

Persian Native Speakers' Processing of Ambiguous Relative Clauses
-From the Perspective of the Effect of the Noun Phrase Animacy on Attachment
Preferences

This paper focused on the relationship between relative clause (RC) attachment preferences and the animacy of the head noun phrases (NPs) in ambiguous relative clauses in Persian. RCs have a complex syntactic structure in any language. If an RC construction has two NPs, RC can be assigned to either NPs, making the sentence ambiguous. (1)

(1) Someone shot the servant of the actress who was on the balcony.

In (1), two interpretations are possible: (a) the actress who was on the balcony and (b) the servant who was on the balcony. In other words, there are two types of attachment preferences: Low Attachment (LA) when RC "who was on the balcony" is attached to a structurally low noun phrase (NP2) "the actress" in the tree, and High Attachment (HA) when it is attached to a structurally high noun phrase (NP1) "the servant" in the tree. As for Persian, few studies have shown that HA is preferred (Arabmofrad, A., Marefat, H., 2008; Marefat, H., Meraji, M., 2005). However, the effect of NPs' animacy on attachment preference is unclear.

Persian is a head-initial language, meaning that the RC appears before the noun it modifies. When a noun is followed by a modifier or clause that limits its meaning, the preceding noun is suffixed with an enclitic marker (EM) -i. The addition of EM-i to NP2 would disambiguate the sentence since the RC would modify only NP2 and its meaning would be limited. In this case, Persian NSs are expected to add the RC to NP2 instead of NP1. However, Shabani (2018), which examined the effect of the presence of EM-i on final interpretation in structurally ambiguous sentences, did not produce the expected results. The reason is that half of the participants were influenced by the EM-i and preferred the interpretation to NP2, whereas the other participants may have been influenced by the animacy of the NPs and added RC to NP1, which was animate.

Therefore, considering this point, we set the following research questions. What is the relationship between RC attachment preferences and the animacy of the NPs in the structural ambiguous constructions of relative clauses in Persian?

30 Persian NSs participated in a Sentence Completion Task created by PCIBex. The experiment investigated the way they completed both inanimate+animate and animate+inanimate configurations.

Using the statistical analysis program R, we tested the generalized linear mixed model

(GLMM) and found that the HA preference rate was significantly higher in animate+inanimate than in inanimate+animate. The order of animacy in the NPs affects attachment preference, suggesting that Persian NSs tend to add RC to NP that is animate. There was also a bias toward HA when the influence of the order manipulation of animacy was excluded. That is, not only is HA proven to be strongly preferred in Persian, but the tendency to add RC to NP1 is even stronger when NP1 is animate. Furthermore, since the relationship between attachment preference and animacy of NPs in Persian was proved, the presence or absence of EM-i, as well as animacy of NPs, would have an impact on the results of Shabani's study.