

COGNITIVE APPROACHES TO ANCIENT RELIGIOUS EXPERIENCE

EIDINOW (E.), GEERTZ (A.W.), NORTH (J.) (edd.) *Cognitive Approaches to Ancient Religious Experience*. Pp. xiv + 299, map. Cambridge: Cambridge University Press, 2022. Cased, £75, US\$99.99. ISBN: 978-1-316-51533-4.

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This collection of essays is the product of events organised during a funded project with the same title, which involved the collaboration of humanities scholars and cognitive scientists of religion. It comprises the first systematic attempt to integrate Cognitive Science of Religion (CSR) into the study of ancient Greek religion. Thus, the volume, consisting of eleven essays, is a milestone in the field.

In the introduction the editors outline essential concepts and offer necessary context for the volume's focus, discussing also existing limitations in each discipline. They highlight the current absence of methodologically rigorous cognitive approaches in favour of case-by-case studies in research on Greek religion, and claim to address this problem by providing a new theoretical approach to the cognitive study of ancient religions.

In 'A Cognitive Approach to Ancient Greek Animal Sacrifice' H. Bowden argues against a single meaning of animal sacrifice. Bowden approaches sacrifice as a sequence of distinct ritual actions and moves the focus from killing and eating the victims to activities and rituals taking place between these stages (e.g. burning). Bowden concludes that the odour of boiled meat is not as pleasing for the human brain as the smell of burning meat. He spatially locates this pleasing odour at the altar area, where he argues that, as a result, participants felt the presence of gods. The essay highlights elements of sacrifice that are sometimes overshadowed. Although the argument would be strengthened by considering the broader cognitive context of sacrifice, for example, the visual impact of accompanying performances, sounds and ritual action sequences, it succeeds in recalling the 'physical' impact of witnessing ancient Greek sacrifices.

'To the Netherworld and Back: Cognitive Aspects of the Descent to Trophonius' by Y. Ustinova is a thought-provoking essay, with several original ideas on elements determining experience and memory of the consultation. In Ustinova's view reading inscriptions presenting previous oracle seekers' experiences prior to the consultation was decisive for a successful cognitive experience and for ensuring the oracle's reputation. However, in the absence of such surviving inscriptions in Lebadeia one can only imagine their content and impact. A central conclusion is that oracular consultation at Lebadeia 'can be interpreted as the suppliant's initiation' (p. 52), supported by the preparatory drinking from the fountain with the water of Lethe, thought to result in the inquirer's self-imposed memory loss; the linen tunics worn by consultants, meant to bear cognitive links to the shrouds of the dead; and the ritual death and rebirth of the consultation process. Ustinova's conclusion that sensory deprivation resulted in memories influenced by the impact of expectations and post-ritual influences, rather than memories of the event, is intriguing. She further argues that these expectations and religiosity determined what was to be remembered, rejecting non-compliant memories as errors.

Eidinow's 'Ancient Greek Smellscapes and Divine Fragrances: Anthropomorphizing the Gods in Ancient Greek Culture' discusses divine shapes, presence and epiphanies. Building on P. Westh's views ('Anthropomorphism in God Concepts', in: A.W. Geertz [ed.], *Origins of Religion* [2014]) of humans as 'hyperactive storytellers', creating cultural

forms able to act as conceptual structures, Eidinow seeks to determine the influence of these cognitive processes on concepts regarding the ancient Greek gods. In the second half, which focuses on the cognitive role of smell, Eidinow argues that smell functioned as a 'cue for activating conceptualizations of the divine' (p. 79). Taking a broader stance in comparison with Bowden's analysis, Eidinow concludes that, by evoking memories and cognitive associations, divine presence was detected through smell, but diverges from previous scholarship by stating that these smells are not simply evocative of divinity (for earlier expressions of this idea in Christianity see e.g. J. Toner, 'Smell and Christianity', in: M. Bradley [ed.], *Smell and the Ancient Senses* [2015]; J. Cockayne, 'Smelling God', in: B. Hereth and K. Timpe [edd.], *The Lost Sheep in Philosophy of Religion* [2019]).

