Pluralism and the Mind: Consciousness, Worldviews, and the Limits of Science by Matthew Colborn. Imprint Academic, 2011. 300 pp. $34.90 (paperback). ISBN 9781845402211.

Can't we all just get along?
—Attributed to Rodney King following his beating by Los Angeles police, May 1, 1991

Matthew Colborn's book on what might seem a topic radically unrelated to the above quote nevertheless might have used Rodney King's much-cited comment as its theme. In the areas of cognitive science and philosophy of mind, there is plenty of conceptual head-bashing going on as multiple views contend. The conflict is more acute than in typical disputes among philosophical positions. Where science stands in relation to this conflict of ideas lies in the advent of neuroscience transformed by the marriage of functional magnetic resonance imaging (fMRI) with the computer model of the brain. By finding that the activity of more or less discrete areas of the brain can be correlated with more or less imprecisely defined mental functions, and by assuming that the brain is a digital machine, the conclusion is drawn that the mind, self, and consciousness are now entirely within the purview of neuroscience. It follows that all other theories of the mind, and especially theories that appeal to spheres inaccessible to the physical sciences, are consigned to the trash heap. As a result, intentionality (meaning) must be cast out along with illusions such as freedom of will and spiritual aspiration.

Now along comes Matthew Colborn to resolve the issue, in at least a tentative manner. His thesis in *Pluralism and the Mind* is that to one extent or another all these conflicting theories must have something to offer. None is to be wholly denied. Therefore, "can't we all just get along?" What Colborn seeks to do is evaluate the merits of all sides and then suggest a kind of co-existence. In so doing he preludes his viewpoint with a carefully detailed account of the historical background of the differing theories (Chapters 1–4), philosophical considerations of ontology, epistemology, and concepts of causality (Chapters 5–7), and the limitations of physicalism (Chapters 8–10). Thus his book becomes a kind of well-tailored tutorial on the entire landscape. Eventually he comes to the question of a pluralistic viewpoint (Chapters 11–15), where in this reader's opinion to some degree he undermines his own view.

Neuroscientists advocating the theory of mind–brain identity (MBI) have often been accused of operating within an outmoded set of ideas such as the classic conceptions of causality. For example, W. T. Rockwell severely criticizes the theory that brain states "cause" mental states on

the grounds that this utilizes outmoded views of atomistic causality and intrinsic causal powers (Rockwell 2007:54–57). Raymond Tallis echoes this objection on the basis that the MBI theory fails to take into account the entirety of the biological system that is active in relation to mental activity (Tallis 2011:83). Colborn addresses this issue in some detail by bringing up the question of whether physical notions of causality can be applicable in the case of living organisms.

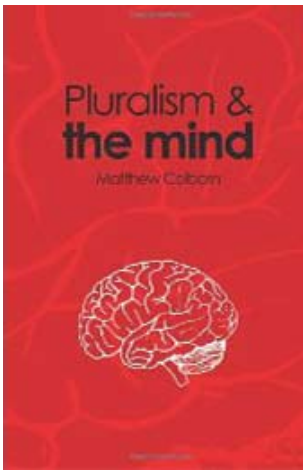
> A central question is whether organisms possess a wider or different kind of causal agency than do inanimate objects . . . active self-maintenance and completion [of organisms is] described as . . . autopoieses. . . . Machines, by contrast, are allopoietic systems. These are not self-producing or autonomous but are built from individual components. (pp. 106–107)

Focusing on these and other central problems, Colborn delivers a comprehensive review. His book does not neglect even areas of thought that are sometimes ignored in such discussions, such as the possible contributions of Buddhist philosophy (p. 192 ff.).

Particularly of significance may be Colborn's account of the basic issue of the relation of theoretical science to reality itself. The situation here is eerily similar to that raised by advocates of creationism who condemn evolutionary theory as "just a theory." In this view, science does not describe reality, but just concocts "theories." Evolutionary scientists may take a hard line, i.e. to assert that evolution is a fact, not a theory (in the sense of whatever one happens to dream up). But on the other hand there is the Pragmatist view of scientific theory as either a continual approximation to reality, or justified simply "because it works." Colborn cites Nancy Cartwright on this most fundamental concern.

> The reductionist programme suggests that everything should . . . be reducible to the "laws" of physics on the bottom tier, as psychology "should" be reducible to biology which should be reducible to chemistry which should be reducible to physics. . . . Cartwright rejects this picture of science, including the notion that there is a universal cover of law, instead adopting Neurath's picture of a patchwork of appropriate domains. (p. 96, citing Cartwright 1999)

This remedial view recalls the Pragmatism of Dewey, who also cites Neurath and at least 70 years ago severely criticized the syndrome of "selective preference" among scientists—the assigning of all reality to the procedures and findings of any one particular set of theories associated with any one particular science: in short, an illegitimate spilling over of science



into metaphysics at the expense of the full range of perspectives found in the experienced world (Dewey 1928). Proposals such as this—essentially related to the view of science found in the Pragmatism of Peirce, Dewey, and James—are certainly the wellspring for the pluralistic remedy proposed by Colborn. They are also ones that have essentially no existence within the circles of MBI theorists.

