Mary Midgley
The Solitary Self: Darwin and the Selfish Gene.
Durham: Acumen Publishing 2010.
154 pages
US$19.95 (paper ISBN 978-1-84465-253-2)

Nelson Rivera
The Earth is Our Home: Mary Midgley's Reconstruction of Evolution and Its Meanings.
Charlottesville, VA: Imprint Academic 2010
250 pages
US$29.90 (paper ISBN 978-1-84540-212-9)

When Charles Darwin published *The Origin of Species* in 1859, he refrained from publishing his thoughts on the evolution of the human species fearing its controversial nature. 150 years later, evolution remains problematic, especially in the United States. On January 31st 2012, the Indiana Senate approved Senate Bill 89, which allows the teaching of creationism alongside evolution in science classes in public schools. In religious circles, despite accepting evolution as fact, both Popes John Paul II and Benedict XVI have maintained that evolutionary science cannot explain the origins of life, of sentience, or of human beings.

In addition, scientists debate the nature and meaning of evolution. Since 1975, evolutionary psychology has been 'seriously influential' in scientific circles (18). Evolutionary psychology traces its roots to E. O. Wilson's *Sociobiology* (1975) and *On Human Nature* (1978) and to Richard Dawkins' *The Selfish Gene* (1976). Evolutionary psychologists defend a determinist understanding of evolution and seek to find the explanation of all human behavior in psychological mechanisms that evolved during the Pleistocene age. Inevitably, evolutionary psychologists reference Darwin's own words in their defense.

Since 1978, with the publication of *Beast and Man*, Mary Midgley has attacked the fallacies of evolutionary psychology, or what others term Darwinism'. Her ethology and understanding of science speaks directly to Wilson's theses. Midgley has continuously defended Darwin and evolution against its misappropriation by and the reductionism inherent in evolutionary psychology. *The Solitary Self* encapsulates her main arguments and addresses Dawkins particularly, and Nelson Rivera's *The Earth is Our Home* explains and defends Midgley's approach to evolution. Anyone working in evolutionary theory or in the field of human nature—biological, psychological, philosophical, or theological—would do well to pay attention to Midgley's work for it resolves many of the problems that arise from more sensational works.

Midgley titles *The Solitary Self* after the object of her argument—a lone self driven by biological directives to compete for scarce resources. The dominant myth of contemporary moral and sociological thought is that of a selfish egoism, more powerful

because backed by the authority of science. This myth of the selfish individual combines two forms of reductionism: social atomism, a belief in isolated individuals that enjoy society only unnaturally, and physical reductionism, which reduces the individual self to the isolated components of her body (3). Neither evolutionary theory nor Darwin supported such reductionism. Further, Midgley's account remains open to traditional metaphysics and theology (though she and Darwin are agnostic).

For Midgley, Darwin's insights into ethics have been neglected because of poor interpreters who have focused solely on Darwin's idea of natural selection and ignored his attempt to work out the evolution of a moral sense. Further, the individualism that characterizes his age caused people to see only what they wanted to see in Darwin's theory of natural selection. This individualism entailed that science involved looking only at the components of an entity rather than the entity itself. This view of science led to the wide acceptance of Dawkins' notion of the selfish gene, the idea that organisms are simple machines built for the reproduction of the gene. Finally, Midgley notes the role of dualism in this play: it allows, first, the separation and, then, the exorcism of the spirit from attempts to understand the whole of human life. Midgley's account, in contrast, remains open to the metaphysical and the religious.

Darwin contends that human beings do not fit into an egoistic or solitary picture. Midgley quotes Darwin: 'the moral sense is fundamentally identical with the social instincts' (25). Midgley shares with Darwin the view that the thesis of evolutionary psychology, viz., that the moral instincts arose out of selfishness, is absurd; individual organisms are not intelligent enough to pretend selflessness in the variety of situations required. Even Dawkins writes that human beings need not despair and can turn against their genes through 'enlightened self-interest' to overcome their inherent selfishness. In fact, in contrast to Dawkins' selfish gene, Midgley contends that recent science shows that empathy acts as a motive for our actions.

