: Mouton de Gruyter: pp 107-138. Doi: 10.1075/cilt.198.10slo

Slobin, D. I. (2004). *"The many ways to search for a frog: Linguistic typology and the expression of motion events. Relating events in narrative: Typological and contextual perspectives in translation"*. Stromqvist S., Verhoeven L. (eds.). Mahwah (NJ): Lawrence Erlbaum, 2004, 219-257.

Talmy, L. (1985). *"Lexicalization patterns: semantic structure in lexical forms"*. In Shopen, T. (Ed.), *Language Typology and Syntactic Description*, Vol. 3, (pp. 57-149). Cambridge University Press.

Talmy, Leonard (2000a). *"Toward a cognitive semantics"*. Vol. I. Cambridge: MIT Press.

----- (2000b). *"Toward a cognitive semantics"*. Vol. II. Cambridge: MIT Press.