An exciting essay on the role of imagination in divine encounters in tragedies is F. Budelmann's 'Belief, Make-Believe, and the Religious Imagination: the Case of the *Deus Ex Machina* in Greek Tragedy'. The essay's premises are: (a) the human propensity to construct and enter temporary imaginary worlds and (b) the notion that religious participants were not at the mercy of psychological mechanisms of which they were unaware, but, instead, had awareness and deliberately shaped their thoughts. This latter idea is not always confirmed by archaeological evidence (e.g. Hellenistic religious apparatuses and automata), but seems to be true in relation to religious immersion and participation in certain cults (e.g. mysteries). Budelmann eloquently argues that, although an act, ritual divine impersonations involved emotional investment for participants and observers. The latter were aware that they were witnessing an act, not divinity, but accepted this performance as a divine encounter. Research on the ability of fiction to move ('paradox of fiction') and developmental psychology provide positive support. The essay will motivate further investigations on the role of imagination in religious belief, by placing the audience in the driver's seat, with control over what was gained from these performances.

M. Patzelt's 'Chanting and Dancing into Dissociation: the Case of the Salian Priests at Rome' investigates how body (e.g. ritual movement) and vocal techniques (e.g. pace) work with the nervous system and psychosomatic reactions to create symbolic constructions of the world. For Patzelt the psychological impact of the Salii's vocal and body techniques resulted in a performance with dissociative effects in the practitioner's minds. The discussion on hypnotic induction (dissociative mind) allowing performers to access alternative identities is thought-provoking. The essay's methodology and approach are informative for anyone interested in the association between body and vocal techniques and the development of mental maps towards creating meanings, identities and perceptions.

V. McGlashan's excellent essay, 'The Bacchants Are Silent: Using Cognitive Science to Explore the Experience of the *Oreibasia*', shows how CRS can progress understanding and interpretations in ancient cultures in practice, by considering the emotional effect of mimetic performances attested in iconography and literature. The significant cognitive spin of the analysis and the argument of abandoning modern differentiation between mythical and historical maenads have much to contribute to discourse on the topic. McGlashan argues that a perceived epiphany of Dionysos during a ritual would have sufficed in creating an unusual experience, without the need to reach an ecstatic state or hysteria. This was achieved through agency detection and as a natural response to sensory data and cultural priming, not hysteria. The material and argument in this essay build considerable momentum in connection with the preceding essays by Eidinow, Bowden and Budelmann.

An examination of the Roman cult of the Bona Dea from the perspective of gender roles, social power and civic cohesion is presented in L. Ambasciano's 'Who is the *Damiatrix*? Roman Women, the Political Negotiation of Psychotropic Experiences, and the Cults of Bona Dea'. Ambasciano argues that the function of this festival was similar

to that of Demeter, namely to stabilise social hierarchy and order by preventing female insubordination, adultery or retaliation against men. In a short cognitive discussion (pp. 179–82) he finds the existence of an experiential class divide within the cult and a patriarchal top-down exploitation of neurophysiological ploys aimed at cognitively controlling subordinates, whilst securing sexual access and reproductive success.

M. Scott's 'Walls and the Ancient Greek Ritual Experience: the Sanctuary of Demeter and Kore at Eleusis' examines how perception and cognitive processing may have been conditioned by the *temenos* wall. As the first study on the cognitive impact of the Eleusinian walls, it offers exciting prospects and an interesting discussion on emotional contagion in relation to the initiates' feelings of sorrow and mourning. Surprisingly, the study does not focus on a specific period or on the sanctuary's topography. The different wall layout between the Archaic and the early classical periods would have altered the effect. Similarly, the sanctuary's sharply inclining topography on the slope of a hillock means that the 'high' and 'fortress-like' impact of the walls changes greatly, depending on the viewer's location (e.g. open horizon views to the gulf of Eleusis if standing in front of the Telesterion and Ploutonion, where the nocturnal rituals were centred). Thus, although the internal space was indeed 'unviewable from the outside' (p. 197), initiates would not be completely cut off or prevented by the wall from seeing outside. The well-pointed out impact of darkness and auditory experience resulting from the wall's 'acoustic integrity' (p. 203) would have similarly been considerably different, subject to topography and architectural phases. Finally, the otherwise interesting 'Post-ritual Understanding' discussion disregards the diurnal experience of the walls before departing from the sanctuary.

