

INTRODUCTION

Metaphor in Philosophy

by

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1. *Special use of Metaphor in Philosophy.* Metaphor in philosophy may be distinguished from metaphor in poetry by being primarily an explanatory rather than an aesthetic device. Its explanatory function is to aid in conceptual clarification, comprehension, or insight regarding a mode of philosophical thought, a problem or an area of philosophical subject matter, or even a total philosophical system. However, the boundary between the aesthetic and the explanatory use of metaphor is admittedly vague. A philosopher may even deliberately select a metaphor for its aesthetic vividness and impact (as with Bergson's *élan vital* or William James's stream of consciousness; and notoriously the Mystics), but the question of the metaphor's having philosophical relevance depends on its explanatory function. Does it contribute to an understanding of the philosophy?

There are relatively superficial uses of metaphor in philosophy, and there are permeating uses. The superficial uses occur when figures of speech are scattered along the written pages to vivify some other unusual conception, and drop out when the conception is grasped. But when the metaphor's use is permeating, it may never completely disappear even after it gets ritualized and deadened under an accepted technical vocabulary within a philosophical school.

It has been frequently noticed that a new mode of thinking or a new school of philosophy as it is emerging and finding itself tends to be expressed in figurative language. This is inevitable before a technical vocabulary is developed with clear definitions and specific designations. Generally, this preliminary tendency is to be regarded as a superficial use of metaphor in philosophy. It is the more permeating use that deserves most attention.

In this connection the term "metaphor" should not be taken in too literal accordance with a definition often found in elementary books on prosody. It is not just a simile with the preposition "like" left out. It is rather the use of one

part of experience to illuminate another—to help us understand, comprehend, even to intuit, or enter into the other. The metaphorical element may ultimately be absorbed completely into what it is a metaphor of. The one element, as frequently explained, is “reduced” to the other. The paradox of a metaphor is that it seems to affirm an identity while also half denying it. “All things are water,” Thales seems to say. In so saying he would be affirming an identity and yet acknowledging that it is not obvious, and that what is more obvious is the difference. He claims an insight beyond the conventional view of things. It becomes incumbent on him to show how the identity can be justified. The same is true of Lucretius’ identifying all things with atoms and a void, and of many other philosophers’ modes of identification of the whole of reality with some general aspect of it.

2. *The Root Metaphor Theory.* The thought was bound to arise sooner or later that metaphor in the above sense was the characteristic mode of developing philosophic theories. Perhaps the first emphatic expression of this thought is in Francis Bacon’s discussion of the “idols,” in particular the “idol of the theater” which he described as man’s tendency to develop comprehensive systems in the language of myth and fantasy far beyond the data of observation. He was pleading for a method of solid empirical cognition in terms of collecting diverse instances of a subject to lift out the “form” that held them together. His intention was to disparage the use of metaphors, and he virtually excluded their use in hypotheses as means of cognition, although he did recognize them as “anticipations of nature.”

However, in recent times with a more generous conception of the use of hypotheses as constructive instruments for both scientific and philosophical thinking, the metaphorical conception of the origin and development of philosophical thinking has been revived without any pejorative connotations.

In *World Hypotheses* (1942), this view is called “the root metaphor theory.” It is itself an hypothesis about the origin and development of schools of philosophy or, more specifically, of world hypotheses. World hypotheses are distinguished from the more limited hypotheses of the special sciences by being “unrestricted” in their subject matter or in the scope of the evidence the hypotheses are expected to cover. An hypothesis in optics can reject as irrelevant any items that do not bear on optical phenomena or laws, as would be the case for so many observations in acoustics, geology, astronomy, linguistics, or social psychology. But a world hypothesis cannot be exclusive in this manner, for it cannot evade a group of items that do not seem to fit nicely into its system by declaring them outside its field and so irrelevant. Everything is relevant to a world hypothesis.

