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Cognitive and linguistic aspects of geographic space: new perspectives on geographic information research edited by M Raubal, D M Mark, A U Frank; Springer, Heidelberg, 2013, 300 pages, €106.95 (\$129.00, £90.00), ISBN 978 3 642 34358 2

This book contains chapters based on presentations at the meeting "Las Navas 2010: Cognitive and Linguistic Aspects of Geographic Space", held 4–8 July at Las Navas del Marques in Avila Province, Spain (in a charming 'half castle, half palace'). The meeting was a follow-up to the longer meeting held on this theme at the same location in July 1990. The original meeting must have been something stimulating to attend (two weeks with Pylyshyn, Lakoff, and Cloud!), and it was definitely seminal for, among other reasons, spawning the biennial conference series COSIT, the "Conference On Spatial Information Theory" and, a few years later, the journal *Spatial Cognition and Computation* (both going strong to this day). The presentations at the 1990 meeting were the basis for an important book (Mark and Frank, 1991) with the same main title as this 2013 book. Several (but not all) authors are the same for both books. I believe the 2013 book is better, however, and I think it is better because so much new thought and new research have been done, and because so many prominent scholars in this field have learned so much (including about ideas and research already existing by 1990). Many of these scholars and their students have become the interdisciplinary (transdisciplinary?) creatures one could foresee emerging from the insights and interactions of the original meeting.

The present book clearly demonstrates that there is an interesting and coherent area of study known as geographic information science (GIScience) that is quite distinct from GISystems, and that includes the study of geographic cognition and language as one of its core undertakings. To be more precise, the book is about cognitive GIScience and GISudies, nowhere demonstrated more clearly in this book than in the final chapter—the most singular—that presents a qualitative analyses of acoustic space for artistic performance, demonstrated at the 2010 meeting by a partial rendition of the journey of Homer's Odysseus through spatialized sound (cool). Chapter 1 is the editors' informative overview, but most of the chapters successfully overview research concepts and accomplishments of the past twenty years and point to future research directions within the cognitive domain of GIScience. Frankly, when I sat down to consume this book, I was expecting more of an uncoordinated buffet than a harmonious prix fixe meal, but I was pleasantly surprised at how well most of the chapters go together stylistically and thematically, making the book more than the sum of its parts, like any fine meal, and unlike many edited collections.

The theme of this book and of this research community is nicely expressed by Kuhn in one of the book's strongest chapters as "an ontological undertaking: to formally define the meaning of qualitative terms in order to enable automated reasoning on them" (page 160). One could summarize this research field and this book's theme in terms of the "COSIT triangle", with vertices of (1) earth and environmental disciplines like geography, geology, and planning; (2) behavioral and cognitive science disciplines like psychology, anthropology, and linguistics; and (3) computational/informational disciplines like computer science, mathematics, and information science.

Yet a third way to understand the content of this book is to consider a fairly small and profound set of major research questions, each dealt with in multiple chapters:

- (1) How can we formalize human conceptions and reasoning about geographic phenomena, so we can implement them in information systems, both to make the systems work better for human users and to replace some of the tasks of human users?
- (2) What is the proper way to understand the relative roles of spatial, temporal, and thematic properties in studying geographic cognition and information, and how should they be understood to interrelate?

(3) What are the conceptual and practical implications for human cognition of modeling spatiotemporal information as quantitative versus qualitative; metric versus topological; precise versus coarse; point-based versus region-based; absolute versus relative; continuous versus discrete versus something in between; etc?

(4) How should we understand universal versus subgroup versus idiosyncratic human cognitive characteristics and implement that into information systems?

(5) What is the relationship of mind and language, not only conceptually and theoretically but methodologically? Do the title words “Cognitive” and “Linguistic” express one thing, two things, or something in between?

Finally, my colleagues among the authors and elsewhere would be disappointed if I did not say something critical about the book besides the banal truism that some chapters are not as good as others. Here it is: most of the chapters recognize the technological advancements in computer power, speed, memory, reasoning, affordability, networked interconnectedness, and general social pervasiveness; some even express a bit of technological ‘gaga-ness’ at these advances. But like the field of GIScience more generally, the chapters do not much recognize the pitfalls of these technological changes, except perhaps their uneven distribution among cultures and social classes. What about their threats to increase cultural homogeneity, impair spatial learning, produce spatial infantilism, deteriorate privacy, and do away with employment—in short, to act as substantial dehumanizing forces in our world?

Daniel R Montello

Department of Geography, University of California—Santa Barbara, Santa Barbara, CA 93106, USA

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City suburbs: placing suburbia in a post suburban world by A Mace; Routledge, Abingdon, Oxon, 2013, 196 pages, £105.00 cloth, £29.99 paper (\$170.00, \$47.95), ISBN: 978 0 415 52060 7, 978 0 415 52061 4

Alan Mace is a lecturer in urban planning studies at the London School of Economics; he has worked as a spatial planner, on community involvement in planning decisions, completed numerous comparative studies looking at policy responses to shrinking suburban areas, working in the suburbs of Manchester and Leipzig, and more generally, Tokyo and Norway, amongst other areas. He has published numerous articles on ageing suburbs, shrinking cities, delivering local plans, and working with communities, and in this most recent book *City Suburbs*, Mace focuses on “relational suburban spaces” with the explicit aim of looking at both the process of suburbanisation and the changing materialities of suburbs with the lived practice of “being suburban” (page 11).

The book begins with a forward that is comprised entirely of a conversation with Sir Peter Hall, esteemed town planner, urbanist, and geographer. Mace states that “in this book a case is made for the importance of studying the suburbs in a way that brings together structural economic forces and the experience and perspectives of people; something that Peter Hall achieved over his long career” (page 1). In doing so, Mace marks out his position as coming from and talking to a planning perspective, and aiming to find a middle ground between grand narratives and structured theorisation of place, aligned with more nuanced and fine-scale understanding of lived experience.

To do this, Mace invokes the work of Henri Lefebvre (2003) in his assertion that spaces should be understood as relational, and that suburbs should be seen as part of the a modern social project, meshing connections and relationships between history, form, and those lives within them. Mace uses Pierre Bourdieu’s concepts and framework of habitus, capital, and field to examine both the literature and his empirical evidence.

The book is comprised of eight chapters and is just short of 200 pages. Chapters 1–4, are review-like and the strength of the book. Mace reviews literature that deals directly with the suburbs as a topic and brings a multitude of issues together into a review that looks at examples from around the world. In all cases, Mace has the aim of showing how the development and changes to suburbs can be understood within a context of wider socioeconomic processes and, further, how ideologically informed governance can shape such spaces.