

Book review

Albert Katz, Christina Cacciari, Raymond Gibbs and Mark Turner, *Figurative language and figurative thought*. New York, Oxford: Oxford University Press, 1998. 195 pp. \$14.95 (pb.).

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How many words do the Eskimo have for snow, anyway? Estimates range from as many as 400 to as few as 2, and ‘experts’ have gone on record with varied counts of 200, 100, 48, 9, and 4. The snow issue, along with related questions about the number of words Arabs have for camels, or how many words the Hanunoo have for rice, have historically fueled debate on the Whorfian hypothesis about linguistic determinism. The idea that language has a profound effect on our perception of the world has long fascinated students of linguistics and, indeed, anyone with an interest in language. However, throughout much of the 1960s and 1970s, perhaps because these squabbles about vocabulary had sometimes been motivated more by ethnocentric ignorance than by scholarship, serious debate about the Whorfian hypothesis seemed to have gone out of fashion.

Enter George Lakoff and Mark Johnson in 1980 with the observation that everyday language is replete with metaphors, and the claim that metaphors offer the linguist a window into the mind. On this view, metaphoric language reflects the output of a cognitive process by which we understand one domain with cognitive models from another. For example, in some of their early work, Lakoff and Johnson (1980) pointed out that a large number of expressions people use to talk about warfare are also used to discuss verbal argumentation (where one can ‘attack’, ‘retreat’, pursue ‘strategies’, and so on). They argued that these linguistic regularities were not the result of a strange coincidence, but, rather, were indicative of a systematic set of correspondences between the two relevant domains. Their early work laid the foundation for conceptual metaphor theory, where researchers have since identified a large number of clusters of metaphoric expressions demonstrating that both words and concepts are shared between many

diverse domains, including ideas and food, love and journeys, time and motion, and many, many others.¹

Not only does conceptual metaphor theory posit a far closer relationship between literal and figurative language than traditionally assumed, it also posits a relationship between language and thought that generative linguists might find inappropriate, if not taboo. It is within this context that Albert Katz begins his introduction to *Figurative language and thought*, a book co-authored with Christina Cacciari, Raymond Gibbs, and Mark Turner, all cognitive scientists with an interest in figurative language. Each author contributes a chapter outlining his or her position on the role of nonliteral language in cognition. The book has the flavor of a performance by a jazz quartet, as each member of the group innovatively opines about the issues. In the book's final chapter, 'Counterpoint commentary', contributors 'trade fours', each writing a paragraph or two about various issues related to the relationship between literal and nonliteral meaning, and between language and thought more generally.

As noted above, the book begins firmly in the past, as Katz marches through a series of issues that clogged the psycholinguistic literature for the latter part of the twentieth century: Chomsky's autonomy of syntax, Fodor's modularity of mind, brain areas dedicated to language, the modular lexicon, and, lest we forget, the grammar module. But, if the issues are a bit tired, Katz, at least, provides a clear, succinct review of the empirical findings that bear on them. From here, he reviews the ever-growing body of work in linguistics and psychology on the topic of figurative language. As he notes, most of this work is concerned, in one way or another, with whether figurative language is special, or differs from literal language in any significant way. But all of this is a preamble, of sorts, for consideration of the implications of the literature on metaphor for the question of the relationship between language and thought.

Like Whorf, modern linguists such as Lakoff, Johnson, and Jackendoff look to linguistic regularities to draw conclusions about conceptual structure. But where Whorf emphasized the influence of language on thought, modern researchers tend to draw the causal arrow in the other direction. In some sense, Katz argues, the very existence of figurative language flies in the face of strong linguistic determinism. If language determined thought, concepts would depend on the prior existence of words that name them. But, rather than being limited by extant vocabulary, speakers frequently appeal to metaphoric meanings in the expression of novel concepts such as 'black holes'. Such metaphoric extensions of word meaning clearly argue against the idea that the contents of thought are limited by language. Katz goes on, however, to propose metaphor as a test case for the effects of language on thought, as in the way that the metaphoric portrayal of Saddam Hussein as a 'modern Hitler' can affect people's conceptualization of Hussein and his policies.

