

**Daniel R. DeNicola.** *Understanding Ignorance: The Surprising Impact of What We Don't Know.* MIT Press 2017. 264 pp. \$27.95 USD (Hardcover ISBN 9780262036443); \$17.95 USD (Paperback ISBN 9780262536035).

According to Daniel DeNicola, what is surprising about ignorance is that there is something to know about it. This will hardly be news to everyone, as feminists and critical theorists have been interested in ignorance for several decades, with seminal contributions by Charles Mills (*The Racial Contract*, Cornell Press 1997) and Nancy Tuana and Shannon Sullivan (*Race and Epistemologies of Ignorance*, SUNY Press 2007). But that work has thus far remained somewhat localized; DeNicola's call for closer attention to ignorance is an argument for ignorance to receive broader attention (yes, analytic epistemologists, I'm looking at you). The appeal for further inquiry that motivates this project clearly extends beyond what DeNicola accomplishes here, but the book itself is an effort to respond to that appeal and advance the study of ignorance.

I find it helpful to think of this work as a cartography of ignorance—my term, not his, but a term that reflects the way DeNicola maps the conceptual terrain of ignorance, charting both the location and edges of what is currently understood. Some of this mapping involves surveying work on ignorance in an almost encyclopedic manner, but significant portions of the text explore, juxtapose, and advance new ideas. There is a charming recursive feel to it; as DeNicola argues for the importance of exploring the pale between knowledge and ignorance generally, he is doing the same thing for what is known about ignorance itself. The term 'cartography' is also a nod to the four spatial metaphors that organize the structure of the book: ignorance as *place or state*, *boundary*, *limit*, and *horizon*. These metaphors aid the explicitly stated effort to appeal to an audience wider than professional philosophers. It is also the case that, as DeNicola notes, our descriptions of knowledge are often metaphorical, and our thinking of ignorance is equally so, in a way that bears exploration.

The discussion of ignorance through the metaphor of *place or state* begins with a nod to ignorance as the original state of humans at birth and proceeds through a striking and insightful analysis that juxtaposes Plato's allegory of the cave with the Garden of Eden myth. In Plato's Cave we find the familiar portrayal of ignorance as a state to be escaped, while the Garden of Eden portrays ignorance not as a 'predicament' but as a 'paradise' in which the loss of *ignorance* is equated with the loss of *innocence* (33). It is one of the most innovative moments of the book, and DeNicola sharply critiques the notion that ignorance is desirable insofar as it preserves a valuable type of innocence. He rejects innocence as a moral ideal, showing it to be a route to moral stuntedness for a fully-developed moral agent, while still acknowledging that it is appropriate to protect the innocence of those who have not yet morally matured. As an instance of DeNicola's range, this section, composed of two chapters, also includes a discussion of categories of ignorance made famous in a quote from Donald Rumsfeld—*known knowns*, *known unknowns*, and *unknown unknowns*—along with a fourth category of *unknown knowns*; a very brief discussion of self-ignorance; a truncated but lucid critique of skepticism, and an analysis of constructed places of ignorance in thought experiments, such as the prisoner's dilemma, John Rawls' original position, John Searle's Chinese room, Frank Jackson's 'Mary's Room', and Harry Frankfurt's locked door.

The second metaphor is that of boundary, especially that of knowledge as a map and/or knowledge as having borders and frontiers. George Lakoff's work on metaphor comes to mind in relation to this rich exploration of the language of ignorance. Here DeNicola suggests an inversion: it is natural to think about ignorance as what lies beyond the boundaries of knowledge—the edges of the map of what is known. But DeNicola suggests it is also possible to make progress in mapping

