

Study of embodiment in cognitive linguistics in sadegh hadayat's the stray dog

Neda Hajimohamadi* and Maryam Iraj

Department of Linguistic, Faculty of Foreign Languages Tehran Markaz Branch, Islamic Azad University, Tehran, Iran

Corresponding author: Neda Hajimohamadi

ABSTRACT: Literature overtly uncovered the new doors from authors' concepts & works in terms of cognitive linguistics. The present study has worked on the basis of shapiro's law of embodiment in cognitive linguistics. This research lighten up the embodiment as one of the cognitive concepts for better understanding of abstract concepts. It is also thinkable that concepts like symbolism & surrealism in what performance used by the author and how it is possible to be helped the transition of story message by embodiment. According to this reality, the researcher analyses with scrutiny the whole context of story. The main purpose of the research is to show the close relation between literatures, linguistics concepts at Persian literature area. The hypothesis of the research are: there are embodiments at the contexts of story and this embodiment due to the author's characterization in story. The author have been affected by the surreal aspects of the story due to the French school. The research method of the study is analytic-descriptive and the exact analysis of the data shows the existence of embodiment in this story. The story of sadegh hadayat's life, thought's and works high lights the reason for usage of embodiment & creation of surreal space where make its own path to the essence of embodiment due to hadayat's characterization which this reality influenced by main body of the story. The result shows also the surrealism in the story affected by both French school and symbolism.

Keywords: Embodiment, Cognition, Cognitive linguistics, Literature, Surrealism.

INTRODUCTION

Embodiment has become an important concept in many areas of cognitive science. However, there are some different notion of what embodiment is all about and what kind of body is required for the type of embodied cognition. In this study, we have tried to study embodiment of emotion and mood of human body in the framework of cognitive linguistics. Cognitive linguistics emphasis on the study of meaning and main point in the study on embodiment shows that our understanding of mental concepts based on the formation of objective concepts. These concepts were experienced by our physical body. In this area of science the main focus is the human experience, the role of his body and how the body interacts with the real world. The researchers tried to conclude whether the given definition is compatible to the field of Persian literature? Embodiment has not been searched exactly in Persian literature till now and since the embodiment is sub-category of cognitive linguistics, this present research will specific pay attention on the cognitive importance of Sadegh Hedayat (the stray dog) as an example of Persian literature.

Research question

- Has the embodiment appearance clearly been shown in the book of the stray dog by Sadegh Hedayat?

Research hypothesis

- The embodiment is apparent in the book of stray dog by Sadegh Hedayat.

Cognitive linguistics is an approach to study of language, based on our experience of the world, understanding and conceptualization. In fact, this attitude the result of conflicts between productive semantics and adherent of Chomsky's generative. What other cognitive linguistics and cognitive approaches to the study of language distinct.

What distinct other cognitive linguistics and cognitive approaches to the study of language, is this important principle that the language does not mean nothing unless meaning. According to this fact the cognitive semantics is one of the main areas of cognitive linguistics. Cognitive semantics, deals with the relationship between meanings and reference it in the real world and believe that the conceptual framework is embodied concept. That is based on the relationship of the body with the environment, each person achieves a perception that the result of this interaction. For example:

- ali was in trouble.

In this sentence, the trouble such as conceptualized which is contained volume and we can go inside it or out of it. The objective concepts are exist that human knows them volume. If a person does not understand the embodied volume, will not understand or uttered this sentences. This concept was first introduced by Lakoff and Johnson (1987) and introduces an approach that has attracted a lot of semantics. According to this view, Linguistic knowledge is not independent of thinking and cognition. This view is in contrast to the ideas of philosophers such as Fodor's and linguists such as Chomsky. They, unlike people like Fodor and Chomsky, is considered linguistic behavior is part of human cognitive capacities. For these people, language skills are part of general human cognition.

