

**Efrosyni Boutsikas, *The Cosmos in Ancient Greek Religious Experience: Sacred Space, Memory, and Cognition***

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Our modern worldview is disjointed, fragmented, excessively compartmentalised. The dominant westernised perspective, as Freya Mathews has pointed out, “is made up of a plurality of discrete individual substances” (Mathews 2021, 2). From her position as a senior lecturer in Classical Archaeology at the University of Kent (and a co-director of the university’s Interdisciplinary Centre for Spatial Studies), Efrosyni Boutsikas argues that this fundamentally distorts our interpretation and understanding of ancient cosmologies and religions. Her book *The Cosmos in Ancient Greek Religious Experience* is an attempt to reconstruct the meaning of “Greek religion” through recovering its essential components: myth and ritual in their temporal and spatial contexts. Boutsikas weaves her narrative through a rather ambitious multidisciplinary approach that considers the topographical, architectural, astronomical, mythological, cognitive, mnemonic and visual elements that heightened religious experience in the Greek world.

In her Introduction, Boutsikas starts off by demonstrating to the reader why it is important to adopt a more holistic and cohesive view of the world around us, buttressing her argument with numerous examples and textual and archaeological evidence. The night sky, for instance, did not merely serve as a canopy of mythical stories and characters for people who inhabited the Greek territories, but also operated as a time-keeping device that reminded people of approaching events, both mundane and sacred. Reflecting on the relationship between astronomy and religion in particular, Boutsikas then raises a fundamental epistemological question: “if the relationship between astronomy and religion is so strong and prevalent, is it not incongruous that modern studies of religious practice do not consider the role of time in the night sky in ritual?” (p. 4).

To address the above question, Boutsikas then defines the scope, focus and aims of her research, which are primarily centred on providing a critical analysis of “Greek

religion” as understood through the modern twentieth-century lens, proposing in its place a definition that describes the Greek religious experience in its totality, incorporating elements such as mythology, ritual, performance, memory and, finally, temporal and topographic settings (in other words, astronomical calendars and archaeoastronomy respectively), within the period extending from the seventh to the first century BC. There is no doubt that the whole idea of reassessing and revising an outdated and defective western conceptualisation of “Greek religion” is a commendable project, yet the parameters that the author set for herself are ambitiously broad in a way that diffuses the focus of the work. Even if the author were capable of investigating all the elements involved (we discover towards the end of the chapter that night, darkness and illumination are added to the already long list of elements), this would most probably be at the expense of the depth and thoroughness of the discussion. This, unfortunately, is accentuated further by the non-sequential structure of the book (as will be discussed shortly).

Boutsikas presents only two of those numerous elements in her Introduction: archaeoastronomy and Greek “timekeeping” (the latter I replace with “Greek calendrical practices and systems” throughout this review to avoid the vagueness of the author’s chosen term). Considering Boutsikas’ expertise in archaeoastronomy, it was disappointing to read her rather terse, inaccurate and unsophisticated definition of it, for according to her, as “a term, archaeoastronomy describes the study of the sky in past societies” (p. 5). Her attempt to expand upon this initial definition is just as unsuccessful, for the reader finds a confused amalgamation of archaeoastronomy, cultural astronomy and folkloric astronomy without establishing any of the much-needed demarcations between the three distinctive fields. Although the author does engage in a critical analysis of the methodological application of archaeoastronomy, one is left to wonder whether such analysis is of any use if the underlying understanding of the driving methodology of the study is disoriented and inaccurate. It must nevertheless be pointed out that the author does address the importance of contextualisation in defining intentionality and cultural significance to the perceived monumental orientations and alignments.

In the subsequent section on Greek calendrical practices and systems, Boutsikas delves into a more informed discussion of the various solilunar, lunar and stellar calendrical systems that were used in the different Greek localities, and the methodological problems that may arise in attempting to unify them into some kind of standardised calendar, let alone in converting them into our modern Gregorian calendar. She also introduces the reader to certain astronomical cycles, which were of religious and political significance, to demonstrate how the ancient Greek cosmology was based on a belief in the interconnectivity of the celestial and the terrestrial worlds. These include the *enneateric* (eight-year) cycle, major and minor lunar standstills and the 18.6-year Metonic cycle. She also briefly makes mention of stellar-related omens that determined the political standing of the political elites, such as shooting stars.

For some reason which is inexplicable to me, the author decides to discuss the most fundamental concepts that underlie the whole study of Greek *religion*, clearly religion and myth, in a compendiarious and depthless manner under the “Research Aims and Context” section. We merely learn from the author that religion and myth are usually intertwined,

but not necessarily so. One is left to wonder: *what definitions of religion, myth and ritual did the author use to frame her inquiry? why so? and what function does myth fulfil in service to religion?* Following Nicholas Campion's enquiries in his book *Astrology and Cosmology in World Religions* (Campion 2012, 22), we may further ask: *does Boutsikas' application of religion here echo that of J. G. Frazer, J. Milton Yinger or of Ninian Smart's seven dimensions of religion* (Frazer 1922, 221–222; Yinger 1969, 91; Smart 1996, 10–12)? *is "Greek religion" studied from a "cosmophobic" or "cosmophilous" perspective* (Campion 2012, 5)? *did myths in the Greek context serve the four functions described by Joseph Campbell* (Campbell 1968, 3–9) *or is myth creation a social reaction towards anomalies and ambiguities and ritual an attempt to assimilate the indeterminate into determinable social categories, as Mary Douglas opined* (Douglas 2001, 40–41)? Failing to reinforce the study with clear frameworks that define cardinal concepts underpinning the whole research strips the argument of its cohesiveness and mystifies the author's academic stance and reasoning.

