

Metaphors, Culture, and the Classroom

Brian Birdsell
Hirosaki University

Reference Data:

Birdsell, B. (2014). Metaphors, culture, and the classroom. In N. Sonda & A. Krause (Eds.), *JALT2013 Conference Proceedings*. Tokyo: JALT.

In the past 30 years the contemporary theory of metaphor in cognitive linguistics has begun to alter the view of metaphor from being simply a part of language to being an important part of human thought. In this paper I briefly cover the historical development of this theory and some of its important principles. I then explore how cultures vary in their use of metaphors and provide some examples in Japanese and English. Then I address some practical applications of bringing this theory of metaphor into the classroom by reviewing past studies that focused on metaphor awareness-raising activities in order to familiarize students with the metaphorical nature of the target language. New ways to use pictorial metaphors to get learners to critically discuss the evaluative function of metaphors and become more aware of their conceptual nature are also presented.

過去30年間で認知言語学におけるメタファーの現代的な理論は、単に言語の一部であることから、人間の思考の重要な部分へとメタファーの見方を変更し始めている。拙論においてその重要な原則のいくつかの歴史的発展を取り上げる。その後、それぞれの文化がメタファーの使用においてどのように異なるかを検討し、日本語と英語のいくつかの例を紹介する。そのうち、学生をその目標とする言語の比喩的性質に慣れさせるために、メタファーを意識し自覚を促すアクティビティーに注目した過去の研究を調査し、このメタファーの論理を実際に授業に応用する例をいくつか紹介する。学習者が批判的に評価の機能を持つメタファーを論じることのできる、映像のメタファーを用いて、概念的な性質をより気づかせる新しい方法も呈示する。

METAPHOR IS often assumed to reside on the periphery of language, something for the rhetoricians or poets to contemplate and not of much concern for linguists or language educators. More recent research in cognitive linguistics, however, has demonstrated that metaphors are not mere decorative language, but rather an essential part of the conceptual system and key to expressing abstract concepts like emotions (Kövecses, 2003; Lakoff & Johnson, 2003). Metaphors also are ubiquitous in language (Dirven & Paprotté, 1985) and some researchers have proposed that a metaphor is uttered about six times per minute of discourse (Gibbs, 1994). Quine (1978) has even suggested that “metaphor, or something like it, governs both the growth of language and our acquisition of it” (p. 162). Cameron and Low (1999) further suggested that learning how to use metaphors is essential for acquiring a second language. The aim of this paper is to elaborate on how metaphor and culture interact and to suggest various ways to bridge the gap between theories of metaphor and practical applications for learning metaphors in the foreign language classroom.



Rise of the Contemporary Theory of Metaphor

Most authors writing about metaphor feel obliged to start with Aristotle (Ortony, 1993, p. 3) by citing him as propagator of the idea that metaphor is for those of great intelligence and “alien to most ordinary speakers” (Gibbs, 1994, p. 121), thus placing metaphor on some higher poetic ground. Yet this view can be rather misleading. Mahon (1999) strongly suggested that if one looks more closely at the works of Aristotle, he in fact asserted, “Everyone uses metaphors in conversation” (p. 79). From an educational perspective, it was also Aristotle who stated, “We learn above all from metaphor” (Grube, 1958, p. 89). Few would disagree with such a statement, for metaphors help us solve problems, make connections between unrelated things, and provide the ability to talk about newly discovered concepts. Giambattista Vico (1668-1744) viewed metaphors as not only essential to language, but also necessary for communication to grasp the ever-changing shape of our lives (Mooney, 1985). Rather reminiscent of Vico, Ortony (1975) published an influential paper entitled “Why Metaphors Are Necessary and not Only Nice” and wrote about underlying motivations for our use of metaphors such as they are vivid and concise and help us talk about the inexpressible.

