The Typology of Motion Expressions in English, Japanese, and Persian:
Satellite-framed, Verb-framed or Mix-framed languages

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Abstract
In this present study, we analyze the Persian Motion Events from Talmy’s semantic-typological standpoint which divide the world’s Languages into two frames based on Path (main-event). It is encoded by the main verb or the satellite (a closed-class category that includes any constituent other than a nominal complement that is in a sister relation to the verb root).

In this study, Persian will be compared with English and Japanese as representative examples of Satellite-framed languages and Verb-framed languages to understand which group Persian belongs to. The analysis of data from the short story “Christmas Carol” shows that in Persian, encoding path shows a two framed way (like English/Japanese). It has also been observed that Persian also is similar to satellite-framed languages for encoding path. However, in expressing manner, Persian is similar to verb-framed Languages.

1 Introduction:
Talmy (1985) examined which semantic elements are expressed by which surface elements chiefly in the field of motion events. He points out a motion event consists of one object (figure) moving or located with respect to another object (ground). Besides figure and ground, there are path and motion that either followed or site occupied by the figure with respect to the ground. He mentioned for expressing a motion event, two or more simple events can be encoded in a single event or complex event. For instance, ‘down’ in 1, the descending motion encodes the path as a ‘main-event’ and ‘ran’ expresses the manner of motion as a ‘co-event’ in a single sentence. According to Talmy’s primary study the world’s languages can be categorized into two frames based on path (main-event) which is encoded onto Verb roots or non-verbal elements. Languages that encode path to verb roots are called verb-framed languages while languages that encode path to non-verbal elements are called satellite-framed languages.

1. The car ran down the hill.

There is a great deal of research on Talmy’s study. The most well-known study is Slobin (2004), the
‘Frog-Study-Project’. Slobin (2004) reported that not all languages can be divided into two frames. He posits a third frame and calls it ‘equipollently-framed language’. For instance, one example is Thai. Thai encodes path and manner equally with verbs. This study has led to many papers and research that argue languages cannot be clearly divided into these framings (e.g., Beavers et. al, 2010; Verkerk, 2014). Slobin (2004) also observed that in satellite-framed Languages the use of manner is salient and these languages have a great number of manner verbs. By contrast, in verb-framed languages there is a lack of manner while they have a great deal of Path verbs. Given the argument that not all languages fall into frames perfectly, this study shows Persian has both the verb- and satellite- framed language features. However, it tends to be a satellite-framed language.

2 Satellite in Persian

Satellite is the grammatical category of any constituent other than a noun-phrase or prepositional-phrase complement that is in a sister relation to the verb root. It relates to the verb root as a dependent to a head. The satellite, which can be either a bound affix or free word, is thus intended to encompass all of the following grammatical forms, which traditionally have been largely treated independently of each other (Talmy 2000:102). Shirvan and Sharifi (2013) investigated the Satellite in Persian according to Talmy’s definition. They argued that Satellite can be classified in two ways. The first most obvious type of satellite is verbal prefixes that were remarkable in the past periods like, andar ‘into’, bāz ‘backward’, bar ‘down to up’, farāz ‘forward’, forud ‘up to down’, furu ‘down’. These prefixes signify the motion directions and in terms of formal criteria they are dependent to their verbs.

2. U parčam-ra bar-afrāst.
   he/she flag.ACC down to up-raise.3SG. PAST
   “He/She raised the flag”

In 2 although the verb afrāst ‘raise’ signifies the ‘down to up’ Path in root verb, the prefix bar ‘down to up’ emphases the direction and add the extra direction. The second type of satellites in Persian is the verb assistant elements\(^1\) in Persian compound verbs. They can be categorized into 2 ways.

I. The first group shows the Path

II. the second group shows the Manner of motion event

Shirvan and Sharifi (2013) claimed that Persian satellites have changed from prefix to verb assistant elements gradually.

