Persian Verbs in Spatial Events Catherine Nouri (Université Lille 3)

This study provides an overview of how complex predicates (CP) and simple verbs behave in spatial events. As far as we know, this is the first study of Persian in spatial events using corpus analysis method that provides us with a set of naturally occurring data and statistics. Based on Talmy's 2002 study, dependent on the way that languages express manner in spatial events, they are divided into two groups. In the first group, the manner of motion and location is encoded on the verb, while in the second group the manner may be expressed via other elements such as adjuncts. For example, in English, speakers would typically say he ran into the house where run expresses the manner. In the same situation, French speakers would rather say il entra dans la maison (en courant), here the adjunct en courant refers to the manner. In this article, we will explain how manner is expressed by Persian verbs, and we will discuss simple verbs vs. CPs behaviors (syntactically and semantically) in such situations. Based on the outcome, we will explain the motivations for which simple verbs have been replaced by CPs. According to certain studies, in contemporary Persian, simple verbs are not productive and since the 13th century have gradually been replaced by CPs which are quite productive and frequent (Bateni, 1989; Barjesteh, 1983; Folli, Harley, and Karimi, 2005). Sharifi (1975), among others, has argued that these predicates either replace verbs of Arabic origin, introduce new semantic concepts, or provide new ways to express concepts that already exist. To compare simple verbs and CPs in spatial events we consider their frequencies, transitivity, and the way in which they express manner.

Since the available Persian corpora were few and their tagging options could not satisfy our needs, to identify the verbs used in spatial events we created our corpus with 2304 sentences from different online sources, namely, novels and news. Of the 2304 sentences, 820 were spatial based on Talmy's and Herskovits' definitions of spatial events. According to Talmy "the basic motion event consists of one object (the figure) moving or located with respect to another object (the reference object or the ground)" (2000, II:25). Herskovits considers spatial events, "any spatial expression involving a preposition, its object, and whatever the prepositional phrase modifies (noun, clause, etc)" (1985:342). Subsequently, simple verbs and CPs used in spatial events were distinguished. The extracted sentences were coded in a spreadsheet, according to a number of criteria, namely, simple verb/CP, location/motion, manner, semantic group, transitivity, novel/news, and frequency.

Per our analysis, 63.24% of all the verbs in spatial events are CPs and 37.76% are simple verbs. However, the distribution of CPs and simple verbs varies in novels and news. The percentage of simple verbs in novels is higher than that of simple verbs in news; in fact, in novels, 42.54% of the verbs are simple, and 57.46% are CPs, while in news, only 25.71% of the verbs are simple, and 74.29% are CPs. Therefore, the frequency of simple verbs is close to the frequency of CPs in *novel data*.

Figure (1) shows a comparison between the transitivity of simple verbs and CPs in spatial events. As it is indicated in Figure (1a), simple verbs mostly appear intransitive while according to figure (1b) CPs have both transitive and intransitive constructions adequately. Intransitive simple verbs mostly have CPs counterparts. Therefore, we suggest that, at least in spatial events, one of the reasons for the replacement of simple verbs by CPs is the shortage of transitive verbs in the simple verb system.

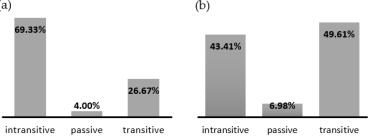


Figure 1: Transitivity in (a) simple verbs and in (b) CPs

Finally, the way that simple verbs and CPs encode the manner of motion and location differs. In sentences containing CPs, the manner is encoded on the verb while in the majority of the utterances with simple verbs;

the manner is expressed in an adverbial clause. Therefore, the syntactic distribution varies between these two systems. The fact that CPs have the potential to express manner shows that they are rich semantically while simple verbs have basic meanings. Figure (2) shows the semantic groups of simple verbs and CPs.

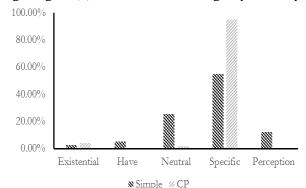


Figure 2: Semantic groups in simple verbs and in CPs

Per figure (2), 95% of the CPs contain specific information (manner) while 55% of the simple verbs express manner. See the following examples:

- 1. (a) dar-haalike lebaas-haa-raa mi-paraakanad aanhaa-raa ru-ye zamin mi-gozarad. while cloth-PL-ACC PROG-spread them-ACC on-EZ ground PROG-put.PRS.3SG 'He spreads the clothes on the ground.'
 - (b) lebaas-haa-raa ru-ye zamin pakhsh-mi-konad. cloth-PL-ACC on-EZ ground spread-PROG-do.PRS.3SG 'He spreads the clothes on the ground.'

As it is indicated in 1(a) the way in which clothes are putting on the ground is explained in an adverbial clause, and the main verb is *gozaashatn* 'put' which is a neutral verb and contains no manner or specific information. On the contrary, in 1(b), the CP *pakhsh kardan* 'spread' contains manner of motion. In fact, CPs are economic, and no adverbial clause is required to add specific information. In addition, CPs have a high degree of productivity and diversity of meaning.

In sum, although the frequency of CPs is higher in spatial events, this frequency depends on the genre of the discourse, and in our case, simple verbs are more frequent in novels in comparison with news. Therefore, a difference in the genre can lead to a different type of verb in spatial events. In fact, in novels, the tendency for writing complex and long sentences is more than that of news, and the usage of simple verbs with adverbial clauses increases. The difference of transitivity and meaning between CPs and simple verbs can be the signs that CPs are compensating for a shortage of transitive verbs and meaning among simple verbs. Since the manner is encoded on CPs, they have rich meanings and are economic. Finally, Persian has the characteristics of both groups in Talmy's typology and can encode manner either on the verb or on an additional element.

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