Calvo and Gomila express that the philosophical interest in the notion of embodiment (Clark, 1997 ; Hurley,1998; Haugeland, 1998 ; Noë, 2004 ; Shapiro, 2004 ; Gallagher,2005;Wheeler,2005; Rowlands, 2006 ; Chemero, in press) goes back to the move from a Cartesian framework into phenomenology, especially with Heidegger (1962) and Merleau-Ponty (1962), and with Wittgenstein (1953). More generally, as cognitivism, post-cognitivism understood the embodiment for the understanding of cognition. The embodiment has existed for quite some time, but accelerated gradually during the last three decades, gaining visibility, influence and substantial momentum, since the 1990s. A number of research programs clearly fall under the umbrella of post-cognitivism. These include ecological psychology (Gibson, 1966, 1979; Turvey & Carello, 1995), behavior-based AI (Brooks 1986, 1991, 1999 ; Beer, 1990; Pfeifer & Scheier,1999), embodied cognition (Ballard, 1991 ; Varela et al., 1991 ; Clancey, 1997), distributed cognition (Hutchins, 1995), perceptual symbol systems (Glenberg, 1997 ; Barsalou, 1999). Areas of research where post-cognitivist principles have been applied successfully include (cognitive) neuroscience (Skarda & Freeman, 1987 ; Damasio, 1994 ; Chiel and Beer, 1997 ; Jeannerod, 1997), AI and evolutionary robotics (Arkin, 1998; Murphy, 2000; Nolfi & Floreano, 2000), cognitive anthropology (Suchman, 1987 ; Hutchins, 1995), cognitive linguistics (Lakoff & Johnson, 1980, 1999; Langacker, 1987, 1991 ; Regier, 1996 ; Tomasello, 1998), motor control and learning (Thelen & Smith, 1994).

Shapiro (2007) in an article entitled "The embodied cognition research programme" presented his research program to embodied cognition. Embodied Cognition is an approach to cognition that departs from traditional cognitive science which emphasis on the role the body plays in an organism's cognitive processes and how body organism effects on human mind. He brings up the embodied cognition as a research programme, rather than a theory. Before turning to these lines of research, it pays to have in sight the traditional view of cognitive science against which embodied cognition positions itself. shapiro in 2011 in his book "embodied cognition" wants to present, what embodied cognition aims to explain and how it relates to and important ways departs from standard cognitive science .

In the article "The embodied cognition research programme" shapiro believe that Embodied cognition is more than a collection of complaints about the traditional approach to cognition. It is convenient to distinguish within embodied cognition three related but distinct research goals (Shapiro, *Mind Incarnate*). Common among these goals is an effort to elevate the importance of the body in the explanation of various cognitive abilities. How might this elevation take place? Shapiro raises the question that if we deal with Lakoff and Johnson's vision to recognize the cognition, how to get recognition In the case of components such as happiness and sadness that are abstract concepts? Are these concepts are well understood physical experience with our body? Shapiro added, Lakoff and Johnson conjecture that beings with bodies quite distinct from human bodies could not acquire the human concepts: 'imagine a spherical being living outside of any gravitational field, with no knowledge or imagination of any other kind of experience. What could UP possibly mean to such a being?' (476). Furthermore, with no concept of *up*, these beings would not likely describe happiness in terms of boosted spirits, feeling high, and so on. Although this does not mean that such beings could not conceive happiness in other terms, it does mean, Lakoff and Johnson think, that their concept of *happiness* would differ from human beings' concept of *happiness*. We would have different concepts of happiness because we have different kinds of bodies.

Ziemke according to Lakoff (1988) argues we are natural creatures. Our brain receives its data from other parts of the body, so how does it play a role in the body and how the concepts that we use them for thinking gives structure. We cannot have any thinking, just thinking that we can allow our embodied mind.

