What’s at Issue in the Question of Metaphor?

Philosophy’s debt to metaphor is profound and immeasurable. Without metaphor, there would be no philosophy. However, philosophy’s debt is no greater, nor less, than that of any other significant human intellectual field or discipline. Philosophers must use the same conceptual resources possessed by any human being, and the potential for any philosophy to make sense of a person’s life depends directly on the fact that all of us are metaphoric animals.

What I have just said is not now, nor has it ever been, widely accepted by philosophers. In fact, for the major part of our philosophical history, the idea that metaphor lies at the heart of human conceptualization and reasoning has been rejected. One could even make a crude distinction between two types of philosophy – objectivist/literalist philosophies that see metaphor as a dispensable linguistic appurtenance and those that see philosophies as creative elaborations of basic conceptual metaphors.

The history of western philosophy is, for the most part, one long development of the objectivist dismissal of metaphor, punctuated rarely by bold declarations of the pervasiveness of metaphor in thought, of which Nietzsche is the most famous proponent. Where a philosopher stands on this issue can be determined by their answer to one question: are our abstract concepts defined by metaphor, or not? Once the question is formulated in this manner, it is easy to see the profound philosophical stakes at issue. If our most fundamental abstract concepts – such as those for causation, events, will, thought, reason, knowledge, mind, justice, and rights – are irreducibly metaphoric, then philosophy must consist in the analysis, criticism, and elaboration of the metaphorical concepts out of which philosophies are made. If, on the other hand, you believe that our most important philosophical concepts are, in the final analysis, literal, then you will
regard metaphor as cognitively insignificant, and you will relegate it to what you disparagingly regard as some distant corner of philosophy, typically the unfairly maligned field of aesthetics.

Anyone who thinks that there is really nothing very important at stake here should consider the following. There are a number of perennial philosophical questions that arise over and over again throughout history any time you reflect on the nature of human experience. These are questions such as What is mind, and how does it work? What does it mean to be a person? Is there such a thing as human will, and is it free? What is the nature of reality? What can I know, and how can I go about gaining that knowledge? What things or states are "good" and should therefore be pursued? Are certain actions morally required of us? Does God exist (and what difference would it make)? Is there any meaning to human existence, or is life absurd? Both the framing of these questions and the kinds of answers we give to them depend on the nature of metaphor. You cannot address any of these questions without engaging metaphor. Consequently, an adequate philosophy must include an extensive inquiry into the workings of metaphor and how it shapes our most important philosophical ideas.

Philosophical Concepts Are Metaphoric

From a practical standpoint, it is obviously not possible to make an exhaustive survey showing that all our philosophical concepts are defined by conceptual metaphors. Instead, I will examine one key concept – causation – to indicate its metaphorical constitution, and I will point to research suggesting that we use metaphors to define all of our abstract concepts and thus all of our philosophical concepts.

I have selected causation as the exemplary metaphorically defined concept because it is hard to imagine a metaphysical concept that is more fundamental than that of causation. It lies at the heart of all of the sciences, is pervasive in our folk theories of the world, and is a philosophical lynchpin of virtually every ontology. When the first substantial metaphor analysis of our causal concepts emerged within cognitive linguistics over a decade ago, it became clear that the implications of this research were stunning. In my own analytic philosophical training, most of the books and articles I read assumed science to be a superior form of knowledge, partly because of its ability to give causal explanations of events. In one philosophical treatise after another, I was struck by how philosophers referred to “causes” as if they were objective forces or entities and as if there existed basically one kind of natural causation (as revealed in expressions such as “X caused Y” and “The cause of Y is X”). In an attempt to explain human actions, many philosophers also spoke of “agent causality,” in order to carve out a space for human “willing,” but in physical nature, natural causes ruled the day. So, there seemed to be at least one type of cause (i.e., physical) but not more than two types (adding agent causation to physical causation), and both conceptions were thought to be literal, not metaphorical. Causes were alleged to be literal entities or forces in the world.

This picture, as we will see, turns out to be mistaken, and badly so. It is a mistake that has disastrous consequences. To see why this is so, let’s begin with an analysis of one of our most often used concepts of causation – that of causation as a physical force. Once detailed analyses were performed on the semantics of our causal terms, the metaphorical nature of this concept became quite evident. In cognitive linguistics, the study of causal concepts emerged from the study of how people conceptualize events generally. The first prominent conceptual metaphor involved an understanding of change of state as (metaphorical) motion from one location to another, according to the following general mapping:2
**THE LOCATION EVENT-STRUCTURE METAPHOR**

<table>
<thead>
<tr>
<th>Source Domain</th>
<th>Target Domain</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Motion in Space]</td>
<td>[Events]</td>
</tr>
<tr>
<td>Locations in space</td>
<td>States</td>
</tr>
<tr>
<td>Movements from one location to another</td>
<td>Change of states</td>
</tr>
<tr>
<td>Physical forces</td>
<td>Causes</td>
</tr>
<tr>
<td>Forced movement</td>
<td>Causation</td>
</tr>
<tr>
<td>Self-propelled movements</td>
<td>Actions</td>
</tr>
<tr>
<td>Destinations</td>
<td>Purposes</td>
</tr>
<tr>
<td>Paths to destinations</td>
<td>Means to ends</td>
</tr>
<tr>
<td>Impediments to motion</td>
<td>Difficulties</td>
</tr>
</tbody>
</table>