Midgley traces the powerful sway of individualism back to Thomas Hobbes' idea that people are selfish individuals who come together in society in order to more securely pursue their interests. Modern people believe that society and government are the enemies of the individual. Psychologists like R. D. Laing and Carl Rogers contended that individuals must break free from tradition and society in order to self-actualize. Economists 'defined rationality solely in terms of self interests' (39). The victory of Hobbesianism over the entirety of human life had help from the scientist Thomas Huxley. 'Struggle' in Darwin's usage could mean either fighting or cooperation to overcome some obstacle, but Huxley and others took it to mean only fighting. Dawkins' *The Selfish Gene* gave a stamp of scientific approval to these ideas: he uses the phrase 'nature red in tooth and claw' to mean fighting and death when the objects of his investigation—genes—do not bleed and have no teeth.

In contrast to enlightenment individualism, according to Midgley Darwin sought to understand human motivation, which meant understanding intelligence. Intelligence refers not simply to greater powers of calculation, but to an ability to understand and evaluate one's motives. Nietzsche too saw the way that intelligence and memory would

explain human motivation and cause conflict within individual human beings. Yet, unlike Darwin, Nietzsche embraced individualism and attacked the morality of custom and memory. In further contrast to enlightenment thinkers, Darwin noted that rationality needs the emotions: 'rationality is not just one of intellectual power or consistency but includes *aims*: desires and wishes that are recognizably human' (64, Midgley's emphasis).

Thus, for Midgley Aristotle was right about human reason: the only way to move human beings to action is through some practical end. Further, theory and practice cannot be separated in the way that David Hume and other modern thinkers pretend. Reasoning 'describes the process of bringing our conflicting motives together, weighing them and trying to combine them to the satisfaction of our whole being' (80). These motives are what Darwin called social instincts, that evolved during our biological history. The difference between human minds and other non-human animal minds is, then, one of degree, not of kind. This claim is exactly the sort of claim that worries people like the late John Paul II and the current pontiff, Benedict XVI. As Midgley notes, however, believing that we suddenly jumped from no inner life to the full and rich inner life of modern human beings 'makes no sense at all'. Midgley contends that when Darwin claimed that the social instincts are shared with the 'lower animals' he intended to show that human beings should not worry about their close ties to non-human animals. Simply because human beings share motivations with non-human animals does not mean that theology and spirituality are throwaways: 'A thing can be explained in as many different ways as there are different kinds of question that can be asked about it and these accounts do not clash' (90). Thus, scientism—the attempt to make all human knowledge into some kind of physical knowledge—reaches too far. Midgely quotes Darwin: 'This follows from the extreme difficulty, *or rather impossibility*, of conceiving this immense and wonderful universe, including man,…as the result of blind chance or necessity' (93).

No all-purpose theory can explain the entirety of the universe. Even the very level of matter already contains patterns that lead to the self-reorganization of matter and plays its own role in evolution. Midgley develops an account of materiality and evolution in order to claim that human conscious purposiveness represents just one form of directionality inherent in the universe. Things like acorns have purposes. Moreover, Midgley shows that, rather than ridding nature and evolution of values and purposes, Dawkins' selfish genes have purposes as well, just of a more sinister type. Midgley's views on matter/materiality echo the views of Aristotle and Thomas Aquinas on metaphysics and substantial change.

Social atomism arose at a time when people were trying to resist feudal forms of relationship that no longer worked. Hobbes, seeking some way out of the English civil wars, reduced the state's function to the protection of individuals. Trying to shock everyone out of their quietism, Hobbes' exposed real human selfishness, but he did so with a distorted picture of human reality. Biologically speaking, of course, Hobbes' war of all against all plays out in the violence higher apes show to members outside their groups. This violence, however, is a natural counterpart to the sociability that underlies

the friendships of groups' members. The way out, then, is to recognize that human beings aim, not simply at self-preservation, but at individual fulfillment.

