JOURNAL OF SOCIAL SCIENCES & HUMANITIES OF SHIRAZ UNIVERSITY

VOL. 26, NO. 4, Winter 2007 (SER. 53) (Special Issue in English Language and Linguistics)

Conceptual Fluency and Metaphorical Competence in Second Language Acquisition: Two Sides of the Same Coin?

Dr. M. R. Talebinezhad* University of Esfahan

Abstract

While most studies in second language acquisition (SLA) have focused on the initial state, stages in SLA, and rate of acquisition, and in general on linguistic or communicative competence, few have as yet addressed the question of metaphorical competence. The problem seems to be rooted in the fact that the end results which have been the concern of most SLA studies have dealt with as non-native-like outcomes in SLA. Nonnative-like outcomes have been examined in the context of UG, where metaphorical language receives less attention. That is, ultimate attainment data are mostly taken as useful when investigating other linguistically-motivated distinctions. The present paper examines ultimate attainment of adult Persianspeakers learning English as a second language in terms of their conceptual fluency which is supposed to account for their metaphorical competence. Data collected was analyzed with respect to the amount of figurative language produced by advanced learners of English in different tasks. The analysis showed that natives and non-natives differed drastically in both type and amount of figurative language they employed in conveying similar concepts. The results confirmed the hypothesis that L2 learners need to be exposed to metaphorical language in the L2 in order to become conceptually fluent.

Keywords: 1. Conceptual Fluency 2. Culture 3. Emergentism 4. Language Learning 5. Language Teaching 6. Metaphor 7. Metaphorical Competence.

.

^{*} Associate Prof. of TEFL

1. INTRODUCTION

In their course of development, the fields of second language teaching and second language acquisition research have been characterized mostly by a debate between formalists and functionalists. The former have focused on the development of techniques that aim to foster in the learner a control of linguistic structure (forms) and the latter have tried to develop the learner's functional knowledge of the communicative uses of the second language. These two trends have been oriented towards what is now referred to as linguistic competence and communicative competence respectively. This debate has stimulated constant search for new ideas and constructs, such as comprehensible input, proficiency, input enhancement, etc. Most of these attempts have intended to transform the classroom into an effective learning environment.

Not all of these attempts have been successful, though, because some problems persist regardless of all the progress made. One such persistent problem is that despite achieving both grammatical and communicative competence - i.e. verbal fluency - learners tend to use their fluency as carriers of their own native language concepts. Obviously, when these concepts coincide, there is no problem. When there is a difference in concepts, the learner language seems asymmetrical in terms of language form and conceptual content. In other words, they are linguistically and communicatively competent, but not conceptually. This means that learner discourse could sound "unnatural", since learners may lack what Danesi (1993) calls metaphorical competence.

The purpose of this paper is to look at some of the possible cause(s) of failure in achieving metaphorical competence. In order to do so, some recent views in the areas of language, culture and metaphor will be reviewed to see how different interpretations of each of these can affect language learning/teaching approaches which may lead to or block the way to the development of conceptual fluency. The results of an experiment to test the claims put forward will be presented along with their tentative implications for second language acquisition as well as second language teaching.

2. STATEMENT OF THE PROBLEM

The problems that learners of a second or foreign language experience in expressing themselves are not solely rooted in lack of linguistic or even communicative knowledge. Recent research has shown that despite the general view that once a learner has mastered both the structure and the vocabulary of a language to a certain extent, he or she will be able to communicate in that language may be misleading. An area where language learners face problems even in the so-called advanced stages, is the area of metaphorical language (Charteris-Black, 2003; Talebinezhad and Vahid, 2002). Danesi's (1993) claims that in her experiment with the acquisition of metaphorical expressions, her subjects did poorly in the tasks of metaphorical language, not because "they are incapable of learning metaphor, but most likely that they have never been exposed in formal ways to the conceptual system of the target language" (p. 496). This ability to express oneself like a native speaker in terms of concepts, which some second language learners seem to lack, is what Danesi calls *conceptual fluency*. To be conceptually fluent in the SL, according to Danesi (1993: 496), "the student must be able to convert common experiences into conceptually and linguistically appropriate models".

Conceptual fluency refers to the extent that bilingual speakers are able to understand and use concepts, knowledge and skills acquired through the channel of either language, and means the level of free access to vocabulary in both languages. Papp and Kecskes (2003) see conceptual fluency as a collective rather than individual phenomenon, just like Chomsky's 'competence'. Unlike the ideal speaker in L1 acquisition in the Chomskyan sense, however, in multilingual development each learner is exposed to each language and culture in a different way for a different period of time. From this observation, Papp and Kecskes (2003) conclude that "it is not the linguistic system of the bilingual that is of primary importance for researchers investigating multilingual development, but the conceptual system that is responsible for the operation of both the L1 ad L2 (or Lx)" (p. 253).

3. RESEARCH QUESTIONS

Having reviewed some major positions on conceptual fluency, the following questions were formulated:

- 1. How does the learner of a second language become conceptually fluent?
- 2. Which interpretation of language/culture is more appropriate in dealing with

conceptual fluency?

3. How does conceptual fluency relate to metaphorical competence?

Building on Dansei's (1993) suggestion that conceptual fluency is the ability to convert common experience into conceptually and linguistically

appropriate models, the present study attempted to look at some possible ways of developing this ability by answering these questions.

One area where this issue can be properly addressed is the area of metaphorical language, because the experiential basis of the metaphors allows us to evidence the validity of such a claim. Kovecses, 2002, has clearly shown that conceptual metaphors are grounded in, or motivated by, human experience. According to Kovecses:

The experiential basis of metaphor involves just this groundedness-inexperience. Specifically, we experience the interconnectedness of two domains of experience and this justifies for us conceptually linking the two domains. For example, if we often experience anger as being connected with body heat, we will feel justified in creating and using the conceptual metaphor ANGER IS HOT FLUID IN A CONTAINER. The experience on which the conceptual metaphors are based may not be only bodily but also perceptual, cognitive, biological, or cultural. The interconnectedness between the two domains of experience may be of several types, including correlations in experience, perceiving structural similarities between two domains, etc. (2002: 249).

