

**COGNITION
AND
SYMBOLIC
STRUCTURES:
The Psychology of
Metaphoric
Transformation**

**Edited by
ROBERT E. HASKELL**

Cognition and Symbolic Structures: The Psychology of Metaphoric Transformation

edited by

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This volume is dedicated to Joseph J. Kockelmans who saw potential in an unsocialized mind—so profoundly different from his own—and saved it from ever wandering in the intellectual margins of academia and life.

I would also like to thank Richard B. Gregg who, with his gentle and learned Being, helped to shepherd me through a critical turning point in my life.

Preface

Prefaces are rather odd sections of a book. I was made sensitive to them by my closest friend and colleague Dr. Aaron Gresson. I became aware that different authors use them for various kinds of comments which do not seem to fit elsewhere in a volume. Occasionally prefaces are used by authors to say something personal to the reader, and about the subject matter. I always found that refreshing. Often I find myself wondering how an author became involved in a particular subject, reflecting a minor interest of mine in the history of ideas. Certainly the subject of metaphor has had a long, interesting, and controversial past. And so in this preface I would like to briefly describe my own personal journey into metaphor. No doubt many readers of this volume have had their own journey into metaphor.

I recall many years ago being made aware of an article that described analogic reasoning using the mathematical and geometric form of the spiral of sea shells. The author of that article wrote it, I was told, in a mudd floor hut in the mountains of Italy. This was not by choice, but due to the author's finances. Such dedication. My journey is certainly neither as colorful as the one just described, nor quite as dedicated. Nevertheless, this volume on cognition and metaphor has come about as consequence of a long standing fascination with what is called metaphor.

As an undergraduate in 1965, some twenty years ago now, I became intrigued with metaphor and analogy. Even then, however, my interest never leaned toward their literary aspects but rather with their cognitive significance, a view that was not held in psychology at that time. How my involvement with metaphor began I am not quite sure, but it had something to do with Freud's *Interpretation of Dreams* which I had read years earlier.

While I am not at all a Freudian—whatever that means these days—nor even primarily a clinician, the metaphoric and analogic reasoning processes in that volume fascinated me. Not only those processes found in the dreamwork, but Freud's analogic reasoning itself was masterful. Very early in my academic career, I read General Systems Theory, which was largely analogical in its initial stage of development. Perhaps, too, an early interest I had in writing poetry influenced my fascination with metaphor, as possibly did my job in Army Intelligence of decyphering codes play a part. The behavioral psychologist in me

knows very well what at least initially reinforced my continued research into metaphor and analogy: as an undergraduate I had two papers on the subject accepted for publication, and as any academic, or writer, knows the reinforcement value of ones first publication is of such a magnitude as to strongly resist extinction.

In any case, my thesis in those two rather clumsy first articles was that metaphor and analogy were not simply literary devices; they were a manifestation of a deeper cognitive process. They contained most of the ideas developed in my later work. In 1965, however, metaphor and analogy were hardly what were considered "hot" research topics, except in departments of Literature, English, and Rhetoric. Just about everyone else still considered them to be linguistic embellishments. This was especially true in psychology, with a few exceptions like Charles Osgoods work, and Robert Oppenheimer in physics. Metaphoric and analogic reasoning were considered dangerous and misleading, especially in science and philosophy. But analogic reasoning was considered somewhat more respectable than was metaphor.

I chose the term "analogic" to be the generic label of which metaphor was the subset. There was then and is now historical precedent for this view. In any event I believed then and still do that what is called analogic reasoning is the basis of what is called metaphor, of which allegory, proverbs, transfer, transposition, perceptual constancy phenomena, and stimulus generalization are also subsets. Underlying them all is an abstract set of cognitive operations generating transformations of invariance. Since my conception of metaphor and analogy were quite different from how they were commonly understood, perhaps I should have selected another term. I did not do that largely because I wanted to retain what I considered to be the end product of a developmental process. Because metaphor and analogy were considered to be two different creatures, which in fact they are from a traditional point of view, the two bodies of research literature were then and now remain quite separate. As it turned out the term "metaphor" has retained its dominance.

