



Review

**TREE-RINGS, KINGS, AND OLD WORLD ARCHAEOLOGY AND ENVIRONMENT:
PAPERS PRESENTED IN HONOR OF PETER IAN KUNIHOLM**

S. W. Manning and M.J. Bruce, eds.

Oxbow Books, Oxford (December 2009)

Distributed in North America by the David Brown Book Co.

xxi + 332 pp.; ISBN-10: 1-84217-386-3; ISBN-13: 978-1-84217-386-2

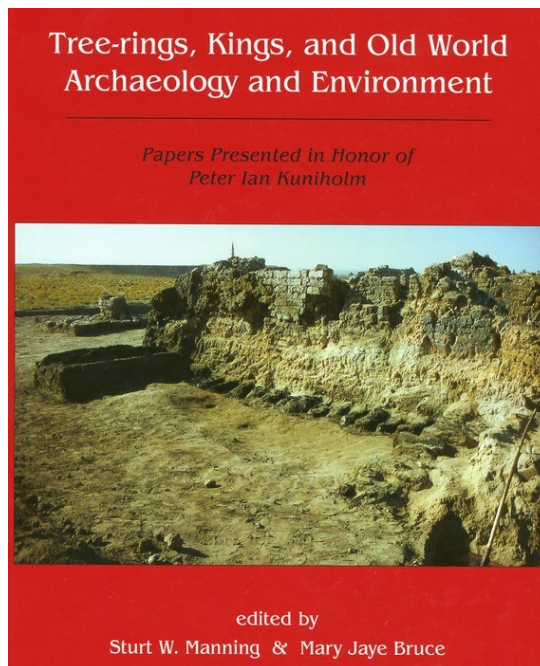
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The result of a conference at Cornell University, November 3-5, 2006, this *Festschrift* marks the formal retirement of longtime professor Peter Ian Kuniholm, who remains active in the field. As might be expected of an event organized by the Malcolm and Carolyn Wiener Laboratory for Aegean and Near Eastern Dendrochronology (emphasis on Aegean), only parts of this volume are likely to be of great interest to readers of this journal.

The tome opens with several brief sections honoring Kuniholm, outlining his academic achievements (including an extensive personal bibliography), but quickly turns into more than a celebration of Kuniholm's contributions to the field. As a whole, the work provides a current review of a variety of archaeological and chronological issues in and around the Mediterranean.

The volume's affable title¹ and introduction suggests a popularized account, but this is an academic text intended for scholarly consumption. The contributions to this volume are well written and the arguments presented are well supported. Most chapters include an extensive reference section, some current to



2009 but most to 2007 or 2008, which alone makes this a valuable resource.

The most significant contributions of this work to scholars of Egyptian interconnections are likely to be the historical and methodological reviews (e.g., Dean; Ünlü *et al.*) and a thorough discussion of "The Thera Debate" (the date and implications of the eruption of Santorini). The subtleties of several scientific methods, such as dendrochronology (dendro-archaeology, dendrochemistry, etc.), ice core dating, and radiocarbon analyses, and their utility for establishing ancient dates or providing insight into ancient climatic and behavioral events, are well explained. It is likely that some or all of these

methods will play integral roles in resolving issues of Egyptian chronologies and developing a more complete understanding of the culture, so this volume should not go overlooked. The issues discussed here are certain to aid future work in Egypt and the eastern Mediterranean.

The Thera discussion (pp. 277-322) incorporates Minoan, Mycenaean, Cypriot and Egyptian archaeologically evidenced connections (Tell el-Dab'a is emphasized). The discussions

between Wiener, Friedrich and Manning provide a frank summary of the primary arguments and evidence for possible dates of the eruption. Should this question be satisfactorily resolved, although there is no indication that it will be in the near future, the implications for understanding the eastern Mediterranean during the Middle and Late Bronze Age / Second Intermediate Period and New Kingdom will be great.

Other chapters which may be of direct interest to readers of this journal include:

S.W. Manning, *et al.* Absolute Age of the Uluburun Shipwreck: A Key Late Bronze Age time-Capsule for the East Mediterranean. Pp. 163-187. The ship contained artifacts of Canaanite, Syro-Palestinian, Cypriot, Mycenaean Greek and Egyptian origin, including a gold scarab bearing Nefertiti's cartouche. Significantly, the authors have withdrawn dates previously proposed (p. 164) in favor of those presented here, and offer new analysis of the reigns surrounding the Armarna period (pp. 178-181).

T. Wazny. Is There a Separate Tree-ring Pattern for Mediterranean Oak? Pp. 41-50. Oaks (*Quercus* spp.) can be found in many Egyptian sites and their use is attested to in coffins, statuary, wagons and boats, from at least as early as the Eleventh Dynasty.² While some oaks may have grown in Egypt, additional material must have been imported from elsewhere in the Mediterranean. Wazny's work indicates that it may be possible to narrow the source for certain specimens, although much work remains.

Touchan, R. and M.K. Hughes. Dendroclimatology in the Near East and Eastern Mediterranean Region. Pp. 65-70. This short review manuscript indicates the possibilities for dendroclimatology in Egypt, should a chronology become available. For example, theories of Dynastic collapse could be evaluated through dendroclimatological reconstructions.³

Apart from the rare editorial errors or inconsistencies, none of which impair the reader's ability to understand the text, and the absence of an index, it is difficult to criticize this volume. Overall, the work captures the current status of several lines of research and lays the groundwork for future investigations. Several of the papers are likely to be mandatory reading for scholars and students in their respective technical fields. Peter Ian Kuniholm should be proud that this volume bears his name, as it is an appropriate reflection of the impact of his work.

Notes

¹ See Colin Renfrew, "Kings, tree rings and the Old World," *Nature* 381 (1996): 733-734.

² Rowena Gale, Peter Gasson, Nigel Hepper, and Geoffrey Killen, "Wood," in Paul Nicholson and Ian Shaw (eds.), *Ancient Egyptian Materials and Technology* (Cambridge: Cambridge University Press, 2000), 344.

³ For example, see Nadine Moeller, "The First Intermediate Period: A Time of Famine and Climate Change?" *Egypt and the Levant* 15 (2005): 153-167; Barbara Bell, "Climate and the History of Egypt: The Middle Kingdom." *American Journal of Archaeology* 79 (1975): 223-269.