3.1. Why Metaphor?

In the past, metaphor was primarily studied by philosophers, rhetoricians, literary critics, and less often, psychologists and linguists. However, today applied linguists are interested in metaphor studies too, because they have realized that metaphor plays a role in human thought, understanding, and reasoning and, beyond that in the creation of our social, cultural, and psychological reality (Kovecses, 2002). In addition, according to Charteris-Black (2002), "figurative language is potentially challenging for second language learners and teachers because it is often more difficult to approach systematically in second language classrooms" (P. 104). These are facts that any practitioner, whether solely a language teacher or an applied linguist in its general sense, cannot afford to ignore. Basso (1976) puts it this way:

For it is in metaphor- perhaps more than in any other form of symbolic expression- that language and culture come together and display their fundamental inseparability. A theory of one that excludes the other will inevitably do damage to both (Basso, 1976: 93).

For Gibbs (1999: 145), metaphor "is a specific mental mapping that influences a good deal of how people think, reason, and imagine in everyday life." Metaphor, therefore, is not just a discourse ornament or even an option, but an integrated aspect of language.

3.2. How is Culture Defined?

During the last two decades, practitioners of cognitive semantics have recognized the need for more attention to culture and its effect in interpretations of language. However, the definitions of culture given by recent researchers seem to fail to include satisfactory statements.

For Lakoff (2001), for instance, culture can exist in the form of Islamic vs. Western. Or Gibbs (1999), though capturing the essence of what culture really seems to be, still believes culture to be a collection of rules shared in a community. Such views of culture, based on the idea of a homogeneous cultural or linguistic community, are too strong because such a community is an illusion. Leezenberg (2003) refers to several communities in which this definition of homogeneity does not apply.

However, Hall (2002: 19) sees culture as "a dynamic, vital and emergent process located in the discursive spaces between individuals". This view of culture inextricably links it to language. Because culture in this view "is located not in individual mind but in activity, any study of language is by necessity a study of culture" (Ibid). This definition is close to what the present study is based on, that is human experience.

3.3. How is metaphor related to culture?

Another issue raised in this relation is whether metaphor constitutes or merely reflects cultural models. Kovecses (1999: 167) puts it this way:

Since metaphors are ordinarily used in connection with cultural models that structure abstract concepts, the issue really becomes: do metaphors constitute abstract concepts (as structured by cultural models) or do they simply reflect them?

Work done by Quinn (1991), Lakoff and Johnson (1980), and Lakoff and Kovecses (1987) represent at least four theoretical positions in answering this question:

- 1. abstract concepts emerge literally, without any metaphors constituting them;
- 2. abstract concepts emerge literally from basic human (physical-bodily or cultural) preconceptual experiences, still without any metaphors constituting them;
- 3. abstract concepts emerge metaphorically, with the help of concrete concepts constituting them;
- 4. and, finally, abstract concepts emerge metaphorically, the metaphors having some additional physical-cultural basis.

To this point many researchers are of the opinion that social action is inherently or essentially cooperative and directed towards social integration.

This view has been challenged by many including social scientists such as Fox (1984), Foucault (1983), and Bourdieu (1991). They see culture not as simply an inherited element of structure, but continually produced, and reproduced, by human agency. The idea of `culture in the making`, for instance, is borrowed from Fox (1984) who emphasizes the theoretical importance of social practice.

Byram and Risager (1999) believe that there might be a more theoretical discussion of the relationship between language and culture as a whole, with the inclusion of insights from disciplines such as sociolinguistics, sociology and anthropology. They suggest that such investigations be conducted with reference to the following conceptualizations of culture in relation to language, or three different perspectives on the language-culture relationship:

- 1. culture as contained in the pragmatics and semantics of language
- 2. culture as macro-context for language use
- 3. culture as thematic content in the discourse of language teaching (p. 146).

In the case of metaphorical expressions, the first concept of culture, i.e. culture as contained in the pragmatics and semantics of language, seems to be the appropriate dimension in the language teaching context. This is the conceptualization which sees any natural language as developing as part of the social practice of a community of language users. This definition is in line with the one given by Hall (2002) quoted above.

3.4. How relevant is the issue of metaphor/culture in studies of language learning/teaching?

A general approach to cognition, known as Emergentism, that stresses the interaction between organism and environment and that denies the existence of pre-determined domain-specific faculties or capacities, has recently attracted some attention among the researchers in the area of language acquisition. According to Ellis (1998: 27):

Emergentists believe that the complexity of language emerges from relatively simple developmental processes being exposed to a massive and complex environment. Thus, they substitute a process description for a state description, study development rather than the final state and focus on the language acquisition process rather than the language acquisition device.

In support of Emergentism, Bates et al. (1998), argue that the facts of the domain-specificity of language "do not constitute ipso facto evidence for innateness, because the same conditions could have emerged by an emergentist scenario" (p. 5). In the same place, they add:

Languages represent a class of solutions to a problem that is undeniably unique in its scope and nature: the problem of mapping a hyperdimensional meaning space into a low-dimensional channel There may be a causal resemblance to domains like birdsong (learning in the vocal channel), chess (a complex set of solutions to a game that only humans play) or music (rule-governed transition in sounds), but these similarities are largely superficial. Turkish case inflections do not 'look like' chess, birdsong or music- but they do look a lot like case inflections in Hungarian. That is, languages have very little in common with other cognitive systems, but they do have a lot in common with each other. Where do these commonalities come from?

In an attempt to provide an answer to the question of where these commonalities come from, Bates et al. (1998) appeal to the existing evidence in the area of meaning:

The meaning space involved in the language-mapping problem includes experiences that are shared by all normal members of the species, and the channels used by human language are subject to universal constraints on information processing (e.g., perception, memory, articulatory planning). Under these circumstances, we should not be surprised to find that the class of solutions to the problem is quite limited, constituting a set of alternatives that might be referred to as Universal Grammar. We will stipulate that domain-specific behaviors have emerged in response to this mapping problem, and that natural languages draw from a common set of domain-specific solutions (p. 5).

In a similar argument, Ellis (2002: 144) calls our attention to the fact that the concept subject must "emerge from learners' lifetime analysis of the distributional characteristics of the language input". The major drive for referring to ideas from the Emergentist views in this article, however, may be that the definitions of culture and metaphor as used here are more in line with motivational experience, i.e. emerging from "a specific mental mapping that influences a good deal of how people think, reason, and imagine in every day life" (Gibbs, 1999: 145), rather than just innate knowledge. The term *motivation* here is borrowed from Kovecses (2002) and is used in the same sense as semantic transparency as used by other researchers such as Irujo (1993). This can also be looked at from the point of view of conceptual fluency, which according to Danesi (1993), "can be thought of as a cognitive mapping operation. It is a largely unconscious strategy which maps sensory experience onto the world conceptualization" (p.492). He claims that this competence "can be brought about pedagogically in ways that are parallel to the other competencies that second language teaching has traditionally focused on (grammatical and communicative)" (1993:493). Similar claims have been made by cognitive linguists who believe that language is grounded systematically in cognition. According to this view, grammatical regularities do not arise in language as a result of the application of formal rules. Instead, it is proposed that "grammar is shaped by all the factors- cognitive, social, interactive and cultural- that are involved in how language is used. Regular patterns of grammatical usage arise as a result of strategies that speakers use in negotiating what they want to communicate to listeners" (Balban, 1999: 129).

