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#### CHAPTER 8

# Walls and the Ancient Greek Ritual Experience The Sanctuary of Demeter and Kore at Eleusis

#### Michael Scott

#### Introduction

### Why Walls?

A key part of any Greek sanctuary was its *temenos:* the boundary marking the limits of the sacred space. The physical form of the *temenos* varied hugely across the ancient Greek world. It could have no, or very little, physical manifestation (for example, when Antigone in *Oedipus at Colonus* wandered into a sacred grove without realizing that she had done so; or at the sanctuary of Asclepius at Epidauros, where the boundary was marked only by a monumental gateway). It could, however, also be physically monumentalized in a variety of ways: with tightly packed banks of cypress trees (for example, at the sanctuary of Eurynome in Arcadia); with a low wall (for example, at the sanctuary of Olympia from the fourth century BCE onwards); or with high monumental walls (for example at the sanctuaries of Aphaia at Aegina, Poseidon at Sounion, and, perhaps most famously, Demeter and Kore at Eleusis).<sup>1</sup>

Despite this vast range of physical forms, what a *temenos* boundary looked like, and what effect it may subsequently have had on the ritual experience, is not a popular topic within scholarship.<sup>2</sup> Tomlinson, for example, did think about the varying nature of the boundary of the *temenos*, but concluded that 'while architecturally, in terms of visual

My deepest thanks to the editors for including me in this volume and their comments on this chapter as it developed. Sincerest thanks also to Dr Elizabeth Blagrove for her engaging guidance and comments on the cognitive aspects of this chapter.

<sup>&</sup>lt;sup>1</sup> Soph. *OC* 16–18. Olympia: Mallwitz 1972: 121–122. Epidauros: Tomlinson 1976: 40. Eurynome in Arcadia: Paus. 8.41.4. Aegina: Goette 2001: 341–342. Sounion: Camp 2001: 307. Eleusis: Camp 2001: 283–289.

<sup>&</sup>lt;sup>2</sup> Bergquist 1967: 116 examined the ways in which the temenos, the altar, and the temple worked together to create a particular volume for the sanctuary. But Bergquist was only interested in the form of a temenos boundary when it disrupted what she termed the 'unity' of a sanctuary ensemble.

appearance, the differences [were] considerable, religiously, [all types of boundary] had the same function'. The *temenos* as a topic receives good coverage in volume 4 of *ThesCRA* on cult places. Yet while, once again, the variety of forms a boundary could take is highlighted, *ThesCRA* does not dwell on the implications of these boundaries for the ritual experience. 4

This absence of discussion about the impact of the physical form of the *temenos* is paralleled by a similar lack of discussion about the ritual impact of another – always monumental – set of walls within a sanctuary: the walls of the sanctuary's temple. Not every sanctuary had a temple, and, of course, the design of a Greek temple ensured that its outer colonnade was more visible than its inner walls. Yet, while temples have been well studied from the perspective of how the structure speaks to the particular values of its constructor and offers a particular message (often political) to its viewing public, the question of what impact temples (and in particular their monumental colonnades/walls) had on the *ritual* experience has been much more muted.<sup>5</sup>

Such absence of discussion about the ritual impact of the – potentially most monumental – physical structures around and inside sanctuaries, should, I think, strike us as surprising,<sup>6</sup> especially given the ways in which, over the last forty years, monumental architecture, including walls, in spheres other than the religious (e.g. civic and governmental) has been re-characterized as an active and critical element in the construction of space, environment, human action, and experience; and given that, within the religious sphere, there have been an increasing number of spatial and architectural analyses of sacred landscapes, not to mention recent in-depth

<sup>4</sup> 'Temenos' in ThesCRA vol. 4: 5–12 (U. Sinn). Mylonopoulos 2008: 52, 78, however, has argued that the stronger presence of porticoes surrounding sanctuaries in the Hellenistic and Roman Imperial periods both reflected and helped construct an intensification of ritual performance. Most recently, see the interesting discussion on the ways in which the temenos constructs the sanctuary as divine property: Ekroth, in press.

<sup>&</sup>lt;sup>3</sup> Tomlinson 1976: 17. See a similar comment in Burkert 1985: 66.

<sup>&</sup>lt;sup>5</sup> Political message: Spawforth 2006: 28–30, 50–51: temple as 'assertion of community and temple's location as aspiring to have conspicuousness and loftiness. De Polignac 1995: temple as marker of territory. Snodgrass 1986: temples as examples of 'peer polity interaction' and rivalry. Scott 2010: 183–184: temples as symbols of victory in war. Ritual impact: Tomlinson 1976: 37: the sturdy solidarity of temple architecture reflecting strength and permanence appropriate to the cult of the gods. Spawforth 2006: 55: the colonnaded space around a temple as symbol of divine protection sought from the deity to whom the temple was dedicated. Spawforth 2006: 72: temple walls 'dramatised these ancient encounters with the sacred' (in reference to wider discussion of the ritual impact of cult statues within temples: Spawforth 2006: 72–81, 86–88).

