York and proceeding through the English and American periods in the remainder of the regions.

Part V is different from the other parts. Here the author examines the land division begun by the French and Spanish. Professor Price examines and explains the differences between the two systems and the resulting divisions and landscapes.

This book is imperative for those who wish to understand the origins of the contemporary landscape, and it certainly achieves its purpose of understanding early land division in a clear and concise manner. Key Words: *land division, metes and bounds, long lot, fee simple, township, town, cadastral.* **Robert E. Clark,** University of Northern Iowa.

Archaeology, Volcanism, and Remote Sensing in the Arenal Region, Costa Rica. PAYSON D. SHEETS and BRIAN R. McKEE, eds. Austin: University of Texas Press, 1994. viii, 350 pp., photos, maps, diags., index, and biblio. $45.00 cloth (ISBN 0-292-77667-5).

About 1800 BC, volcanic ash buried a small village in western Costa Rica. Preservation was unusually good for a wet-tropical, Mesoamerican environment, where "intact" archaeological sites are rare compared with highland contexts. Dubbed "Tronadora Vieja," this is one of the earliest sedentary villages known from the Mesoamerican lowlands, established before 2000 BC (calibrated dates). It was quite modest, with circular houses (5 to 8 m diameter) documented by post-molds and clean floors, rich in phosphates. Internal post patterns suggest room dividers or elevated platforms for domestic activities, below a conical, presumably thatched roof. Traces of hard mud and closely spaced, small and large posts suggest wattle and daub construction. Doorways faced east to the Arenal River valley, from a low promontory; caches of discarded cooking stones ("pot-boilers"), grinding stones, and hearths were found in front. Structures were about 20 m apart, with some small outbuildings (storage?) in between; nearby rectangular pits may represent burials. Maize cupules are adequately preserved but allow no identification of the variety; other plant remains represent noncultivated, economic plants, including the gourd-like *jícaro* and palm seeds (*pejibaye*). A considerable dependence on wild foods is suspected, but there is no bone preservation to round out a tentative dietary picture.

These excavations, including surveys and several digs, were part of a larger project (1984–1987, 1991) directed by Payson Sheets, with 16 other collaborators who contributed to this publication. For over 20 years, Sheets has directed his research to the impact of volcanism on prehistoric settlement. In Costa Rica the critical focus became El Arenal, a smaller strato-volcano of 1,630 m that accumulated an apron of ash far to the west over the last 3,800 years. Some 10 explosive eruptions have been verified, each depositing 5 to 20 cm of tephra. Each unit has a superposed, dark, acid organic paleosol (typic hydrandepts), reflecting rainforest vegetation and very high annual rainfalls. The earliest archaeological sites are from about 3500–3000 BC and are found within deep tropical soil sediments, predating the Arenal tephra; they represent a local version of Archaic food-gathering activities. The Tronadora "Phase" dates ca. 2000–500 BC and is marked by small, sedentary villages, with maize agriculture. The subsequent Arenal Phase, ca. 500 BC–600 AD, is notable for larger villages (similar in detail to Tronadora Viega) next to cemeteries on prominent ridges. Thereafter, population declined during the Silencio Phase (ca. 600–1300 AD), during which more scattered, small- to medium-sized villages were characteristic. Remote sensing indicated "linears" that proved to be deeply eroded footpaths, subsequently infilled with younger sediment. These footpaths trace out the direct networking of villages, cemeteries, springs, and other special-activity sites. Demographic decline continued during the Tilaran Phase (ca. 1300–1520 AD), with small hamlets widely dispersed across the countryside.

The key interest of the settlement history of this marginal, wet-tropical environment is that: (a) The site features and lithics indicate a strong element of continuity across five to eight millennia, with the botanical record (phytoliths, pollen, macrobotanicals) suggesting a continuing, heavy dependence on collected foods, as supported by stable isotope analyses on Silencio Phase skeletons; (b) the ceramics, their stylistic nuances, and a few lithic implements imply selective adaptation of outside information, primarily from the Nicoya region; (c) the botanical record indicates

considerable opening up of the rainforest into savanna-grass patches, especially during the peak population of the Arenal phase; (d) as in many other wet tropical lowlands of Central America, there was already a millennium of demographic decline before the Spanish intrusion; and (e) plinian eruptions, such as the one in 1968 that killed 64 people and numerous livestock in a 10 km^2 area, did not lead to widespread settlement retraction, presumably due to their limited effective range and a simple social organization with primarily utilitarian architecture. This contrasts with widespread prehistoric abandonments among more complex and less resilient societies after major eruptions in El Salvador or Panama. Nonetheless, the internal correlation of the two standard tephra and paleosol sequences of the Arenal area, and of the key sites against these, leaves something to be desired. This book is a highly interesting study with regard to long-term settlement histories. Key Words: *adaptation, volcanic hazards, Mesoamerica, paleobotany, population, prehistoric settlement.* **Karl W. Butzer,** University of Texas at Austin.

Beijing: The Nature and Planning of a Chinese Capital City. VICTOR F. S. SIT. New York and Chichester: John Wiley and Sons, xvi and 389 pp., maps, diags., tables, and biblio. $54.95 cloth (ISBN 0-471-94983-3).

The volume has two features that clearly distinguish it from other works on Chinese cities. First, almost all literature concerning Chinese cities in the past four decades has been focused on either traditional cities or cities developed since 1949. This volume appears to be the first to cover a span of 3,000 years and to link the origin of cities in neolithic times with the concept of the World City in the postindustrial period. The theme is the single city of Beijing, but Beijing also functions as a model city for China and exemplifies the general principles and dynamics of city development in China as a whole. Second, in the past 45 years or so, due to language differences and ideological barriers, the gap in our understanding of Chinese cities has increasingly widened. This important work, employing volumetrical collections of published literature and unpublished documents, has narrowed this gap significantly.

The book is organized in 13 chapters. The first four are arranged in chronological order of the city's evolution. The following eight chapters deal with topics of urban development, such as spatial growth, economic development, population changes, urban housing and environment, transportation, social areas, and the city under open economic policy. The concluding chapter summarizes the book and links the early cosmological ideas of the Chinese capital with the concept of a socialist city model. Each chapter ends with a useful conclusion so that some readers who are pressed for time can get a pretty good idea about the book by just reading the conclusion of each chapter.

Perhaps due to the relative lack of literature in Chinese for the period 1912–1949, this period is slighted in the volume. Although Beijing was not important in China's political scene during this period, it was appreciated culturally and aesthetically by many Western writers. It is unfortunate that some classic works on the city by George Kates, L. C. Arlington, and Osvald Siren are not mentioned here.

The employment of rich Chinese materials is certainly a strength of this volume. In a few instances, however, the author appears to be overwhelmed by the source material at the expense of analysis and objective assessment. One of the supporting facts for his argument on China's mobile capitals, as compared with the national capitals in Western Europe, seems to be that the Xia dynasty capital moved 7 times and the Shang capital moved 13 times. The text fails to mention that both Xia and Shang people were seminomadic in nature and their mobile character is obvious. In 1949, as there were "only 15 architects in Beijing," Soviet expertise was relied on to form the Beijing Municipal Town Planning Commission. It will be hard for serious readers to believe that there were so few architects in Beijing. The context in which a certain rhetoric is used by the author, such as "Chinese feudalism" and "Beijing was liberated," was also influenced strongly by Chinese official documents. Probably due to the shortage of published materials in Chinese, an important aspect of Beijing's population, the floating population from various provinces totaling more than 1.2 million, is never mentioned. The "Zhejiang Village"