UC Berkeley

UC Berkeley Previously Published Works

Title Image Metaphors

Permalink https://escholarship.org/uc/item/5k61m44j

Journal Metaphor and Symbolic Activity, 2(3)

Author Lakoff, George

Publication Date 1987

.

Peer reviewed

218 KLEIN

¢

à.

- Tetmeyer, D. C. (1976). Comparable item approach to establishing frequency of maintenance and maintenance tasks for a new aircraft. Dayton, OH: Wright Patterson Air Force Base, Aeronautical Systems Division.
- Tversky, A. (1977). Features of similarity. Psychological Review, 84, 327-352.
- Weitzenfeld, J. (1983). Similarity and purpose. Unpublished manuscript.
- Weitzenfeld, J. (1984). Valid reasoning by analogy: Technological reasoning. Philosophy of Science, 51, 137-149.
- Winston, P. H. (1970). Learning structural descriptions from examples (Tech. Rep. No. A1 TR-231). Cambridge, MA: MIT Artificial Intelligence Laboratory.
- Woods, D. D. (1984). Some results on operator performance in emergency events. In D. Whitfield (Ed.), *Ergonomics problems in process operations* (pp. 21-32). Elmsworth, NY: Pergamon.
- Zakay, D., & Wooler, S. (1984). Time pressure, training and decision effectiveness. Ergonomics, 27, 273-284.

METAMETAPHORICAL ISSUES

Image Metaphors

George Lakoff Department of Linguistics University of California

To date, this column has concentrated on conceptual metaphors-metaphors that map complex conceptual structures in a source domain onto conceptual structures in a target domain. Take, for example, the common metaphorical understanding of life and death given by the mapping "LIFE IS PRESENCE HERE," in which birth corresponds to arrival and death to departure; it is exemplified by common expressions like "He passed away," "There's a baby on the way," "He's still with us," and many others.

In addition to these, there is another major type of metaphor that maps conventional mental images onto other conventional mental images by virtue of their internal structure. I will refer to these as *image metaphors*. When André Breton (1931/1984) in *Free Union* (translation by David Antin) writes, "My wife... whose waist is an hourglass," (p. 183), we understand this as an image mapping in which the mental image of an hourglass is mapped onto the mental image of the wife, with the central narrow portion of the hourglass corresponding to the wife's waist. Image metaphors of this sort are very common, and it is important to understand their nature and the ways in which they differ from conceptual metaphors.

Let us begin with the mental images involved in the metaphors. Because of the research by Kosslyn (1980) and Shepard and Cooper (1982), the reality of mental images has come to be generally recognized in the cognitive science community. But the images to which image metaphors apply have a somewhat different character than those studied by cognitive psychologists. Kosslyn and Shepard, for example, have subjects in experiments look at something—say, a drawing or a picture or an object—and then form an image of it. These are images made up by the subject on the spot for the given

Requests for reprints should be sent to George Lakoff, Department of Linguistics, University of California, Berkeley, CA 94720.

220 LAKOFF

ò

task. But the images that image metaphors apply to are conventional images—images that are acquired largely unconsciously and automatically over the years by members of a cultural community. For example, we all have a conventional image of an hourglass that we can call upon without being shown a particular hourglass or a picture of one. It is such a conventional image that Breton was relying on in the line cited above.

In mapping one image onto another, we make use of the internal structure of the images. But the current theories of mental images within cognitive psychology do not have an account of the appropriate internal structure. For example, Kosslyn's cathode-ray-tube theory claims that images are stored in the mind in terms of bits of information in the way that a computer stores an image to display on a cathode ray tube. This theory does not attribute to mental images the kind of structure needed to account for image metaphors. Again take the Breton example. To map the hourglass image onto the woman image, both images must be structured in terms of a general shape of the same sort. Because the shape of an hourglass is not exactly the same as the shape of a woman, the shapes must be represented in a manner flexible enough to fit in an image mapping; that is, the shapes must be represented in a manner that is more topological than picture-like, topological in the sense of generalizing over specific geometric shapes. Only then can the shape of the hourglass map onto the shape of the woman. Kosslyn's cathode-ray-tube model does not structure images in this way; it structures images dot by dot and does not have such overall structures that generalize over shapes.