There are different types and notions of embodiment as can be seen in the variety of terms such as situated embodiment (Zlatev, 1997), mechanistic embodiment (Sharkey & Ziemke, 2001), phenomenal embodiment (Sharkey & Ziemke, 2001), natural embodiment (Ziemke, 1999), naruralistic embodiment (Zlatev, 2001), social embodiment

(Barsalou, Niedenthal, Barbey & Ruppert, in press), plus historical, physical, organismoid, and organismic embodiment. Embodiment nowadays by many researchers considered for any form of natural or artificial intelligence. Wilson (2002) has recently mentioned the diversity of claims in this area is causing the problem, while this comprehensive approach is widely considered but in fact there are claims frequency in this field, if the term "embodied cognition" maintain its significant mood, we need to resume and re-valuation of this claim.

Shapiro (2011) in his research attempts to provide an explanation for the embodied cognition in cognitive domain. He presents the basic concepts of cognition based on 3 ideas.

1) The Conceptualization hypothesis is centered on the relationship between a body organism's and the concepts that organism acquires over time. On the Conceptualization account, even the most abstract of concepts are rooted in characteristics of our bodies and our embodied interactions with the surrounding environment. Several other questions of note under debate in relation to the Conceptualization hypothesis include the relationship between spatiality and language, and the relationship with embodiment.

2) The Replacement hypothesis asserts that there is a conflict between standard cognitive science, embodiment and embodied cognition in which the embodied paradigm should replace standard cognitive science. In general those who assert the need for replacement hold there are deep and irreparable flaws with the standard cognitive science approach. These flaws are generally

Linked with the standard approach's assumption that cognition is representational and computational. Shapiro in his book in scope embodied cognition, pay attention to Varela, Thompson, and Rosch's *The Embodied Mind* (1991) theories. They believed, by using the term embodied we mean to highlight two points: first, that cognition depends upon the kinds of experience that come from having a body with various sensorimotor capacities, and second, that these individual sensorimotor capacities are themselves embedded in a more encompassing biological, psychological, and cultural context. According to Shapiro, Esther Thelen's pioneering application of dynamical systems theory to cognitive phenomena has earned her royal status in the embodied cognition community. Thelen believe that cognition is embodied means that it arises from bodily interactions with the world. From this point of view, cognition depends on the kinds of experiences that come from having a body with particular perceptual are inseparably linked and that together form the matrix within which reasoning, memory, emotion, language, and all other aspects of mental life are meshed. Shapiro goes on to introduce the ideas of embodiment explored to introduce Clark's comments. Clark briefly presented six ideas to the embodiment, as properties which he made candidate to change the views of others. It means that the thinking with body as a contained for mind, and the body is more appropriate to show the mental activities. Clark believes it is possible for organisms to innovate with its completely different body, brain and different world, and apply their various resources to gain similar recognition. And processing their daily information. The question "How do you conceptualize the world?" will undoubtedly elicit a variety of answers. Shapiro, in this context, to recognize the embodied cognition concerned in order to show the relationship between the living creatures has the body type and the types of perceptions that living things can be achieved. On the Conceptualization account, even the most abstract of concepts are rooted in characteristics of our bodies and our embodied interactions with the surrounding environment. After review of this hypothesis Shapiro mention that we are going to consider research in embodied cognition that purports to show a relationship between the kinds of body an organism possesses and the kinds of concepts an organism can acquire. In its most dramatic form, the hypothesis under review is this: to conceive of the world as a human being does requires having a body like a human being's. Admittedly, this hypothesis is not precise. It does not tell us what it means to "conceive of the world as a human being does;" nor does it say what it means to have a body "like" a human being's. Finally Shapiro states conceptualization predicts that at least some differences between types of body will create differences in conceptual capacities. Different kinds of organism will bring different worlds. Shapiro, after a survey of Varela and Thompson and Rosch in the field of embodiment, also Lakoff and Johnson's hypotheses in the role of the body in the perception of the outside world adds that for Glenberg, et al., an understanding of language, which reflects an understanding of the world, builds from the capacity to derive affordances, the meanings of which are a function of the properties of bodies. Common to all these thinkers is the conviction that standard cognitive science has not, and cannot, illuminate certain fundamental cognitive phenomena – color perception, concept acquisition, and language comprehension – because it neglects the significance of embodiment. Shapiro reiterated that the embodied cognition have been proposed as a research programme. Shapiro (2011) point out that his classification could be updated in the future based on new empirical findings and theoretical works. Wilson and Golonka (2013) in their article entitled "embodied cognition is not what you think it is" have Examines the role of the body and the environment to get grips with cognition. Also the two are using an analogy and with the help of animal instance trying to explain the mechanism of embodiment.

