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ABSTRACT: A collection of essays in honor of Anthony Aveni, one of the leader figures in archaeoastronomy or cultural astronomy, offers an interesting survey of the current state of the field and of Mesoamerican knowledge and practices of timekeeping and skywatching in relation to agriculture, ritual, and political power.

According to The Center for Archaeoastronomy (http://terpconnect.umd.edu/~tlaloc/archastro/cfaar_as.html), archaeoastronomy is the “study of the astronomical practices, celestial lore, mythologies, religions and world-views of all ancient cultures…. We like to describe archaeoastronomy, in essence, as the 'anthropology of astronomy,' to distinguish it from the 'history of astronomy.'” As *Cosmology, Calendars, and Horizon-Based Astronomy in Ancient Mesoamerica* paraphrases Anthony Aveni, one of the most prolific and influential scholars in the field, “people of different cultures see the same sky, but they have different ways of looking at it” (p. 298).

This new collection of fourteen essays, edited by two former students and including a conclusion by the great man himself, “honors more than two katuns [a katun equals 7,200 days in Maya timekeeping] of Aveni achievement]” (p. xxiii), such as his 1975 edited volume *Archaeoastronomy in Pre-Columbian America* and his 2001 *Skywatchers*. In the Foreword, E. C. Krupp writes that Aveni always insisted on “an anthropological perspective” (p. xxii) on archaeoastrological matters, and accordingly the new volume brings together archaeologists, anthropologists, and art historians for an exploration of “the integration of time and space...trough the study of the calendrical structures, horizon-based astronomy, and recorded observations of natural cycles, especially those featuring astronomical events” (p. 8) across the region from Mexico to Honduras.

The twelve descriptive chapters are divided roughly evenly between three named sections, with some themes cutting across the sections. For first part (officially the second, after the introduction), Horizon-Based Astronomy, opens with a brief survey by Ivan Sprajc of Aveni's contributions to “the development of the research on astronomical properties of Mesoamerican architecture and urbanism” (p. 20), with an assessment of methodological advances and future problems and prospects. Anne Dowd follows with a chapter on Maya 'architectural hierophanies' or “natural light displays on architectural backdrops” (p. 37) of the sort that have also been noted at other ancient sites such as Newgrange in Ireland. Complete with several pages of tables, Dowd shows how these effects could be used to track time and seasons and to organize rituals. Ronald Faulseit then discusses one particular site, Dainzu-Macuilxochitl in southern Mexico, contending that “the site was organized around a central axis, delimited by the rising and setting points of the sun during the winter and summer solstices, and that the spatial arrangement of earth and sky elements on either side of this axis reflects Mesoamerican concepts born out in representations of the Prehispanic agricultural cycle and festival calendar” (p. 78).

The second (officially third) part, Cosmological Principles, contains four chapters, starting with

Clemency Coggins' essay on North Celestial Pole and its meaning, uses, and representations in “imagery and metaphors” (p. 101). Susan Milbrath looks at the Codex Borgia, offering a new interpretation that the document “represents an annual cycle that combines mythohistoric religious beliefs and astronomy in the framework of the seasonal cycle” (p. 140). Gabrielle Vail introduces one of the cross-chapter themes, eclipses, determining that for both “the Colonial and contemporary Maya, eclipses are associated with times of considerable danger, leading to the blinding or disfigurement of an individual, harm to a pregnant woman or her unborn child, mauling by descending celestial beings, death, and possibly the destruction of the world”; further, data suggest “that many of these ideas are Prehispanic in origin” (p. 184).John Carlson analyzes another document, the Dresden Codex, which has been historically linked to a Maya deluge myth, arguing that the assumption that the codex illustrates an end-of-the-world flood is inaccurate but depicts “nothing more than the generous nourishing of the earth by downpours of life-giving rain, at the seasonal springtime onset of the rainy season, invoked by pan-Mesoamerican practices of Venus-regulated warfare and subsequent ritual sacrifices” (p. 213).

There are five chapters in the third (officially fourth) part, Calendar Records. Flora Simmons Clancy's contribution addresses another theme, sky-objects and especially the moon, investigating “the moon's role in the ancient calendar, by stressing the moon's close associations with the planet Venus, by considering the glyphic statement called the Lunar Series, and by describing the intriguing material evidence that the ancient Maya left us concerning celestial events” (p. 229). David Freidel and Michelle write on the so-called 'pecked circles and divining boards,' which may have been used as calculating devices or calendars, and they offer artifactual objects as potential candidates for tokens or markers on these circles/boards. Prudence Rice examines another and singular object, the Las Bocas Mosaic, a non-rectangular plaque that “can be shown to be a unique 'calculator'-like device for numerous astro-calendrical computations and is either a one-of-a-kind cognitive tool or a remarkably complex hoax” (p. 265). Rice at least

judges that “we should not summarily reject the possibility” that the mosaic is a genuine and sophisticated multi-purpose calculating table. Victoria Bricker and Harvey Bricker return to the topic of eclipses in their essay, describing a variety of eclipse periodicities in Maya documents. The part and the case-study chapters end with the longest and most technical offering in the volume, John Justeson's modeling of “indigenous Mesoamerican eclipse theory” (p. 301), working out how “calendar specialists could have anticipated the date in sacred time of every eclipse, lunar or solar, that was visible in Mesoamerica” (p. 302), with special reference to the 11,960-day cycle.

The volume ends with Anthony Aveni's brief conclusion on “Maya books and buildings” (p. 353) in which he summarizes the chapters, a “rich collection of astronomical and calendrical studies [that] has managed to touch on practically every discipline contiguous to the field of cultural anthropology—a testimony to the way skywatching has been integrated into its true parent discipline, where I suggested...that cultural astronomy (then called archaeoastronomy) really belongs” (p. 359). Based on that opinion, and the ample photographs, maps, drawings, and tables that we have come to expect from the University Press of Colorado, we can declare this volume a success and a worthy tribute to its honoree.