METAPHORIC PROCESS

A. HOW METAPHORS RESHAPE THE WAY WE THINK

We were invited by Joseph Bracken to give two workshop presentations on our book *Metaphoric Process: the Creation of Scientific and Religious Understanding* (1984). Our work has a dual relationship with the theme of the convention, the linguistic turn. On the one hand, we are critical of linguistic solutions to the problems of relating science and religion—solutions like that proposed by Earl MacCormac in his book *Metaphor and Myth in Science and Religion* (1976). Efforts like MacCormac's to relate science and religion through the use of language seem to us to avoid the epistemological issue of how we come to know in either field. On the other hand, the creation of understanding through metaphoric process, as presented in our book, although it includes linguistic meaning, is not limited to language.

In this first session, we examined what we mean by metaphor in our book and the epistemological process by which metaphors reshape the way we think. The forty participants in the workshop, asked to write one or two sentences that stated their understanding of metaphor, provided a large range: from metaphor understood as a figure of speech that compares two things not using *like* or as to definitions informed by major theorists of metaphor, such as Aristotle, Richards, Black, Ricoeur, and Derrida (MP 95-107). We noticed the limitations of these definitions taken singly: for example, the classical metaphysics underlying Aristotle's definition, and the focus on "dead" metaphor in Derrida's. Our own work in metaphor draws upon this theoretical tradition (see our summary and analysis, MP 95-107) and points out their family resemblances. Rather than define metaphor as a linguistic object, however, we focus on metaphoric process as a way of coming to know.

In spite of all the attention given to it, metaphor is generally not taken seriously in everyday communication. Imagine a conversation like the following:

G: Are you going to the meeting this afternoon?

R: Yes, I plan to. Do you know who is chairing it?

G: Nancy Ballard, I think. Do you know her?

R: No, what is she like?

G: She's a bulldozer! (pause) Speaking metaphorically, of course.

Notice that the tag line, "Speaking metaphorically," acts as a denial of a claim which usually would be understood appropriately without the tag line. The tag line in effect means, "It's *merely* a metaphor."

Not only is there a tendency not to take metaphor seriously in everyday communication; most of what are called metaphors turn out in our analysis to be anal-

ogies. So that we can set aside non-metaphors from our consideration, we examine analogy as an extension of meaning (as distinct from the creation of new meanings).

For both analogy and metaphor, we showed a figure, a world of meanings, represented as an artist's pallete. We speak of an epistemic *world* of meanings to refer to an individual's knowledge in process at any given time, or in a related sense, to one's "horizon"—that which encompasses what is known from a determinate perspective. A subject's world of meanings is the totality of "things" known, including relationships among those things with which this subject in the present state of intentional development can operate (see *MP* Fig. 4.2). The boundary or horizon of a subject's world of meanings is depicted in this figure as a line that separates what is known from what is unknown.

Within a world of meanings we find many *fields* of meanings. These are regions which have rather indefinite boundaries and which can be understood as relating to a particular discipline or sub-section of a discipline or topic. A concept, which we illustrate as an s-shaped curve, is described as imbedded in a field of meanings and, if it is an understood or known concept, it can be expected to have well established relations to other concepts within its field. It is, in other words, rigidly embedded in its field.

In the case of analogy, we apply something that we know already to a new situation. Diagramatically, we adjust the concept curve of understanding (the new concept) until it is similar to the analog concept in the known field (see *MP* Fig. 6.2). Most pedagogy is conducted by means of analogy as the teacher tries to transform something that is initially unknown to students by adjusting it to conform to something with which they are already familiar. Explaining something we know to a person who does not know involves finding an analogy, or a correspondence. Thomas Aquinas used the common knowledge of "habit" to develop an analogous theological understanding of "grace." Making analogies in this way leaves the shape or the world of meanings undistorted.

