Southeast Asia: ancient centre of urbanization?

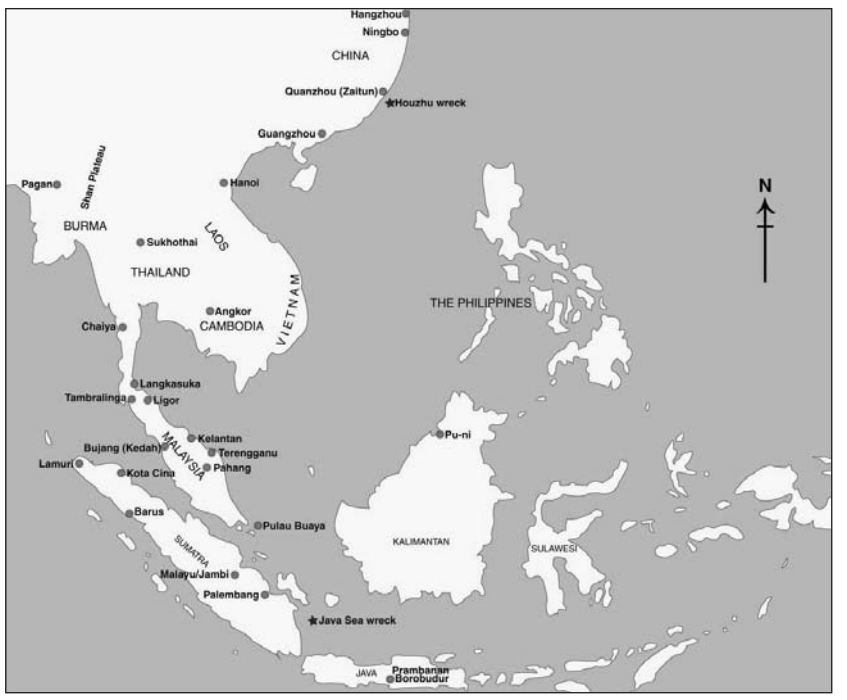
The study of early Southeast Asian urbanization can reveal the variety of human responses to the environment that gave rise to the entity known as the 'city' today. Archaeologists have long been intrigued by cities, yet the specialized field of urban archaeology has only emerged within the past 25 years; the study of early Southeast Asian cities remains in its infancy.

John Miksic

The city

Defining the city continues to be problematic. Until recently, archaeologists assumed the city was a cultureless, universal phenomenon, with standard features regardless of time and place. It is now acknowledged, however, that the agglomeration of buildings and people was not an evolutionary inevitability. Physical and spatial expressions of social structure, population, political power, economic activity and religion are determined by local factors that vary across space and time. So describing the evolution of cities must begin by comparing local sequences of development with sequences found in other parts of the world. Differences in causal variables such as trade, warfare, religion and control of water supply then become apparent, revealing the effects of local environmental and historical conditions on urban development. Different cultures produced cities similar in form but bearing the stamp of their unique origins. Cities on Java, for example, function differently than cities in Thailand, the Philippines, Myanmar, China and India. Attempts to explain urban development according to a single linear model are thus doomed to fail; the evolution of the city was likely the result of an analogous rather than a homologous process (i.e. a form of convergent evolution).

Archaeologists still divide the development of human society into stages of increasing complexity, starting with the clan and proceeding to the tribe, the chiefdom and the state. The city was not thought of as a stage at all, but rather as proof that a society had attained state-level organization, a correlation now known to be erroneous. To take one example, the largest Egyptian pyramids were constructed around 3000 BCE, whereas the first urban centres did not appear until 1,500 years later. Early Egypt is now recognized as a 'civilization without cities'. It was, however, a civilization with monuments. Paul Wheatley, in his study of Southeast Asian urbanization, *Negara and Commandery*, equated monuments with urban economic patterns. The site of Angkor Thom in Cambodia is thus often called a city and assigned arbitrary populations of up to one million people, yet no evidence of dense habitation has been confirmed within its central precinct. Future research might discover such evidence, especially as our knowledge of Angkor Thom remains abysmal; archaeologists such as Jacques Gaucher have only recently begun to search for signs left by people who lived in perishable structures.



11th and 13th century ports

If not monuments, then what archaeological criteria can define the city? Population, even if it can be reconstructed, is not a valid yardstick. For instance, a city in ancient Mesopotamia may have contained no more than 5,000 inhabitants, but that figure is met by many large villages in Southeast Asia. In fact, the sites of Angkor Borei and Oc-èo in the lower Mekong River valley were dense population centres, apparently restricted within small areas and possibly protected by walls. Indeed, at Oc-èo, Malleret, Pierre-Yves Manguin, and his Vietnamese collaborators have shown that numerous brick structures and a wide variety of manufacturing existed in the early first millennium CE. Despite signs of significant population and economic activity, neither site shows evidence of state-level organization. Such possible examples of states without cities and cities without states reinforce the conclusion that political structure cannot necessarily be divined by artifacts or settlement patterns.