The location event-structure metaphor comprises a vast complex system of several submappings, each of which is what Grady (1997) calls a “primary” metaphor. In English, the semantics of our terms for events is given by the detailed structure of the mapping. Each submapping supports a large number of expressions whose dependence on metaphor goes largely unnoticed in our ordinary discourse. For example, the submapping Change Of State Is Movement underlies expressions such as “The water went from hot to cold,” “The system is moving toward homeostasis,” and “The pizza is somewhere between warm and cold.” Causation Is Forced Movement is evident in “The fire brought the soup to a boil,” “His treachery pushed the King over the edge,” “The candidate’s speech threw the crowd into a frenzy.”

Notice how these submappings code various dimensions of what linguists call aspect, which concerns the means and manner of an action. For instance, we say, “the stove brought the water to a boil” but not “the stove threw the water to a boil,” for a very good reason. In the source domain of physical forces and motions, to “bring” something to someone is to apply continuous force to an object to move it from one location to another, causing it to end up in that person’s possession. When metaphorically extended to causation in general, the semantics of bring thus entails continuous application of force to bring about change of state. Thus, bringing water to a boil entails the constant heating of the water until it boils (i.e., until it arrives at the metaphorical boiling-state location). Throwing a physical object, by contrast, involves an initial application of strong force with the object continuing to move to a new location, even after the force is no longer applied. Thus, “threw,” according to the submapping, is not appropriate for the case of boiling water, though it is just the right term for “Babe Ruth’s homerun threw the crowd into a frenzy.”

Now, how could a literalist philosopher have any adequate account of the semantics of throw, as revealed in this case of Ruth’s home run? Will she say that there is a purely literal way to express the type of causation involved here? But there isn’t. If we say, “Babe Ruth’s homerun caused the crowd to get emotionally excited,” we lose the key semantic details expressed by “threw.” “Caused to get excited” does not capture the manner of the causation, which is rapid initial “force” followed by an extended trajectory after the initial event.

The crucial moral of this example is that the precise details of the semantics of basic causation terms are determined only by the submappings of the metaphors. The inferences we make about causal situations come from the metaphorical structure of our causation concepts. You cannot grasp the meaning of the causal terms, nor can you do appropriate causal reasoning, without the metaphors.

Moreover, the case of causation is even more complicated than it first appears because there turn out to be many different metaphorical conceptions of types of causation. Analyses to date reveal upwards of twenty distinct metaphors that express twenty kinds of causation (Lakoff & Johnson, 1999). A brief survey of just a few of these additional metaphors is highly instructive. It smashes the illusion of core literal concepts of causation and of any objectivist
philosophy that pretends to be founded on such concepts.

Consider, for instance, a second major metaphor system for certain types of causation, one that conceives of change of state or having an attribute (or property) as the acquisition of a possession.

**THE OBJECT EVENT-STRUCTURE METAPHOR**

<table>
<thead>
<tr>
<th>Source Domain</th>
<th>Target Domain</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Transfer of Possessions]</td>
<td>[Change of State]</td>
</tr>
<tr>
<td>Possession</td>
<td>Attribute</td>
</tr>
<tr>
<td>Movement of possession</td>
<td>Change of state</td>
</tr>
<tr>
<td>Transfer of possession</td>
<td>Causation</td>
</tr>
<tr>
<td>Desired objects</td>
<td>Purposes</td>
</tr>
</tbody>
</table>

The submapping Causation Is Transfer Of Possession is evident in expressions such as “Professor Johnson’s lecture on causation gave me a headache, but the aspirin took it away,” “Mary gave her cold to Janice,” and “Janice caught Mary’s cold.” Moreover, even our common philosophical notion of a “property” is based on this metaphorical mapping. What does it mean for an object to “possess” a property? When something has a property, it is in a certain state (defined by that property). When something loses that property, it no longer manifests the features appropriate to that property. Additionally, there are many other submappings within this causation metaphor that specify various ways of acquiring a desired object, which equates metaphorically with acquiring a certain property or attribute and thus achieving a purpose. For example, there is the submapping Achieving A Purpose Is Getting Food, as in “I’m still job hunting.” “She is aiming for rapid advancement in the firm.” “Larry bagged a promotion.” “That idea won’t hunt.”

- Trying To Achieve A Purpose Is Fishing
  “Ann landed a big promotion.” “Before that, she had a line out for a new job.” “My boss is always fishing for compliments.” “Every night he’s out trolling for a date.”

- Trying To Achieve A Purpose Is Agriculture
  “Every worker should reap the fruits of his or her labor.” “That promotion is ripe for the picking.” “Harry’s been cultivating several job prospects.”

Metaphorically based expressions like these are not just colloquialisms, used loosely in ordinary talk. Once again, the submappings of the metaphor specify the precise details of the semantics of causation and determine what types of inferences we will make. Some people harbor the illusion that good science would merely avoid such expressions in causal explanations. But, as it turns out, there is no way to avoid the use of one or another basic causal metaphor in science, and scientists reason on the basis of the entailments of the submappings of these metaphors.