In metaphor, however, one insists that two knowns, each of which is firmly embedded in its field of meaning, are the same. If the insistence is successful, that is, if the two concepts declared to be the same are pulled together with their separate fields of meanings and held there in tension, the result is a metaphor (see MP Figs. 6.3 and 6.4). Analogies rearrange the concepts that make up our fields of meanings: the unknown adjusts and finds its place in the known. But metaphors re-form the fields of meanings themselves. To say that a saint is an enigma is to expand our knowledge of saints but to leave both fields of meanings undistorted. To say that a saint is a masochist, however, is to create the following possibilities: (1) The character of a saint is initially unknown and is now known incorrectly in terms of masochism; (2) The character of a masochist is initially unknown and is now known incorrectly in terms of saintliness; (3) the characters of both saint and masochist are initially known and the analogy is denied. In each of these possibilities, the analogy is received as a "bad" analogy either because it creates misunderstanding or, as in the third possibility, because no analogy exists. It is at this

¹For our use of Bernard Lonergan's notion of "things" see especially MP 18 and 33, "horizon" MP 62, "world of meanings" MP 71.

point that metaphor may make its bloody entrance with the insistence that the analogy, which appears to be "bad" or impossible, really is the case. The insistence—that is, the making of the metaphor—creates a distortion in the field of meanings of both saint and masochist.

Whether or not a particular example is an analogy or a metaphor depends ultimately on the process of knowing and the world of meanings of the knower. However, to the extent that the fields of meanings are shared and concepts are indeed embedded in fields of meanings, it is often possible to arrive at consensus among a given group of interpreters. This possibility of consensus was explored in particular examples by the participants in the workshop. Two lines from Shakespeare were tried. "All the world's a stage" is commonly accepted as a metaphor today, even though it has lost whatever tension it might have had for the early audiences of Shakespeare's As You Like It. Most participants agreed that "Bare ruin'd choirs, where late the sweet birds sang" ("Sonnet 73"), however, is a metaphor because the tension between bare tree boughs and vacant choir lofts is sustained in our ordinary understanding. Everyone agreed that "time flies" is today a dead metaphor since only with reflective effort can we discern two distinct fields of meanings; in everyday usage the tension has been lost and one field has been assimilated into the other.

In groups of 4-6, the participants suggested and discussed the following religious examples generally thought to be metaphors: "dark night of the soul," "This is my body," "kingdom of God," "I am the bread of life," "the cross as salvation," "the God who suffers," "God as warrior," "Jesus as the Lamb of God." The discussion centered on three considerations: (1) which of the examples are better understood as analogies; (2) which of the examples are better understood as metaphors; (3) which of the examples cause us to understand differently because they are metaphors rather than analogies.

B. NEW MEANINGS ARISE FROM NEW WAYS OF THINKING

The second workshop on metaphoric process began with a brief recapitulation of the main points developed on the first day, with special emphasis on the distinction between analogy and metaphor. The distinction was made in terms of the following model.

Analogy: "What is X (where X is an unknown)?"

Answer (the analogy): "X is like Y (where Y is known)."
The effect of an analogy is to enlarge a world of meanings and to create new knowledge.

Metaphor: "An X (where X is known) is a Y (where Y is known)." The effect of a metaphor is to *distort* a world of meanings and, thereby, to create new relations among other established meanings. The metaphoric form, an X is a Y, provided the basis for our first exercise, which we called a modelling of the metaphoric process.

The Noun Exercise

Two transparencies, each with a vertical set of blanks, were given to the workshop participants, one sheet to those on the left and the other to those on the right. Participants were asked to print, in block letters on a line, a simple noun in the

singular, drawn from any field. The two transparencies were then projected together so that they each provided a random noun to fill each blank of the statement,

"A _____ is a _____."

The challenge to the participants was to make sense out of what was being asserted. The following are examples of some of the combinations considered along with comments about their implications.

One word contributed for X was "community," which combined—perhaps too easily for theologians—with contributions for Y such as "house," "cell," "table," and "meal." More difficult were the combinations,

"A river is a house."

"A wave is a table."