MATERIALS AND METHODS

Present research methodology, has been investigated an analytical on the story. The data collected by the help of books and article available in library, and the Internet search of books and papers. Then according to the definitions of embodiment to analyze sentences and phrases, the entire text of the story have been investigated for found the embodiment in their body. All the stray dog story text, have been detected line by line, by considering embodied cognition concept presented in the Shapiro's vote. In order to show samples of embodiment lies in the story of the stray dog by Sadegh Hedayat, the reaserchers have been chosen the process of conceptualization and embodiment during the context. The creation of embodiment of the sentences have been investigated after selecting words to describe how the embodiment occurs during the story.

RESULTS AND DISCUSSION

It Is the story of a dog named Pat who goes to Varamin on a road trip on a day in fall with his owner and two other guys. He loses his owner as he follows the scent of a female dog and this is how his life gets changed and from then on all he experiences is pain, panic, suffering and waiting which ends by his death at the end of the story.

The story analysis based on embodiment:

1. There's a human sole at the depth of his eyes
 - This sentence is the start of embodiment of this story. The existence of the human soul at the depth of his eyes is the beginning of experiencing of the humans feelings and emotions experience where has been seen again and again throughout the story.
2. There was not only a similarity between his eyes and those of a human but also an equation.
 - Sadegh Hedayat refuses any thought of metaphor or simile and according to the explanation of embodiment, he puts a human inside him and he tries to make an equation between a dog and a human to use a dog's body to express human's experiences which would be difficult to explain through a human body.
3. The scent of dead or living things in his nose evokes some far, and perplexed memories in his mind.
 - Beginning of the nostalgia in remembering a happy morn, reviewing memories in a person's mind by a scene or a scent starts in this dog and takes him back in time and brings up some old memories. Here Hedayat tries to show the back story of the dog little by little by his experiencing nostalgia. Experiencing memories through the smelling power and sight as embodiment.
4. He felt like he was trash and something in him was dead, turned off.
 - There exist two types of embodiment. One about the dog as he feels useless like a human in a human society and the second is the feeling of being dead which can't happen to things so it is considered to be embodiment.
5. Among all the scents he smells, the one which really made his head spin was the smell of The white liquid that was so like his mother's milk in front of the boy which reminded him of his childhood.
 - The nostalgia and remembering memories based on the fact that this is not a stray dog and once upon a time he had a mother and a family to feed him. Here the dog himself embodied his mind. Here the notion of embodiment happens itself in the dog's mind which reminds him every single memories of his childhood.
6. That person put the bread on the platform of the shop and put his hand on pat's head with fear and caution.
 - The experience of embodiment this time is seen by the baker with the feeling of care and fear. When he touches the dog's head he feels fear and at the same time is careful.
7. It was like all the responsibilities, duties and limitations were off Pat's way.
 - Concepts like taking responsibilities,being limited,and accepting a duty is understandable through a body.when we say I have a resposibility or a duty or a limitation in fact we have embodied all these concepts. On the other hand all these feelings make sence to a teated dog which has his own experience of feelings through embodiment.
8. The memories of that time were reviwed in his eyes unwillingly.
 - Doing something or imagining memories willingly which are based on embodiment are the only way possible for human. So the concept of embodiment is so clear in here.
9. He was more surprised because the guy entered a room he perfectly knew and was the source of the smell of food.
 - Being surprised is an experience through embodiment by human but distinguishing a place by the scents of things is a mutual feeling between both human and dog and in this case this feeling and experience is much stronger and more effective among dogs because human can use other body parts to recognize things.
10. Was he awake or was it a dream? Was it possible that he had found a new owner?