Although our main concern is with metaphor rather than with mentalimage research, the study of image metaphors nevertheless provides important data for the study of the internal structure of mental images. Let us consider two further examples that show the robustness of image metaphors. The first is from Brendan O'Hehir's as yet unpublished translation of "The Destruction of Da Derga's Hostel," an Irish poem of the eighth or ninth century:

A good soldier is Mac Cécht. He was in the depth of his sleep, flat on his back in his room when you saw him. The two bald heads beside the man with the hair you saw, they are his two knees and his head. The two lakes beside a mountain, they are his two eyes beside his nose. The two hides beside an oak you saw, they are his two ears beside his head. The two five-benched boats on a circular cover you saw, they are his two shoes upon his shield. The slender stream of water the sun shines on, and the streamlet down from it, that is the shimmering of his sword. The pillar of a king's house you saw there, that is indeed his lance. . . . The two surfaces of a blue-topped wave you saw there, they are his two even eyebrows balanced across his lovely ruddy-colored features.

Here we see overall shape and size mapped ("The two lakes beside a mountain, they are his two eyes beside his nose"), and well as reflectance ("The slender stream of water the sun shines on . . . that is the shimmering of his sword"). It is the same sort of image mapping one finds in Rabelais's (1957/1985) The Descriptions of King Lent: "His toes were like the keyboard of a spinet . . . His feet like guitars . . . His ballocks like a double leather bottle . . . His nipples like cattle horns . . . His teeth were like boar spears" (p. 368). Examples of this sort can also be found in the Navaho tradition:

My horse with a hoof like a striped agate, with his fetlock like a fine eagle plume: my horse whose legs are like quick lightning whose body is an eagle-plumed arrow: my horse whose tail is like a trailing black cloud. (War God's Horse Song I, 1930/1985. Words by Tall Kia ahni. Interpreted by Louis Watchman.)

Each image metaphor of this type is what I refer to as a "one-shot mapping." Such one-shot image metaphors aare to be distinguished from very general conceptual metaphors like "DEATH IS DEPARTURE" in important ways:

- 1. One-shot mappings, as their name implies, are not used over and over again; that is, they are not conventionalized.
- 2. They are not used in everyday reasoning.
- 3. There is no system of words and idiomatic expressions in the language whose meaning is based on them.
- 4. They map image structure instead of propositional structure.
- 5. They are not used to understand the abstract in terms of the concrete.
- 6. They do not have a basis in experience and commonplace knowledge
- that determines what gets mapped onto what.

Image metaphors are nonetheless structure mappings at the conceptual level. As such, they can interact in interesting ways with conceptual metaphors. Let us consider again Antin's translation of Breton's *Free Union*:

My wife whose hair is a brush fire Whose thoughts are summer lightning Whose waist is an hourglass Whose waist is the waist of an otter caught in the teeth of a tiger. (p. 183)

Take the last line. Here there is first of all a mapping of the image of the waist of an otter caught in the teeth of a tiger onto the image of the wife's waist. How much is mapped depends on the imagination of the reader: The writhing motion of the otter may be mapped onto the wife's body; the dripping sheen of the otter's fur may be mapped onto the wife's shiny sweat. Although how much is mapped is variable, the mechanism of image mapping is what does the job.

222 LAKOFF

Compare this to the second line of the Breton poem: "Whose thoughts are summer lightning." In this case, there is no target domain image conventionally given in advance. Thoughts are abstract; we have no conventional images of thoughts in themselves. Thus, although there is a source domain image of lightning, there is no image mapping because there is no target image for it to map onto. Nonetheless, there is a compelling metaphor in this line - a conceptual metaphor that maps commonplace knowledge about lightning onto the wife's thoughts. The mechanism used is the common conceptual metaphor in which "UNDERSTANDING IS SEEING," light is necessary for understanding, and the mind is a source of light that permits understanding. Thus, we have sentences such as "I see what you're getting at" and "That was an illuminating discussion," and someone who can produce such mental light is "brilliant." Breton is invoking this metaphor when he says of his wife that her "thoughts are summer lightning." The mapping of the conventional metaphor applies to our knowledge of lightning. Just as lightning is a brilliant source of light, so her thoughts are brilliant sources of insight. Just as lightning is powerful and commands our attention, so are her thoughts. And just as lightning is unpredictable (and sometimes scary), so are her flashes of insight.