One participant asserted that a river was indeed a house for fish, and one of us remarked that quantum mechanics had two theoretical forms, one of which is wave mechanics in which a particle is described as a wave, and another, which is matrix mechanics in which the same particle can be equivalently described by a table of numbers.

We voiced our suspicion that poets, especially those with a penchant for playing with words, might hunt out effective metaphors in much this way. We told of an artist friend who makes creative images out of combinations of random lines. All of these activities model the metaphoric process even though only very rarely are true metaphors created, because there must be grounds for creating a distortion of a field of meanings; distortion for its own sake is merely the form and lacks the substance of metaphor.

What justifications might there be for asserting that X is Y? We suggested that there are two. The first, one that might apply to the poet or the artist, is productivity: the images that result are useful and effective; the distortions open us to new understandings. The second, more important for the metaphoric process in science and religion, is the ontological flash—an experience that creates conviction (sometimes a conviction that might be said to "go beyond all reason").

Visual Metaphors

Since we consider the metaphoric process a form of cognitive distortion, we modeled the distortion by showing examples of pictorial distortion and sharing the experience of the cognitive dysfunction that can accompany such visualizations.

A slide of a collage was projected onto the screen. The image had been constructed by cutting vertically into strips a print of a 15th century Flemish painting of a woman. Every other strip had been replaced by its mirror image. Superficial viewing of the resulting image gave an impression of distortion that did not obliterate the original but a bit like looking at the original through ripple glass. We said that the image was distorted in a metaphoric way, but that the distortion was unproductive. One of the participants in the workshop disagreed, however, asserting that the reflected strips gave an impression of the woman looking into herself that had clear overtones of introspection or fragmented self-consciousness.

Our second example was provided by a famous drawing by M.C. Escher: the box whose corners are exchanged. For the projected image of a normal box we

suggested the sentence, "On a clear day one can see the island." To accompany the Escher drawing we suggested, as a parallel distortion, "On a clear island one can see the day." Both of these—the images and the sentences—we said were examples of non-productive cognitive distortions, although after the experience with the Flemish woman, we might want to try harder with both the second sentence and the Escher image. Perhaps the perceived finiteness of an island on a clear day gives new meaning to the day.

Sometimes Escher's drawings juxtapose elements in a metaphoric arrangement that is strikingly productive. We showed as an example a slide of his "Still Life and Street" (MP Fig. 6.5).

Jiri Kolár, a Czechoslovakian artist, uses combinations of images to create new meanings. In the slide, "Winter Pears," Kolár has taken a botanical rendering of two pears, removed the pictures of the pears themselves and placed the resulting cut-out over a reproduction of Brueghel's "Hunters in Winter." The field of meanings associated with "pears" and "pair," imposed upon two hunters and farming scene in the painting, lead us to consider the hunt and fruit, the picked and shot, the growing and the living—all in winter.

The slide, "Breakfast in Heifer," in which Kolár took an Alpine scene of a cow, removed the picture of the cow and placed the resulting cut-out over a reproduction of Manet's "Déjeuner sur L'Herbe," produced lively feminist interpretations.

Four examples were drawn from the field of political cartooning, the face of Richard Nixon as a spider web which contains the names of Erlichman, Magruder, and other Watergate figures (by Conrad in *The Los Angeles Times*); a visual remark (by Poul Holck in *Dag Bladet Politiken*, Denmark), which shows a Lockheed jet with a cow's udder being milked into a briefcase by a general in full-dress uniform; Lyndon Johnson as shown (by David Levine in *New York Review of Books*) displaying his scar (depicted as Viet Nam) to newsmen; and—the cartoon that provoked extensive discussion—a Tic Tac Toe (by Tom Darcy of *Long Island Newsday*). The spaces are filled with either a skull or two stalks of wheat; skulls are placed in five of the nine spaces and wheat in the remaining four. Skulls fill the diagonal with the skull in the upper left marked "overpopulation." All of these examples illustrate the mixing of humor and seriousness that can result from effective application of the metaphoric process.