In the area of social psychology, Asch (1958) noticed that when talking about a person’s character, emotions, or ideas, we often use concepts within the natural world such as temperature (e.g., *warm* or *cool*) to refer to human characteristics such as friendliness and unfriendliness. Asch also wrote that “for the descriptions of persons, we draw upon the entire range of sensory modalities” (p. 86). Reddy (1993) developed the *Conduit Metaphor*, which proved to be a catalyst that expanded the idea that metaphors are more than simply linguistic in nature but are actually conceptually structured. Reddy uncovered certain cognitive associations between the act of communication and the process of receiving and sending packages. Put simply, our

internal ideas and thoughts are objects and the words of our language are containers. To express these ideas through language, we must first package them into containers (words), and then send them along some conduit (the act of communication), whereupon the recipient of the containers proceeds to unpack the ideas from the words. This process allows us to transfer our internal thoughts and ideas to others. Consequently, when someone says, “I couldn’t grasp what she said,” it means they have failed to receive the package, and “I’m having trouble putting my ideas into words” means the person has failed to find the right container for his or her internal ideas and cannot communicate them to another individual.

Observing the systematicity of these linguistic metaphors, Lakoff and Johnson (2003) developed and expanded on this idea, noticing that the “locus of metaphor is thought” (Lakoff, 1993). By analyzing a broad range of linguistic metaphors, the researchers began to see how some metaphors, which they called *conceptual metaphors*, were not deviant or riddle-like but were conceptually structured. Conceptual metaphors are usually written in capital letters to distinguish them from linguistic metaphors. The following is an example of a conceptual metaphor: ECONOMY IS A PLANT. The first item, ECONOMY, is the target concept, which is often a more abstract concept, and the second item, PLANT, is the source concept, a more concrete and familiar concept and frequently physical in nature. In language, people will often talk about the economy as if it were a living plant. These conceptual metaphors are discerned by looking at certain clusters of metaphorical expressions in language. Here are some examples taken from a corpus¹ that point to this organizing conceptual structure.

- We’re seeing some *green shoots* in the economy.
- The new economy is in *full bloom*.
- The economy began to *wilt* during his first term.

The above expressions clearly describe an economy (the target concept) in terms of something very unrelated, a plant (the source concept). Certain elements of the source concept are mapped onto the target concept; in this case, the abstract financial entity, an economy, which is the production and consumption of goods and services, can in fact have green shoots, bloom, and wilt. It should be noted, however, that the target concept, economy, is not restricted to only one source concept (e.g., ECONOMY IS A MACHINE).

- The answer is that the banking system is the *engine* of the economy; if banks stop functioning, economic activity will *grind to a halt*.

Another important part of conceptual metaphor theory is how abstract thought is grounded in everyday, embodied experiences in the world. One common source concept is JOURNEY, which is often applied to such target concepts as LIFE or LOVE. Our knowledge of this source domain comes from our embodied experiences of interacting with the world around us. This reoccurring bodily experience of motion forms something that Lakoff (1987) and Johnson (1987) called an *image schema*. A motion image schema is an abstract representation that provides the necessary structure for our understanding of motion. It can be applied to any situation of motion and therefore lacks details and specificities of that particular situation. A motion image schema contains the basic structure of SOURCE-PATH-GOAL (Gibbs, 2006; Hampe, 2005; Johnson, 1987; Lakoff, 1987). All motion starts at some specific point, proceeds along a given path, and eventually reaches a desired destination or end goal. Another important schema relating to motion and physically experienced in FORCE dynamics (Talmy, 1988) is BLOCKAGE. This sense of BLOCKAGE derives from our experiences encountering such things as a roadblock, a wall, a cliff, or any other impediments that may block us from reaching our desired goal.

Looking at the conceptual metaphor, NEGOTIATIONS ARE A JOURNEY, certain entailments from the source, JOURNEY, are mapped onto the target, NEGOTIATIONS, providing a degree of structure for this target concept:

- Negotiators are travelers.
- The goal of the negotiation is the destination.
- Problems in the negotiation are impediments.
- The outline of the negotiation is a road map.

The following examples reveal how customary the expression *road map* is when talking about negotiations, as well as the use of *bumps* as impediments that slow down the movement towards reaching a desired outcome or the goal of the negotiation.

- Otherwise, the *road map* will go nowhere.
- There will always be *bumps* in the *road* on this *road map* for peace.

Another example in regards to motion is how we may begin a negotiation the same way we begin a journey by car, by initiating the movement of the wheels.

