## **Critical Discussions**

## GRASPING PHILOSOPHY BY THE ROOTS

by Francis F. Steen

**R**EDUCTIONISM HAS A tattered reputation; its promise of simplicity is suspect. Yet the power of an explanation lies precisely in identifying that level of analysis at which simplicity is genuinely illuminating. Philosophy may seem an unlikely candidate for such a project; it cultivates abstruseness as a measure of sophistication, and surely its unwieldy subject matter deserves no less. There is, then, something refreshingly shameless about Lakoff and Johnson's *Philosophy In the Flesh*, extravagantly subtitled *The Embodied Mind and Its Challenge to Western Thought*. It sets out to give us a clear window into the structure of philosophical thinking itself, into the spreading lines of reasoning that have patterned this millennial search for a truth that can be formulated. Can it deliver?

The hidden engines that construct philosophical edifices, the authors suggest, are not the ones that spring first to mind. Philosophical ideas are not systematically assembled out of meticulous observations, drawn up within a mathematical order of abstract reason, or serendipitously manifested in an unmediated glimpse of truth. Nor are our ideas of the mind and of the cosmos, of causality and morality, arbitrary inventions *ex nihilo*, acts of the creative will. Nor yet are they simply cultural constructions, pawns of concealed political agendas.

Philosophy In the Flesh: The Embodied Mind and Its Challenge to Western Thought, by George Lakoff and Mark Johnson; xiv & 624 pp. New York: Basic Books, 1999, \$28.00 cloth, \$20.00 paper.

The conceptions of philosophy, Lakoff and Johnson contend, are inference-preserving elaborations and projections of modes of cognition grounded in the fact that we have bodies—no, that we *are* bodies.

*Philosophy In the Flesh* is an adventurous elaboration of the thesis of the metaphoricity of language and the ubiquity of metaphor in everyday thought spelled out in the authors' groundbreaking *Metaphors We Live By.* In the course of the intervening twenty years, the model has been structurally strengthened, projected into new arenas, and firmly bolted to the cognitive capacities of the embodied mind. The central notion that abstract thought is largely metaphorical, molded on the last of the pre-verbal—on locomotion, vision, spatial reasoning; on our hands' experience with bounded objects—is now extended to the currently dominant approach to philosophy, the Anglo-American analytic tradition, with some gestures to its rival, postmodernism.

Unless you insisted on carrying it around, you might not notice this is a brick of a book, topping six hundred pages. With a few honorable exceptions—at times, a surfeit of detail and examples bogs it down—it is a delightful companion and a compelling read, much helped by a loud and clear organization. The first part presents the main components of the challenge that the model of the embodied mind poses to the Western philosophical tradition, treating topics such as the cognitive unconscious, embodied realism, and the relation of metaphor to truth. Part Two outlines the perspective of cognitive science on basic philosophical ideas such as time, causation, the mind, the self, and morality. The third part examines the history of philosophy in the light of metaphor theory—a selective exploration focused on analytic philosophy and its roots. In the final part, the authors briefly set out their own vision of an embodied philosophy.

own vision of an embodied philosophy. *Philosophy In the Flesh* may be characterized as a sustained act of constructive deconstruction. It shares with deconstruction a program as old as philosophy itself: that of examining our implicit assumptions. Unlike the postmodern critics de Man and Derrida, however, Lakoff and Johnson do not view the contradictions they discern within the body of Western philosophical thinking as a terminally destructive *miseen-abîme* that robs language itself of its power of signification. While they argue that Anglo-American analytic philosophy's insistence on nonfigurative language is itself enabled by an unconscious act of figuration, this contradiction is in their view a manageable and corrigible failure, requiring nothing but a healthy respect for empirical evidence and a dose of clear thinking. In this sense, *Philosophy In the Flesh* situates itself in an optimistic mediating position between postmodernism and analytic philosophy.

What enables this act of mediation between analytic rigor and figurative ambiguity is the notion that the springs of abstract thought lie in the brain's primary role of moving the body and sensing the environment. In the first section, they argue that our evolutionary history has given us "basic-level concepts" such as color, spatial relations, and force dynamics. These form the basis of philosophical ideas:

Our brains are structured so as to project activation patterns from sensorimotor areas to higher cortical areas. These constitute what we have called *primary metaphors*. Projection of this kind allow us to conceptualize abstract concepts on the basis of inferential patterns used in sensorimotor processes that are directly tied to the body. (p. 77)

Consider the example of human relationships. Through an act of conflation reminiscent of Lockean associationism, the child's experience of physical contact in caring relationships allows it to conceptualize these as "warm" and "close"—primary metaphors that appear in early speech.