In order to test the relevance of motivational experience in pedagogical environments leading to the development of conceptual fluency, the following experiment was designed.

4. THE EXPERIMENT:

Participants: A group of 35 Persian-speaker, adult learners of English as a foreign language at the upper-intermediate level were homogenized in terms of their English proficiency through a popular test of ESL (the TOEFL). They were then instructed to follow the procedures in doing tasks assigned for the extraction of the necessary data (See procedures for the details).

5. INSTRUMENTATION

First, the subjects were instructed on the idea of metaphorical language and specifically conceptual metaphors using examples from their native language (Persian). They were then exposed to English metaphorical expressions and helped to find possible equivalents for some metaphorical expressions from both languages.

An alphabetical list of some common animal names prepared on the basis of the findings of another experiment conducted by the author was used as the basic material for teaching and also as an index for later comparison¹. The rationale behind taking animal names for this purpose was that animal metaphors are ubiquitous in world languages. In fact, "much human behavior" according to Kovesces (2002), "seems to be metaphorically understood in terms of animal behavior" (p.124). The question of how these animal-related words come to acquire their metaphorical meaning has been the concern of many linguists and philosophers throughout time. However, the recent interest in metaphor studies, especially in cognitive linguistics, results from the interest in the relationship between language and culture. This list contained the correspondences the native speakers of both English and Persian had provided for the animal metaphors in question and included three sets of animal metaphors (See the appendix I for the animal images and the number of correspondences provided by the native speakers of both languages):

- 1. a group of animal metaphors which were found to be identical in terms of source and target domains in both English and Persian, based on the number of correspondences provided by the native-speakers of both English and Persian;
- 2. a group of animal metaphors which were similar in terms of some entailments but were not always the same in different contexts, based on the similarity between the correspondences provided by the native-speakers of the two languages, i.e. those features of the animal metaphors which were found to be the same in both languages;
- 3. and, those animal metaphors which were interpreted differently in the two cultures.

6. PROCEDURE

The 44 animal names from the list already prepared on the basis of native-speaker judgments (see appendix I) were presented to the subjects intermittently during the 12 weeks of instruction in the course *Using Figurative Language in Translation*, a course specifically designed for the students of English as a foreign language majoring in Translation or Literature. Since some animal metaphors were similar in the different expressions used, attempt was made to avoid giving the animal names with the same type of metaphor (in terms of their counterparts in the other language) in a row. They were presented along with metaphors from the other three types mentioned above. This was to check the effect of the metaphor on the participants, rather than the effect of instruction per se. It was hoped that this kind of treatment would reduce the risk of priming effect too.

Instructions for completing the task of finding correspondences between animal names and their metaphorical expressions were given using Lakoff & Turner's (1989) convention along with a model for analysis as follows:

The following table shows a set of correspondences, or mappings between constituent elements of an animal and a human, i.e., a lion and a man.

Metaphors: Ali is a lion.	
Target: Ali	Source: Lion
A man	the bravest of animals
physical shape	the most strong looking animal
ability to help the weak	the most generous animal
ability to fight	the most courageous animal
having self-respect	the animal with the highest self-esteem

For each animal name in the list, find as many metaphors as you can. Then follow the example below to analyze each metaphorical expression:

Metaphorical expression: Ali is a lion.

Topic: Ali **Image**: *lion*

Point(s) of similarity: being brave, courageous, generous, ...

Non-figurative meaning: Ali is very brave,

The data:

Data classification Procedure:

The following criteria were used in classifying the data:

First, the total number of correspondences produced by the learners in each case were counted and the mean was calculated. This mean was compared with that of the native-speakers' for the same animal image. These two numbers were juxtaposed. The correspondences produced by learners were then checked against two indexes: The judgments made by native-speakers of Persian and those made by the native-speakers of English. The criteria for comparison were the highlighted features in the correspondences provided. If the learner productions were closer to those of the English native-speakers, they were safely categorized as acceptable metaphors in English. However, if they were more in line with the Persianspeaking productions, two possibilities were considered: They could still be acceptable in English because they were identical in the two languages, or they might not be acceptable because they were differently interpreted in the two languages. The following table shows the descriptive statistics of the results:

Table 1: Descriptive statistics on the results of the experiment.

