
Much of the recent interest in pragmatism has been focused on social, political, cultural, and moral issues. The insights that Peirce, James, Mead, and Dewey have for us today regarding such questions are of obvious value. However, there has not been a remotely parallel interest in the classical pragmatists when it comes to the impressive amount of new research in the mind and life sciences. Indeed within recent philosophical writings on cognitive neurobiology, one can count on one hand the number of pragmatist philosophers who are taking seriously and exploring what the classical pragmatists may have to contribute. Jay Schulkin is a welcome contributor to these discussions. He comes to them, however, as a neuroscientist, not a philosopher on the sidelines or in the armchair. In *Cognitive Adaptation*, Schulkin not only continues his career long interest in both philosophy and science but achieves something all too rare: a humanistic work that blends our best scientific knowledge about mind and life with a poetic sensibility not found among many of today’s philosophers or scientists for that matter.

Schulkin’s central project is to show that science and the humanities – their two cultures or their respective conceptual objects, nature and culture – are continuous with one another. Through his vast background in psychobiology, cognitive and behavioral neuroscience, and classical pragmatism, Schulkin moves with ease from scientist to philosopher to poet and back. The key distinction he makes for this project is that between agency and animacy. Agency speaks to Schulkin’s roots in the humanities. Culture, if it is concerned with anything, is concerned with the recognition that people have beliefs, desires, intentions – and above all a rich experiential life. Animacy speaks to Schulkin’s roots in the sciences. It serves to emphasize that we humans are not just personal agents but natural animals as well. This distinction does significant philosophical work for Schulkin, particularly as he ties it both to evolution and the major insights of the classical pragmatists.

Throughout the book, Schulkin fluently draws on the resources of the classical pragmatists, especially their emphasis on the nature of inquiry as self-corrective. The introduction of the book provides a nice survey to Schulkin’s position. He starts by noting that we humans are social creatures who seek to
share as well as exploit one another’s experiences – often to create new, more meaningful ones. This social transaction is, for Schulkin, both a cognitive adaptation and an evolutionary achievement. In the terms of agency and animacy, Schulkin casts the achievement as one “of distinguishing animate from inanimate objects and then recognizing the beliefs and desires of others and their personal histories” (2). The transition from animacy to agency, Schulkin argues, occurs when nervous systems evolve not only to detect motion – an enabling condition for animacy – but to interpret that motion as well – the mark of agency. Schulkin then ties this evolutionary story to contemporary neuroscientific research on autism. The autistic person is one who does not share in the neural hardwiring necessary for looking for both animacy and agency. Schulkin concludes this introduction with a valuable discussion of the nature of inquiry in relation to doubt and the precariousness of the world. In light of his discussion of autism, Schulkin, whether he realizes it or not, presents an interesting project for further inquiry: the nature of inquiry in autistic persons.

Chapter one, “Cognitive Adaptation, Objects, and Inquiry,” continues the undermining of Cartesianism by pragmatism introduced in the introduction. The animal nature of humans is employed in this endeavor by Schulkin to demonstrate the origins of categorical schemes in biology and not as something strictly impressed upon the developing child by the external culture. Rather the basic categories of mind – notably the distinctions between animate/inanimate and between agency/animacy – are understood as developing innately within a child yet nurtured by the cultural interactions a child has with other humans. Schulkin’s recognition of this continuity between nature and culture in the behavioral and cognitive development of children serves as a platform for his recognition of another cognitive adaptation and evolutionary achievement: language and the symbolic meaning it endows on the interactions of human organisms with each other and their environments. Schulkin notes, rightly, that “language changes everything in the diverse cognitive systems that are at work” (25). The linguistic empowerment of symbolic meaning and manipulation is an evolutionary game changer. Schulkin argues that “human understanding lies in the ability to secure stability and security in representing events” (33–34) – an ability that requires language not only as it improves upon the cognitive adaptation of distinguishing between animate and inanimate things but as it modifies the ability to take the intentional stance making possible the personal and cultural histories used to explain why some things move.

In the second chapter, “The Human Situation: Uncertainty and Adaptation,” Schulkin explores the human context of inquiry. Beginning with the biological, Schulkin introduces recent neuroscientific findings that illustrate that the brain not only evolved to solve problems but has a direct correlation in size and structure to the level of sociability. The greater size of the neocortex goes hand-in-hand with richer and larger social interactions. This level of cognitive and social complexity underlies, in part, human inquiry as the subtleties of human social interaction provide both opportunities for greater