In the social sciences, for example, there are a number of quite specific metaphors that can be used for the types of causal explanation appropriate for the science of those fields. One especially common case is the causal path metaphor.

**THE CAUSAL PATH METAPHOR**

<table>
<thead>
<tr>
<th>Source Domain</th>
<th>Target Domain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-propelled motion</td>
<td>Action</td>
</tr>
<tr>
<td>Traveler</td>
<td>Actor</td>
</tr>
<tr>
<td>Locations</td>
<td>States</td>
</tr>
<tr>
<td>A Lone path</td>
<td>A natural course of action</td>
</tr>
<tr>
<td>Being on the path</td>
<td>Natural causation</td>
</tr>
<tr>
<td>Leading to</td>
<td>Results in</td>
</tr>
<tr>
<td>End of the path</td>
<td>Resulting final state</td>
</tr>
</tbody>
</table>
Examples:  
"Pot smoking leads to drug addiction." "As a nation, we’re careening wildly down the road to destruction." "That path will get you nowhere, man." "You’re heading for catastrophe."

The causal path metaphor plays a key role in certain types of causal explanation for human actions. It utilizes our common knowledge about motion through space to some destination: if you start down a certain path, you will naturally end up where that path leads you, unless something intervenes to retard or block your progress. Metaphorically, then, if you start down a certain "path" of action, it will typically lead you to a certain destination (end), unless something intervenes to retard or block your metaphorical movement. This argument is used by those who believe that certain actions or behaviors will necessitate a certain specific outcome in the ordinary course of events (as in the 1950s song lyric, "I’ll tell you son, you’re gonna drive me to drinkin’, if you don’t stop drivin’ that hot rod Lincoln"). In politics, the causal path metaphor can be even more decisive. One often hears the argument that a certain third-world country is "on the road to democracy (read, capitalism)," so that, if we (the United States) will just eliminate any potential obstacles (i.e., we intervene politically, economically, militarily, or covertly), then that country will naturally and inevitably continue along the path to the desired end-state (namely, democracy!). Millions of dollars and sometimes even the lives of citizens are sacrificed to supposedly ensure the smooth unrestricted motion of some metaphorical entity (a country, an economy, or a political institution) along a metaphorical causal path to a metaphorically defined destination.

Another important metaphor in political and economic debate is the plate tectonics metaphor for social/political/economic change, which is appropriated from the geology of plate tectonics. According to the logic of the metaphor, continual, long-term application of "pressure" to a system, institution, or state will eventually result in a rapid, massive causal consequence. The rapid, surprising disintegration of the Soviet Union is supposed by some to be a classic example of this process. Often, when large sustained infusions of funds or manpower do not appear to be producing the desired change in a government or economy (usually both), the plate tectonics metaphor is frequently invoked to argue for the continued commitment of resources by Congress, on the assumption that we need just a little bit more pressure to produce an eventual massive transformation.

The analysis of the full range of metaphors could be continued along similar lines. In Philosophy in the Flesh (1999), George Lakoff and I summarized the mappings and entailments of nearly 20 different causal metaphors, showing how several of them are employed within various sciences. A number of key philosophical points emerge from these analyses:

1. An adequate conceptual analysis (in this case, of causation concepts) must provide generalizations that explain the precise details of the semantics of the terms and must explain the inferences we make concerning those concepts. The details of the semantics and inference structure of each causal concept are provided by the submappings that jointly constitute the metaphor.

2. Almost all of the basic causation concepts we studied are metaphoric.

3. There appears to be what we called a "literal skeleton" shared by all causation concepts, namely, that a cause is a determining factor in a situation. However, this bare skeleton is far too underspecified to generate any serious causal reasoning in the sciences. It is the metaphors that give rise to the relevant conceptual structure and that constrain the appropriate causal inferences.

4. Several of the main causation metaphors are mutually inconsistent. In other words, there are significant metaphors that have incompatible ontologies. For example, in the location event-structure metaphor, states are (stationary)
locations, and the object or agent changes by moving to a particular (metaphorical) location. In contrast, in the object event-structure metaphor, a state is an object that moves, rather than being a stationary location. Consequently, these two metaphors cannot be reduced to a consistent literal concept.

5. **Causation** is thus a massive radial category. At the center of the category is the closest thing to a literal conception—something like the application of physical force to an object that results in a change in its state or location. One example of this is what we call “billiard-ball causation.” Other less prototypical kinds of causation are metaphorically defined.

If we take stock of the argument so far, the results are devastating for any literalist/objectivist philosophy. At least with respect to causation, there is no single literal concept of *cause*, nor are there even two or three basic literal concepts. There is no set of necessary and sufficient conditions that define all causes. Instead, there are 20 or more metaphorical concepts used by ordinary people, scientists, and philosophers in their reasoning about causation. This conclusion does not undermine science at all. It only reminds us that different scientific approaches rely on different metaphorical concepts, which can be more or less appropriate in different situations and that dictate what counts as evidence and argument within a given science. What these analyses do undermine are objectivist philosophies that accept a classical theory of literal meaning, a classical objectivist metaphysics, and a classical correspondence theory of truth.