animal image NS/X L/X NS/E NS/P L/+E L/+P Ass 4 4 3 4 3 1 Bat 2 2 1 1 1 1 Bear 2 2 1 1 1 1 1 Bee 2 2 1 1 1 1 1 1 Bull 3 3 2 1 1 2	Table 1: Descriptiv						
Bat 2 2 1 1 1 1 Bear 2 2 1 1 1 1 Bee 2 2 1 1 1 1 1 Bird 4 4 2 2 2 2 2 2 Bull 3 3 2 1 1 2 1 1 1 1	animal image	NS/X	L/X	NS/E	NS/P	L/+E	L/+P
Bear 2 2 1 1 1 1 Bee 2 2 1 1 1 1 Bird 4 4 4 2 2 2 2 Bull 3 3 2 1 1 2 Butterfly 4 4 2 2 2 2 2 Chicken 4 4 2 </td <td>Ass</td> <td></td> <td></td> <td>3</td> <td>4</td> <td>3</td> <td>1</td>	Ass			3	4	3	1
Bee 2 2 1 1 1 1 Bird 4 4 4 2 2 2 2 Bull 3 3 2 1 1 2 Butlerfly 4 4 2 2 2 2 Chicken 4 4 2 2 2 2 Cow 4 4 2 2 2 2 Cow 4 4 2 2 2 2 Crocodile 3 2 1 2 2 2 Crow 4 4 2 3 1 3 3 1 3 3 1 3 1 3 1 3 1	Bat	2	2	1	1	1	1
Bird 4 4 2 2 2 Bull 3 3 2 1 1 2 Butterfly 4 4 4 2 2 2 2 Chicken 4 4 2 2 2 2 2 Cow 4 4 2 2 2 2 2 Crow 4 4 2 2 2 2 2 Crow 4 4 2 3 3 1 3	Bear	2	2	1	1	1	1
Bull 3 3 2 1 1 2 Butterfly 4 4 4 2 2 2 2 Chicken 4 4 2 2 2 2 2 Cow 4 4 2 2 2 2 2 Crow 4 4 2 3 1 3 Dodo 1 1 Dog 4 4 2 2 1 3 Dove 4 4 4 4 4 Doy 4 4 2 2 1 3 1 Dog 4 4 2 2 1 1 1 Eagle 3 3 1 1 Eagle 3 3 1 3	Bee	2	2	1	1	1	1
Butterfly 4 4 2 2 2 2 Chicken 4 4 2 2 2 2 Cow 4 4 2 2 2 2 Crow 4 4 2 3 1 3 Dodo 1 1 Dog 4 4 2 2 1 3 Doye 4 4 2 2 1 3	Bird	4	4	2	2	2	2
Chicken 4 4 2 2 2 2 Cow 4 4 2 2 2 2 Crocodile 3 2 1 2 2 Crow 4 4 2 3 1 3 Dodo 1 1 Dog 4 4 2 2 1 3 Dove 4 4 4 4 4 Duck 4 1 3 1 1 1 1 Eagle 3 3 3 1 3 1 Eagle 3 3 3 1 3 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 1 1 1 1 <t< td=""><td>Bull</td><td>3</td><td>3</td><td>2</td><td>1</td><td>1</td><td>2</td></t<>	Bull	3	3	2	1	1	2
Cow 4 4 2 2 2 2 Crocodile 3 2 1 2 2 Crow 4 4 2 3 1 3 Dodo 1 1 Dog 4 4 2 2 1 3 Dove 4 4 4 4 4 Duck 4 1 3 1 1 1 3 1 1 1 2 2 1 1 1 1 2 2 1 1 3 1 1 3 1 1 2 2 1	Butterfly		4				
Crocodile 3 2 1 2 2 Crow 4 4 2 3 1 3 Dodo 1 1 Dog 4 4 2 2 1 3 Dove 4 4 4 4 4 Duck 4 1 3 1 1 1 3 1 1 1 2 2 1 2 2 1 1 1 1 3 1 1 3 1 1 2 2 1 1 1 1 1 1 1 1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Chicken	4	4	2	2	2	2
Crow 4 4 2 3 1 3 Dodo 1 1	Cow	4	4	2		2	2
Dodo 1 1 Dog 4 4 2 2 1 3 Dove 4 4 4 4 4 Duck 4 1 3 1 1 Eagle 3 3 3 1 3 Fish 5 3 2 3 2 1 Goose 3 4 2 1 2 2 Hawk 2 2 2 2 2 Hen 4 4 2 2 3 1 1 Horse 4 4 3 1 1 3 1 1 3 1 Horse 4 4 4 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 </td <td>Crocodile</td> <td>3</td> <td>2</td> <td>1</td> <td>2</td> <td></td> <td>2</td>	Crocodile	3	2	1	2		2
Dog 4 4 2 2 1 3 Dove 4 4 4 4 4 1 Duck 4 1 3 1 1 Eagle 3 3 3 1 3 Fish 5 3 2 3 2 1 Goose 3 4 2 1 2 2 Hawk 2 2 2 2 2 Hen 4 4 2 2 2 Hen 4 4 2 2 2 Hen 4 4 2 2 2 3 1 1 3 House 4 4 3 1 1 1 1 1 Lark 2 2 1 1 1 1 1 1 1 1	Crow		4	2	3	1	3
Dove 4 4 4 4 4 1 Duck 4 1 3 1 1 Eagle 3 3 3 1 3 Fish 5 3 2 3 2 1 Goose 3 4 2 1 2 2 Hawk 2 2 2 2 2 Hen 4 4 2 2 3 1 Horse 4 4 3 1 1 3 Hound 2 2 1 1 1 1 1 Lark 2 2 1	Dodo	1 \		1 /		-	-
Duck 4 1 3 1 1 Eagle 3 3 3 1 3 Fish 5 3 2 3 2 1 Goose 3 4 2 1 2 2 Hawk 2 2 2 2 2 Hen 4 4 2 2 3 1 Horse 4 4 3 1 1 3 Hound 2 2 1 1 1 1 1 Lark 2 2 1	Dog	4	4	2		1	3
Eagle 3 3 3 1 3 Fish 5 3 2 3 2 1 Goose 3 4 2 1 2 2 Hawk 2 2 2 2 Hen 4 4 2 2 3 1 Horse 4 4 3 1 1 3 Hound 2 2 1 1 1 1 1 Lark 2 2 1 2 2 2 2 <t< td=""><td>Dove</td><td>4</td><td>4</td><td>4</td><td>4</td><td>4</td><td></td></t<>	Dove	4	4	4	4	4	
Fish 5 3 2 3 2 1 Goose 3 4 2 1 2 2 Hawk 2 2 2 2 Hen 4 4 2 2 3 1 Horse 4 4 3 1 1 3 Hound 2 2 1 1 1 1 Lark 2 2 1 1 1 1 Lark 2 2 1 1 1 1 Lion 5 5 5 5 5 Mare 4 4 2 2 2 2 Monkey 6 4 4 4 2 2 2 Mule 2 2 2 2 2 2 Mutton 2 2 1 1 2 <	Duck	4	1	3	1		1
Goose 3 4 2 1 2 2 Hawk 2 2 2 2 2 Hen 4 4 2 2 3 1 Horse 4 4 3 1 1 3 Hound 2 2 1 1 1 1 Lark 2 2 1 1 1 1 Lark 2 2 1 1 1 1 Lion 5 5 5 5 5 Mare 4 4 2 2 2 2 Monkey 6 4 4 4 2 2 2 Mule 2 2 2 2 2 Mutton 2 2 1 1 2 2 Owl 3 3 3 3 2 <td< td=""><td>Eagle</td><td></td><td>3</td><td></td><td>1</td><td>3</td><td></td></td<>	Eagle		3		1	3	