In contrast, the author delves into an extensive (and unnecessarily so) overview of memory-related studies in her discussion of the impact of memory on religious experience. This section is placed in the second chapter of the book, *after* a long section on methodological considerations and approaches. This placement disrupted the logical flow of the author's ideas – especially since she had already defined (accurately or otherwise) the other elements of her focus in the Introduction. Furthermore, the author branches out to an exploration of experience, fantasy and cognition (and the various forms of cognition) *in addition to* memory.

Having said that, I have to acknowledge that the methodological section *prior* to the above commences with a literature review that presents the reader with a persuasive critique supported with adequate evidence of past approaches towards the study of ancient Greek religions and religious monuments, starting with the nineteenth-century "main-entrance" theories that saw the significance of alignments (usually eastern) in relation to the main entrance of the studied temple or sanctuary. While Boutsikas points out that such a hypothesis could help us – once the exact orientation is ascertained – to determine a specific date of construction and/or festival associated with the deity of the temple (Nissen 1885, 1887, 1906; Penrose 1892, 1893a, 1893b), she argues that such a hypothesis narrows our understanding of ancient temple orientations to the rising of a single astronomical body in one direction, the east, overlooking in the process archaeological features that seldom survive such as windows, roof openings and side entrances. The main problem with Penrose's model, according to Boutsikas, is its "over-precision" – a term coined by Clive Ruggles to describe how apparently extreme precision in orientation measurements could give the false impression of an equally precise interpretation, not to mention that such an approach is based on highly speculative Eurocentric assumptions that exaggerate the value of precision in ancient societies (Ruggles 1999, ix). Boutsikas adds that other issues that have not been addressed in previous studies include, as previously mentioned, the problematic conversion of dates from the numerous Greek calendars to Gregorian (and vice versa), and the big margin of error associated with this conversion (approximately three weeks).

Extracting portable lessons from previous literature and incorporating latest relevant methods of archaeoastronomy and historical contextualisation, Boutsikas presents in Chapter 3 her archaeoastronomical statistical study of 240 orientations of a sample of 232 religious structures that date from the Mycenaean to the Roman period, geographically located in Greece, Asia Minor, Sicily and Cyprus. The primary questions the author attempts to answer via her “general analysis” are as follows: what general astronomical principles guided the placement of Greek temples? and, how was (or was not) the distribution of the orientations affected by the governing deity of the temple and the chronological period of the construction of the temple? The aim of this survey, according to Boutsikas, is “to understand the function of temples in relation to astronomy and the environment (land- and skyscape) within which they are situated” (p. 32). The results are displayed in very informative distribution histograms that provide the study with very effective visual representations that summarise the results of the survey. The author derives from these several conclusions which “revolutionise current expectations of the placement of Greek temples” (p. 69). The most important are that temple precise orientations towards solar risings and/or settings on specific dates – including Apollonian temples – was not the common practice across Greek territories, that temples governed by heroes and chthonic deities (associated with the underworld) were not necessarily oriented toward the west, nor were temples and altars conclusively aligned to the four cardinal points.

Due to the inconclusive results of her extensive statistical survey, Boutsikas infers that there must be some other “meaningful connection between structures, cult performance, experience, and astronomy” (p. 70). She then endeavours to make it by engaging in a detailed analysis of the Apolline Cults in Delphi, Delos, Dreros, Miletos, Didyma, Klaros and Bassae (in Chapter 4); of the Athenian Acropolis (focusing on the festivals of Panathenaia and Arrephoria) and the sanctuaries of Artemis Orthia in Sparta and Messene (in Chapter 5); and of the three mystery cults of Eleusis, Lykosoura and Samothrace (in Chapter 6). These are explored from various epistemological lenses: cognitive psychology and ecology; embodied memory; memory as a means to reinforcing collective national identity, myth and cosmology; and low-sensory conditions and heightened states of awareness, ritual experience and sacred space – to name a few. These are sometimes correlated to a number of solar and stellar phenomena that the author perceives as relevant.

As a graduate student studying religious cosmologies and cosmological philosophies in the classical and medieval worlds from the epistemological perspective of cultural astronomy, I started reading the book with great enthusiasm and equally high expectations. As I progressed through it, however, my enthusiasm faded away and was eventually replaced with a mixed sense of disappointment and disorientation. The latter feelings did not result from my unfamiliarity with the complexities of archaeoastronomy, histograms nor the intricacies of ancient Greek mythology and cosmology – for these topics are not new to me. What bewildered me was the lack of focus and the expansiveness of the study’s framework. It is unfortunate that the author (and her advisors and/or editors) did not see how detrimentally broad her project was and how unrealistically so. This attempt to cram every single possible paradigm, theory and interpretation of a huge chronological era into 278 pages has diluted the impact of original ideas and persuasive arguments that deserved

more attention in a more focused work – or a series of volumes, each dedicated to a certain epistemological perspective, guided by one or a few theoretical paradigms and certainly within a shorter frame of time. It is sad, for instance, how her unique analysis of the way memory and related cognitive processes extend our interpretation of religious experience beyond that which is physically palpable – such as the physical surroundings, landscapes and skyscapes – becomes lost in the endless list of all that which could be possibly considered. It also perplexes me that while Boutsikas critiques “sweeping approaches” (p. 10) as not suited to the study of Greek religious practices, this does not seem to have deterred her from earnestly implementing her unbounded project, ambitious aims and all-encompassing methods, epistemologies and paradigms. What we end up with, regrettably, is a compilation of scattered ideas, since when you lose focus, you lose concentration, depth and cohesion. Clearly, Boutsikas avoided the trap of “over-precision” that has plagued western academia, yet the result was an “under-precision” which revealed itself in a disjointed, fragmented, excessively compartmentalised book, very similar to our modern westernised worldviews after all.

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