The root metaphor theory gains a good deal of credibility if one is persuaded that methods of deriving philosophical systems from claims of certainty (such as those of infallibility, self-evidence, or indubitable and incorrigi-

ble data) have proved unreliable. Once such methods of philosophizing from supposedly certain bases of knowledge have been given up, methods for seeking probable knowledge by way of hypotheses and their confirmation become acceptable. And this is the point of departure for the root metaphor theory of philosophic thought.

The problem then arises as to what are the sources of world hypotheses. The suggestion is that world hypotheses get started like any man's everyday hypothesis framed to solve some puzzling practical problem. The man looks back over his past experience for some analogous situation which might be applicable to his present problem. Similarly, a philosopher, puzzled about the nature of the universe, looks about for some pregnant experience that appears to be a good sample of the nature of things. This is his root metaphor. He analyzes his sample, selects its structural elements, and generalizes them as guiding concepts for a world hypothesis of unlimited scope. This set of concepts becomes the set of categories of his world hypothesis.

If the world hypothesis proves fruitful in its application to the varied items of the world, it will be adopted by other men, and a school of philosophy comes into being, dedicated to the development of this world theory (*Weltanschauung*). Its categories will be refined and modified to render them as adaptable as possible to the total range of the world's facts to which they are applied. The root metaphor itself becomes refined by this process. There evolves a give-and-take between the categories and the facts to which they are applied. The categories are modified to fit the facts, and the facts are interpreted in terms of the categories. The philosophers of the school will then perceive the facts as they are structured by their categories, and the ultimate facts in terms of their categories will come to appear to these philosophers as indubitable. Then it can become almost impossible to disabuse them of the certainty of the foundations of their philosophy except by introducing them to an alternative but equally justifiable world theory constructed with another set of categories yielding a different interpretation of the facts and a different group of apparent indubitables.

Only a limited number of categorial sets, however, according to this root metaphor theory, have proved fruitful enough to acquire a relatively adequate interpretation of the full scope of the world's facts. The position held in *World Hypotheses* was, up to the time of its publication, that the fruitful root metaphors could be reduced to four: (1) formism, based on the root metaphor of similarity, or the identity of a single form in a multiplicity of particular exemplifications; (2) mechanism, based on the root metaphor of material push and pull, or attraction and repulsion culminating in the conception of a machine or an electromagnetic-gravitational field; (3) organicism, based on the root metaphor of a dynamic organic whole as elaborated by Hegel and his followers; and (4) contextualism, based on the root metaphor of a transitory historical situation and its biological tensions as exhibited by Dewey and his

followers. None of these is fully adequate. There are also several less adequate root metaphors, and in *World Hypotheses* it is suggested that still more adequate ones may appear in the future.

3. *The Extensiveness of Metaphor in Philosophy.* One corollary of the root metaphor theory is that any treatment of the topic of metaphor in philosophy would spread over the whole history of the subject. Not only are the great traditional systems caught up in the action of metaphorical interpretations, but the cultural concepts and institutions dominating the beliefs and values of ordinary men are impregnated with them. Common sense and ordinary language have long been saturated with the presuppositions of Platonic, Aristotelian, and Cartesian metaphysics, and lately in many cultures with the Hegelian dialectic and contextualistic operationalism. If to these relatively adequate philosophies are added the metaphorical presuppositions of a number of humanly fascinating inadequate philosophies such as animism and mysticism, the spread of the influence of philosophic metaphors in the cultural thought and practices of men is enormously extended.

The mention of animism leads one inevitably to think of mythology. Here metaphor runs rampant—and with cosmic references also. Its intent is apparently to be as philosophically explanatory as Aristotle's categories of form and matter or A.S. Eddington's Space-Time Gravitation. This close relation of primitive myth to the relatively adequate philosophies named above in respect to the explanatory use of metaphor should not prejudice one against the relatively adequate world hypotheses or their presuppositions incorporated in modern common sense and in modern science and logic. As long as men must make hypotheses to solve their problems, they will seek analogies to stimulate their invention, and when these analogies generate explanatory categories, these immediately function as explanatory metaphors. The important thing is to find explanatory hypotheses that are widely confirmable and here is where the difference lies between primitive myth and adequate hypothesis.