\(^1\)”verb assistant” refers to the free morphemes in the compound verbs in Persian.
3 Methodology

In the current study we utilized a corpus study, the short story “Christmas Carol” (Charles Dickens) which has been translated into various languages including Persian and Japanese. In this study, we examined motion events, focusing primarily on path (main-event). We compared Persian with English and Japanese in order to examine the position of Persian language in relation to the Talmy’s theory and reveal the tendency of the Persian language toward this division. In this study, ‘M+S’ designates manner verb + satellite like “fly out”. It is noteworthy that this pattern in Persian is ‘S+M’, satellite (verb assistant) + manner verb. However, since satellites are attached to the manner verbs we account ‘S+M’ as ‘M+S’. Also ‘S’, ‘V’, and ‘E’ means satellite, verb, and equipollent frame respectively. Moreover, verbs which encode path and manner at the same time like “escape” is noted as ‘Mix’ while verbs which only encode motion are noted as ‘N’. Furthermore, in this study deictic verbs are categorized in a separate group since, deictic motion verbs refer to motion with respect to a deictic center, rather than motion that has a certain path (Verkerk 2014:328). Thus, D and D+S means respectively deictic verb and deictic verb+satellite. The total sentences have been examined in this study are 72 sentences which contained both boundary and unboundary transitional motion events.

4 Result and Discussion

In this section I look into the strategies of each language (English, Japanese, and Persian) on how they encode path. Figure 1 shows the path strategies in the three languages.

![Figure 1 The Path encoding in English, Persian, and Japanese](image)

In figure 1, it has been shown that the common pattern in English which has known as a typical satellite-framed language is M+S. The figure 1 indicates M+S accounts for 33 cases. However, in Japanese which known as verb-framed language this pattern has not observed Similarly, this pattern in Persian is not usual as M+S has no more than 5 cases. Thus, it became clear that M+S is not a common
pattern in Persian. In this study, the manner in motion event is underlined and the path is bold.

3. Scrooge **walked out** with a growl.  P.18
4. Kudakan-e xane-i baraye didan-e amme-ha va amu-ha xale-ha va Chidren-EZ home-one for see-INFI-EZ unt-PL and uncle-PL aunt-PL and dayi-ha va. xahar-an va baradar-an-e moteahel xod va xojamadguyi uncle-PL and sister-PL and broder-PL-EZ married themselves and greeting be-anha **be-birun-e** xaneh va be-miyan-e barfla mi-davida-nd. To-them to-out-Ez home and to-among-Ez snow PAST.PRO.run.PL “there, all the children of the house were running out into the snow to meet their married sisters, brothers, cousins, uncle, aunts, and be the first to greet them.”  p.108

What is worthy to be noted here is in English and Persian satellites not only come with manner verbs but also, with other verbs. For example, in English the verbs like ‘got out into’ the verb ‘get’ doesn’t show the manner of motion and the satellite encodes the path. As mentioned above, the verb assistant elements in Persian encode the path, and the main verb can be light verb like kardan ‘do’ which has no special motional meaning. Moreover, in Japanese the verb ‘satogaeri-suru/returning home’ can be consider as satellite because ‘suru/do’ is a light verb and according to Slobin (2004) those languages that have light verb the path can be encoded on satellite. The satellite cases that is observed in English, Japanese, and Persian are respectively 4, 1, 32 cases. Therefore, by concerning the result of S pattern strategies we can see this is a common pattern in Persian.

5. Alight shone from the window of a hunt, and swiftly they **advanced towards** it.  p.102
6. Ruh āram va bā-vagher aheste be-eskruj nazdik- şod. ghost quiet and with-dignity slowly to-Scrooge near-shod,3SG.PAST “The Phantom slowly, gravely, silently, approached.”  p.132
7. Achira-no ie-dewa satogaerishite-kuru anesan ya anisan There-POS house-LOC-TOP return home-come elder sister and elderbroder itoko ya ojiisan obaasan-wo massaki-ni demukaeyou-to kodomotachi-ga cousin and uncle aunt-ACC the head-DAT for meeting children-NOM mina yuki-no naka-ni tobidashiteita all snow-POS inside-DAT jump-go-PAST p.95 “there, all the children of the house were running out into the snow to meet their married sisters, brothers, cousins, uncle, aunts, and be the first to greet them.”