Hawk 2 2 2 2 2 Hen 4 4 2 2 3 1 Horse 4 4 3 1 1 3 Hound 2 2 1 1 1 1 Lark 2 2 1 1 1 1 Lion 5 5 5 5 5 Mare 4 4 2 2 2 2 Monkey 6 4 4 4 2 2 2 Mule 2 2 2 2 2 2 Mouse 4 4 4 4 4 2 Mutton 2 2 1 1 2 2 Owl 3 3 3 3 3 2 1 Peacock 3 3	Fish	5	3	2	3	2	1
Hen 4 4 2 2 3 1 Horse 4 4 3 1 1 3 Hound 2 2 1 1 1 1 Lark 2 2 1 1 1 1 Lion 5 5 5 5 5 5 Mare 4 4 2 2 2 2 2 Monkey 6 4 4 4 2 2 2 2 Mule 2 2 2 2 2 Mouse 4 4 4 4 4 2 Mutton 2 2 1 1 2 2 Owl 3 3 3 3 2 1 Peacock 3 3 3 3 2 2 1 <t< td=""><td>Goose</td><td>3</td><td>4</td><td>2</td><td>1</td><td>2</td><td>2</td></t<>	Goose	3	4	2	1	2	2
Horse 4 4 3 1 1 3 Hound 2 2 1 1 1 1 Lark 2 2 1 1 1 1 Lion 5 5 5 5 5 Mare 4 4 2 2 2 2 Monkey 6 4 4 4 2 2 2 Mule 2 2 2 2 2 Mouse 4 4 4 4 4 Mutton 2 2 1 1 2 2 Ostrich 2 2 1 1 2 2 Owl 3 3 3 3 2 1 Peacock 3 3 3 2 2 1 Puppy 2 2	Hawk		2	2	2	2	
Hound 2 2 1 1 1 1 Lark 2 2 1 1 1 1 Lion 5 5 5 5 5 5 Mare 4 4 2 2 2 2 2 Monkey 6 4 4 4 2 2 2 2 Mule 2 2 2 2 2 2 Mouse 4 4 4 4 4 4 2 2 1 1 2 2 Multon 2 2 1 1 2 2 Multon 2 2 1 1 2 2 1 2 2 1 2 2 1 1 2 2 1 <	Hen	4	4	2	2	3	1
Lark 2 2 1 1 1 1 Lion 5 5 5 5 5 5 Mare 4 4 2 2 2 2 Monkey 6 4 4 4 2 2 2 Mule 2 2 2 2 2 Mouse 4 4 4 4 4 4 Mutton 2 2 1 1 2 2 Ostrich 2 2 1 1 2 2 Owl 3 3 3 3 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2	Horse	4	4	3	1	1	3
Lion 5 5 5 5 5 5 Mare 4 4 2 2 2 2 Monkey 6 4 4 4 2 2 Mule 2 2 2 2 2 Mouse 4 4 4 4 4 4 Mutton 2 2 1 1 2 Ostrich 2 2 1 1 2 Owl 3 3 3 3 2 1 Peacock 3 3 3 3 2 1 Pigeon 3 3 3 2 2 1 Puppy 2 2 2 2 1 1 Rabbit 3 2 2 2 1 1 Rat 3 3 3 3 3 3 Shark 2 2 2 1 2 <td>Hound</td> <td></td> <td>2</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td>	Hound		2	1	1	1	1
Mare 4 4 2 2 2 2 Monkey 6 4 4 4 2 2 Mule 2 2 2 2 2 Mouse 4 4 4 4 4 Mutton 2 2 1 1 2 Ostrich 2 2 1 1 2 Owl 3 3 3 3 2 1 Peacock 3 3 3 3 2 1 Pigeon 3 3 3 2 2 1 Puppy 2 2 2 2 1 1 Rabbit 3 2 2 2 1 1 Rat 3 3 3 3 3 3 Shark 2 2 2 1 2	Lark					1	1
Monkey 6 4 4 4 2 2 Mule 2 2 2 2 2 Mouse 4 4 4 4 4 4 Mutton 2 2 1 1 2 Ostrich 2 2 1 1 2 Owl 3 3 3 3 2 1 Peacock 3 3 3 3 2 1 Pigeon 3 3 3 2 2 1 Puppy 2 2 2 2 1 1 Rabbit 3 2 2 2 1 1 Rat 3 3 3 3 3 Shark 2 2 2 1 2	Lion	5	5	5		5	
Mule 2 2 2 2 2 Mouse 4 4 4 4 4 4 Mutton 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 1 1 2 2 1 1 1 2 2	Mare	94=	4	2	2	2	2
Mouse 4 4 4 4 4 4 4 2 Mutton 2 2 1 1 2 Ostrich 2 2 1 1 2 Owl 3 3 3 3 2 1 Peacock 3 3 3 2 1 Pigeon 3 3 3 2 2 1 Puppy 2 2 2 2 1 1 Rabbit 3 2 2 2 1 1 Rat 3 3 3 3 3 3 Shark 2 2 2 1 2	Monkey		4				2
Mutton 2 2 1 1 2 Ostrich 2 2 1 1 2 Owl 3 3 3 3 2 1 Peacock 3 3 3 2 1 Pigeon 3 3 2 2 1 Puppy 2 2 2 2 1 1 Rabbit 3 2 2 2 1 1 Rat 3 3 3 3 3 Shark 2 2 2 1 2	Mule	2	2		2	2	-
Ostrich 2 2 1 1 2 Owl 3 3 3 3 2 1 Peacock 3 3 3 3 2 1 Pigeon 3 3 3 2 2 1 Puppy 2 2 2 2 1 1 Rabbit 3 2 2 2 1 1 Rat 3 3 3 3 3 Shark 2 2 2 1 2	Mouse	4	4	4		4	-
Owl 3 3 3 3 2 1 Peacock 3 3 3 3 2 1 Pigeon 3 3 3 2 2 1 Puppy 2 2 2 2 1 1 Rabbit 3 2 2 2 1 1 Rat 3 3 3 3 3 Shark 2 2 2 1 2	Mutton	2	2	4.0		-	2
Peacock 3 3 3 3 2 1 Pigeon 3 3 3 2 2 1 Puppy 2 2 2 2 1 1 Rabbit 3 2 2 2 1 1 Rat 3 3 3 3 3 Shark 2 2 2 1 2	Ostrich	2	2	1	1		2
Pigeon 3 3 3 2 2 1 Puppy 2 2 2 2 1 1 Rabbit 3 2 2 2 1 1 Rat 3 3 3 3 3 Shark 2 2 2 1 2	Owl	3				2	1
Puppy 2 2 2 2 2 1 1 Rabbit 3 2 2 2 1 1 Rat 3 3 3 3 3 Shark 2 2 2 1 2	Peacock	3	3	3	3	2	1
Puppy 2 2 2 2 2 1 1 Rabbit 3 2 2 2 1 1 Rat 3 3 3 3 3 Shark 2 2 2 1 2	Pigeon	3	3	3	2	2	1
Rabbit 3 2 2 2 1 1 Rat 3 3 3 3 3 Shark 2 2 2 1 2		2	2			1	1
Shark 2 2 2 1 2		3	2	2	2	1	1
	Rat	3	3	3	3	3	
Sheep 3 3 3 3	Shark	2	2	2	1		2
	Sheep	3	3	3	3	3	

