

Buddha image on T5 (CH3). Paiman admits that “common sense” would incite one to date the image to the fifth century and subsequently to ascribe T5 to the same period as T3. Yet he circumvents the problem and further supports his dating, highlighting similarities between the small stupa found in CH2 (T5) and those of the porticoes on T8 and Z14 which, Paiman says, “are certainly posterior to 870”. But it is not clear how he comes to 870: a date is implicitly given for T8 in light of a comparison to the columns of the mosque of Hāji-Piyāda in Balkh dated to 784 by Adle. As for zone 14, the author argues that the numismatic finds, the parallel with the portico on T8 and the resemblance of the sculptures with those on T5 and CH8 (Z10) “attributed to *c.* 900 if not later” on numismatic grounds all point to a date after the eighth-century point of departure (T5), a closer examination of the numismatic data allows less firm dating. The catalogue of coins compiled by M. Alram provided in appendix 2 lists for Z14 one coin of Śrī Samanta Deva (*c.* 970–1000) and two Sassanian coins issued by Ohrmazd IV (579–590) and Khusro II (591–628). With regard to CH8, three coins of Śrī Samanta Deva (*c.* 970–1000) are registered. This would indeed hint at a date as late as the tenth century (and even the eleventh) if the reliability of the data was not to be questioned. As Paiman reports, CH8 was backfilled and covered by a monument identified by Paiman as a stupa (only the angle units of a structure on a high of 0.50–0.70 m were discovered) and the mound was disrupted by the digging of tombs.

On the basis of current knowledge, nothing allows us to attribute the production of sculptures as well as their associated monuments to a period after 870. Likewise, nothing prevents one from believing that T5 (and the other terraces) already existed when T4 was built over T3. In fact, this is a plausible scenario if one considers that none of the (few) coins discovered on upper terraces (T7 and T8) date to after 700 and that some of the shards, mentioned only in passing, are attributed to the fifth or sixth century by Paiman. Unfortunately, although a list of the shards is provided in appendix 1, the author did not see the need to conduct a study of ceramics found on the site (“il n’a pas paru utile d’en faire une présentation typologique”, p.79). It is unlikely, however, that this would corroborate the present chronology of Tepe Narenj. One may only hope that the latter will be more convincing in light of the detailed analysis of sculptures announced in the second volume.

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JOHN CARSWELL, SIRAN DERANIYAGALA, ALAN GRAHAM et al.:

Mantai: City by the Sea.

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This lavishly produced, generously illustrated publication focuses on the excavations and follow-up interpretive work carried out in the early 1980s at the port city of Mantai on the north-western tip of Sri Lanka. This archaeological project must be considered one of the most significant in South Asia in recent years, since it involved an international team of excavators, historians, linguists, art historians and other specialists working at a site that was in its heyday the centre of a truly cosmopolitan maritime trade network encompassing the Mediterranean, the Middle East, South-East, and East Asia. Interrupted in their fieldwork in 1984 by the violent

civil war that beset this part of the island, these scholars managed somehow to complete the reports of their findings, which are now published in their entirety. As summarized by John Carswell in his Foreword, the volume begins with the first description of the site in 1828 by Sir Alexander Johnston, before surveying the archaeological research carried out during the 1880s. The volume then proceeds to define the site as revealed by the researchers some 100 years later, and to present new interpretations based on detailed catalogues of the findings.

Mantai's role as a dynamic, inter-regional entrepôt lasted for almost 1,000 years up to the end of the tenth century with the conquest of northern Sri Lanka by the Chola rulers of Tamil Nadu. The seaborne linkages that underpinned Mantai's pre-eminence are outlined in Sirima Kiribamme's chapter on the role of Mantai as a port city, while K. Indrapala reviews the Tamil historical, literary and epigraphical sources that mention Mantai, including an inscribed pillar discovered at the site in the 1920s. Alan Graham and Siran Deraniyagala point out the advantageous location of Mantai, less than 250 metres from the ocean, before describing the investigative trenches dug into the earthen mounds of the site between 1887 and 1984 during successive archaeological campaigns, and the artefacts discovered on these occasions. The authors conclude with a chronological sequence for the site extending back to the third millennium BCE.

While the chapters so far constitute a general introduction to Mantai, the second part of the volume focuses intensely on the excavations, especially on the mound in the middle of the site. On analysis, the majority of the artefacts discovered here revealed dates spanning the third to eighth centuries, typical of the late Roman period, the Sassanian–Islamic transitional era of the Middle East, and the contemporary empires of China. In the following chapters Graham examines the architectural complex unearthed in the central part of the mound. This was partly built of brick and coral-stone, and incorporated ramparts and moats, as well as structures with verandahs, all of which Graham tentatively dates to the ninth and tenth centuries.