- The president then hoping to set the *wheels in motion* for peace talks

It should be stated, however, that this does not imply wheels are necessary components for negotiations to start. Rather, wheels are a component of vehicles, which are commonly used in journeys; it is the motion of the wheels that causes the vehicles to start this forward movement, and this causal relationship gets mapped onto the negotiation as an impetus that gets the talks moving forward. As a physical journey proceeds along a given path, so too, does a negotiation. Though obviously in a negotiation, this is not a literal path, as nobody is actually moving in space.

- Even then, the White House was only able to say the two sides had “identified a path forward” in the negotiations.

As this movement forward is an important part of a journey to reach one’s desired destination, so, too, is it for a negotiation to reach a deal or agreement.

- Talks on track: The Iran negotiations *must keep moving forward*.

When a negotiation is not proceeding according to plan it may be *stalled*, *sidetracked*, or *stuck*, which are all impediments to this forward movement and the goal of reaching the destination; to overcome this impediment, the negotiators attempt to get *back on track*.

- We directed our trade ministers to take action to get the negotiations *back on track* toward a successful conclusion.

What connects these seemingly unconnected metaphors is how each one conceptualizes a negotiation as some kind of movement forward, with which the participants are trying to reach some kind of destination, but along the way they encounter various obstacles that may prevent or defer them from accomplishing this goal.

Grady (1997a) noticed that conceptual metaphors had the ability to be generalized into simpler ones, which he called primary metaphors. Lakoff and Johnson (1999) adapted this into their conceptual metaphor theory and proposed a list of them such as; AFFECTION IS WARMTH, HAPPY IS UP, INTIMACY IS CLOSENESS, and DIFFICULTIES ARE BURDENS. Primary metaphors, being highly generalizable and the least arbitrary of metaphors, are naturally widely shared cross-linguistically because they come directly from bodily experiences in the world, which all humans share (Grady, 1997b, p. 288). On the

other hand, complex metaphors composed of these primary metaphors will utilize various culturally based conceptual frames and naturally will vary between cultures (Lakoff & Johnson, 2003, p. 257). The next section takes a look at how culture interacts with metaphors and some cross-linguistic differences between Japanese and English.

Culture and Metaphors

The concept of culture is formidably rich and expansive. Geertz (1973) attempted to summarize the vast number of definitions that surround this concept, as put forth by the anthropologist Clyde Kluckhohn, including, among many others: “the total way of life of a people,” “a way of thinking, feeling, and believing,” and “a storehouse of pooled learning” (pp. 4-5). Trying to tackle the meaning of culture is beyond the scope of this article, but more recently Hong (2009) succinctly stated, “Culture is networks of knowledge” (p. 4). This definition of culture utilizes the conceptual metaphor, MINDS ARE COMPUTERS (Gigerenzer & Goldstein, 1996). Individual minds are computers, and just as computers are linked together in networks in order for them to communicate efficiently and effectively, it is culture that provides “learned routines of thinking, feeling and interacting with other people, as well as a corpus of substantive assertions and ideas about aspects of the world” (Hong, 2009, p. 4).

Language is one of the essential tools used by those within a culture to transmit knowledge, to interact with others, and to make assertions about the world. Basso (1976) summed up the distinct relationship between culture and language when he stated, “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” (p. 93). How languages differ in their conceptualization and use of metaphors naturally would be closely linked to certain cross-

cultural variations. In a special issue of *Metaphor and Symbol*, Boers (2003) summed up three possible cross-cultural variations in the use of metaphor: differences in the particular source-target mappings that have become conventional in the given cultures, differences of value judgments, and differences in regards to the degree of pervasiveness of the metaphors (p. 232). The use of certain metaphors varies greatly between languages. Boers and Demecheleer (2001) showed how French students struggle with guessing the meaning of certain idioms derived from the domain of sailing, compared to the relative ease they have with metaphors derived from the domain of eating, because the latter is prevalent in French, but the former is less salient. Such high frequency use of one thematic domain can serve as a window into the language's history and culture and even into the language community's patterns of thought and worldview (Boers, 2003; Lakoff, 1987).