This theory of metaphor is crucially also a theory of reason: "The main function of conceptual metaphor is to project inference patterns from one conceptual domain onto another. The result is that conceptual metaphor allows us to reason about the target domain in a way that we otherwise would not" (p. 82). This is a view of reason hardly recognizable from its classical or enlightenment formulation, and the philosophical entailments are dramatic. If inferential logic can be traced to sensorimotor systems, it follows that reason itself is embodied, bearing the stamp of its specific origins. The multiplicity of such systems creates a multiplicity of reasons, each ordered by its source domain.

The embodied basis of cognition has a related and still more radical entailment: there can be no single truth, even of a local kind; instead, truth is irreducibly relative to perspective. We can describe "green" as a neural phenomenon, for instance, or as a subjective experience of perception, but "there is no perspective that is neutral between these levels," there is no "one consistent, level-independent truth" (p. 105). The result is a pragmatic metaphysical pluralism: "What we mean by 'real' is what we need to posit conceptually in order to . . . function successfully to survive, to achieve ends, and to arrive at workable

understandings of the situations we are in" (p. 109). Our basic concepts and their metaphorical projections are neither indisputable nor absolute truths, but they are potentially just the kind of truths we need: human truths, unfolding in the development of the child, built into our bodies over evolutionary time, elaborated by cultural ingenuity and individual initiative.

This is a relativist and skeptical vision, yet it is a skepticism that does not run away with itself. Ideas do not lose their validity because they are figurative. Truth is not negated; language does not lapse into incoherence; morality is not left floating on thin air. On the contrary, embodied philosophy grounds truth, although—in a contemporary version of the skeptic's adage that man is the measure of all things—it grounds it in ourselves rather than in transcendent reality. Evolution provides the pragmatic link that makes this construction non-destructive: truth is what works *for us*, because we are human beings living on this planet Earth. The popular conviction that the cognition of aliens will be compatible with ours is rendered highly implausible. While our truths are not arbitrary, they are nevertheless idiosyncratically ours.

The impressive breadth of Lakoff and Johnson's research program is regrettably not fully reflected in the work they reference, which relies heavily on a close-knit group of collaborators. It is a weakness of the book that it does not more broadly tap into the large body of research into basic concepts, such as Spelke and Hermer's work on object perception,<sup>1</sup> Wynn's on numeracy,<sup>2</sup> and Hatano and Inagaki's on natural kinds,<sup>3</sup> to name a few examples from a large and vital field of research. Lakoff and Johnson's evidence remains largely linguistic, a methodological decision that—as I return to in a moment—is not unproblematic.

In the second section, Lakoff and Johnson present their inquiry into basic philosophical ideas—broad concepts we rely on in daily life. Their analyses are delightful and frequently illuminating. Time, they convincingly argue, is impossible to conceptualize without metaphor. The self is figured through the projection of inferences from a variety of source domains, giving rise to contradictory conceptions. A brilliant section on morality covers the canvas from basic moral concepts to politics. There is a lucidity in their best moments that is startling, a quiet elegance in following the entailments of the anatomy of metaphor into common beliefs, philosophical ideas, and political practice. The red thread that runs through the analysis is that human beings draw on a multiplicity of basic conceptual domains to think about abstract ideas. The resulting projections map the inference patterns of the embodied source domain onto the abstract thought and ensure that our most speculative and airy cogitations remain grounded in the body.

Starting with the Ionian philosophers, the third section gives us a whirlwind tour of the universes of metaphors that inform the metaphysics of Plato and Aristotle, Descartes and Kant. The weight of scholarship in this area makes it most contentious: can Descartes' philosophy be understood as a series of entailments flowing from a few basic metaphors of vision? Was Kant in his moral reasoning held prisoner to the logic of his source domains, such as that of the strict father? It is hard to feel that Lakoff and Johnson do full justice to the complexity of the minds they engage with; on the other hand, they sketch out solid lines for fruitful future inquiry.

The heaviest artillery is reserved for the demolition of analytic philosophy, the chief polemical target of the book. In a lucid analysis, the very basis of formalist philosophy is attacked as the opposite of embodied cognition. Yet the savage elegance of the reduction of seemingly absurd doctrines such as Duhem's holism to a set of erroneous assumptions may not win many converts. The critique of analytic philosophy is so fundamental that there is little room for compromise. To meet the challenge of the philosophy of the flesh, the Anglo-American philosophical tradition would effectively have to dismantle itself.