In sum, Katz argues that any assessment of the importance of nonliteral language in cognition is obliged to consider whether language is an autonomous component of the human cognitive system, and whether metaphor and other sorts of figurative

¹ For review see Gibbs and Steen (1999).

language can be dissociated from language proper. The interrelationship between these issues virtually necessitates the development of models of language and reasoning that are both explicit (that is to say, computationally implementable) and psychologically real. Although the creation of such models requires one to make assumptions about the very issues at hand (e.g., Are language and cognition separable? What is the precise relationship between literal and figurative meaning? What is the relationship between metaphoric expressions and metaphoric concepts?), it is through the development of such models that we will ultimately answer these questions. Whether he is right or wrong, Katz brings together ideas and evidence from linguistics, psychology, computer science, and cognitive neuroscience, and provides a nice overview of the issues.

Perhaps not surprisingly, many of the same issues that drive Katz' thinking are also evident in Gibbs' contribution to the volume. Gibbs' focus, though, is not the traditional Whorfian claim, but the claim in conceptual metaphor theory that metaphoric language reflects underlying connections between conceptual domains. Accordingly, he formulates four different hypotheses about the conceptual implications of figurative language, and carefully considers how each might be evaluated. Like Katz, Gibbs is concerned with psychologically real models of language comprehension, and carefully lays out the hypotheses the linguist is best suited to address, separating them from those for which the psychologist's toolbox is more appropriate. For example, one way that metaphoric thought might affect language would be by playing a role in the historical evolution of what words and expressions mean. This is a question best addressed by linguists, and one, Gibbs notes, that linguists have shown to be true. A somewhat stronger connection between language and thought can be found in the claim that metaphoric thought motivates synchronic word meanings, or meanings understood by current speakers. This, too, is well-addressed by linguistic methods and well-supported by existing data.

However, such claims about lexical semantics do not necessarily entail Gibbs' third hypothesis, that metaphoric thought motivates speakers' use and understanding of word meanings. A claim about the products of speaker's on-line comprehension processes, Gibbs argues, must be tested with methods from experimental psychology. Citing numerous studies on imagery in idiom processing and on the comprehension of metaphors, proverbs, and euphemisms, Gibbs argues that the third hypothesis is also supported by the data. The fourth hypothesis is that metaphoric thought functions in people's immediate on-line use and understanding of linguistic meaning. Gibbs notes that linguistic methods are incapable of addressing this hypothesis, and only particular methods in psychology are appropriate for assessing the initial processing of metaphoric language. Although Gibbs' fourth hypothesis is probably the one psychologists are most interested in, Gibbs' review suggests the jury is still out.

One criticism of this chapter is that Gibbs' eloquent writing style occasionally covers for some questionable assumptions. For example, at one point, he asks the question, 'Where does the ability to think metaphorically come from?', alluding to an important claim in cognitive semantics that knowledge is grounded in perceptual interaction with the physical and cultural world. In conceptual metaphor theory, the

embodied basis of metaphor also constitutes the basis of abstract thought more generally construed. In view of the book's topic, this claim posits a very close relationship between language and thought, as each depends on embodied experience in an important way.

However, the case Gibbs makes for embodied motivation is less than compelling. In support of his thesis, Gibbs cites evidence that concepts of anger have close parallels in the logic of containers. Gibbs writes, "It is difficult to explain the richness of these metaphorical inferences without appealing to people's embodied experiences for heated fluid in containers that are then metaphorically projected to help individuals make sense of their anger experiences" (p. 114). However, it seems rather absurd to suggest that people need to appeal to their knowledge of fluid-filled containers to make sense of anger, a domain with(in) which they presumably have far more embodied experience.

