Lakoff, George and Johnson, Mark. *Philosophy in the Flesh: The Embodied Mind and its Challenge to Western Thought*. New York: Basic Books, 1999. Cloth, $30.00 xiv + 624 pp.—*Philosophy in the Flesh* is a small, important book wrapped inside a large self-important one. It begins by announcing three major "findings" of cognitive science: "The mind is inherently embodied. Thought is mostly unconscious. Abstract concepts are largely metaphorical." which between them bring to an end "more than two millennia of *a priori* philosophical speculation." (p. 3) To help mitigate this mortal blow to Western Thought, Lakoff and Johnson helpfully propose, from empirical foundations, to build philosophy anew. The findings they detail are of extreme importance, the arguments in support of them are challenging, innovative, and largely convincing, and their willingness to explicate their implications is laudable. But their explicit and oft-repeated expectation that the work of cognitive scientists will deeply change the practice of philosophy, "require our culture to abandon some of its deepest philosophical assumptions," (p. 3) and become "one of our most profound resources for self knowledge" (p. 551) is based on a questionable understanding of the foundations of philosophy, an apparently limited appreciation of the breadth and diversity of Western Thought, and, more importantly, on a vision of the role of science in culture that is at best somewhat naïve, and at worst a little dangerous.

The shortest, but finest part of the book is spent explaining and arguing for the three theses above. According to Lakoff and Johnson, the mind is inherently embodied not just because all its processes must, *ex hypothesi*, be neurally instantiated, but because perceptual and motor systems play a foundational role in concept definition and in rational inference. Color concepts, for instance, are characterized by a "center-periphery" structure, with certain colors being "focal" and others conceptualized in terms of the focal hue. In the category "red" there is a central red, as well as peripheral hues tending toward the purple, pink, and orange. "The center-periphery structure . . . is a result of the neural response curves for color in our brains. Focal hues correspond to frequencies of maximal neural response," with the peripheral structure being determined by the overall shape of the neural response curve. (p. 24) And not just the particulars of neural structure, but the body as a whole, can play an important role in the determination of conceptual content. Consider the concept of an altar: no set of objective features defines an altar, but rather the altar’s place in a complex web of religious, social, institutional and comportmental relations. The proper way to approach an altar, and the sorts of behavior that are appropriate near and towards an altar, both define and demonstrate what it is.

How this impacts rational inference is a bit harder to explain, but involves, at least partly, the thesis that abstract concepts are largely metaphorical—that certain domains of concepts "map onto" other domains, and in so doing inherit the inferential structure of the original domain. For instance, the concept of a purpose maps onto the concept of a destination (Purposes are Destinations) and therefore reasoning about purposes naturally follows the same paths. We imagine a goal as being at some place ahead of us, and employ strategies for attaining it analogous to those we might use on a journey to a place.
We plan a route, imagine obstacles, and set landmarks to track our progress. In this way, our thinking about purposes (and about time, and states, and change, and many other things besides) is rooted in our thinking about space. It should come as no surprise to anyone that our concepts of space—up, down, forward, back, on and in—are deeply tied to our bodily orientation to, and our physical movement in the world. According to Lakoff and Johnson, every domain which maps onto these basic spatial concepts (think of an upright person, the head of an organization, facing the future, being on top of things) thereby inherits a kind of reasoning—a sense of how concepts connect and flow—which has its origin in, and retains the structure of, our bodily coping with space.

As might be expected from the authors of *Metaphors We Live By*, the material on metaphor and its role in shaping our understanding of the world is by far the best in the book. Indeed, their short excursus on the complex metaphor A Purposeful Life Is A Journey should probably be required reading for everybody in the country. They advise, "If you have any doubt that you think metaphorically or that a culture’s metaphors affect your life, take a good look at the details of this metaphor . . . . As you do so, recall that there are cultures around the world in which this metaphor does not exist; in those cultures people just live their lives, and the very idea of being without direction or missing the boat, of being held back or getting bogged down in life, would make no sense." (p. 63) It is in these early chapters where they come closest to their ideal of providing "deep insight into who we are, how we experience our world, and how we ought to live." (p. 551) But unfortunately the bulk of the book does not live up to the promise of its beginnings.

As part of their attempt to position cognitive science as a resource for self-knowledge, the authors offer a series of long analytical chapters on deep and important cultural determinants like Time, the Self, and Morality. They hope to get us to "abandon" our "deepest philosophical assumptions" by demonstrating that these assumptions rest not on objective truths or facts about the world, but rather on the same sorts of metaphorical mappings (e.g. Morality as Posture) mentioned above. As fun and interesting as these analyses are, they are marked by an anthropological tone and distance that stands in the way of the authors’ purpose. Such accounts can become resources for self-knowledge (in the deep sense that the authors intend) only if we substitute our internal understanding of the cultural practices we are engaged in for the external, "scientific" accounts of those same activities offered here. The substitution may allow one to escape a given perspective or practice, but will not resolve problems which arise within it. If someone suspects that a business deal may be fishy, what he wants to know is whether it is fishy; it is no help to realize that he is employing an instance of the Morality is Purity mapping. Thus, although I do not doubt that their account will have some influence among those for whom the external perspective is the natural one, those who dwell, however thoughtfully, in the cultural interior will be hard pressed to find enlightenment here.

There are other reasons to question the authors’ overall project. As they are well aware, any theory that focuses mainly on concepts eventually has to give an account of whether and how those concepts answer to the world. Although they spend a great deal of time developing an "embodied realism," it is nothing like acceptable in its current formulation.
Perhaps because of the imagined audience for this book, they fail to treat the issues with the delicacy and precision they require (for instance, within three pages they discuss whether "time in itself is inherently resource-like" (p. 165), deny that one can talk about time in itself at all since "we create the concept of time" (p. 167), and treat history as a real aspect of the world.) Although I’m sure these apparent discrepancies can be resolved, my sense is that there is more at stake than sloppy semantics. To put the problem in their own terms, they never fully face the metaphor of cognitive confinement (we are "inside" our concepts looking out) that plays such a large role in their book. Without a coherent understanding of this metaphor and whether it has any philosophical legitimacy, increased precision would be a superficial improvement. Combined with, indeed being in part caused by, their failure to pay much attention to the best work in the philosophy of mind and body (their very strange and programmatic chapters on the history of philosophy do not constitute philosophical attention), the lack of a consistent metaphysical account of their central theses means that their project to re-fashion philosophy simply does not warrant the attention due the theses themselves.