Here are a few examples of how metaphors vary between Japanese and English. First are examples of how they can be quite similar and share the same conceptual metaphor such as the primary metaphor, AFFECTION IS WARMTH.

- *atakaku mukaete agetai mono desu*²
warmly to receive give-VOL to be
(We want to give a warm reception)
- He got a *warm welcome* from President Raul Castro

Here, Japanese *atakaku* and English *warm* both have the same literal and figurative meaning; a word denoting the degree of temperature refers to the human characteristics of affection and friendliness. However, the languages differ somewhat in regards to the opposite expression using the word *cold* and the human trait of being unaffectionate or unfriendly. In Japanese, *tsumetaime de mirareru* literally means "look with a cold eye"; in English the expression is simply a "cold look," but both have the same figurative meaning.

- *gokon de joshi kara "nande kita no?"* to *tsumetaime de mirareru*
Dating party-LOC women from "why came-INT?" cold-eye-INS look-PASSIVE
(Women at the party give the guys a cold look as if saying, 'Why did you come here?')
- America under Barack Obama is *taking a long, cold look* at its transatlantic relations

On the other hand, some metaphorical expressions in Japanese and English might have the same literal meaning, but different figurative meanings. Japanese, utilizing the conceptual metaphor, PROGRESS IS FORWARD MOVEMENT, has the figurative expression *ashi wo hipparu* (to pull someone's leg), which means to impede someone's forward movement, as seen in the example below. English has a different figurative meaning for *pull someone's leg*, to tease or joke with someone, which likely comes from the physical act of tripping someone in public as a form of ridicule (Flavell & Flavell, 2006). Though English also uses the same conceptual metaphor, PROGRESS IS FORWARD MOVEMENT, it uses different language such as *to hold someone back*, which has the figurative meaning of impeding someone's progress in some activity like work, a sport, or more generally in life.

- *inobeta no ashi wo hipparu funiki ga atte wa, keizai mo shakai mo shinpo shinai*
Innovator-POSS leg-OBJ pull atmosphere-SUBJ exists-TOP,
economy-CONJ society-CONJ progress-NEG
(Society and economics do not progress in an atmosphere that holds back innovators)

Another difference between languages may be the specificity of certain target domains that are utilized by the culture. For example, Japanese and English both use the conceptual metaphor,

COMPETITION IS WAR, and more specific examples of it such as, SPORTS / POLITICS / ARGUMENTS ARE WAR, but only Japanese uses ENTRANCE EXAMS ARE WAR (Hiraga, 2008). Examples of this can be frequently found in Japanese, such as when the exam is referred to as the “entrance exam war,” the English language becomes a “weapon” to fight this war, and “enemies” of the student taking the entrance exam are deterrents such as fatigue and cell phones.

Naturally, salient themes also vary between languages and cultures. One example is how English makes ample use of the card-playing theme in the following examples.

- Major League Baseball has called for Alex Rodriguez’s attorney to *show his hand*.
- Both may have emboldened North Korea to *overplay its hand*, while at the same time prompting Washington to decide there was already too much *at stake* to consider *folding*.

Languages invariably share some conceptual and linguistic metaphors, and at the same time many metaphors differ between languages. Knowing the metaphorical themes or being aware of the conceptual metaphor, however, does not guarantee mastery of the linguistic metaphorical usages in everyday language. In the next section, I look at (a) how teachers can bring metaphors into classrooms by helping students become more aware of the structure of metaphors and (b) ways to get students to be more creative with language.