*Philosophy In the Flesh* is an exciting work that testifies to a major ongoing intellectual endeavor. The project has gathered pace; the foundations are stronger and the entailments are being spelled out in new directions. Still, there are potentially serious weaknesses. Even as Lakoff and Johnson explicitly reject the notion that the structure of thought can be derived from that of language, they remain excessively reliant on linguistic evidence. This leaves them open to the objection that there may be significant differences between how we think about something and how we talk about it. Consider one of the examples of metaphorical thinking of causation: "The home run threw the crowd into a frenzy." Try to think of this particular kind of causation purely abstractly, they ask, without conceptualizing it in terms of forced movement: "We doubt that you can do it any more than we could" (p. 187).

In response to this example, let us slow down a moment and imagine sitting in the upper deck of Coors Field in Denver, facing southwest. In April, the sun is warm but the breeze still cool. As you look at the sky and the mountains, you suddenly hear the *smack* of bat connecting to ball. You turn just in time to see the Rockies' batter finish the swing with a beautiful follow-through, his body twisting. The crowd is hushed, sitting on the edge of their seats. We watch the ball sail over the upper deck and out of the stadium; people jump to their feet, flail their arms, and give out a huge yell, unable to contain their excitement.

If we allow ourselves to contemplate the subjective phenomenology of this scene instead of focusing on the linguistic formulation, it becomes much less plausible that our theories of mental causation, pace Lakoff and Johnson, are derived from force dynamics. We understand that the spectators get excited because they perceive something, realize others are also perceiving it, and interpret what they see in certain culturally complex terms. A gap opens up between the causal mechanisms activated in the interpretation of the phrase "The home run threw the crowd into a frenzy" and the causal mechanisms we employ to think about the event itself. This is not to suggest there is anything wrong with the authors' analysis. In order to make sense of the metaphor, it is necessary to think of the causal relations between the home run and the crowd's response in terms of force dynamics and spatial cognition. Yet it does not follow that these inferences carry over into what appears to be the mind's rich native format for thinking about mental causation: in this format, it clearly is not the case that the home run throws the crowd into a frenzy. The home run is not an entity, it does not throw anything, the crowd is not an object that can be thrown, and frenzy is not a location or a container. The metaphor evidently functions as a dramatic and efficient communicational cue, on the basis of which listeners or readers construct their own understanding. This understanding is not only significantly more complex than the utterance-we might say language underspecifies the simulation-but it contains a different set of implicit causal conceptions. To characterize these conceptions is a major and ongoing project of psychology; they are being captured in a burgeoning literature on what Whiten has called "mindreading,"<sup>4</sup> elaborated by Baron-Cohen into a battery of mechanisms that include intentionality detection, gazedirection detection, shared attention, and belief attribution.<sup>5</sup>

Any account that questions the reduction of all forms of reasoning about causation to the domain of force dynamics—the contenders are lined up in *Causal Cognition: A Multidisciplinary Debate*<sup>6</sup>—is faced with the massive collection of linguistic evidence that Lakoff and Johnson have assembled. It cannot be an accident that language makes such pervasive use of force dynamics to reason about causes, nor is it plausible that the mind is duplicating identical causal networks in several domains. At the same time, the project of grounding abstract thought in our embodied existence invites a broader engagement with non-linguistic evidence.

This is an important book. It seeks to unify what the authors call "an empirically responsible cognitive science" with an understanding of certain persistent themes within the Western philosophical tradition. The payoff is dramatic, even as the project is clearly partial and incomplete. In the end, the project of grasping philosophy by the root leaves a tentatively weeded garden with a multiplicity of vibrant plants, grounded in our own physicality rather than floating in a disembodied world of intelligible forms. Its challenge to philosophy presents a magnificent opportunity to strike out in a new direction.

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2. Karen Wynn, "Evidence Against Empiricist Accounts of the Origins of Mathematical Knowledge," *Mind and Language* 7 (1992): 315–32.

3. Giyoo Hatano and Kayoko Inagaki, "Young Children's Naive Theory of Biology," *Cognition* 50 (1994): 171–88.

4. Natural Theories of Mind: Evolution, Development, and Simulation of Everyday Mindreading, ed. Andrew Whiten (Cambridge: Basil Blackwell, 1991).

5. Simon Baron-Cohen, *Mindblindness: An Essay on Autism and Theory of Mind* (Cambridge: MIT Press, 1995). For a discussion, see *Theories of Theories of Mind*, ed. Peter Carruthers and Peter K. Smith (New York: Cambridge University Press, 1996).

6. *Causal Cognition: A Multidisciplinary Debate*, ed. Dan Sperber, David Premack, and Ann James Premack (New York: Oxford University Press, 1995).