Snake	3	2	2	3		2
Swallow	2	2	2	2		2
Turkey	2	2	2	2		2
Turtle	2	2	2	1	1	1
Whale	2	2	2			2
Wolf	3	3	3	3	3	

NS=native-speaker; X=total mean; L=learner; NS/E= native-speakers of English; NS/P= native-speakers of Persian; L/+E= learner production identical with English-speakers' suggestions; L/+P= learner production identical with Persian-speakers' suggestions

7. THE RESULTS

What can be understood from the table above to some extent is that certain metaphors were literally understood based on the preexisting cultural models. For these, subjects produced as many animal metaphors as their repertoire allowed. Many of such animal metaphors were considered equally acceptable in both languages, though. Others were abstract concepts which could not be understood literally and so were only judged based on the animal name as representing some characteristics which are usually typical of such animals in the native culture. In general, the following categories can be detected in the data obtained:

- A. In about seventy five percent of the cases (33 out of 44 animal metaphors), the answers were somehow correct for the following reasons:
- 1. Animal metaphors have different interpretations and if you do not control the context in which you expect to get a specific answer, the judgments will most likely be subjective. That is, there are several points of similarity only one of which matches your required response and that happens to come accidentally, not consciously. The example of dog metaphor is in order here, since many of the character traits attributed to dogs are similar in the two languages English and Persian. However, this similarity may be the cause of many misunderstandings too. A non-native speaker may highlight a feature that is considered negative in the target language as positive, vice versa.
- 2. Ambiguity in terms of point of similarity of the images used may also cause the respondents to provide the type of response the researcher is after without the real knowledge of the respondent as what he really is doing. That is the answer may be correct but the respondent just chose it haphazardly, not intentionally. The *pig* metaphor, for instance, is usually

understood as a negative character trait in Persian, although rarely used in Persian metaphorical language. Nor is it always used in the same sense in the English language.

- 3. Some animal metaphors are universal, especially those that ethno biologically can be classified as basic generic animal terms, such as *dog*, *cat*, *monkey* (Martsa, 2003) and are supposed to be learned early in life and more readily accessible to native speakers. For these, learners do not seem to have too much difficulty, but in fact they do. Cats are not always as pleasant for Persian-speakers (at least among Persian-speakers in Iran) as they are for some English-speakers. *Cat* metaphors, therefore, are not always correctly used by Persian learners of English.
- **B.** For those cases where the respondents provided the wrong equivalent for the English animal metaphors, two possible interpretations are candidate:
- 1. Where only one metaphor is associated with the animal term, the respondent appeals to that regardless of it's being correct or incorrect (for instance, *turkey* which is only associated with hypocrisy in Persian but is used in other senses in English).
- 2. Where there were several metaphorical interpretations of the same animal image, the responses were variable, mostly incorrect, because of the cultural differences which greatly affect language learning within a closed society where contact with the outside world is limited to controlled means of communication. Ideological interferences were clearly at work too. For instance, in Persian attributing dog characteristics to humans is commonly considered negative in metaphorical expressions, only because dogs are considered *untouchable*. However, dogs are said to be loyal, a characteristic considered positive in many cultures. Even then, this loyalty could metaphorically have both negative and positive applications. For more details, see Talebinejad and Vahid(2005).

8. DISCUSSION AND CONCLUSION

As stated earlier in this paper, if people appeal to their knowledge coming from their experience, then it could be claimed that when a language is used as a foreign language, its meaning potential is taken over. Since learners still do not have sufficient knowledge of the foreign language, they will have to supply meaning potentials from their own mother tongue (transfer) and perhaps from other sources. Thus, even in its early phases, the interlanguage of the learners is not culturally neutral, but contains meaning potentials from both languages involved (and perhaps others), i.e. the

experiences coming from his previous languages as well as what follows from experiencing the new situation.

Metaphors are said to pervade and structure many aspects of language and culture (Kovecses, 2002, for instance). If so, then the related questions would be: Do they pervade and structure thought, the conceptual system of people? The results of the present study seem to suggest that this is partially true since the responses of the learners not familiar with the metaphorical expressions provided tended to represent their mother tongue culture, not that of the target one. On the other hand, the mere exposure to such metaphors created in the learners a kind of tendency to relate the animal metaphors with what they had already experienced and extend them to a new situation, thus sometimes providing correct responses to metaphorical expressions which would otherwise be rather unfamiliar. This is where the other theoretical positions come in: for instance Gibbs's suggestion that metaphors are not all in the heads of people, but also in the cultural world. Gibbs (1999) emphasizes that:

Our use of metaphors is strongly shaped by (a) how we culturally conceptualize of situations, like getting angry and sensing time, and (b) by our interactions with social/cultural artifacts around us. Under this view, metaphor is as much a species of perceptually guided adaptive action in a particular cultural situation as it is a specific language device or some internally represented structure in the mind of individuals (p. 162).

The results seem to support some of the findings researchers in other studies, not just related with cognitive research, but dealing with the real world problems of culture, have come up with. Byram and Risager (1999) who conducted an international research project on determining the effect of geopolitical changes on foreign language teaching in Europe, for instance have this to say:

Language learners are individuals in their own right, with a social status, with social identities, who have been socialized into a given culture. They are social actors who accept interaction with other social actors from other cultures. They bring to the interaction their existing identities, but also accept the identities bestowed upon them in this new situation, and become representatives of their cultures and country of origin. The competence they need for successful communication is one which enables them to bring the two cultures and cultural identities present in the interaction into a relationship of communication (p. 65).

In this relationship, the learner is regarded as a mediator between cultures and it is the mediation which allows for effective communication.

The language teacher can act as a professional mediator between learners and foreign languages and cultures.

Given all the various ideas reviewed here, then, one cannot but reiterate that cognitive and cultural research studies have shown the importance of experience in the area of language and culture, specifically the role of metaphor as a pervasive tool in reaching out to the world. Cognitive studies have emphasized the role of the individual in "manipulating and structuring external resources (including public representations of metaphor) to extend and off-load his or her own problem-solving activities" (Gibbs, 1999: 162).

To put things together, this might be one way of pursuing the claim that in second language learning, too, IL knowledge emerges, just as it does in any problem-solving activity. Conceptual fluency, therefore, is possible to come about as a result of the emergence of this problem-solving ability.