Moreover, it appears that what is true of our causal concepts holds for all of our most important abstract philosophical concepts. The current evidence for this is inductive, but it is very impressive. Many studies have now shown the metaphorical constitution of basic concepts in the sciences (Magnani & Nersessian, 2002), law (Winter, 2001), mathematics (Lakoff & Núñez, 2000), ethics (Fesmire, 2003; Johnson, 1993), medicine (Wright, 2007), politics (Lakoff, 1996), psychology (Fernandez-Duque & Johnson, 2002; Gibbs, 1994), music (Johnson & Larson, 2003), and many other fields. In light of this metaphorical constitution of our abstract concepts, we need to rethink what we are about as philosophers. There does not now exist, and probably never will exist, an exhaustive metaphorical analysis of the full range of philosophical concepts and arguments. That would be a daunting, unending task. However, a surprisingly large number of philosophical concepts have already been subjected to conceptual metaphor analysis over the past decade and a half. Here is a partial list of some of the more prominent concepts for which we have at least a preliminary metaphorical analysis:

- **Event, Cause, Action, State, Property, Purpose, Mind, Thought, Concepts, Reason, Emotions, Knowledge, Attention, Communication, Self, Will, Moral Rule, Rights, Justice, Duty, Good, Happiness, Society, Democracy, Love, Marriage, Being, Number, Set, Infinity, Addition (Subtraction, Multiplication, etc.), the Cartesian Plane, and a host of other mathematical concepts.**

The number of key concepts analyzed so far, and the depth of those analyses, strongly support the prospect that our abstract concepts are defined by conceptual metaphor and metonymy. If this is so, then philosophical analysis is primarily metaphor analysis—working out the logic and inferential structure of the metaphors that ground our basic philosophical understanding of experience. Philosophical theories, like all theoretical constructions, are elaborations of conceptual metaphors. In a very strong sense, philosophy is metaphor.

**Metaphor and Contemporary Philosophy of Language**

The reality of conceptual metaphor and its central role in abstract conceptualization and reasoning calls into question large parts of traditional western views of meaning and truth, and it also challenges most of contemporary philosophy of language. If our
abstract concepts are metaphorically structured, then the classic objectivist/literalist view must be false. According to objectivist metaphysics and theory of knowledge, the world consists of objects, properties, and relations that exist in themselves, independent of human conceptual systems and human agency. Meaning is a matter of how our concepts map onto or pick out aspects of this mind-independent objective reality. Literal concepts are the direct connection between what we think (or what’s in our mind) and how the world is, and this connection (sometimes called “intentionality”) is the basis for the possibility of truth, which is taken to be a correspondence relation between propositions and states of affairs in the world. There cannot be any significant role for metaphor in this picture of mind and world because the cognitive content of a metaphor would need to be reducible to some set of literal concepts or propositions, if it is to have any meaning and play a role in truth claims.

Quite obviously, if conceptual metaphor is essential for abstract thought, then the classic objectivist/literalist picture cannot be correct. Conceptual metaphor is a structure of human understanding, and the source domains of the metaphors come from our bodily, sensory-motor experience, which becomes the basis for abstract conceptualization and reasoning. From this perspective, truth is a matter of how our body-based understanding of a sentence fits, or fails to fit, our body-based understanding of a situation. And when we are thinking with abstract concepts, that understanding involves conceptual metaphor. There is a form of “correspondence” here – a fitting of our understanding of a statement and our understanding of a situation. But this is not the classic correspondence of literal propositions to objective states of affairs in the world. Instead, the correspondence is mediated by embodied understanding of both the sentence and the situation.

In spite of the growing body of empirical research on conceptual metaphor that has emerged over the past two decades, contemporary analytic philosophy of language has refused to recognize the existence of conceptual metaphor. This is not surprising, considering that to do so would undermine certain fundamental assumptions of analytic philosophy. I want to examine briefly two of the most popular contemporary views of metaphor within analytic philosophy – that of John Searle and the view shared by Donald Davidson and Richard Rorty – in order to show why they cannot accept the reality of conceptual metaphor and how they are done in by its existence.

Searle (1979) approaches metaphor from a speech-act perspective, and he regards the activity of speaking a language as a highly conventionalized rule-governed form of behavior. Searle is also a literalist. He believes that the possibility of truth claims and a robust realism requires that all meaning be reducible to literal concepts and propositions that can, in the last analysis, correspond to states of affairs in the world. Various types of illocutionary speech acts would, according to Searle’s account, be rule-governed functions on these basic propositional contents. So, the problem of metaphor within Searle’s philosophy of language is to state the rules by which the literal sentence meaning (“S is P”) used for a metaphorical utterance can come to be interpreted by a hearer as a different literal utterance meaning (“S is R”) (Searle, 1979). On Searle’s view, the hearer must recognize that the speaker cannot be intending to convey the literal meaning of her utterance, must then calculate the possible alternate meanings she might possibly be intending, and must finally determine which is the most appropriate literal meaning in the present context.