The other way for encoding path is path-verbs that encode the path in the root verb as is usually the case in Japanese. According to the figure 1 Japanese’s V cases run up to 51 while English and Persian are alike and only contained 12 cases that indicates a great difference between English and Persian with
Japanese.

8. Scrooge entered timidly, and hung his head before this Spirit. p.78

9. ἀν ὀν ρο ῶν ὁ εκ ῶγ росл аз-рăхро гозаşтанд вاء бе дар-ї дар-п卵巢-e

They two ghost and Scrooge from-hall across-PAST and to-door-a at-back-EZ

săxteman residand

building reach-PAST-PL

“They went, the Ghost and Scrooge, across the hall, to a door at the back of the house.”

10. Sukuruji-wa mado-wo shime bourei-ga haitekita tobara-wo neniri-ni

Scrooge-TOP window-ACC close ghost-NOM enter-PAST door-ACC carfully-DAT

Shirabeta p.41

check.PAST

“Scrooge closed the window, and examined the door by which the Ghost had entered.”

English has the highest cases of D with 7 cases and D+S with 24 cases. Persian follows with 18 cases in D+S and 8 cases in D. Japanese has no more than 9 cases in both. In third type framed languages it is possible to encode manner and path together. In compound verbs in Japanese manner and path can be encoded together. This pattern accounts 9 cases and it has shown that this pattern is less common pattern in Japanese.

11. Sukuruji-wa butsubutsu monku-wo iinagara ayumisatta.

Scrooge-TOP grumbling complaint-ACC saying-while to walk away

“Scrooge walked out with a growl.”

Verbs can be divided into 3 subdivisions. The first group, as mentioned before, is verbs that conflate path as seen in sentences 8, 9, and 10. The second group is the verbs that only shows motion or unspecific direction (N). The last group contains the least common pattern that conflate path and manner in single verbs (Mix). As seen in figure 1 N groups in three languages contain almost less than 5 cases. Also Mix group is no more than 1 case in Persian and in Japanese. In this study N and Mix verbs are as below:

12. N verbs

English: across

Japanese: yokogiru (to cross)

Persian: gozaştan (cross), harekat-kardan (move-do/ to move)

Mix verbs

Japanese: nigatedu (to escape)

Persian: pa-be-farăr-gozaştan (foot-to-escape-put/to escape)

It is interesting that in ‘pa-be-farăr-gozaştan’ not only the path and the manner but also the figure
pa/foot’ is encoded.

5 Conclusion

We conduct this research based on the framework of Talmy’s binary framed languages in order to figure out the position of Persian in this continuum scale. Furthermore, we have focused on the methods of comparison that delves into the strategies used in each language. Results show that the significant pattern in English was M+S and then D+S while in Japanese the remarkable patterns are V and then E patterns. Moreover, in Persian it seems that the common pattern is S and the next pattern is D+S. The notable thing in this study is the frequency of D+S pattern in English and in Persian. Regardless the tendency of Persian to satellite-framed language, only because of the limitation of data the question might remain unanswered whether it is possible that Persian belongs to the Mix group or not. Therefore, I will expand my data by including other novels such as Harry Potter and research not only the quantity but also the type of the verbs in Persian that encode path by comparing with the typical satellite-framed language (English) and verb-framed language (Japanese).

Corpus data

Moki, Kazuko (Trans.). 2013.Kurisumasu Kyaroru[Christmas Carol], Nishimura shoten
Ebrāhimi, Hosein (Trans.).1999. Sorude kirismas[Christmas Carol], Tehran: Sazmane Pažuheš va barnāmerizi āmuzesh entešārāt madreseh

6 Reference