Tegurwangi 14th century East Javanese temple mural of an itinerant merchant

Political structure is only one aspect of determining social complexity, and since some archaeologists believe it is no longer viable to determine political evolution through archaeological remains, they avoid using the term 'city' altogether and have turned to a more profound study of settlement patterns as the best hope of developing an accurate, objective 'yardstick' to understand the processes that lead to increasing social complexity. Instead of looking for 'cities', they look for 'hierarchies of settlement'.

Methods

To establish a hierarchy of settlement, one must chart the settlement patterns of many sites in a large area. Identifying early Southeast Asian settlement patterns requires large-scale archaeological surveys and excavations, interpretation of primary documents, analysis of tropical disease patterns and agricultural systems, and geological, hydrological, remote sensing and other natural science techniques to recover data necessary to reconstruct models of early urbanization. Surveys of large areas such as the Mun and Chi River basins of northeast Thailand have confirmed that archaeological sites the world over tend to fall into discrete categories based on size, which is determined by barriers and a society's ability to overcome them. Once a society overcomes a barrier to its growth, it suddenly expands until it encounters another barrier, and a period of stagnation follows before this barrier, too, is (or is not) overcome. As a result, a pattern develops: first comes an early period when all sites in a particular region are approximately the same size; next, one or more of them grow into population centres significantly larger than the rest, either because of their strategic location on trade routes, relative security in the midst of war, access to an important resource, such as water, or importance as a centre of pilgrimage and ceremony. These centres form a hierarchy of settlement.

The passage of time is crucial. Sriksetra and Bagan in Myanmar, and Angkor Borei and Angkor in Cambodia, have revealed centuries of occupation during which population and activity fluctuated drastically. Therefore, the hierarchy of settlement is not fixed; over time sites can shift from being higher-level centres to lower-level ones, and vice versa, thereby changing the hierarchy. One must now consider multiple criteria to determine precise sequences of growth and decline that can be used to reconstruct the hierarchy at different points in time. The daunting amount of field and laboratory work this requires has rarely been applied in Southeast Asia, where funds and trained personnel are scarce, which makes urban archaeology's exceedingly expensive and time-consuming nature an obstacle to progress. Yet only its approach can firmly resolve whether ancient Southeast Asia was a centre of early urbanization.

Indigenous or introduced?

Did foreigners fuel urbanization in Southeast Asia? Wheatley and many other scholars have asserted that foreign, mainly Indian, influence gave rise to Southeast Asian cities. Persians, Arabs, Sinhalese, Chinese and Indians did play significant roles in early urban development, but so did trade and industry. Evidence of foreign enclaves at such sites as Barus, northwest Sumatra, does not appear before the ninth or tenth centuries, although some speculate that Indians might have lived in the isthmian region of the Malay Peninsula at a much earlier date. Chinese immigration began no later than the twelfth century and gradually created enclaves over the next 200 years. The earliest direct reference to one is in 1349, when Wang Dayuan refers to Chinese living in Singapore. Ian Glover and his coworkers have shown that Chinese artifacts were surprisingly common in what was probably an early Cham centre at Tra Kieu during the transition from prehistory to proto-history. Indeed, Chinese impact is an important, little-researched subject. But archaeological data is not conducive to determining the linguistic affiliations of past site residents unless epigraphical or historical data exist to augment the artifacts. <

Excavation of Sri Ksetra: a mound being investigated at Sri Ksetra, late first millennium, Burma

Relief pendopo 14th century Javanese depiction of part of a settlement

SCC volunteers: archaeologists at work on a 14th century urban site in Singapore

Reference

- Wheatley, Paul. 1983. *Nagara and Commandery*. Chicago: University of Chicago, Department of Geography Research Paper Nos. 207-208.

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IIAS is organizing a series of four masterclasses on modern research techniques in Asian archaeology. The first, *Southeast Asia: a Centre of Ancient Urbanism?*, was led by Prof. John Miksic (National University of Singapore) and held in Leiden, 22 to 25 February 2005. He was assisted by three invited speakers, Prof. Ian Glover (University College London, UK), Dr Pierre-Yves Manguin (EFEO, Paris) and Dr Bion Griffin (University of Hawai'i, US). Some 15 participants from Europe and Asia attended, discussing their research interests, field results and experiences. The masterclass was co-sponsored by NWO and CNWS.

The masterclass was followed by a round table discussion on 26 February, co-organized with the Faculty of Archaeology, Leiden University, to draw attention to the current state of the art in Asian archaeology teaching and research at European universities.

The next masterclass in this series, *Sciences and Technology in Asian Bio-archaeological Research*, will take place from 8 to 10 December 2005 and will be led by Prof. Rethy Chhem (Departments of Radiology and Anthropology, University of Western Ontario, Canada). For more information please see the advertisement in this newsletter and www.iias.nl