Metaphors in the Classroom

Research from the field of cognitive linguistics has gradually been extended into the realm of foreign language acquisition. Lazar (1996) used figurative expressions to expand students’ vocabulary by introducing classroom activities that utilized certain conceptual metaphors such as LOVE IS MADNESS and

LOVE IS MAGIC. Deignan, Gabrys, and Solska (1997) used cross-linguistic awareness raising activities by discussing and comparing metaphors between the learners’ L1 and L2. Boers and Demecheleer (2001) looked at how idioms are a good way to improve learners’ problem-solving skills and build learners’ awareness of cross-cultural variations in metaphors. They also researched how elaborating on the etymology of idioms makes idioms easier to remember (Boers, Demecheleer, & Eychmans, 2004). Yasuda (2010) has done work in Japan, teaching phrasal verbs through conceptual metaphors and examining how doing this improved learners’ ability to successfully comprehend novel phrasal verbs. Bringing metaphors into English for specific purposes classrooms has also been researched as a way to enhance learners’ overall vocabulary in the fields of economics (Chartelis-Black, 2000) and literature (Picken, 2007). Boers (2000) also researched metaphor awareness raising by organizing linguistic expressions in English by metaphorical themes and evaluating the possible positive impact this has on vocabulary retention.

Using the conceptual metaphor ANGER IS A HEATED SUBSTANCE, teachers could include a mini-lesson as part of a larger lesson that focuses on cooking. Students may have learned vocabulary such as *simmer* and *boil*, but most likely in the literal sense such as *boiling water*, but not the metaphorical use of similar expressions with regards to anger. Arranging the expressions on a continuum from lowest heat to highest heat can distinctly show the students how anger follows the same structure (i.e., the greater the heat the greater the anger) and subsequently a reduction in the temperature from a boil to a simmer reduces the level of anger. This of course can be done with visual cues. In addition, phrasal verbs such as *boil over* and *simmer down*, and idiomatic expressions such as *let off some steam* could be introduced to demonstrate how they may be used in sentences by providing examples from a corpus as in the following:

- *Boiling with rage*, Annie steamed out of the office.

Rather than simply memorizing a seemingly arbitrary list of metaphorical or idiomatic expressions, we can increase students' awareness of the conceptual structure of these metaphors. Understanding this structure, students might then be more capable of interpreting new and novel usages of language, which are based on the same conceptual metaphor, as in the following example:

- And I said, you know, before you, like, stomp all over your wedding, *breathing tongues of fire*, let's just, like, simmer down.

Another area of research that deserves more investigation in the foreign language classroom is the use of pictorial metaphors (Forceville, 1994) as discussion springboards and opportunities for learners to improve their interpretive ability of metaphors. Advertisements by antismoking campaigners and the World Wildlife Federation are examples of pictorial metaphors that have a very evaluative function and could be used in the classroom to stimulate not only creative metaphorical thinking but also critical thinking skills. These pictorial metaphors can easily lead to discussions on topics such as smoking, health, addiction, corporate power, deforestation, and global warming, just to name a few. One advertisement that the antismoking campaign has produced is a picture of a gun with cigarettes packed into the barrel. Students would have to think of associations that these two dissimilar things have, from the more obvious association of both having the same shape to the more complex one of both having the potential to kill.

Other pictorial metaphors that could be easily applied to the classroom could be taken from the cover art of *The Economist*. The cover art for this magazine often exploits the conceptual

metaphors MORE IS UP and LESS IS DOWN, for example by illustrating the advancing economy in Africa with a kite, shaped like the continent of Africa, flying high in the sky (2011, December 3), or with George Washington, cut out from the U.S. dollar bill, flying an airplane that is in a downward descent and appears to be crashing (2007, December 1). Spatial language for upward movement such as *soar*, *rocket*, and *shoot up*, or downward movement such as *plunge*, *sink*, *dive*, and *plummet* can all be used metaphorically to speak of quantifiable entities like economic numbers (*GDP*, *currency*, and so on).

Another common conceptual metaphor used on these magazine covers is DIFFICULTIES ARE BURDENS, with the depiction of such abstract ideas like debt (2009, June 13) or the aging population in Japan (2010, November 20) as a heavy weight in the form of a ball being carried by the young. Again, this pictorial metaphor is representative of many linguistic metaphors bound by this same embodied experience of being physically weighed down by an abstract concept like responsibility, being in debt, or harboring a secret, embodied in the sense that being weighed down by a burden such as keeping a secret can actually influence one's perception of distances to be farther and hills to be steeper (Slepian, Masicampo, Toosi, & Ambady, 2012). Using pictorial metaphors provides learners with important visual cues to enhance their understanding and insight into metaphors and at the same time creates an opportunity to introduce linguistic metaphors that are connected to images.

