

Book Reviews

Spatial Cognition, Spatial Perception. Edited by Francine L. Dolins and Robert W. Mitchell. New York: Cambridge University Press; 2010. 581 pp. US \$110.00 Hardcover. ISBN: 978-0521845052.

“Where am I? Where am I going? How do I get there?” These are the questions on the minds of *Spatial Cognition, Spatial Perception*’s authors. And since this reviewer has chosen to write his review on location in a remote and unfamiliar city while traveling for a conference, such questions are on my mind as well. As my enormous human prefrontal cortex and conveniently opposable thumbs allow me to navigate the mean streets of San Diego by staring intently at the GPS-enabled Google map on my iPhone, the desert ants, dolphins, and tamarin monkeys that are the subjects of the book have evolved somewhat different strategies for their own navigational needs.

Weighing in at 24 chapters and more than 500 pages of academic prose, *Spatial Cognition, Spatial Perception* isn’t exactly what most people might consider beach or airport reading. As noted in the introduction, it’s intended for “postgraduate students and researchers,” and as such may not appeal to the reader with a passing interest in human and animal spatial cognition. But for those looking for a volume to use in a class or researchers in a related field seeking a reference work, this work may be an appropriate addition to the bookshelf. The book’s writing is scholarly without being overly technical, which makes it useful for educated, yet not necessarily expert, readers.

Spatial Cognition, Spatial Perception is loosely organized into five sections focusing on animals’ representations of ex-

ternal space, the use of landmarks, evolutionary perspectives, body mapping, and a comparison between human and non-human primate spatial cognition. While the text discusses a good number of species, cognitive abilities, and research methodologies, there are also many topics that are left out. Additionally, the topics of some chapters are similar enough that their contents can be a touch redundant: for instance, the authors of chapters 21 and 22 each spend a fair bit of time reviewing the others’ work to provide context for their own. And while most topics in the general oeuvre of spatial cognition/perception are mentioned somewhere, they’re not all reviewed as comprehensively as one might hope. Different methods of spatial perception and navigation in various species is by far the topic that gets the most attention; if cohesiveness were the goal of this book, then the authors might have done well to focus solely on the comparative ethology of spatial cognition, which is an area of expertise for both of the volume’s editors.

Overall, *Spatial Cognition, Spatial Perception* is certainly replete with interesting topics written about competently by experts in their fields, but it doesn’t quite stand alone as a complete representation of the state of the field as one might expect of an introductory textbook or a longer encyclopedic reference work. It would, however, work perfectly well as the primary textbook of a “topics in” style graduate (or upper-level undergraduate) seminar or as one among several similarly styled volume’s on a researcher’s reference shelf.

Matthew R. Johnson
Yale University
Interdepartmental
Neuroscience Program