Example of Metaphoric Process in Science

We presented a description of the metaphoric process at work, first in the case of Isaac Newton, and then for the Special Theory of Relativity developed by Albert Einstein. These are the same examples used in *MP* to show the way new meanings arise as a result of the metaphoric process in science.

First we stressed how important it is to understand that metaphoric acts are extraordinarily rare in science, perhaps one of the most intellectually conservative of intellectual disciplines. Then we described Newton's metaphoric act, taking as X, Johannes Kepler's laws of planetary motion, and as Y, Galileo Galilei's laws of terrestrial motion, and asserting that they are the same laws. In making the metaphor, Newton was insisting that the laws of nature are the same on the Earth as they are in the heavens.

Einstein's metaphoric act was to insist that the concept of (Galilean) relativity applied not only to mechanical phenomena, but to electromagnetic phenomena as well. Galilean Relativity was established in the 16th century by Galileo Galilei. He used the example of a person in a boat on smooth water, in which no observation of any mechanical system in the boat would show whether the boat was in motion or at rest. This was a way of saying that the laws of nature (physics) are the same for all persons regardless of their individual state of uniform motion in any straight line. One of the aspects of the electromagnetic theory, developed in the 19th century by James Clark Maxwell and others, was the loss of this invariance—an issue particularly striking to Einstein. When he required that *all* laws of nature (physics) and the speed of light be the same for all persons in the various states of motion, he discovered that moving clocks must run slow, that objects get short in their direction of motion, that moving particles increase in mass, and that $E = mc^2$ —all new meanings that arose from his metaphoric act of equating the relativity of mechanics (X) with the relativity of electromagnetism (Y).

Example of the Metaphoric Process in Religion

When we treat the religious theme of life-after-death as metaphor, we focus on what we know about those two disparate fields of meaning. There are many aspects of both life and death, of course, that are unknown, such as the questions of when and where I will die; the questions of if, where, and how the present world as we know it will end. The religious fascination of life-after-death has always been with the sense of projecting a future which is intrinsic to human freedom and the operations of consciousness. This sense is based in an awareness of openness toward a future which is possible not merely as given but as gift.

In fact, we do know many things about life-after-death from diverse fields of meaning. From biology, we know what happens to the body. From psychology, we know the effects of dying, not only on the terminally ill but on those bounded to them with ties of blood, love or care. From the history of religions, we know about the role of the dead in different civilizations—about the Nuer tribe, for example, where the most recently dead are believed to reside in the village, those dead up to ten years to reside at the boundary of the village and forest, and the ancestors (who are thought of as the founders of the village and the way of life) to reside in the forest. From post-holocaust theological ethics, we learn not to give Adolf Hitler a posthumous victory.

Even in traditional theology, the "last things"—however numbered and however conceived (Friedrich Schleiermacher, for example, relegated damnation to an appendix)—have never together been understood literally. That is, there has always been an uneasy relationship or a tension among them. Today we might understand the last things as aspects of our limit-thoughts about the future as they impinge upon our present. However, when life-after-death is understood only as concept, what is to prevent it from becoming a gnostic category, as has original sin? We argue that our theory of metaphor enables us to retain the tension and thereby an appropriate theological understanding of the concept.

Indeed, we have a precedent for such tension in the originating texts of Christianity. How can we completely reconcile the sayings attributed to Jesus that the reign of God was both to occur in time to come after the present *and* that it was

to be found within human beings themselves? Or Paul's statements that he was "born when no one expected it," that he "died in Adam" and had been "born in Christ"; that "we are not all going to die but we shall all be changed?" Metaphoric process enables us at once to recognize the theoretical structure of the concept and the mediative role of that structure in coming to know religiously. With that understanding, we are likely to position ourselves differently in life than before.

Conclusion

Our final slide shows a world of meanings that depicts one figure as representing the field of science and another figure representing the field of meanings of religion. We summarized our program by saying that, in our view, the dominant metaphor is formed in the insistence that these two fields of meanings are epistemologically equivalent.

Joseph Bracken closed the session with the comment, "This has not been your ordinary workshop."

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