4. *Categories and Metaphors in Philosophy.* The close connection brought out above between a set of categories for a world hypothesis and their generating root metaphor raises the question as to how the metaphorical basis of a set of categories could ever come to light. For the categories are inevitably conceived by the indoctrinated exponents of the philosophy as the actual structural framework of nature. The metaphor is amalgamated with what it is a metaphor of. To a philosopher fully immersed in his system, other interpretations of the world than his are treated simply as errors or meaningless or, perhaps charitably, as partial approximations to the truth. To become aware of the metaphorical nature of one's philosophical interpretations, there is need of a certain amount of cognitive "distance" like the "aesthetic distance" required in the arts to appreciate the realism of a play or a novel or a picture. Yet the distance

must not be so great as to convert the object into pure fantasy and absurdity. In art one must recognize the conventions which support and sustain the aesthetic realism. So in philosophy one must recognize the categories that maintain the truth or interpretive adequacy of the world theory. The categories must be taken seriously as constructive instruments serving, like glasses to astigmatic eyes, to reveal reality truly or effectively in ways we have not previously seen. Bacon completely missed the significance of comprehensive philosophy through his lack of recognition of this cognitive distance. He noticed correctly the metaphorical interpretive action of the traditional philosophies, but failed to appreciate the revelatory power of the great systems and the fruitfulness of their metaphors.

At what point in the history of philosophy did an appreciation of the metaphorical action of categories emerge? The ground was laid by Kant when, in his *Critique of Pure Reason*, he argued that the structures of space, time, causality, etc., attributed to nature in scientific cognition were provided by the mind and should not be taken as the intrinsic structures of things in themselves. He introduced a little "distance" between phenomena and the interpretive action of his categories (and also space and time which he distinguished as *a priori* forms of intuition). But he regarded his categories as *a priori*, and inescapable, and incorrigible in cognition. As C.I. Lewis later pointed out in his *Mind and the World Order* (1929) there was more than a paradox implicit in Kant's view. There was a self-contradiction—that of being at the same time real and not real operations among cosmic events. For how could a thinker distinguish his interpretive categories from the structure of nature itself unless he had at least one other set of categories with divergent interpretations with which to compare them? In short, the categories must be regarded as corrigible. They must be open to error and correction. They cannot be posited as wholly *a priori* and inescapable in human cognition. They must be allowed enough "distance" between themselves and what they are interpreting to permit of alternatives and judgments of their adequacy. They must be treated in some degree as explanatory hypotheses, or metaphors.

That Kant had some awareness of this dilemma is obvious from his treatment of moral and aesthetic experiences as distinct from that of scientific experience. In moral experience particularly he found he could bypass the categorial restrictions of scientific cognition and obtain some authoritative disclosures about the non-perceptual world. He accepted in a questionable way the ideas of God, freedom, and immortality for the moral life and its justification. Here, in a way, were the two sets of categories which revealed to him that the deterministic scientific categories clearly could not be attributed to such structural features of things-in-themselves as God, freedom and immortality.

It should be acknowledged that there were many earlier premonitions of some sort of mental projections upon external things: Descartes' mind-matter

dualism had already raised the issue, Spinoza's theory of "attributes," Locke's stress on the distinction between primary and secondary qualities (a distinction that can be traced as far back as Democritus), and finally Hume's analysis of impressions, causality, and habit, and his reluctant admission that he just could not help believing in an external world although he could not understand how he could justify any belief in it.

Following Kant, Hegel's dialectic can be viewed as a proliferation of Kantian categories ordered according to their increasing degree of scope and adequacy till they culminated in the total synthesis of the Absolute. But still the categories were not entirely shaken loose from the actual structure of things they categorized. The dialectic was not only a history of increasingly adequate cognition but also a history of a kind of cosmic growth.