After completing my masters thesis in 1968 on a general theory of analogy, life's little personal detours sidetracked me for a few years as far as active research was concerned. Then in teaching small group processes and studying the language use in those groups, I once again, but with an entirely new perspective, began to see the cognitive structure of metaphoric/analogic reasoning and its relation to spontaneous language production. I noticed that the ostensibly literal language used in those groups was simultaneously metaphoric/analogic; that the literal language and topics of the groups were metaphorical, describing what was occurring in the group. The linguistic distinction between literal and figurative did not exist.

In 1978, I completed my doctoral work with a dissertation utilizing those data from small group language use. In about 1976, I read the seventeenth century philosopher Giambattista Vico's *New Science*, where he laid out his theory of meta-

phor. For the first time in my experience here was a truly cognitive theory of the development of what was called metaphor, a theory that was not just poetic speculation. I first "met" Vico, in passing, in a freshmen sociology course. He was briefly mentioned in the text for his ideas on social theory. It was but a short paragraph. I met Vico more formally some fourteen years later while in graduate school. J. J. Kockelmans, the reknowned phenomenologist and Heideggerian scholar at the Pennsylvania State University had "adopted" me even though I was not a philosophy major and despite the fact that we saw the world quite differently epistemologically. He had mentioned to me that a young philosopher there, Phillip Verene, had just co-edited a volume with Giorgio Tagliacozzo (1976) who was head of the Institute for Vico studies. I had read the *New Science* and then the above volume and was amazed that Vico held, in fundamental outline, the same cognitive view of metaphor I had been developing for some years. I was as bewildered then as I am now that Vico had not been discovered and was not more well known by metaphor researchers. If Vico had been discovered and understood by mainstream metaphor researchers years ago, the literature on metaphor so hopelessly locked into the Aristotelian figure-of-speech framework would not have been so ponderous and confused.

In 1977, I heard of a conference on "metaphor and mind." I went and was disappointed. Most of the participants were still quibbling over what I considered to be an antiquated aristotelian definition of metaphor. When they were not doing this they were endlessly arguing about the interaction view of metaphor. The conference itself, as indicated by its title, was symbolic of an organized shift in focus within metaphor research, and its organizer Anthony Ortony was obviously on the vanguard of this incipient paradigm shift. I went home mumbling to myself in self-righteous indignation, "Well nothing is going to be happening in metaphor research." As it turned out I was wrong.

In 1978, I presented a paper, at the International Vico conference in Venice, Italy, on Vico's theory of metaphor and using my own work as further confirmation of Vico. Most of the scholars there, however, did not seem overly concerned with Vico's revolutionary theory of metaphor, as such, let alone my own rather strange findings. With some exceptions, the Vico scholars seemed more interested in his social theory and philosophy. Even within metaphor research proper, so to speak, Vico's work was virtually unknown, and remains so today. Despite the ostensible interdisciplinary character of metaphor research, each field concerned with it seems to largely stay within its own confines.

Being caught up in life's survival activities, I remained unaware of a surge of interest in metaphor by a small group within psychology doing hard research during the 70's. I was aware of Ortony's work, and of Howard Gardner's. Then in 1978, a very good acquaintance and colleague Bob DiPietro, now chair of the Department of Language at the University of Delaware, with whom I became acquainted through the Vico conference, and who had been working on metaphor himself, sent me a notice of the *Metaphor Research Newsletter*, edited by Bob

Hoffman at Adelphi University, Psychology Department. I contacted Hoffman who I learned was an experimental psychologist. I thought to myself "what is an experimental psychologist doing in metaphor research?" I soon found out. There was and had been for some time experimental work on metaphor being done. Bob Hoffman revitalized my demoralized interest in metaphor.

As a result of my correspondence with Bob Hoffman, I was later contacted by Howard Pollio of the University of Tennessee, department of psychology, who was developing a journal called *Metaphor and Symbolic Activity* which grew out of the *Metaphor Research Newsletter*. Howard asked me to write a piece for the new journal. At the end of the summer of 1983, I sent him a manuscript putting together what I had intended to put together for years, but because of my demoralization with the subject, and because of health problems I had not done it. It was a cognitive developmental theory of metaphor based in part on the work of Vico, Ernst Cassirer, and my own empirical data on language use.