Conclusion

Metaphors can be found in all forms of language, from playful tweets, to solemn political speeches, to explaining how economies work, to advertisements along the highway. They are everywhere in language and critical for language learners to grapple with, become more aware of, explore, and try to create on their own. Metaphors are deeply interwoven in cultures and

can be used as a way to discuss cross-cultural differences and enhance intercultural understanding. Furthermore, they provide a practical lead into critical thinking tasks, for metaphors often contain highly evaluative positions. A lot more work needs to be done regarding the use of metaphors in foreign language classrooms, especially looking at ways to measure metaphorical competence and how these various approaches to introducing metaphors affects learners' overall ability to understand, interpret, appreciate, and produce metaphors in the target language. The importance of teaching metaphors should not be undervalued, for having metaphorical competence in a foreign language contributes to various language skills such as sociolinguistic, illocutionary, textual, and grammatical competencies (Littlemore & Low, 2006).

Notes

1. The English examples in this paper were acquired from The Corpus of Contemporary American English (<http://corpus.byu.edu/coca>) a 450 million-word corpus or by using WebCorp (<http://www.webcorp.org.uk/live/>), a linguist's search engine developed by Birmingham City University.
2. The Japanese examples came from the Kotonoha Corpus (<http://www.kotonoha.gr.jp/shonagon/>).

Bio Data

Brian J. Birdsell is a lecturer at Hirosaki University in northern Japan. He has been living and working in Japan since 2004. He is currently a PhD candidate at the University of Birmingham in the UK, researching metaphor and creativity in the foreign language classroom. Outside of teaching, he enjoys telemark skiing and hiking in the mountains of Tohoku. He keeps a website at <www.tsugarupress.com>.

References

- Asch, S. E. (1958). The metaphor: A psychological inquiry. In R. Tagiuri & L. Petrullo (Eds.), *Person perception and interpersonal behavior* (pp. 86-94). Stanford, CA: Stanford University Press.
- Basso, K. H. (1976). "Wise words" of the western Apache: Metaphor and semantic theory. In K. H. Basso & H. A. Selby (Eds.), *Meaning in anthropology* (pp. 93-121). Albuquerque: University of New Mexico Press.
- Boers, F. (2000). Metaphor awareness and vocabulary retention. *Applied Linguistics*, 21, 553-571.
- Boers, F. (2003). Applied linguistics perspectives on cross-cultural variation in conceptual metaphor. *Metaphor and Symbol*, 18, 231-238.
- Boers, F., & Demecheleer, M. (2001). Measuring the impact of cross-cultural differences on learners' comprehension of imageable idioms. *ELT Journal*, 55, 255-262.
- Boers, F., Demecheleer, M., & Eychmans, J. (2004). Etymological elaboration as a strategy for learning figurative idioms. In P. Bogaards & B. Laufer (Eds.), *Vocabulary in a second language: Selection, acquisition, and testing* (pp. 53-78). Amsterdam: John Benjamins.
- Cameron, L., & Low, G. (1999). Metaphor. *Language Teaching*, 32, 77-96.
- Chartelis-Black, J. (2000). Metaphor and vocabulary teaching in ESP economics. *English for Specific Purposes*, 19, 149-165.
- Deignan, A., Gabrys, D., & Solska, A. (1997). Teaching metaphors using cross-linguistic awareness-raising activities. *ELT Journal*, 51, 352-360.
- Dirven, R., & Paprotté, W. (1985). Introduction. In W. Paprotté & R. Dirven (Eds.), *The ubiquity of metaphor: Metaphor in language and thought* (pp. vii-xvii). Amsterdam: John Benjamins.
- Flavell, L. & Flavell, R. (2006). *Dictionary of idioms and their origins*. London: Kyle Books.
- Forceville, C. (1994). Pictorial metaphor in advertisements. *Metaphor and Symbol*, 9, 1-29.
- Geertz, C. (1973). *The interpretation of cultures: Selected essays*. New York: Basic Books.