The journey Colborn sets out for the reader takes us through key issues such as this, including the question of the nature of memory (p. 168), the validity of "folk psychology" (p. 182), and the elimination of telic factors in biology (p. 197 ff.). This provides a picture of the multiple ramifications springing from the claim that neuroscience has co-opted all other explanations of the fundamental nature of the human being.

So is this the proper role for science? Is neuroscience the final arbiter of all human questions? Colborn generously does not claim to have reached any "firm conclusions," but he feels that from the broad perspective he has painted "a few comments are in order" (p. 212).

> A pluralistic option would be to resist the adoption of a "universal" theory at all . . . bits and pieces of both mainstream and heterodox theories may well prove useful for deepening our understanding.

But this brief nod to a pluralistic solution is not at all Colborn's final assessment. In his concluding chapter he engages in a more philosophically (and scientifically) satisfying analysis. Like any philosopher worth his or her salt, Colborn now asks the *necessary questions* and seeks at least tentatively to answer them.

1. *Could* we construct a one-size-fits-all theory of consciousness?
2. *Should* we construct such a theory to the exclusion of others?

Colborn's answer to the first question is: Yes, but possibly at an unacceptable cost. What he actually appears to be saying is that such a theory would not satisfy the overall scientific demand for adequate explanation of all the phenomena in question, but instead would "work" only in the sense that the range of the explained phenomena must be severely limited.

> The short answer to question (1) is probably affirmative . . . provided one is willing to reduce "consciousness" to functions, objects, "information-processing," or maybe novel physical processes, and provided one is willing to actively suppress or to subsume alternative models and/or modes of knowing.

What Colborn is diplomatically saying is that the answer to (1) is simply *no* on the grounds that such a theory is unacceptably related to the testimony of experience. This conclusion becomes more and more inevitable as one moves through the course of his insightful penetration of problems that arise within single-focus theories and in contrast to the multiplicity of counter-theories and issues. Assuming Colborn is correct in his assessment of (1), far more interesting is his discussion of question (2).

As far back as his Chapter 11, Colborn touched upon the question of an ethical and even perhaps *moral* issue surrounding the impulse to turn all reality over to a single theoretical viewpoint. There he cited Feyerabend.

> Feyerabend also advanced arguments for the primacy of everyday experience, and held that it was possible to dissent from a scientific view if one felt that it diverged significantly from one's own personal experiences of the world. This may be necessary, for example, if one finds the "objective" world promulgated in the name of science *dehumanizing*. (p. 182, citing Feyerabend 1978 [my italics])

Here in his final chapter he questions

> whether the supremacy of one faction would be either good for science or good for the populace at large, who . . . will also have to live with the ramifications of a predominant theory. (p. 267)

There is something more here than simply saying that any point of view, no matter how whimsical, is equally "good" or just saying that the domination of a particular science, no matter how functionally useful, is "bad" per se. Lurking beneath this is a more uncomfortable observation—one which Raymond Tallis did dare to articulate in his recent *Aping Mankind*. There Tallis states outright his opinion that domination of the human self-image by MBI theory and the computer model of the brain is politically, socially, and psychologically dangerous (Tallis 2011).

Throughout his ostensible advocacy of mediation and pluralism, Colborn engages a style which I have called "generous." Yet more than once, as in the quote from Feyerabend above, ideas emerge which suggest that an absolute pluralism in the absence of ethical and moral considerations is going too far. In his Chapter 13 on the topic of free will, Colborn cites

neuroscientist Michael Gazzaniga's book *The Ethical Brain*, reporting Gazzaniga as suggesting legal reform based on brain science (Gazzaniga 2005).

> If the legal system was reformed as Gazzaniga and others suggest, this would place a significant amount of power into the hands of the consultant neuroscientists and simultaneously reduce the power of the "lay person" (who is, after all, effectively an—often malprogrammed—robot in these conceptions). This would be part of the wider trend of the appropriation of mental health management from private individuals to various experts. (p. 230)

Responding to these and similar concerns, Colborn strikes at the very heart of the matter.

> The models and ideologies that issue from institutional science form part of a hierarchical and bureaucratic society that . . . often favors personal uniformity and internal cohesion over diversity. . . . I personally find it very suspicious how well the vision of the human produced by cognitive science fits with the agenda of a consumer society. (p. 280)

So for Colborn, in the last analysis, pluralism is a good thing; but it must not be an uncritical pluralism that says "anything goes" but a critical pluralism: a pluralism of ideas tempered by an understanding of good and evil and a sense of the primacy of human experience.

Stan V. McDaniel
Professor of Philosophy Emeritus, Sonoma State University

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