In SLA, then, the attempt should be to adopt a distributed perspective on what it means for something to be 'conceptual' and to recognize that cognition arises, and is continually re-experienced, when the body interacts with the cultural world (Gibbs, 1999:162). In this way, one will not have to wait for something magical to happen in the process of language teaching or language learning. That is to say, we might have to consider the concrete social and cultural context in our analysis of the data, for instance about language learning, rather than just looking for a direct relationship between linguistic analysis and psychological modeling.

The results also endorse Danesi's (1993) claim that "to be conceptually fluent in the SL the student must be able to convert common experiences into conceptually and linguistically appropriate models" (p. 496). If we agree that this is an important aspect of language education, then we have to confess that so far muc nuclear language teaching methodology.

9. NOTES confess that so far little has been done in incorporating this into our second

12. This list was prepared based on the data obtained in an experiment the author conducted at the University of Isfahan earlier in April 2003, supported by the Vice-Chancellor for Research. The results of this research were presented at the Paris **RAAMV** (Researching and Applying Metaphor) Conference, September 2003 (please refer to the Book of Abstracts from the 5th **RAAM** Conference). The author thus acknowledges the cooperation of the Vice-Chancellor for Research, The University of Isfahan, Iran.

Appendix I

Appendix I							
animal	number of			similar/identical	Different		
image	correspondences			similar/identical	Different		
Ass	4	4	3	3	1		
Bat	2	1	1	1	1		
Bear	2	1	1	1	1		
Bee	2	1	1	1	1		
Bird	4	2	2	2	2		
Bull	3	2	1	1	2		
Butterfly	4	2	2	2	2		
Chicken	4	2	2	2	2		
Cow	4	2	2	2	2		
Crocodile	3	1	2		2		
Crow	4	3	2	1	4		
Dodo	1	\langle	1		1		
Dog	4	2	2	1	4		
Dove	4	4	4	4			
Duck	4	1	3		3		
Eagle	3	1	3		3		
Fish	5	3	2	2	1		
Goose	3	1	2	2	2		
Hawk	2	2	2	2			
Hen	4	2	2	3	1		
Horse	4	1	3	1	3		
Hound	2	1	1	1	1		
Lark	2	111 1 4,11	1, 1, 1,	1 4 1 4 1	1		
Lion	(55/	5	5	5			
Mare	4	2	2	2	2		
Monkey	6	°114 to	4	2			
Mule	2	2	2	2	2		
Mouse	4	4	4	4			
Mutton	2	1	1		2		
Ostrich	2	1	1		2		
Owl	3	3	3	2	1		
Peacock	3	3	3	2	1		
Pigeon	3	2	3	2	1		
Puppy	2	2	2	1	1		
Rabbit	3	2	2	1	1		
Rat	3	3	3	3			
Shark	2	1	2		2		
N							

Sheep	3	3	3	3	
Snake	3	3	2		2
Swallow	2	2	2		2
Turkey	2	2	2		2
Turtle	2	1	2	1	1
Whale	2		2		2
Wolf	3	3	3	3	

Appendix II

Based on the results of the experiment, the following 12 observations can be made about how Persian-speaking people in Iran conceptualize some animal metaphors.

- 1. The *bee* in Persian is an image for a person with a sharp tongue. The English concept of being "very busy" is not understood through this image in Persian. The "sharp tongue" is the property of *scorpion* in Persian.
- 2. The *crocodile* image is now in use in Persian too, but only as a loan image, not something that everybody would understand. Only educated people familiar with written language, and especially with translated texts would understand and use *crocodile tears*.
- 3. **Mutton**, which refers to the meat of sheep is not recognized as such in Persian. Neither will **beef** or **pork** be thus understood as the meat of certain animals. To identify the type of meat, one has to follow it by the animal name. For instance, "cow meat" for **beef**, or "pig meat" for **pork** or "sheep meat" for **mutton**. The metaphorical image related with **mutton** in the sense of "being useless" is not common in Persian, but the other sense of it, i.e. "being stupid", as in the expression "muttonheaded" is similar to the Persian expression "mesle gaw"[like a cow], used to refer to a stupid person.
- 4. The image of *ostrich*, an exotic bird in Persian, is an interesting case of the interpretation of animal symbols applying generic taxa sometimes exemplifying metonymic mappings underlain by the conceptual metonym THE NAME OF THE ANIMAL FOR Y, in which Y may stand for a product, a state or a country (Martsa, 2003:1). The counterpart of the *ostrich* in Persian is *shotor morgh*, meaning a "camel bird". In fact it is a hybrid of the two, with neither feature being complete. It should be able to fly like a bird and carry loads like a camel. However, it neither flies nor carries loads. Thus an image for "people who do not carry out their responsibilities out of laziness". When asked to fly they say they are not birds. When asked to carry loads they are not camels! The image of *ostrich* as a "person capable

of digesting a lot" is not commonly understood in Persian.

- 5. The *dodo* bird is not a metaphor for "extinction" in Persian. Instead, old-fashioned out of date, extinct phenomena are said to belong to the time of *Daghyanous*, a prehistoric king.
- 6. A *duck* in Persian is a person who is "very keen on water, washes a lot, and is not afraid of water". In this sense, it is similar to the English concept of being "water resistant", but the point of similarity is not very elaborate.
- 7. The images of *goose* in Persian and English differ in that in the former language goose is a featureless bird with no specific characteristics to become an image, while in the latter it has several metaphorical representations. "The bird that lays the golden egg" is not a *goose* in Persian, but a *hen*.
- 8. The *shark*'s image in Persian is completely different from that in English. While in English a *shark* is a "dishonest person, a swindler", in Persian a *shark* is a "man with no or very little beard growing on him".
- 9. The *swallow* image in Persian is representative of "light-weighted, easy going person who moves very lightly and easily". It also refers to "people who eat very little". In this sense, it is very similar to the general image of bird in English.
- 10. The *turkey* image is a very interesting case of a negative image in both languages, but in two different senses. While a *turkey* in English is a "stupid person", a *turkey* in Persian it is an image for a "hypocrite", a "person who changes sides easily", and an "opportunist". Both images are unpleasant though.
- 11. **Turtles** is not very popular in Persian, especially **sea turtle** that is rare and exotic. The common image related with **turtle** in Persian is a "slow person", in terms of movement. The image of **turtle** as "capsizing of a boat" is nonexistent in Persian.
- 12. Another animal metaphor which represents a completely different picture in the two languages is the *owl* image. The *owl* in English is a symbol of "wisdom and deliberation". A picture of an *owl* or even a living one would bring the owner wisdom. This, however, is just the opposite of the Persian belief. The *owl* in Persian is "inauspicious", whether real or only in a picture! It would bring "bad luck" to the owner. The Persian *owl* is not wise!