The manuscript laid out what I considered to be the fundamental cognitive basis generating all forms of what has come to be called metaphor. I also incorporated many of the authors work that appear in this volume. I had been familiar with Laurence Mark's work on cross-modal transfer. Brenda Becks work however I had in my file but had not read, until Bob Hoffman suggested it was a "must." By this time, I had become familiar with Honeck, Reichman and Hoffman's conceptual Base Hypothesis that was similar to my concept of deep cognition. So I incorporated it as well. My thesis is that all that goes by the name of metaphor is based in deeper neurological substrate operations generating multiple transformations of invariance.

And so I find myself putting together this volume on cognition and metaphor, a kind of cathartic culminating labor of love that has spanned many years. I say "culminating" as I think, for me at least, there is no where else to go with the traditional notion of metaphor per se. Metaphor has led me into another place where metaphor as commonly understood becomes excess baggage. In this new place there are only abstract "metaphorical" transformations of invariance—into the world of cognition and dream research.

R. E. Haskell
Great Island, Maine
1985

Foreword

During the period between 400 B.C. and 1900 A.D., it was commonly accepted, with Plato and Aristotle, that metaphor basically was a figure of speech. The term "figure of speech" refers to a large variety of uses of words, phrases, sayings, clauses, and even sentences to achieve desired effects in meaning. Traditionally, the term was defined as a derivation in the use of words from the literal sense, or at least from common practice. Metaphor was said to be the most basic of all figures of speech; it states an analogy, a similarity, or some other relation between two things. Usually metaphor was defined as that figure of speech which consists in the transference to one object of an attribute or name that literally is not applicable to it, but which can be applied to it figuratively or by analogy. This conception of metaphor has been largely maintained until the present, and is the conception which most people have in mind when hearing the term.

Yet, in the contemporary literature on metaphor, some very drastic changes have taken place over the past 70 years or so. Whereas, traditionally the concern with metaphor was concentrated mainly within the domain of rhetoric, in contemporary discussions, concern has shifted from rhetoric to semantics, and still later from semantics to hermeneutics and literary criticism. Greisch has suggested dividing the *philosophical* literature on metaphor into three major sections: (a) there is the analysis of the function of metaphor in the Anglo-Saxon philosophy of language (I. A. Richards, Max Black, Menroe Beardsley, etc.); (b) then there is the study concerning metaphor's link with interpretation (Ricoeur); and, finally (c) there is the ontological or metaphysical question concerning the meaning of metaphor in philosophical discourse itself (Heidegger, Derrida). The most important contribution in analytic philosophy consists in the realization that, in addition to the classical, rhetorical theory of metaphor as unfolded by Aristotle, which sees in metaphor a substitute of one word for another, there is also a semantic theory of metaphor in which metaphor is taken to be the effect of meaning which comes to the word but has its origin in a contextual activity which brings the semantic fields of several words into interaction with each other. Ricoeur has tried to show that the true place of metaphor is neither the name, nor the sentence, nor even discourse itself, but rather the copula of the verb *to be*. The metaphysical "is" namely signifies both "is like" and "is not." Finally, Heidegger and Derrida are

mainly interested in the question (first raised by Nietzsche) of whether or not the use of metaphor is constitutive for metaphysical discourse as such.

If we now turn from philosophy to the sciences, we shall see that there, too, important changes have taken place and intriguing discoveries have been made. Some of these discoveries were made in the sciences that concern themselves with language and literature. Yet another large area in which some very stimulating and novel ideas about metaphor have been proposed is that of the human sciences and of cognitive psychology in particular. Where, formerly, it was universally accepted that metaphor is inherently a linguistic phenomenon, many social scientists today have come to the view that what one usually calls metaphor is really the linguistic manifestation of a very fundamental *cognitive* operation. In other words, metaphor does not primarily refer to a figure of speech, but rather to a fundamental form of man's knowing. This cognitive theory of metaphor was anticipated in the work of Vico, and it has been influenced also by the work of Richards.

The essays on metaphor contained in this anthology focus mainly on metaphor taken as a cognitive operation. The editor and the contributors to this important volume are to be congratulated for their efforts to inform the contemporary reader about the "use" of metaphor in the domain of the human sciences today.