In the end, Midgley believes each human being needs solitude, but they are not 'totally separate beings' (140). Behind the myth of economic competition that dominates present politics lies a more important idea: 'the centrality of independence in human life' (141). Later thinkers like Nietzsche and Ayn Rand trumpeted freedom above all other values. True independence, in contrast, requires that human beings act as whole persons. Such whole persons are material beings, and the only threat there is the reduction of matter—of nature—to lifeless, spiritless dead stuff, an idea which, hand-in-hand with individualism, has caused so much damage in the modern world.

The idea that human beings are home in the world gives Nelson Rivera the title of his book on Midgley's philosophy. In it, he seeks to show how evolutionary theory proves fruitful for philosophical and theological thought by examining Midgley's account of evolution and her attacks on neo-Darwinians. Divided into five chapters, *The Earth is Our Home* first situates Midgley in her specific philosophical and cultural world. Rivera then develops an account of those philosophical problems that concern Midgley. Rivera then recounts some of the problems that have arisen in the conflict between evolution and theology, and finely proposes a different way of thinking about that relationship by 'thinking from below'.

Followers of Midgley will appreciate Rivera's discussion of Midgley. He recounts, for instance, that Iris Murdoch influenced Midgley in her belief that the inner life of human beings matter. She seeks, further, to reveal the role of science in human understanding, recognizing that it cannot explain all of human life. This point proves central to Rivera's discussion, because he wants to argue against that kind of science that tries to explain everything from one or two simple scientific facts; such science is theologically motivated. Picking up on various themes in Midgley's work, Rivera contends that Midgley is needed today to provide an understanding of the myths that drive science and scientific thought.

One of these myths is evolution itself and how it can work as a religion. Evolution can 'speak of promise while [promising] salvation' (47). Midgley's concerns about evolution lead to questions about epistemology and morality. She attacks reductive humanism that not only denies dignity to non-human animals, but also pits human beings against nature till they dominate it. The mind-body problem makes thinking about how human beings fit into the world problematic. However, Rivera says, Midgley sees it as a problem of 'how we think' (56). The inner life of the person must be seen together with the body. Human beings need a humble humanism that shows their continuity with nature and gives proper respect to being rational and animal. Scientists capture this humble humanism with the notion of Gaia, 'the idea of life on earth as a self-sustaining natural system' (64). Further, Midgley believes that science and theology both have a place in understanding human beings. For Rivera, science contains a little bit of religion with its emphasis on simplicity and beauty in scientific explanation, and religion contains a little bit of science with its attempt to be systematic and seek truth. 'Science is not merely a

collection of facts but a value' (86) and, Midgley contends, it is necessary but not sufficient for understanding human beings and their world.

Rivera's book aims to convince the non-scientist of the importance of science as much as it aims to convince the scientist of science's limitations and the importance of theology as a discipline aimed at truth. His aim entails that his chapter on evolution lacks depth. It merely explains Darwin's theory for those who have never been exposed to it. Further, it takes up the task of showing why its status as 'theory' does not undermine evolution's claim to be science or to be true. This last point is necessary for those on the religious side, especially creationists, who claim that, because evolution is only a theory, it is not really true. Importantly, Rivera shows that natural selection did not constitute the only mechanism for evolution. He defends, further, a pluralistic approach to understanding evolution, one that goes beyond explaining evolution solely through genes.