The pottery and other artefacts discovered at Mantai are exhaustively described, catalogued and analysed in the third part of the volume. Here readers should take note of the finds coming from different parts of Asia as revealed in the same stratified layers of the site, which according to Carswell span the first/second–tenth/eleventh centuries. Indian pottery at Mantai, especially polished wares and rouletted wares, are reported by Rabi Mohanty, followed by Carswell's listing of the Chinese Yue and Dusun stonewares, green-splashed white wares and Changsha pottery. Carswell compares some of these with the Chinese ceramics discovered in Nishapur, Samarra and Ctesiphon in Iran and Mesopotamia in the 1930s and 1940s, as well as with the many thousands of Chinese ceramics recovered in 1998 from the Belitung shipwreck off the coast of Sumatra. Graham examines the copper and iron objects from Mantai, while Gillian Juleff provides a detailed analysis of metal-working techniques, concluding with an overview of the iron and steel industry that thrived in Sri Lanka in the first millennium CE.

More than 1,000 broken glass dishes, bottles, goblets and spherical vessels were discovered at Mantai. Stefano Carboni attributes most of these artefacts to Syria and Mesopotamia in the seventh century and later. Mantai's cosmopolitan commerce is further reinforced by the discovery of glass, cornelian and gold-foil beads of diverse Mediterranean, Middle Eastern, Indian and South-East Asian origins, some of which according to Peter Francis recall the beads found at Nishapur and Siraf in Iran. Leonard Gorelik and A. John Gwinnett discuss bead-drilling and finishing procedures, as well as the glass bangles and rings, and shell, bone, ivory and stone objects. One of the most interesting of these discoveries is a broken Muslim

gravestone engraved with an ornate Kufic inscription containing a date equivalent to 8 January 949 CE. David James considers the possibility that this could have been shipped to Sri Lanka by the then caliph of Baghdad. The last chapters here concentrate on the faunal and botanical remains uncovered in the excavations. Various specialists identify the animal species that inhabited Mantai and its environs; not surprisingly, they conclude that the food economy was dominated by the aquatic component. Human remains are mostly confined to burials, though the method of interment remains obscure. A synopsis of these finds is offered by the three principal authors of the volume, who recommend that there is little evidence of human occupation at Mantai prior to the first or second century CE.

The final part of the volume is devoted to the educational programme at Mantai, which involved Sri Lankan students being instructed by scholarly experts in surveying and architecture, drawing pottery, and conservation and material science. It is to be deeply regretted that this most worthwhile component of the project was brought to an abrupt and tragic end. The 12-page bibliography and thorough index that follow should satisfy most readers. So too the attached CD with catalogues of the Chinese ceramics and of the beads, accompanied by more than 2,000 colour photographs.

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JEAN DELOCHE:

Ancient Fortifications of the Tamil Country as Recorded in Eighteenth-Century French Plans.

(Collection Indologie.) viii, 139 pp. Pondicherry: Institut Français de Pondichéry and École française d'Extrême-Orient, 2013. Rs. 700. ISBN 978 81 8470 193 7.

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Tamil Nadu, a vast state situated in South India, is known for cities and monuments of enlightening architecture and fortifications. In the transitional pre-colonial and colonial periods of the seventeenth and eighteenth centuries, new fortifications, now forgotten, emerged in the context of Carnatic or Mysore wars which pitted against each other several Indian and European powers in southern India (including the Anglo-French war of 1753–60).

In this series of publications on Indian fortifications, Jean Deloche helps us discover the French and English engineering plans for eighteenth-century Tamil Nadu fortifications. Through very thorough archival research on plans and text sources, Deloche puts into perspective the role of the defence of cities, temples and forts in the context of war and European participation in the adaptation of oldest forts to new standards of artillery used in Europe and America in the same period, while still maintaining several local defensive elements. Forts become strategic places on the chessboard of war and some were selected to be adapted to the construction of *ravelins*, forts with a star-shaped layout, additions of massive bastions, and battery set up.

Unlike M. S. Naravane (*Forts of Maharashtra*, Delhi, 1995), Deloche goes beyond exhaustive cataloguing of the eighteenth-century fortifications of Tamil Nadu by comparing primary sources with field observations and old plans obtained from archives. The graphic quality of the full-page reproductions of watercolour