BOOK REVIEWS

THE METROPOLIS ERA. VOL. I, WORLD OF GIANT CITIES, edited by Mattei Dogan and John D. Kasadra. Newbury Park: CA. Sage Publications, 1988.

This is the first of two volumes exploring the emerging phenomenon of the world's giant cities. The second volume examines 10 giant cities, four in industrially advanced countries and the latter six in the context of the Third World. The first volume, employing a more comprehensive view of the subject, contains an introductory chapter, a cross-cultural description of giant cities as Maritime Gateways, ten review papers of the giant cities phenomena of the world's major urban regions: Western and Eastern Europe, North and South America, Africa, South East Asia, Mainland China and India, and two concluding overview manuscripts. The contributors include urban and political scientists, sociologists, geographers, and planners.

In spite of the fact that the editors seem to have "imposed" a series of guiding questions upon the contributors, the papers reveal considerable variety, a result of the authors' research philosophies, methodologies, styles, and, more importantly, the impact of the issue involved, the existence of previous research and its inherent value, and the availability basic information.

In this reviewer's opinion the most important guiding questions are:

1. What roles do giant cities play in the international, national and regional socio-economic systems?
2. What are the pathologies of these giant cities and giant city systems, and what are the future outlooks for the persistence of these pathologies?
3. What conclusions can be drawn about the future of giant cities and of giant city systems, and of the quality of life there?

The majority strengths of the volume are its "pluralistic," inter-disciplinary, and world-wide comprehensive approaches to the topic. These qualities make it a valuable reference for those who require well-digested descriptive information on the giant city system on a cross-cultural basis.

The most notable short-coming of the book is that the chapters are too descriptive, mostly lacking any real attempt to employ even the most simple analytical methodology; in several cases, professional "jargon" or terms are inappropriately used (examples are "primate city" on page 129 and "C.B.D." on page 229). In some papers, the presentation has been poorly edited.

Although all the papers contribute to the general knowledge of the giant city phenomenon, the following deserve more thorough attention: the editor's Introduction;

Kasarda's "Economic Restructuring and America's Urban Dilemma," Castell's "'High Technology and Urban Dynamics in the United States," Chan's "Giant Cities and the Urban Hierarchy in China," and Nagpaul's "India's Giant Cities." In contrast, the concluding chapters by Sach and Teune, although very promising in names, fail to build up their theses based on the valuable materials of the preceding descriptive chapters.

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RIVER ENGINEERING by Margaret S. Petersen. Englewood Cliffs, NJ, Prentice Hall, 1986, 580 pp.

The title of this book is similar to *Principles of River Engineering*," edited in 1979 by Jansen *et al.* The latter is a textbook and cannot be used as a guide for the planning of most river-related engineering works. However, *River Engineering* is almost singly devoted to the detailed description and method of construction, operation and maintenance of navigational river structures. Thus, it can be used as a handbook by practicing engineers working in government agencies, such as the U.S. Corps of Engineers.

The book has 14 chapters. The first six are rather short, and include a clear introduction that sets the scene with an interesting view of planning and design. Much of the material presented in the first few chapters too general for use by practicing engineers, or even as an introductory text for students. Perhaps the most disappointing part of the book is that which is devoted to sediment transport and river morphology, two topics that should have formed a modern, detailed base to which engineering works could relate. This, however, is not the case in *River Engineering*. The outdated treatment of river morphology is merely descriptive, whereas that of sediment transport lacks minimal information on the physics of sediment transport phenomena. At least the chapter that follows, measurement of streamflow and sediment, is more informative.

The backbone of this book is the navigational aspect of river engineering: stabilization and rectification of rivers, dredging, inland navigation, canalization, including tables and equations useful for actual riverwork design. These aspects comprise the bulk of the book, thereby shedding an informative light on the history of navigation-related engineering works in large U.S. rivers. The basic approach of the U.S. Corps of Engineers has been to view the river as a useful but wild animal that must be tamed. Hence, unbelievably large quantities of cement, rubble and boulders have been poured into rivers, with still larger volumes of sediment dredged out from them. Petersen's inside story of such river works is, perhaps, more detailed than previously presented in any single volume, but I find it amazing that no intensive evaluation or critique of the historic approach was attempted.

It is rewarding that the book incorporates several good sets of questions and appended answers. The reproduction quality of figures and tables is high, as expected