

The Psychological Reality of Evidentiality Hierarchy in Persian during Sentence Listening Comprehension

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Abstract

The main question of this inquiry is the psycholinguistic reality of evidentiality hierarchy arranged from direct(witnessed) to indirect (reported, inferred, argued, etc). This study investigates processing of sentences containing evidentials by the cross-modal lexical decision method run by DMDX software. The theoretical framework is mainly based on episodic processing in which mental representations of linguistic items are not as abstract as it seems, but it is subject to the sensory input by which the representation is formed. The independent variable is evidential type and the dependent one is the subjects' reaction times to the visual stimuli. Subjects were 30 university students aging 20 to 22 classified into two groups of male and female. As for the results, they show that in Persian along evidentiality hierarchy, sentences containing direct witnessed evidentials are processed later and longer than the second- hand inferred evidential, besides the fact that there is a significant difference between sensory and non-sensory/ second hand evidentials. The explanation is that processing a direct evidential needs much more cortical activation areas like memory and attention leading to much more cognitive load than inference which is limited just to frontal lobe. Findings approve the psychological reality of this theoretical hierarchy in Persian classifying them into direct/sensory and indirect/non-sensory evidentials. The aim is to examine the psychological reality of evidentiality hierarchy experimentally.

Keywords: Evidentiality, direct witnessed evidential, indirect, reaction time, auditory comprehension

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1. Introduction

Different linguists have proposed different definitions for examining the psychological reality of various theoretical linguistic issues. This study investigates processing of sentences containing different types of evidentials of Persian by the cross-modal lexical decision method. This psycholinguistic method has been used classically by Shapiro (1990) to estimate the cognitive load across the mind. The main question of this inquiry is the psycholinguistic reality of evidential complexity hierarchy. The theoretical framework is mainly based on episodic processing in which mental representations of linguistic items are not as abstract as it seems, but it is subject to the sensory input by which the representation is formed. Also the classification of Omidvari and Golfam. (2017) on evidentials has been applied here. They divided Persian evidentials in to two broad categories of direct and indirect analyzed in detail.

2. Literature Review

The method used in this research is the cross modal lexical decision method, which will be detailed due to its importance. Theoretical framework applied here is that of Shapiro (1990) in psycholinguistics. Independent variable is the type of Persian evidentials used in the verb form and the dependent variable is subjects' reaction times. 30 students of universities aged 18-30 participated in this study. The results of two experiments show that the psychological reality of the complexity of representation of Persian evidentials according to Persian data is confirmed and there is a significant difference between the processing time of sentences containing different types of Persian evidentials .

3. Methodology

It was found out that Persian has two types of evidentials: direct and indirect. The theoretical framework is mainly based on episodic processing in which mental representations of linguistic items are not as abstract as it seems, but it is subject to the sensory input by which the representation is formed. The independent variable is evidential type and the dependent one is the subjects' reaction times to the visual stimuli. Subjects were 30 university students aging 20 to 22 classified into two groups of male and female.

4. Conclusion

As for the results, they show that in Persian along evidentiality hierarchy, sentences containing direct witnessed evidentials are processed later and longer than the second-hand inferred evidential, besides the fact that there is a significant difference between sensory and non-sensory/ second hand evidentials.

The explanation suitable for the found results is that processing a direct evidential needs much more cortical activation areas like memory and attention leading to much more cognitive load than inference which is limited just to frontal lobe. Findings approve the psychological reality of this theoretical hierarchy in Persian classifying them into direct/sensory and indirect/non-sensory evidentials. As the aim was to examine the psychological reality of evidentiality hierarchy experimentally the results showed the psychological reality.