It was not till pragmatic or contextualistic modes of thought began to be influential that enough "distance" was introduced between the instruments of cognition and what they cognized for sets of categories to be viewed as metaphors. It was the typical pragmatic theory of concepts as instruments that made this possible. The pragmatic analysis of categories by C.I. Lewis has been mentioned. And Hans Vaihinger's *Philosophy of As If* (*Die Philosophie des Als-Ob*, 1911) may have helped too, though his doctrine of fictions was cognitively ambiguous in leaving one in doubt as to their cognitive function. If the "useful" concepts are rendered too fictional, the sense of metaphor may be almost totally lost. In order to maintain the metaphorical character of a set of guiding concepts, the structure of the concepts must in some degree be identified with what the concepts are applied to. A committed contextualist may accordingly be as unaware of the metaphorical relations of the categorical presuppositions of his own philosophical view as any of the traditional philosophers of the earlier schools. The service of contextualism in revealing the explanatory use of metaphor in philosophy is due solely to its theory of the instrumental role of concepts in knowledge. Emphasis on this role revealed just the degree of cognitive "distance" that has to be recognized before the metaphorical character of a set of categories can be consciously realized.

Once this is realized, a set of categories acquires the role of a useful hypothesis and a philosopher becomes wary of regarding the categories as *a priori* or incorrigible features of the world or of the mind's way of looking at the world. Yet one is aware that the categories direct one's view of the world and one can become critical of the adequacy of the view, and can deliberately seek out other sets of categories offering other views. Then it is possible for one to see that these views are functioning as cognitive metaphors. And if one seeks out the core and origin of these world metaphors, he reaches what may be called their root metaphors.

5. *Cognitive Metaphors of Restricted Scope*. The term "root metaphor" seems to have entered the language of philosophy in other ways than that of the source of the categories of world hypotheses. It has come often to refer to any

central idea about which any complex problem can be organized. It becomes then the point of reference for a restricted or special hypothesis. When so used it overlaps the function lately assigned by extending it over what has come to be known as the "paradigm case."

The term "paradigm case" acquired importance in philosophy mainly through an analysis by Ludwig Wittgenstein of the meaning in ordinary language of such terms as "chair," "leaf," "game." He found that such terms are used to refer to a group of objects which as a group are not characterized by a set of common characteristics. But as a group they have "family resemblances." During childhood men learn the range of application of these family resemblance concepts, which become perfectly well understood by all who speak that ordinary language. Such a concept can be identified or pivoted on any one of its typical objects from which the family resemblances can be traced out to the other members of the group. Such a conveniently selected member would be the "paradigm case" for the group. The paradigm case furnishes the analogy from which the family resemblances of the other members can be traced. It could be called the root metaphor of a family resemblance concept. Some writers appear to be using the term "root metaphor" in much this way. It is one important way of using metaphor in philosophy. It is clearly an explanatory, not aesthetic, use of metaphor, and falls well within the topic of this article.

It can even be argued that the root metaphors of world hypotheses should better be described as paradigm cases of groups of world hypotheses making up the various schools of philosophy. Thus the world hypotheses of Plato, Aristotle, Aquinas, and many others are easily recognized as having family resemblances pivoting on the relation of form and matter. When one type of formism is presented as representative of the group, this might be offered as a paradigm case for the group.

This chief difference between this interpretation and the root metaphor theory is that in this view a philosophical school exhibits a development of a root metaphor towards a more nearly adequate structure for a comprehensive view of the world. The Wittgensteinian family resemblance concept does not suggest any such developmental process, or allow that the paradigm case which might be selected possesses any special explanatory superiority in respect to the precision and scope of the application of the concept to what may be called its field of application. Indeed the case is quite the reverse. All members of a family resemblance group are on a par, and there is no presumption of the group yielding any special explanatory insight beyond the fact of the family resemblances which the concept records in the usage of ordinary language.

However, some recent writers have spread the use of "paradigm" so as to include the progressive degrees of adequacy exhibited by the paradigm to its field of application. Thomas S. Kuhn in particular has developed this concep-

tion in his *The Structure of Scientific Revolutions* (1962). According to his exposition there is practically no difference between the function of the paradigm as a guiding conceptual pattern in scientific procedure and that of the root metaphor as a guiding conceptual pattern in world hypotheses except the restricted scope of the former.