In contrast to the chapters by experimental psychologists, Turner addresses the relationship between language and thought from the perspective of classical rhetoric. He argues that even Aristotle, who is often attributed the belief that metaphor was a 'mere' figure of speech, held that metaphoric language was motivated by underlying conceptual commonalities. Indeed, the classical rhetorical view is that rhetorical figures are anchored in conceptual patterns. Citing Fahnestock, Richards, Burke, and even Quintilian, Turner shows that the distinction between literal and figurative language has no real basis in classical rhetoric. As Quintilian (1921: 352–355) wrote, "Quare illo intellectu priore et communi nihil non figuratum est" ("In the first and common sense of the word everything is expressed by figures" p. 42). It is only because Quintilian chose to focus on 'artful' figures that figurative language has come to be thought of as ornamental and different in kind from the literal expression of meaning.

In his contribution to the volume, Turner manages to lead the reader on a delightful romp that begins with a tour of rhetorical figures (*antimetabole*, *ecphonesis*, *metalepsis*, and *zeugma*, to name a few), and ends with modern developments in cognitive linguistics. For example, he traces the classical definition of figure, as a pairing between linguistic form and conceptual meaning, to its modern day counterpart in construction grammar, a formalism that defines grammatical constructions as devices for pairing phonological form to conveyed meaning. Turner explains that in attempting to account for all of language use, construction grammarians tackle the project that Quintilian set aside when he confined himself to the study of 'artful' figures.

The bulk of the chapter, though, is devoted to what Turner calls the network model of conceptual integration. Developed in collaboration with Gilles Fauconnier, Turner's network model holds that meaning construction often involves the construction of blended spaces in which pieces of two or more input concepts can be combined to form novel conceptualizations. For example, Turner explains that to understand *President Franklin Delano Roosevelt moved at a quick pace during his first 100 days in office*, readers combine aspects of their knowledge of Roosevelt's political achievements with aspects of their knowledge about people moving along a path. Turner argues that qualitatively similar sorts of integration underlie the more

obviously metaphoric *FDR made the dust fly as he sped along during his first 100 days*, or *FDR moved at full gallop through his first 100 days*.

On the issue of whether figurative thought is mirrored in figurative language, as well as the question of whether figurative thought is typically paired with linguistic form, Turner suggests that language provides speakers with a set of constructions that typically can express both literal and figurative meanings. For example, compound nouns prompt speakers to integrate frames from different domains, regardless of the figurativity of the resultant integration. That is, the same sort of integration process is involved in *boat house* and *door knob* as in *fossil poetry* and *jail bait*. In many ways, he side-steps his assigned task with the assumption that the traditional questions are ill-posed. But, of course, if Turner is right, the traditional questions are indeed ill-posed.

In the book's last authored chapter, the discussion spirals heavenward, and perhaps even reels, as Cacciari addresses the question of why speakers use metaphors in the first place. Given the commonality of speakers' metaphor usage, what does this imply about the organization of the brain? To answer this question Cacciari undertakes a dizzying discussion of a number of issues. Topics range from things such as the expressive properties of objects ("The postbox 'invites' the mailing of a letter, the handle 'wants' to be grasped ..." p. 125), to synesthetic metaphors (why do touch words like *sharp* transfer to taste, color, and sound, but, not – it is claimed – to vision or smell?), to the importance of culture-specific cognitive models (so-called cultural models). In the end, Cacciari suggests three reasons for why we use metaphors. First, metaphors help us understand and express relevant parts of our inner lives. Second, they extend preexisting categories and use the expressive properties of objects and events as a perceptual basis. Third, metaphors are used because literal language is not very good at expressing the complexity of perceptual experience. If some of Cacciari's suggestions are a bit unusual, at least they are testable – and perhaps even right.

Figurative language research is clearly a burgeoning field. Anyone in doubt need only look to the sheer breadth of the issues touched upon in this little volume. Moreover, given the book's content, it would appear that this is no accident. Not only is figurative language itself more common than typically realized, the mechanisms that allow us to comprehend and to produce it have wide ranging implications for cognitive science. Given the diverse set of topics and the interdisciplinary perspective of its authors, *Figurative language and thought* should prove interesting to a wide range of readers. This includes those with a particular interest in figurative language, those with a more general interest in language in context, and indeed anyone with an interest in the way the mind works.

References

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