Lines 1, 3, and 4 of the Breton poem are image mappings, cases where there are images in both the source and target domains and where the source domain image is mapped onto the target domain image. But in Line 2, there is no target domain image, and hence no image mapping. Instead, there is a source domain image – summer lightning – about which we have knowledge. The image is not metaphorically mapped, but that knowledge is. And the mechanism by which the knowledge mapping is accomplished is a common conceptual metaphor, "UNDERSTANDING IS SEEING."

There is a moral here: Not every case where there is a source domain image and a metaphor is an image metaphor. Image metaphors only occur when there is both a source image and a target image that the source image maps onto.

REFERENCES

- Breton, A. (1984). Free union. In P. Auster (Ed.), The Random House book of twentieth century French poetry (p. 183). New York: Vintage. (Original work published 1931)
- Kosslyn, S. M. (1980). Image and mind. Cambridge, MA: Harvard University Press.
- Rabelais, F. (1985). The descriptions of King Lent. In J. Rothenberg (Ed.), *Technicians of the sacred* (2nd ed., p. 368). Berkeley: University of California Press. (Original work published in translation 1957)
- Shepard, R. N., & Cooper, L. A. (1982). Mental images and their transformations. Cambridge, MA: MIT Press.
- War God's Horse Song I. (1985). In J. Rothenberg (Ed.), *Technicians of the sacred* (2nd ed., p. 40). Berkeley: University of California Press. (Original work published 1930)

Cognition and Figurative Language

Edited by

Richard P. Honeck, University of Cincinnati Robert R. Hoffman, Adelphi University

A distinguished group of experts analyze the complexities and the creativity of figurative language. The organization of the volume reflects the more basic, general concerns with cognition – from historical and philosophical background, through problems of mental representation and semantic theory, to developmental trends and to applications in problem solving.

"An excellent book ... it contains helpful overviews, stimulating theories and some new data." - AAAS.

Contributors:

Part 1: Historical and Philosophical Perspectives. R. R. Hoffman, R. P. Honeck, M. Johnson, A. Ortony, Part II: Processing and Representation. R. R. Verbrugge, R. P. Honeck, K. Voegtle, M. A. Dorfmueller, R. R. Hoffman, R. J. Harris, M. A. Lahey F. Marsalek, P. F. Riechmann, E. L. Coste, Part III: Foundations In Semantic Theory. C. E. Osgood, R. G. Malgady, M. G. Johnson, K. Connor, N. Kogan, Part IV: M. R. Pollio, J. D. Pickens, E. Winner, M. McCarthy, H. Gardner, Part V: Problem Solving. H. R. Pollio, M. K. Smith, R. R. Hoffman. 0.89859-047-7 1980/436 pp./\$39.95

SUBSCRIPTION ORDER FORM

METAPHOR A	ise enter / renew my subscription to ND SYMBOLIC ACTIVITY for Volume 2, 1987.
Subscriptions a advance.	e entered only on a volume basis (4 issues) and must be paid in
	20.00 [1] Institutional: \$40.00 ge outside the U.S. and Canada
Payment must be	made by check, credit canl, or money onler (U.S. currency only).
Payment enc Charge My	losed Total amount enclosed \$ {}?VISA [] Mastercard {] AMEX Exp/
Card Number	
Signature	must accompany credit card orders
Name	please print
Address	
	C : . Z :-
City	State Zip

Lawrence Erlbaum Associates, Inc., 36 Broadway, Hillsdale, NJ 07642_