Rivera's account of evolution sets him up to claim, following Midgley, that evolution and religion need not be at odds. Rather, Darwin's evolutionary theory shows that human beings belong down on earth. Further, Darwin remained open to religion and showed its importance for the development and perpetuation of moral principles. Darwin's opinion aside, many in the Victorian era saw his theory as anti-religious. Again, Wilson and Dawkins adopted this anti-religious interpretation as their own and erroneously traced it back to Darwin. The real question to ask is, however, 'Is the rejection of religion science?' The view that Midgley has attacked for decades requires its own faith—a faith in human powers and in science to create the better world of tomorrow. This faith highlights the fact that, despite the claim to complete objectivity, scientists have motivations that are not completely objective.

The claim to impartiality and complete objectivity has been used against religion. Rivera, then, turns to a discussion of whether evolution can help explain religion. Certainly, theorists can use evolution to explain not only the development of organisms, but also the development of cultures. However, following Midgley, Rivera contends that culture cannot be explained by the same methods and analysis as biology. Still, while evolution can say nothing about the meaning of life, evolution can revitalize religious examination into the meaning of God's creative activity and into the human relationship to the non-human natural world.

Theorists in general need, then, an epistemology of the world that includes the insights of Darwinian evolution. Rivera contends that theorists should model themselves after Midgley's thinking from below. This thinking involves a rejection of an empiricism that proves dogmatic by investigating all things in the universe as isolated entities. Nor must theorists fear finding purpose in nature. Rather, theorists must begin from the complexity of an entity as encountered in the world. Rivera sees here a parallel with theological argumentation. Karl Barth identified two ways of thinking theologically: from below, e.g., from scripture; or from above, e.g., where the nature of the thing remains 'partly beyond itself' (183). In short, by trying to think biology from above, scientists reduce biology to physics and think deductively. Doing so, according to Midgley, blinds scientists to insights and methods from other disciplines that could be more insightful.

Rather, Midgley proposes a methodology 'which requires that we judge the basics of human nature and cognition from an earthly perspective' (192). Such a methodology requires an attention for detail and a concern for the big picture.

Rivera concludes his book with reflections on the Christian attitude toward nature. While Christianity claims that God created all of nature, Midgley wonders whether this view has been influential. People like St. Francis of Assisi are truly unique in the Christian tradition. According to Rivera, Darwin's lasting contribution in Midgley's eyes is the way he united human beings with other animals, making 'earth our only true home' (204). We must approach the world with a sense of wonder. Midgley's contribution to this project consists in her rejection of mechanistic understandings of the world, her critique of anthropocentrism, and her down-to-earth epistemology.

The Solitary Self and *The Earth is Our Home* summarize much of Midgley's work. While Midgley touches clearly on religion, Rivera's book exposes Midgley's entire *oeuvre* to discover an openness to the validity of religious thought. Wilson, Dawkins, and other evolutionary psychologists will most likely continue to ignore Midgley's work. To do so now, however, is to imperil any citation they make of what Darwin said, would have said, or would have supported. Midgley presents passage after passage from Darwin to support her claims about Darwin's beliefs. These quotes would be handy to have around if someone were arguing with theists as well.

Rivera's subtitle, on the other hand, proves misleading. Someone picking up this book might expect to find a deeper analysis of Midgley's philosophical engagement with science. While Rivera covers that aspect, his real goal is to show that theists should learn from, rather than fear, evolution. His greatest contribution to an analysis of Midgley is what he has to say throughout about Midgley's thinking from the ground up. However, he could have strengthened his argument by bringing in Aristotle or, for theists, Thomas Aquinas. Midgley works within an Aristotelian paradigm of looking at the facts, thinking inductively, recognizing the importance of motives, and understanding that the animal nature of human beings proves necessary for understanding their inner life. Rivera either misses this point or never fully utilizes it.

Both Midgley and Rivera write in a style accessible to the educated non-academic, though that does not mean their arguments prove of interest only to non-academics. Midgley's work would fit nicely into an introductory philosophy course, a philosophy of biology course, or a human nature course and in courses on evolutionary theories in the sciences. Rivera's would be more at home in an introduction to philosophy or religion and science course.

Jeffery Nicholas
Providence College