REFERENCES

Balban, V. (1999). Self and Agency in Religious Discourse: Perceptual Metaphors for Knowledge at a Marian Apparition Site. in: Gibbs, R. and Steen, G. (Eds.). **Metaphor in Cognitive Linguistics.** Amsterdam: John Benjamin's Publishing Company, 125-144.

Basso, Keith, H. (1976). *`Wise Words` of the Western Apache: Metaphor and Semantic Theory*`. **Meaning in Anthropology**, Basso, K. and Selby, H. (Eds.). Albuquerque: University of New Mexico Press, 93-121.

Bates, E., Elman, J., Johnson, M., Karmiloff-Smith, A., Parisi, D., and Plunkett, K. (1998). *Innateness and Emergentism*. in: Bechtel, W. and Graham, G. (Eds.). **A Companion to Cognitive Science**. Oxford: Basil Blackwell, 590-601.

Bordieu, P. (1991). Language and Symbolic Power. Cambridge: Polity.

Byram, M. and Risager, K. (1999). Language Teachers, Politics, and Cultures. Toronto: Mutilingual Matters Ltd.

Chartris-Black, J. (2002). Second Language Figurative Proficiency: A Comparative Study Malay and English. Applied Linguistics. 23/1: 104-33.

Danesi, M. (1993). Metaphorical Competence in Second Language Acquisition and Second Language Teaching: The Neglected Dimension. Georgetown University Round Table on Language and Linguistics 1992: Language, Communication and Social Meaning. Washington D.C.: Georgetown University Press.

Ellis, N. C. (1998). *Emergentism, Connectionism and Language Learning*. **Language Learning**. 48, 631-64.

Ellis, N. C. (2002). Frequency Effects in Language Processing: A Review with Implications for Theories of Implicit and Explicit Language Acquisition. Studies in Second Language Acquisition. 24, 143-88.

Gregg, K. (2003). The State of Emergentism in Second Language Acquisition. **Second Language Research**. 19/3, 95-129.

Irujo, S. (1993). Steering Clear: Avoidance in the Production of Idioms. IRAL. 30/3, 205-219.

Isacenko, A. V. (1972). Figurative Meaning, Derivation, Semantic Features. The Slavic Word. Proceedings of the International Colloquium

at UCLA. Paris: Mouton, 76-91.

Emanatian, M. (1999). *Congruence by Degree: On the Relationship Between Metaphor & Cultural Models.* in: Gibbs, R. and Steen, G. (Eds.). **Metaphor in Cognitive Linguistics**. Amsterdam: John Benjamin's Publishing Company, 205-218.

Fox, R. (1984). **Lions of Punjab: Culture in the Making**. Berkeley: University of California Press.

Foucault, M. (1983). The Subject and Power. in: Dreyfus, H. and Rainbow, R. (Eds.). **Michel Foucault: Beyond Structuralism and Hermeneutics**. Chicago: University of Chicago Press.

Geeraerts, D. and Grrondelaaers, S. (1995). Looking Back at Anger: Cultural Traditions and Metaphorical Patterns. in: Taylor, J. R. and MacLaury, R. E. (Eds.). Language and the Cognitive Construal of the World. Berlin: de Gruyter, 153-179.

Gibbs, R. and Steen, G. (Eds.), (1999). **Metaphor in Cognitive Linguistics**. Amsterdam: John Benjamin's Publishing Company.

Gibbs, R. (1999). *Taking Metaphor out of our Heads and Putting it into the Cultural World.* in: Gibbs, R. and Steen, G. (Eds.). **Metaphor in Cognitive Linguistics**. Amsterdam: John Benjamins Publishing Company, 145-166.

Grady, Joseph E. (1999). *A Typology of Motivation for Conceptual Metaphor: Correlation vs. Resemblance*. in: Gibbs, R. and Steen, G. (Eds.). **Metaphor in Cognitive Linguistics**. Amsterdam: John Benjamins Publishing Company, 79-100.

 $Hall,\ J.\ K.\ (2002).$ Teaching and Researching Language and Culture. London: Longman.

Kecskes, I. and Papp, T. (2003). *How to Demonstrate the Conceptual Effect of L2 on L1? Methods and Techniques*. in: Cook, V. (Ed.). **Effects of the Second Language on the First**. Clevedon: Multilingual Matters, 247-265.

Kovecses, Z. (2002). Metaphor: A Practical Introduction. Oxford: OUP.

Kovecses, Z. (1999). *Metaphor: Does it Constitute or Reflect Cultural Models?* in: Gibbs, R. and Steen, G. (Eds.). **Metaphor in Cognitive Linguistics**. Amsterdam: John Benjamins Publishing Company, 79-100.

Lakoff, G. (1987). **Women, Fire, and Dangerous Things**. Chicago: Chicago University Press.

Lakoff, G. and Johnson, M. (1980). **Metaphors We Live By**. Chicago: Chicago University Press.

Lakoff, G. and Turner, M. (1989). **More Than Cool Reason: A Field Guide to Poetic Metaphor**. Chicago: Chicago University Press.

Lakoff, G. and Kovecses, Z. (1987). *The Cognitive Model of Anger Inherent in American English*. in: **Cultural Models in Language and Thought**. Holland, D. and Quinn, N. (Eds.). Cambridge: Cambridge University Press, 195-221.

Leezenberg, M. (2003). Communication as Social Practice: The Interface Between the Cognitive and the Social Sciences. in: Laszlo, I Komlosi, Peter Houtlosser and Leezenberg, M. (Eds.) Communication and Culture: Argumentative, Cognitive and Linguistic Perspectives. Amsterdam: Sic Sat.

Quinn, N. (1991). *The Cultural Basis of Metaphor*. **Beyond Metaphor: The Theory of Tropes in Anthropology**. Fernandez, J. (Ed.). Stanford: Stanford University Press, 56-93.

Sweetser, E. (1990). From Etymology to Pragmatics: he Mind-Body Metaphor in Semantic Structure and Semantic Change. Cambridge: CUP.

Talebinezhad, M. R. and Vahid Dastjerdi, H. (2002). Conceptual Mappings, Perception and Production of L2 Metaphorical Expressions. **The Journal of Humanities**. 9 (3), 47-61.

Talebinejad, M. R. and Vahid Dastjerdi, H. (2005). A Cross-Cultural Study of Animal Metaphors: When Owls Are Not Wise! Metaphor and Symbol. 20 (2), 133-149.

Turner, M. (1991). Reading Minds: The Study of English in the Age of Cognitive Science. Princeton N.Y.: Princeton University Press.