The problem with this literalist/objectivist version of the speech-act approach is that it simply cannot explain how metaphors actually work. Searle correctly sees that most metaphors are not based on an underlying set of literal similarities that might explain how P (in “S is P”) calls up R (in “S is R”) when we hear the metaphorical utterance. But Searle has no alternative specification of the rules for cases that cannot be based on similarities.
He must surely recognize that his final attempt to formulate a rule for certain types of metaphors is no explanation at all!

Things which are P are not R, nor are they like R things, nor are they believed to be R; nonetheless it is a fact about our sensibility, whether culturally or naturally determined, that we just do perceive a connection. (Searle, 1979, p. 108)

Saying that it just “is a fact about our sensibility” that we do make certain connections does not explain anything. When a literalist is forced to admit that certain metaphors are not based on any literal similarities between the source and target domains, then his literalism leaves him without resources to explain where the meaning comes from or how it is possible.

Conceptual metaphor theory solves this problem by rejecting literalism and by recognizing the pervasive structuring of our abstract concepts by metaphor. On this view, metaphors are based on experiential correlations and not on similarities. Joe Grady (1997) has analyzed the experiential grounding of a large number of what he calls “primary metaphors” that are sometimes combined into larger metaphor systems. Consider, for example, the primary metaphor Affection Is Warmth. Grady hypothesizes that this metaphor is based, not on similarities between warmth and affection, but rather on our experience, from infancy, of being held affectionately and feeling warmth. Multiple experiences of this sort in childhood would involve a neuronal co-activation of brain areas tied to the experience of bodily warmth and those tied to the subjective experience of affection and nurturance. This co-activation later becomes the basis for a primary metaphor, Affection Is Warmth. One of Searle’s well-known arguments against the similarity theory of metaphor is that there are no relevant literal similarities between a person named Sally and a block of ice that could explain the meaning of the metaphorical expression, “Sally is a block of ice.” Quite so, for this expression is not based on similarities. Rather, it is an instance of the primary metaphor Affection Is Warmth, and so it is based on experiential correlations (of affection and warmth), rather than on similarities. If anything, the similarities are a result of the experienced correlation. However, Searle cannot accept this alternative theory because his literalism does not permit him to recognize that metaphoric source-to-target mappings could be equally as basic to our thought as are literal concepts. Searle’s theory is constrained by his traditional objectivist views of meaning, knowledge, and truth.

Another extremely popular view of metaphor is Donald Davidson’s deflationary rejection of metaphoric meaning. In his 1978 article, “What Metaphors Mean,” Davidson provocatively answers that they do not mean anything at all or at least nothing beyond the ordinary literal meaning of the utterance. In short, Davidson simply denies that metaphor is a semantic phenomenon, and he thus denies that metaphor has anything to do with making truth-claims: “We must give up the idea that a metaphor carries a message, that it has a content or meaning (except, of course, its literal meaning)” (Davidson, 1978, p. 45). Metaphor is only a pragmatic effect achieved by using a certain literal utterance to induce the hearer to notice something. Davidson says that a metaphorical utterance uses its literal meaning to “intimate” or “suggest” some nonpropositional insight: “Seeing as is not seeing that. Metaphor makes us see one thing as another by making some literal statement that inspires or prompts the insight.” (Davidson, 1978, p. 47).

Richard Rorty has become the flamboyant spokesman for Davidson’s nonsemantic theory of metaphor. Seizing on Davidson’s claim that metaphor is not about propositional content or meaning of any kind, Rorty describes metaphors as linguistic flares that catch and redirect the hearer’s attention:

Tossing a metaphor into a conversation is like suddenly breaking off the conversation long enough to make a face, or pulling a photograph out of your pocket and displaying it, or pointing at a feature of the surroundings, or slapping your interlocutor’s face, or kissing him. Tossing a metaphor
This view of metaphor as a nonsemantic use of language for certain attention-getting purposes has an important implication that Rorty is quick to note. The distinction between the "literal" and the "metaphorical" is seen, not as one "between two sorts of meaning, nor a distinction between two sorts of interpretation, but as a distinction between familiar and unfamiliar uses of noises and marks" (Rorty, 1989, p. 17). According to Rorty, these "unfamiliar" marks and noises somehow get us searching for new vocabularies in which they are no longer unfamiliar, but he has no account whatever of how this process is supposed to work.

The considerable popularity of both Searle’s and Davidson-Rorty’s view is easily understandable within the framework of analytic philosophy of language. As different as their two views may appear to be on the surface, they both share a set of grounding assumptions about meaning and truth that are foundational for analytic philosophy. In particular, they agree (1) that meaning is conceptual and propositional in nature, (2) that meaning is truth-conditional, and (3) that only literal concepts can be the bearers of meaning. Searle thinks that metaphors can have a semantic content of sorts, but he is at a loss as to how to explain that possibility, since he sees that they are not based on literal similarities and don’t seem to be literal propositions. Davidson and Rorty think that metaphors have no semantic content, are not propositional, and so cannot be bearers of truth.