A paradigm for Kuhn is a model or pattern accepted in science like a "judicial decision in the common law . . . an object for further articulation and specification under new or more stringent conditions." At the time of its first appearance it is "very limited in both scope and precision." The survival and endurance of a paradigm depends upon its success in solving problems which the practitioners in the field regard as acute. "The success of a paradigm . . . is at the start largely a promise of success discoverable in selected and still incomplete examples. Normal science consists in the actualization of that promise, an actualization achieved by extending the knowledge of those facts that the paradigm displays as particularly revealing, by increasing the extent of the match between those facts and the paradigm's predictions and by further articulation of the paradigm itself" (pp. 23-24).

According to Kuhn's description, the history of science can be almost equated with the history of the metaphors of limited scope in their pursuit of adequacy through their predictions and articulations in revealing the facts of their special fields. To what extent Kuhn's philosophy of science pivoting on the paradigm will be found acceptable, remains to be seen. It has the virtue of putting emphases on the practicing scientists' use of "models," which no treatment of scientific method, in the philosophy of science can safely ignore. For if on Kuhn's view a scientific model is not quite equated with a paradigm, it must be regarded as at least a material or conceptual embodiment of one.

If some form of the root metaphor theory for unrestricted hypotheses is combined with a form of paradigm theory like Kuhn's for restricted hypotheses, it would suggest that the basis of all productive empirical theory is in principle metaphorical. This would be no disparagement of it. It comes down simply to being realistic about what theories are as products of human creativity.

There is, of course, also the formal logical and mathematical aspect of theory which is perhaps properly regarded as the ideal terminal formulation of any empirical theory whether in science or philosophy. But however contrasted the formal approach may be to the metaphorical, there seems to be no necessary incompatibility between the two in their joint pursuit of some control and understanding of our world. If there is an issue, it lies beyond the scope of this article.

Bibliography

The root metaphor theory of the basis of metaphysical thinking was devel-

oped by S.C. Pepper in his *World Hypotheses* (Berkeley, 1942) and later exemplified by a deliberately chosen new root metaphor in his *Concept and Quality* (La Salle, Ill., 1967). A somewhat similar theory was developed independently by Dorothy Emmet in *The Nature of Metaphysical Thinking* (London, 1945), extending the analogical principle also to myth, religion, and theology. *The Compass of Philosophy* (New York, 1945) by Newton P. Stallknecht and Robert S. Brumbaugh carries on much the same idea by their stress on "key concepts" in metaphysics. And Charles Morris' *Paths of Life* (New York, 1942) is also relevant for a sort of statistical confirmation of the influence of "key concepts" in the attitudes of ordinary men.

C.I. Lewis' *Mind and the World Order* (New York, 1929) has already been mentioned for stimulating the metaphorical conception of metaphysics. Hans Vaihinger in his *Die Philosophie des Als-Ob* (Berlin, 1911), trans. C.K. Ogden as *Philosophy of As If* (New York, 1924) was influential by distinguishing between scientific hypotheses, which could be true, and fictions (As If's), which could not be true but had useful semi-cognitive functions. And metaphysical systems fell in the latter category. Philip Wheelright in his *The Burning Fountain* (Bloomington, Ind., 1962) speaks of the language of metaphor and the language of science as two equally legitimate ways of gaining cognitive insight into two different aspects of the world. Max Black, on the other hand, in his *Models and Metaphors* (Ithaca, N.Y. 1954), makes no such cognitive division but regards metaphors and models as valuable explanatory devices whether in the special sciences or in comprehensive metaphysics. This leads to Thomas Kuhn's still stronger view in *The Structure of Scientific Revolutions* (Chicago, 1962), which, as pointed out already, regards models and paradigms (virtually in the role of root metaphors) as central explanatory instruments in science. For an exceptionally intensive and original treatment of metaphor in metaphysics and science (and poetry too) the two articles by D. Berggren "The Use and Abuse of Metaphor" in the *Review of Metaphysics*, 16 (1962/1963) are recommended.