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Introduction

This volume has come about as a consequence of a long-standing fascination with what is called metaphor. As an undergraduate in 1965, some 20 years ago now, I became intrigued with metaphor and analogy. Even then, however, my interest never leaned toward their literary aspects, but rather with their cognitive significance, a view that was not held in psychology at that time. In any event, I believed then and still do that what is called analogic reasoning is the basis of what is called metaphor, of which allegory, proverbs, transfer, transposition, perceptual constancy phenomena, and stimulus generalization are subsets. Underlying them all is an abstract set of cognitive operations generating transformations of invariance.

Metaphor has had a long and controversial past. Since the time of Aristotle, the subject of metaphor has been the object of analysis. It still is. It will probably remain so for some time to come. On the one hand, the useful characteristics of metaphor have been examined by rhetoricians, and its insightful virtues extolled by poets. On the other hand, its character has been assassinated by most logicians and scientists. Metaphor was originally defined by Aristotle as a linguistic figure of speech. More recently, the term "metaphor" has become polysemically stretched to mean multiple things to its users and researchers.

A scientific model is said to be a metaphor, as is a piece of art. A dancer is often said to be making a metaphorical statement: that the dance is an external expression of inner feelings. The more traditionally inclined gatekeepers of linguistic meaning often object to metaphor being used in this way. Everyone knows, they say, that metaphor is a linguistic device. I am reminded here of the response of Freud's colleagues—or so the story goes—to the application of his concept of hysteria to male patients: That men can have hysteria, they said, is not possible; after all, as everyone knows, the term "hysteria" comes from the Greek term meaning "floating or suffering womb."

This volume is organized around the view that what is termed "metaphor" is an important cognitive process. This conception is not essentially a new one. It has been suggested by others to various degrees. As will be seen later in this volume, it is my judgment that the original cognitive theory of metaphor was the

discovery of the 17th century philosopher Giambattista Vico, whose discovery has not been widely recognized in metaphor research. Other poets and philosophers have from time to time suggested the cognitive significance of metaphoric thought, but in a globally intuitive way.

In more contemporary times, the "Interaction Theory" of metaphor put forth by I. A. Richards can be said to be the modern progenitor of a cognitive theory of metaphor. In contrast to metaphor being a simple linguistic comparison, a substitution of terms, it was Richards who maintained that the vehicle and tenor of a metaphor come together to create a new conception; that a metaphor can force a cognitive reorganization.

With the increasing publication of volumes on metaphor in recent years, along with the organizing of metaphor conferences, this volume, among a small list of others, marks the beginning of a new *era* and the end of an old one. The historical *error* has been that metaphor belongs to the domain of language. The new era is that metaphor is an important cognitive operation. Metaphor can no longer be considered the sole domain of language and rhetoric, though this is one important research domain, as some of the chapters in this volume demonstrate. I strongly suspect, and have in fact suggested elsewhere, that what is called metaphor is simply a linguistic manifestation of a more fundamental cognitive operation. Until this is widely recognized, a great deal of research into what is called metaphor will be led astray, as indeed it has been historically. The chapters in this volume reflect the modern history of metaphor in the sense that they cover many of the ways metaphor is conceptualized and applied. No attempt is made to cover in depth old, well-trodden ground. Previous volumes have accomplished that task quite well.

The chapters in this volume suggest and explore a number of functions characteristics and implications of the metaphoric process, including that metaphoric processes originate in a sensory-motor-affective matrix; that it may be based in a neurological substrate; that it manifests itself developmentally in various forms; that, cognitively, the comprehension of metaphor may depend on an abstract, featureless conceptual base; that it is central to concept formation and categorization; that it figures significantly in some pathological syndromes and in therapeutic discourse; that it often functions nonconsciously, both individually and socio-historically; that it may influence communication subliminally; that it is significant epistemologically; and, finally, that the traditional distinction between literal and figurative language is not as distinct as is commonly thought.

The opening chapter by Beck, on "Metaphors, Cognition, and Artificial Intelligence," is broad in scope, yet it is sufficiently detailed to give the reader a feel for the wide range of functioning and application in various fields of what has come to be called metaphor. In doing so, the chapter foretells many of the concerns and issues of the chapters that follow. Perhaps congruent with the very concept of metaphor, Beck does not abstractly define the concept but structures its meaning by her illustrations of its use. Beck, like others before her, points out the role of