- The feeling of doubt or asking ourselves questions and answering them in our minds and imagining reality or dream and distinguishing them is possible through the mind and body of a human as the embodiment is concerned.
11. This people might be searching for their own female?
- The dog started judging. first of all judgment is a human experience and second of all he looks at people through his embodied eyes as he sees that the man walks into the same street and thinks that he would have the same experience. All these experiences and imaginations based on embodiment are experienced in the dog's mind.
12. With his own instinctive will which could never be fooled, he felt that he can't move anymore. his hands and feet were getting numb little by little.
- Sadegh Hedayat little by little fades the human experiences to depict the dog as an animal with his own experience of embodiment and emphasise that the dog's instinctive willing not having a way out of here. The dog's instinct is a way through which accompanied with the body realises the world around him in order to defend himself, live and his satisfactory.
13. Spontaneous memories of that time were embodied in his eyes.
Having a choice and embodied the image of memories relates to human being only. So here the embodiment is obvious.

CONCLUSION

After reviewing in the field of cognitive linguistics and the study of the definitions of embodiment and then review on the book of stray dogs by sadegh hedayat observed that, based on the research question "Has the embodiment appearance clearly been shown in the book of stray dog by sadegh hedayat?", This hypothesis is confirmed. So the mbodiment is apparent in the book of stray dog by Sadegh Hedayat. In fact, the stray dog is a human in dog's body. Using the embodiment are evident in this literary work, and use of embodiment as an linguistics concept has been very effective to create and understand literary concepts in the field of Persian literature to create evolution and deapth in literary works. As a result, understanding delicacy of literary language of writer or poet would be easier and more tangible using the concept of embodiment.

REFERENCES

- Calvo P and Gomila T. 2008. *Handbook of Cognitive Science an Embodied Approach*, Elsevier Publication, 1st edition, USA.
- Clark A. 2008. *Embodiment and Explanation, Handbook of Cognitive Science an Embodied Approach*, Elsevier publication, 1st edition, USA.
- Clark A. 2008. *Surprising the Mind : embodiment, action and cognitive extention*, Oxford University press, New York.
- Gilson Gregory D. 2005. "Review of "The Mind Incarnate", " *Essays in Philosophy*: Vol. 6: Iss. 1, Article 8.
- Hedayat S. 2006. *The Stray Dog*, Jamedaran Publication, 3rd edidion, Tehran.
- <http://Cjarchie.v.cogsci.rpi.edu/> Ziemke, Tom, 2003, Wthat's *That Thing Called Embodiment?* 1305-1310.
- Rayan K. 2012. *A Critical History of th Embodied Cognitive Research Paradigm, A Review Of Lawrence Shapiro's Embodied Cognition*, Avant, Vol.3, No.1, pp172-175.
- Rasekh Mahand M. 2011. *An Introduction to Cognitive Linguistics: Theories and Concepts*, SAMT Publication, 2nd edition, Tehran.
- Shapiro L. 2007. *The Embodied Cognition Research Programme*, Philosophy Compass, Vol2, Issue2, pp338-346.
- Shapiro L. 2005. *The Mind Incarnate*, MIT Press, US.
- Shapiro L. 2011. *Embodied Cognition*, Routledge Publication, New York.
- Wilson M. 2002. *Six View Of Embodied Cognition*, Psychological Bulletin and Review. 9(4), 625-636.
- Wilson A and Glonka S. 2013. *Embodied Cognition Is Not What You Think It Is*, Frountiers In Psychology, Vol4, Article58, pp1-13.