Both theories are badly mistaken. Both theories ignore the growing body of empirical research on conceptual metaphor as a basic operation of abstract thinking. It should come as no surprise that neither Searle nor Davidson pays any serious attention to the work of cognitive linguists on the semantics of natural languages. If they did, they would acknowledge the pervasive role of conceptual metaphor in abstract conceptualization and reasoning. How could Searle, or especially Davidson, explain our previous analysis of the semantics and inference structure of our metaphors for causation? Their literalist views have no resources whatever to explain the polysemy and inference generalizations that are explained in cognitive linguistics by the source-to-target mappings. Rorty sees quite clearly that his view has nothing whatsoever to say about the meaning and motivation for basic metaphors in science and philosophy:

For all we know, or should care, Aristotle’s metaphorical use of ousia, Saint Paul’s metaphorical use of agapé, and Newton’s metaphorical use of gravitas, were the results of cosmic rays scrambling the fine structure of some crucial neurons in their respective brains. Or, more plausibly, they were the result of some odd episodes in infancy – some obsessional kinks left in these brains by idiosyncratic traumata. It hardly matters how the trick was done. The results were marvelous. (Rorty, 1989, p. 17)

This is extremely clever, and beautifully expressed, but it is quite wrongheaded. For it does matter “how the trick was done.” It does matter where these metaphors come from – that is, why we have the ones we do, how they are grounded experientially, and how they shape our thought. Moreover, there are (at least partial) answers to such questions, answers provided by conceptual metaphor theory, that challenge the basic assumptions of contemporary analytic philosophy of language.

Rorty is probably right that we aren’t going to explain precisely why St. Paul came up with the metaphor for love that he did. But that does not mean that his metaphor was an irrational, unmotivated miracle, or a chance occurrence! Our inability to predict what novel metaphors will emerge does not entail the opposite extreme that metaphors just happen, irrationally. On the contrary, there is a great deal that we can say about what St. Paul’s metaphor means, about how it connects up with the other conceptual
metaphors for love that were common in his time (and in ours), and about how his metaphor extends or creatively blends aspects of these other metaphors. Conceptual metaphor theory can explain how this new metaphor could possibly make any sense to people and how they could draw inferences about its implications for how they should live their lives. Within cognitive linguistics, there already exist extensive analyses of the mappings for the key metaphors for love in our culture (Kövecses, 1988, 2000; Lakoff & Johnson, 1980). Nor did the Aristotelian conception of ousia spring fully armed from the head of Aristotle. Lakoff and Johnson (1999) have traced some of the main steps in the development of the metaphysical understanding of Being that begins with the pre-Socratic philosophers, blossoms in Plato, and is transformed in Aristotle. The idea of Being is a construction from various folk theories and conceptual metaphors concerning the nature of categories and entities in the world. Aristotle’s ousia is a remarkable achievement, but it is not a miracle. If, like Davidson and Rorty, you don’t see that metaphor is a semantic phenomenon, then it should come as no surprise that, like them, you will regard metaphor merely as a nonrational rupture in a conceptual system (or, to use Rorty’s favorite term, a “vocabulary”) that inexplicably gives rise to a new way of talking. If you miss the experiential grounding of primary metaphors, you will, like Rorty, think that metaphor change is relatively arbitrary and not rationally motivated. Moreover, you will not recognize the crucial role of metaphor in shaping and constraining inference in ordinary mundane thinking, scientific research, and philosophical theorizing. In other words, Davidson and Rorty are literalists. Because they are oblivious to the pervasive workings of conceptual metaphor in shaping our conceptual systems, they cannot see that or how metaphor lies at the heart of human understanding and reasoning.

**Philosophy as Metaphor**

Virtually all of our abstract concepts appear to be structured by multiple, typically inconsistent conceptual metaphors. If this is true, then philosophical theories are not systems of foundational literal truths about reality but rather elaborations of particular complex intertwining sets of metaphors that support inferences and forms of reasoning. Humanizing and embodying philosophy in this manner does not devalue it in any way. On the contrary, it reveals why we have the philosophies we do, explains why and how they can make sense of our experience, and traces out their implications for our lives.

In *Philosophy in the Flesh* (1999), Lakoff and Johnson analyzed several philosophical orientations to reveal their underlying metaphors. That analysis included pre-Socratic metaphysics, Platonic and Aristotelian doctrines of Being, Cartesian views of mind and thought, and some of the founding assumptions of analytic philosophy of mind and language. As an example of how a metaphorical analysis of this kind might proceed, I want to consider Jerry Fodor’s “Language of Thought” metaphor for mind, since it has been so influential in recent philosophy of mind. Fodor wants to defend what he regards as a scientifically sophisticated version of the widespread folk theory that to have a mind is to have mental states (e.g., beliefs, wants, fears, hopes) that purport to be “about” aspects of our world. Thinking, as he sees it, must consist of chains of inner mental states that are somehow connected to each other (i.e., one thought leads to another) and that are also somehow connected to aspects of our experience (i.e., things in the world “cause” us to have these specific mental representations that we have). There are thus two major parts to Fodor’s theory: (1) how the mental states are related and (2) how those mental states are connected to the world (or how they are caused).