- Gibbs, R. W. (1994). *The poetics of mind*. Cambridge: Cambridge University Press.
- Gibbs, R. W. (2006). Metaphor interpretation as embodied simulation. *Mind & Language*, 21, 434-458.
- Gigerenzer, G., & Goldstein, D. G. (1996). Mind as computer: Birth of a metaphor. *Creativity Research Journal*, 9, 131-144.
- Grady, J. (1997a). *Foundations of meaning: Primary metaphors and primary scenes*. (Unpublished doctoral dissertation). University of California, Berkeley.
- Grady, J. (1997b). THEORIES ARE BUILDINGS revisited. *Cognitive Linguistics*, 8, 267-290.
- Grube, G. M. A. (1958). *Aristotle on poetry and style*. New York: Liberal Arts Press.
- Hampe, B. (2005). Image schemas in cognitive linguistics: Introduction. In B. Hampe (Ed.), *From perception to meaning: Image schemas in cognitive linguistics* (pp. 1-12). Berlin: Mouton de Gruyter.
- Hiraga, M. (2008). The Tao of learning. In E. A. Berendt (Ed.), *Metaphors for learning: Cross-cultural perspectives* (pp. 55-72). Amsterdam: John Benjamins.
- Hong, Y. (2009). A dynamic constructivist approach to culture. In R. S. Wyer, C. Cjiu, & Y. Hong (Eds.), *Understanding culture: Theory, research, and application* (pp. 3-23). Hove, East Sussex, UK: Psychology Press.
- Johnson, M. (1987). *The body in the mind: The bodily basis of meaning, imagination, and reason*. Chicago: The University of Chicago Press.
- Kövecses, Z. (2003). *Metaphor and emotion: Language, culture, and body in human feeling*. Cambridge: Cambridge University Press.
- Lakoff, G. (1987). *Women, fire, and dangerous things: What categories reveal about the mind*. Chicago: The University of Chicago Press.
- Lakoff, G. (1993). The contemporary theory of metaphor. In A. Ortony (Ed.), *Metaphor and thought* (2nd ed.). (pp. 202-251). Cambridge: Cambridge University Press.
- Lakoff, G., & Johnson, M. (1999). *Philosophy in the flesh. The embodied mind and its challenge to western thought*. New York: Basic Books.
- Lakoff, G., & Johnson, M. (2003). *Metaphors we live by* (2nd. ed.). Chicago: University of Chicago Press.
- Lazar, G. (1996). Using figurative language to expand students' vocabulary. *ELT journal*, 50, 43-51.
- Littlemore, J., & Low, G. (2006). Metaphoric competence, second language learning, and communicative language ability. *Applied linguistics*, 27, 268-294.
- Mahon, J. E. (1999). Getting your sources right. In G. Low & L. Cameron (Eds.), *Researching and applying metaphor* (pp. 69-80). Cambridge: Cambridge University Press.
- Mooney, M. (1985). *Vico in the tradition of rhetoric*. Princeton, NJ: Princeton University Press.
- Ortony, A. (1975). Why metaphors are necessary and not just nice. *Educational Theory*, 25, 45-53.
- Ortony, A. (1993). Metaphor, language and thought. In A. Ortony (Ed.), *Metaphor and thought* (2nd ed., pp. 1-16). Cambridge: Cambridge University Press.
- Picken, J. D. (2007). *Literature, metaphor, and the foreign language learner*. Houndmills, Hampshire, UK: Palgrave Macmillan.
- Quine, W. V. (1978). A postscript on metaphor. *Critical Inquiry*, 5(1), 161-162.
- Reddy, M. (1993). The conduit metaphor. In A. Ortony (Ed.), *Metaphor and thought* (2nd ed., pp. 164-201). Cambridge: Cambridge University Press.
- Slepian, M. L., Masicampo, E. J., Toosi, N. R., & Ambady, N. (2012). The physical burdens of secrecy. *Journal of Experimental Psychology: General*, 141, 619-624.
- Talmy, L. (1988). Force dynamics in language and cognition. *Cognitive science*, 12, 49-100.
- Yasuda, S. (2010). Learning phrasal verbs through conceptual metaphors: A case of Japanese EFL learners. *TESOL Quarterly*, 44, 250-273.