straints. He argues that what we experience and learn in the physical world allows us to reason (and limits our ability to reason) in abstract matters. As a consequence, a person with experience in a wide variety of things may have a wider variety of inference patterns available to him to apply in new situations and problems. He may see a problem from a new perspective and find a better solution. (Or perhaps he will smell out the problem and brew up a good solution?)

Johnson's book is written to prove a point. He argues against "traditional" theories of cognition and cites the work of many researchers in support of his own views. Although dry and academic, the book is carefully written. The chapter titles themselves explain the progression of argumentation in the book: The Need for a Richer Account for Meaning and Reason; The Emergence of Meaning through Schematic Structure; Gestalt Structure as a Constrain on Meaning; Metaphorical Projections of Image Schemata; How Schemata Constrain Meaning, Understanding and Rationality; Toward a Theory of Imagination; On the Nature of Meaning; "All this and Realism, Too!"

As can be seen from the title of the sixth

chapter "Towards a Theory of Imagination," Mark Johnson's book takes one more step toward understanding how we think. The step is an important one. I look forward to future work in cognition based on this effort.

Received 11 October 1991

More than Cool Reason, A Field Guide to Poetic Metaphor. By George Lakoff and Mark Turner. Chicago: The University of Chicago Press, 1989. xii + 230 pp. cloth: US\$34.50, paper: US\$13.70.

> Review by David Snyder Summer Institute of Linguistics, Papua New Guinea Branch

Lakoff and Turner have written an excellent book on metaphor. They claim that "traditional" approaches to the study of metaphor have not allowed students of language, especially poetry, to understand the nature of this powerful mechanism of language. Given a better understanding of metaphor, a student of poetry can begin to comprehend why a poet can instill wonder and insight using such ordinary words. Yet Lakoff and Turner's interest is not limited to simply understanding poetry. They believe that a proper understanding of metaphor can give insight into many facets

of human cognition.

Since Lakoff and Turner believe that metaphor is basic not only to human language but also to human cognition, they begin their book by demonstrating how metaphor pervades all of human language. From these examples they argue that metaphor is not just a mechanism of language, but is basic to how humans think and reason. They write on page 62, "Part of the power of ... metaphor is its ability to create structure in our understanding." They argue that metaphor allows us to comprehend and manipulate things. It allows us to "borrow" structure and inference patterns from one domain and use them in another domain. But not only does metaphor give humans a mechanism to comprehend things, it also limits our comprehension. They discuss the power that metaphor brings to cognition such as the power of structure, the power of options, the power of inference and reason, and the power of evaluation. As they say on page 214, "To study metaphor is to be confronted with hidden aspects of one's own mind and one's own culture."

After discussion the crucial role of metaphor in cognition and language in general, Lakoff and Turner go on to describe why poetic metaphor is special. While there is not one simple answer, two of the major factors that they discuss are that poets extend our normal metaphors in unique ways and that they often use several different metaphors within the space of a few lines.

Having expressed their view of metaphor, Lakoff and Turner return to traditional views of metaphor and contrast them to their view. This helps again to reinforce the model that they are using. Finally in the third and fourth chapters of their book they apply their model to a careful study of two poems.

More than Cool Reason is written for an undergraduate readership. While extended technical discussion and argumentation is avoided, an addendum and bibliography is provided to lead an interested reader into a more detailed study of the topic.

Without hesitation I recommend More than Cool Reason. It is a fascinating discussion of metaphor and cognition. The first two chapters should be required reading in any course in semantics, translation, or knowledge acquisition. The entire book should be required reading for a study of poetry.

Received 11 October 1991