The first part of his theory consists of the claim that these mental states form a “language of thought”: “A train of thoughts . . . is a causal sequence of tokenings of mental representations which express propositions that are the objects of the thoughts” (Fodor, 1987, p. 17). The language of thought is purely computational:
Mental states are relations between organisms and internal representations, and causally interrelated mental states succeed one another according to computational principles which apply formally to the representations. This is the sense in which internal representations provide the domains for such data processes as inform the mental life. It is, in short, of the essence of cognitive theories that they seek to interpret physical (causal) transformations as transformations of information, with the effect of exhibiting the rationality of mental processes. (Fodor, 1975, p. 198)

Fodor’s language of thought (sometimes called “mentalese”), consists of symbols that in themselves are completely meaningless but that can be given meaning by the ways in which they are caused, or “tokened,” by certain events in the world. The mental representations in this language of thought are precisely like the arbitrary, meaningless symbols in computer programs. Within a computational program, operations are performed entirely on the formal (syntactic) features of the symbols, and Fodor believes that such features can “mimic” what we think of as semantic relations between our various mental representations:

Within certain famous limits, the semantic relation that holds between two symbols when the proposition expressed by the one is entailed by the proposition expressed by the other can be mimicked by syntactic relations in virtue of which one of the symbols is derivable from the other. (Fodor, 1987, p. 19)

The second key part of Fodor’s theory concerns the causal grounding of the internal representations. His claim is that these symbols are mental representations because they are caused by aspects of the world. Fodor summarizes this aspect of his theory:

I want a naturalized theory of meaning: a theory that articulates, in nonsemantic and nonintentional terms, sufficient conditions for one bit of the world to be about (to express, represent, or be true of) another bit. (Fodor, 1987, p. 98)

Fodor and his followers believe that the language of thought hypothesis expresses literal truths about the nature of mind, namely, that the mind is a computational functional program, that thinking is governed by syntactic rules, and that the meaningless symbols of mentalese are given meaning through their relation to aspects of our experience that cause them to be tokened in our minds. A large body of empirical research in the cognitive sciences shows why this view of mind cannot be correct, but that is not my focus here. Rather, my point is to show that Fodor’s entire model is composed of a series of interwoven complex metaphors that give rise to specific entailments about the nature of mind and the operations of thought.

Fodor’s key claim that all human thinking has the form of a language is an idea (a false idea) deeply rooted in our ordinary and philosophical ways of thinking. Because we so often express our thoughts in language, we are easily seduced into believing that human thinking has the form of a language. In other words, we presuppose the Thought As Language metaphor.

THE THOUGHT AS LANGUAGE METAPHOR

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<thead>
<tr>
<th>Source Domain [Linguistic Acts]</th>
<th>Target Domain [Thinking]</th>
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<tbody>
<tr>
<td>Linguistic activity (speaking/writing)</td>
<td>Thinking</td>
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<tr>
<td>Words</td>
<td>&gt;&gt;&gt;&gt;&gt; Ideas</td>
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<tr>
<td>Sentences</td>
<td>&gt;&gt;&gt;&gt;&gt; Complex ideas</td>
</tr>
<tr>
<td>Spelling</td>
<td>&gt;&gt;&gt;&gt;&gt; Communicating a sequence of thoughts</td>
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<td>Writing</td>
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Our ordinary ways of thinking about the operations of mind and thought draw massively on our conception of written and spoken language. The idea that thoughts are linguistic forms written in the mind is the basis for expressions such as, “Let me make a mental note of that,” “She’s an open book to me – I can read her every thought,” “The public misread the President’s intentions,” and “Do you think I’m some kind of
mindreader?” Spoken language also provides a rich source domain for our conception of thinking as speaking, as in, “She doesn’t listen to her conscience,” “I hear what you mean,” “I can barely hear myself think,” and “That sounds like a good idea.” The Thought As Language metaphor covers all types of intellectual activity, as in, “Liberals and conservatives don’t speak the same language,” “He can’t translate his good ideas into practice,” “What is the vocabulary of basic philosophical ideas?” and “I wouldn’t read too much into what he’s saying.” Notice also that, according to this mapping, careful step-by-step thinking is conceived as careful spelling, as when we say, “Our theory of embodied meaning is spelled out in Chapter 3,” “Do I have to spell it out for you?” and “He always follows the letter of the law.”

Fodor’s language of thought metaphor makes intuitive sense to many people precisely because most of us assume that a purely formal language can be meaningful in the same way that a natural language is meaningful. That is, we assume the formal language metaphor.

### The Formal Language Metaphor

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<tr>
<th>Source Domain</th>
<th>Target Domain</th>
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<tr>
<td>Natural Language</td>
<td>Formal Language</td>
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<tr>
<td>Written signs</td>
<td>Abstract formal symbols</td>
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<tr>
<td>A natural language</td>
<td>A Formal language</td>
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<tr>
<td>Sentences</td>
<td>Well-formed symbol sequences</td>
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<tr>
<td>Syntax</td>
<td>Principles for combining formal symbols</td>
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Fodor correctly understands that a truly computational theory of mind requires that the language of thought be a formal language (akin to a computer language), and that a formal language cannot be modeled on a natural language. A “formal” language is an artificial language that, unlike natural languages, consists entirely of arbitrary meaningless symbols, each of which has specific formal (syntactic) features that play a role in formal operations specified for the language.

