Comparison of visual schemas of Arabic and Persian biology inputs based on Johnson's linguistic approach

Sima Nabipour

PhD Candidate in language and linguistics, Islamic Azad University, Zahedan, Iran.

Mehdi Mohammadi Nia[1]

Assistant Professor in Language and Linguistics, Iranshahr University, Iranshahr, Iran

Ahmad Mojavezi

Assistant Professor in Language and Linguistics, Islamic Azad University, Zahedan, Iran

Abstract

One of the new scientific fields directly related to the human mind is cognitive science. Visual diagrams, first proposed by Mark Johnson, are one of the most important infrastructures in this field. Due to its psychological nature and direct connection with the mind, vocabulary can be investigated through cognitive studies. Cognitive science and its related disciplines, such as cognitive linguistics, have provided researchers with the necessary tools to conduct cognitive research due to their communicative nature. The goal of this article's authors is to use these tools to decipher the meaning of words.The current research involves a case study of equivalent vocabulary found in Persian and Arabic in biology courses during the first and second terms. The aim is to determine the use of visual schemas in equivalent vocabulary and examine these two languages based on Johnson's linguistic approach. The research method is descriptive-analytical. The study seeks to investigate how far equivalent words in Persian and Arabic in biology lessons from seventh to twelfth grade reach meaning with the application of physical experiences, and whether they have been found in language form.The purpose of this research is to show the prominent role of image schemas as semantic tools in making abstract spaces concrete in people's minds. After analyzing the data, it was found that the volumetric schema has the highest rate in equivalence of words in Arabic language. The Arabic word is not found in the movement schema, but it has an equal contribution as the power schema does in transferring meaning for equivalent words between Persian and Arabic languages.

Keywords: cognitive linguistics, image schemas, corporeality, Persian and Arabic equivalent words. biology book.

[1]-Corresponding Author. Email: m.mohammadinia@velayat.ac.ir

References

Arianfar, S. (2016). *a survey of some Persian proverbs based on image schemas in the framework of the semantic theory of cognition*, Master's thesis, Tehran: Al-Zahra University.[In Persian].

Al-Khouli, M. (1991). *Al-Nazari Al-Al-Lagheh Dictionary*. Al-Thaniyyah Edition, Beirut: Lebanese Library. [In Arabic].

An elite group of linguists. (1983). *The dictionary of terms of al-al-lugh al-hadith*, first edition, Beirut: Lebanese Library.[In Arabic].

Babasalari,Z.Zand,B.Roshan,B.Qasim-PodMoghadam,H.(2014).Cognitive examination of imaginary schemas in Persian books of the elementary school period, *Journal of Language and Linguistics*, 11(21), 69-87.[In Persian]

Bagheri Khalili, A. Mehrabi Kaleh, M. (2012). The circular schema in the lyrical poetry of Saadi and Hafez Shirazi, *Literary Criticism Quarterly*, 6(23), 125-148 .[In Persian]

Behrouzi, Z., far shirazi,H. (2019). investigation of the image schemasof rahma in the Quran based on the approach of Jhonson's Schnalkhti language. *Quarterly Journal of Literary-Quranic Research (Scientific-Research Quarterly)* 7(3), 2-14.[in Persian]
Dor: 20.1001.1.23452234.1399.8.3.2.1

Dadour Kashani, M. Mousavi Jarukani, H. (1401). Investigation of image schemas of envy and longing in Bostan Saadi. Research *Journal of Educational Literature*, 14(55), 1180-161.[in Persian]

Dastlan, M. Mohammad Ebrahimi,Z. (2014). Study of the auxiliary aspectual verbs of the Persian language in the framework of Thalami's force-dynamic model and Langaker's ideal cognitive model. *Linguistic research*, 7(1), 16-1.[in Persian]

Dehghan, H & Sayyedi, H & Nazeri,H. (2022). historical and descriptive semantics of the word "Tal" in the Holy Qur'an, *Arabic Language and Literature*, 14(2), 1-21. Doi: 10.22067/jallv14.i2.85485.[In Persian]

Drees, F, Khaso Visi, B. Sharfi,S. (2017). Investigating the application of conceptual schemes in the Holy Qur'an, relying on educational hints and moral rules in the Word of Revelation. *Quarterly Journal of Educational Teachings in the Qur'an and Hadith,* 2 (4), 59-76.[in Persian]

Imani, A. Rafiei,A.(2018).Structure-oriented analysis of head-organ noun combinations in Persian language, *Journal of Linguistics*, 11(33),129-159.
Doi: 10.22051/jlr.2018.19239.1506) .[In Persian]

Fathi Iranshahi, Meizaei Al-Hosseini,M.Pourabrahim,S. (2019). Imagistic schemas of the field of emotions in the novel "Hayayat Yusuf Tadares", *Journal of the Iranian Language and Arabic Literature Association,* (58),131-154.[in Persian]
Dor: 20.1001.1.23456361.2021.17.58.7.6

Hosseini Beheshti, M. (2012).Syntax, terminology and knowledge engineering. Tehran: Iran Institute of Science and Information Technology.[in Persian]

Johnson, M. (2018). The body in the mind is the physical basis of meaning, imagination and reasoning. Translated by Jahanshah Mirza Begi. Tehran: Aghaz.

Mohammadi Asiabadi, A. Sadeghi, I. Taheri, M. (2013), volume schema and its use in expressing mystical experiences, *researches of mystical literature (Gohar Goya)*, 6(22),141-162.[In Persian].

Mohammadi Asiabadi,A.Taheri,M. (2012). Investigation of the volume diagram of the temple and the light in the spiritual Masnavi, *researches of mystical literature (Gohar Goya)*, 6(23), 124-95.[in Persian]

Rasakh Mohand, M. (2012). *Introduction to Cognitive Linguistics, Theories and Concepts*, 4th edition, Tehran: Samit Publications.[In Persian]

Rasouli,H &Rezaei,A. Hosseini,F. (2022). Linguistic essays in the ode "Attaq Daji" written by Mahmoud Mehdi Javaheri with the phonetic, lexical and syntactic familiarization-defamiliarization approach, *Journal of Arabic Language and Literature*, 14(3). 1-25. Doi: 10.22063/jallv14.i3.2101-1013[In Persian]

Roshan, B & Yousefi Rad, R & Shabanian, F.(2012). The schematic basis of metaphors in the eastern proverbs of Gilan, *Cognition Language*, No. 8, 75-94. [In Persian].

Safavi, K. (1995). Sociological and Linguistic Study of Loanwords and Types of Loanwords in Persian Language, *Nameh Farhang*, No. 19. 96-111 .[In Persian].

Safavi, K. (2012). a discussion about image schemas from the perspective of cognitive semantics, Journal Of Nameh Farhangistan, Vol. 21, pp. 65-85. [In Persian].

--------------. (2013). *An Introduction to Semantics*, Second Edition, Tehran: Surah Mehr Publications. [In Persian].

Salimi ,F. Ali Netaj,Z. (2016). The function of image schemas in the concepts of moral education of the Qur'an. *Siraj Munir*, 8(29), 57-85. [In Persian]

Talmy, Leonard, (1988). "Power Dynamics in Language and Cognition."*cognitive science*,Translated by Morteza Daslan.12(1). 40-100.[In Persian]

Word selection group, (2008). *principles and rules of word selection with descriptions and explanations,* Third edition, Tehran: Persian Language and Literature Academy. [In Persian].