L. Martin's 'Identifying Symptoms of Religious Experience from Ancient Material Culture: the Example of Cults of the Roman Mithras' focuses on Mithraic cults as a robust exemplar for identifying religious experience. It discusses cognitive elements affecting the senses and defining experience in Mithraic worship. Engaging conclusions are offered on brain processing imagery and the impact of an active brain interpreting vision, which concur with physical and anatomical research. The interpretation of the tauroctony scene depicting Mithras concurrently as a sacrificer and kosmokrator is fitting and describes an enormous cognitive impact on initiates of Mithraic mysteries.

Links between feelings and emotions, and literary mechanisms evoking emotions is the focus of 'Bridging the Gap: from Textual Representations to the Experiential Level and Back' by A. Klostergaard Petersen. The essay describes how feelings and emotions may have affected the audience of Paul's letter to the Corinthians, which refers to baptism. Klostergaard Petersen argues that the understanding of feelings differs between past and present, but not in terms of their underlying emotions. He therefore seeks to move beyond cultural limitations, to understand better human emotions across time and space. The argument is that Paul tried to forge a new identity for his recipients by evoking strong feelings and emotions. The approach presents an attractive challenge in examining past emotions in light of recent evolutionary biology and moral psychology research, demonstrating the potential of integrating CSR with ancient text analysis.

The final essay by I. Sandwell, 'A Relevant Mystery: Intuitive and Reflective Thought in Gregory of Nyssa's Representations of Divine Begetting in the *Against Eunomius*', contrasts Gregory's language that resorts to material images, with the Christian emphasis on an immaterial and eternal God. The essay discusses how reflective explicit thought and intuitive implicit thought have been argued to influence religious concepts and make them appealing to the human mind. Sandwell concludes that certain phrases or divine representations are understood between followers, despite not being precisely interpreted

or explained. Because these not-fully-explainable concepts remained mysterious, they became catchy and were disseminated widely, transforming to cultural concepts.

The wide-reaching material of this collection undeniably offers credible insights and a wealth of cognitive observations. The volume lacks an epilogue synthesising the new insights, especially for themes explored across a number of papers (e.g. epiphany or altered state of consciousness), and explicating the claim of putting forward a new methodological approach. The volume's division into five sections ('Ritual', 'Representation', 'Gender', 'Materiality' and 'Texts') is not successful in unifying common themes, as some themes are explored beyond these sections. Perhaps a few jointly authored papers would showcase the project's prolific interdisciplinary dialogues and its aim for a rigorous interdisciplinary methodology. These minor shortcomings do not, however, detract from the engaging contribution of the volume to the cognitive study of ancient Greek religion.

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DIVINATION FROM A COGNITIVE PERSPECTIVE

FRIGERIO (G.) *A Cognitive Analysis of the Main Apolline Divinatory Practices. Decoding Divination*. Pp. xii + 198, ills. London and New York: Routledge, 2023. Cased, £120, US\$160. ISBN: 978-1-032-41152-1.

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Cognitive approaches to the ancient world, and in particular to ancient religion, that is the application of theories and methods from experimental psychology and neuroscience as well as from certain areas of anthropology and evolutionary biology, have become increasingly dominant in the field. At their best these approaches can offer important new insights into the significance of ancient ritual practices and beliefs. However, too often the nature of the ancient evidence makes it difficult to do more than hint at what a cognitive approach might reveal to us, if only we could be confident that we knew what these ancient rituals involved.

Divination has been examined from a cognitive perspective before (see e.g. some of the contributions to L.G. Driediger-Murphy and E. Eidinow [edd.], *Ancient Divination and Experience* [2019]), but this is the first monograph focused on Apolline divination from a cognitive perspective. While it has high ambitions, it is rather let down by its variability of scholarship. After a short introduction, Chapter 1 explains briefly the various cognitive terms that F. uses in the book: 'The brain as a prediction engine and Bayesian inferences', 'The extended mind', 'Hyperactive agency detection device (HADD)', 'Theory of Mind (ToM)', 'Ritualised actions', 'Counterintuitive concepts', 'Intuitive and reflective beliefs', 'Whitehouse's modes of religiosity' and 'Material agency'. This is something of a ragbag, and some of these terms receive rather longer discussion than others, but, overall, they are clearly explained. The bulk of the book is made up of three sections, focused on 'Landscape', 'Architecture' and 'Material Culture and the Prophets of Apollo'. Each of these sections has two chapters, the first devoted to Delphi, and the second to Claros