ignorance itself. This progress will likely be ineliminably incomplete, but it may still be progress nonetheless. As an example, DeNicola describes a fascinating example of an initiative led by Marlys Witte at the University of Arizona's College of Medicine to develop courses focusing on exploring medical ignorance. While it may seem odd to claim to describe what is unknown, charting ignorance can be especially useful for reframing questions, identifying research projects, and generating 'corrective humility' (69). DeNicola also distinguishes among various types of boundaries of knowledge, including natural/unconstructed ignorance and created/constructed ignorance that create distinct conditions for remedying ignorance (natural boundaries cannot be crossed, constructed ignorance cannot generally be eliminated by merely pointing out reasoning errors, some boundaries may serve important purposes, etc.). This section also includes a chapter on the ethics of ignorance, where DeNicola defends the view that in some circumstances we ought to recognize a defeasible right not to know. Furthermore, virtue epistemologists will find of interest his discussion of the relevance of ignorance to familiar virtues and vices, both epistemic and intellectual. DeNicola rejects the view that there may be virtues of ignorance, offering a detailed critique of Julia Driver's position that modesty is one such virtue. He locates the significance of ignorance for the virtues in knowledge-directed virtues where ignorance is significant, such as curiosity, discretion, trust, and intellectual humility.

The third metaphor is that of charting the limits of knowledge, where the primary difference between a limit and a boundary is that boundaries imply something on the other side and limits do not: 'a boundary ... implies that which it excludes, that which lies outside.... But when something has a limit, there is no intimation of what lies beyond except as a negativity' (137). Completion is a kind of metaphysical limit, as one can know only what is possible to know. Other limits arise from physical possibility; for instance, reading all books ever written is limited by availability of those books and the human lifespan. This discussion of limits also includes an inventory of ways that have been developed for dealing with ignorance. Here DeNicola describes rituals and recipes as ignorance-management tools, enabling the securing of certain ends even if it is unclear why these procedures in particular result in those ends. Like much of the book, the discussion of managing ignorance is reminiscent of a museum tour ('We begin our tour with psychological mechanisms for coping with ignorance. From there we will proceed to transformative experiences, eventually making our way to the second floor where you may peruse exhibits on techniques for dealing with ignorance of the future, such as making contracts and promises, buying insurance, and calculating probability ...'). But the tour is informative and thorough, reflecting the relevance of ignorance to many different aspects of society.

The fourth metaphor of a horizon draws attention to the ever shifting, affectively charged, perspectival features of the edges of our knowledge. It is no accident that the discussion of horizons is last, and one gets the sense that this final section is an attempt to encourage a bit of wanderlust. Here he addresses epistemic luck, how ignorance can be improved by gains in knowledge, and the positive contributions of ignorance to human life through inspiring curiosity, improvisation and creativity. The focus keeps returning to ways in which ignorance is beneficial, but the goal is not merely to harness ignorance to serve our ends. This chapter surveys responses to the situation of ignorance which DeNicola has detailed so extensively in the earlier chapters.

Given the taxonomic structure of the book, one might perhaps doubt that DeNicola has put forward an overarching argument, but that would be a mistake. I count at least two central theses that are developed and defended throughout the entire work. The first thesis has already been mentioned: that the study of ignorance is an important locus of epistemological inquiry. A brief epilogue to philosophers makes this goal clear and articulates a vision for broadening the field of contemporary

epistemology. But there is also a second thesis, more subtle but equally significant. Ignorance is a mixed bag of sobering liabilities and surprising assets. Ignorance can be damaging and dangerous, a cause of life-threatening and life-limiting errors. But can also be rational and productive, essential for privacy and trust, and generating wonder and creative exploration. How can one best live in this world of ineliminable, limiting, and yet sometimes fruitful ignorance? We must begin by knowing what we are up against; or better, by charting our ignorance about ignorance. But DeNicola also suggests that the proper response to our epistemic situation in this case is not quietism, nihilism, or radical skepticism. DeNicola's response is better understood as the thesis that the proper way forward is to cultivate a delicate balance of sober evaluation and optimistic pragmatism. We must continually evaluate both our available resources and our aims, learning how to flourish in spite of and sometimes because of our ignorance.

It is in this spirit that this book sets the tone for a rewarding inquiry into ignorance. It's a must-read for those working in the theory of knowledge and a comprehensive resource for anyone wondering what there is to know about ignorance.

**Sharon E. Mason**, University of Central Arkansas