The key problem with this formal language metaphor is that actual formal languages do not and cannot possess the key features that make it possible for natural languages to be meaningful. Consequently, if Mind Is A Computational Program (i.e., the Mind As Computer metaphor), then the Language of Thought will not, in itself, be meaningful in any way. As a result, Fodor must officially reject the formal language metaphor. But then he is left with the problem of how an intrinsically meaningless Language of Thought can somehow acquire meaning.

Fodor’s answer is that “tokenings” of particular mental symbols must become “representations” by being “caused” by objects and events that we experience. In other words, the “inner” mental symbols must be causally connected to things outside the mind. In his book *Psychosemantics* (1987), Fodor tries to develop a causal theory of how the symbols in mentalese can become meaningful, that is, how the symbols can come to be related to things “outside” the mind. Although I cannot argue this here, Fodor is ultimately unable to explain how there is a determinate connection between being in a certain situation and having certain specific symbols tokened in the mind. He cannot establish such relations for the reasons that Quine earlier articulated; namely, the “input” is always subject to multiple interpretations, so there is seldom or never a one-to-one correspondence between a mental symbol and an aspect of the “world.”

### Philosophy’s Debt to Metaphor

My interest here is not to evaluate the adequacy of Fodor’s theory of mind and language. It is, rather, to show that his theory is based on a set of intertwined conceptual metaphors that operate, mostly unconsciously, in our culture. It is no criticism of a philosophical or scientific theory to show the underlying metaphors on which
it rests. Indeed, it is the metaphors that make it possible for the theories to make sense of our experience. All theories are based on metaphors because all our abstract concepts are metaphorically defined. Understanding the constitutive metaphors allows you to grasp the logic and entailments of the theory. Thus, we will discover various common metaphors underpinning our philosophical theories, ranging from the pre-Socratics’ notions of Being and physis, to ideas about God in medieval theology, to Cartesian doctrines of mind, and up to 21st-century neurocomputational theories of cognition.

It would be impractical to try to survey the metaphorical foundations of all our philosophical theories. But it is a task that can and should be undertaken if we want to understand the inner workings of any particular theory in philosophy or science. This task will always include a metaphorical analysis of concepts such as cause, being, reality, and event but also of all aspects of mind and thought themselves, such as the grounding metaphors for concepts, reason, mind, thought, knowledge, logical relations, and values that lie at the heart of a specific theory. Even the theories of metaphor themselves must be analyzed. The theory of conceptual metaphor, for example, employs metaphors of “mapping” and “projection” to conceptualize the nature of metaphor itself. Such a conception could never be absolute – could never tell the whole story or cover all of the data – and so we must always be self-reflectively aware of our own metaphorical assumptions and their limitations.

I have argued that the single biggest reason that most traditional and contemporary philosophy cannot recognize the pervasive, theory-constituting role of metaphor in philosophy is the failure of philosophers to acknowledge the existence of deep systematic conceptual metaphor. They cannot recognize it because to do so would require a fairly substantial revision of some of the founding assumptions of their philosophies. It would require them to abandon some of their founding metaphorical conceptions in favor of other metaphors. If you acknowledge conceptual metaphor, then you have to give up literalism. If you give up literalism, you must abandon objectivist theories of knowledge. If you reject objectivist metaphysics and epistemology, you must abandon the classical correspondence theory of truth. Eventually, you will have to rethink even your most basic conception of what cognition consists in.

The hold on us of objectivist and literalist views is so strong that we are sorely tempted to go to great lengths to salvage our traditional theories of mind, thought, and language. Searle ultimately falls back on a form of literalism. Davidson retains his literalism by denying that metaphors have meaning beyond their literal sense. Rorty doesn’t appear to be a literalist since he sees that metaphors are terribly important in the history of philosophy, but he has no theoretical resources to explain the phenomena as anything more than contingent, irrational, inexplicable random events.

In sharp contrast, once you understand how conceptual metaphors lie at the heart of our abstract conceptualization and reasoning, you acquire a new set of tools for analyzing, explaining, and criticizing philosophical theories. Philosophies are built out of conceptual metaphors. We need not be slaves operating blindly under the harsh influence of our metaphors. We can learn what our founding metaphors are and how they work. We can analyze the metaphors underlying other cultures and philosophical systems, too. Our ability to do this type of analysis is, admittedly, always itself shaped by metaphorical conceptions of which we are hardly ever aware. However, we can become aware of those metaphors, we can subject them to critical evaluation, and we can creatively elaborate them in developing new philosophies to help us deal with the problems that confront us in our daily lives.

Notes

1 In Philosophical Perspectives on Metaphor (1981), I have surveyed some of the more influential expressions in Western philosophy.
of the denial of a serious cognitive role for metaphor.

The analysis of causal concepts that follows, along with their role in shaping philosophy, is adapted, with minor changes, from Lakoff and Johnson (1999), chapter 11, which is an extensive survey of the several metaphors that define our multiple concepts of events and causes.

References