<sup>&</sup>lt;sup>6</sup> Compare the discussion about the ritual impact of barriers within temples (often surrounding the cult statue): Hewitt 1909: 91, Mattern 2006, Mylonopoulos 2011: 287.

discussions of particular forms of sacred architecture (e.g. steps and doorways) and their impact on the ritual experience.<sup>7</sup>

# Walls and the Ritual Experience

In this chapter, I situate a discussion of the active impact of temenos and temple walls within a cognitive approach to the ritual experience in order to examine how these architectural forms interacted with the ritual experience of the religious participants to create, reinforce, and augment their perceptions, experiences, conceptions, and memories of that ritual.<sup>8</sup> The model I am using for the cognitive experience of ritual is the predictive coding model, which understands cognition in the following way: the brain constantly makes models of the world around it, informed by prior expectations and experience (the top-down input).9 The brain then constantly checks these models for error against the sensory information it receives at any given moment (the bottom-up input) and of course corrects the model accordingly. The application of this framework for the process of cognition in relation to religious experience has focused on how religious rituals and institutions impart particular top-down expectations to participants, but subsequently also hamper and constrain the ability of participants to check these expectations against bottom-up sensory information, in order to ensure maximum susceptibility to both pre-event expectations and/or post-ritual explanation as the basis for a person's 'understanding' of a religious event. In particular, studies have focused on the ways in which participants can find their attentional and executive cognitive resources (their ability to sense-check their expectation model) 'depleted', and/or on the ways in which participants can be 'deprived' of sensory information with which to check pre-installed expectations.10

Analysis of non-religious architecture: e.g. Rapoport 1990, Pearson and Richards 1994, Maran 2006, Tilley 2004, Parker- Hamilakis 2013. Sacred landscapes: e.g. Cole 2004, Scott 2010, 2012, and 2015. In-depth analysis of the impact of particular architectural forms within sanctuaries: Jones 2000, Wescoat and Ousterhout 2012a, Hollinshead 2015.

<sup>&</sup>lt;sup>8</sup> In this chapter I concentrate on the effects of *temenos*/temple wall construction, rather than the (potentially different) reasons for their construction (sometimes to do with the cult itself, sometimes to do with the need to demonstrate power and influence in the surrounding landscape by the sanctuary's controlling city, and sometimes even the need to defend the sanctuary from attack).

<sup>9</sup> See also the Introduction, Ustinova, Chapter 2, McGlashan, Chapter 6, and Patzelt, Chapter 5, in this volume.

Schjoedt 2019: 364–365, Schjoedt and Jensen 2018: 321–322, Schjoedt et al. 2013a and 2013b, Friston 2010, Friston and Kiebel 2009, Frith 2007.

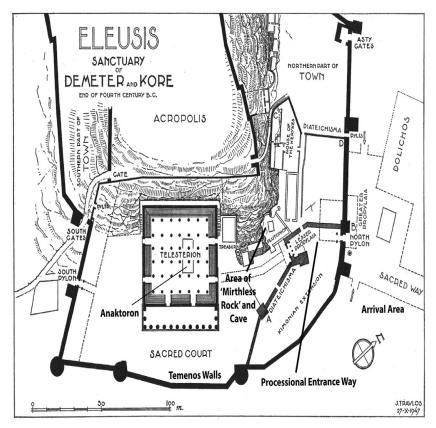


Figure 8.1 Plan of the sanctuary of Demeter and Kore at Eleusis by J. Travlos 'The Topography of Eleusis' *Hesperia* 1949 (18.1) pp. 138–147, adapted by M. Scott.

While this approach could (and should) be applied to a wide range of sanctuaries with (as outlined above) their wide range of types of *temenos* and temple wall in order to understand their varying impact on the religious experience, in this chapter I will apply the predictive coding model specifically to analyze the ritual impact of monumental *temenos* and temple walls at one particular sanctuary: the sanctuary of Demeter and Kore at Eleusis (Figure 8.1).

This sanctuary makes a particularly good case study for two reasons. First, because it was surrounded by high fortress-like *temenos* walls extending for some 580 m around the sanctuary from at least the sixth century BCE, and at its centre it had a very unusual square, non-colonnaded,

temple structure (the *Telesterion*), designed to create a large internal space unviewable from the outside. The second reason that Eleusis makes a good case study is the nature of the ritual conducted there: a mystery cult, which it was forbidden for non-initiates to witness. Yet while the monumental *temenos* and *Telesterion* walls played an obvious, and well-studied, role in allowing the mystery cult to remain a mystery to outsiders, there has so far been very little scholarly investigation of the impact of the monumental *temenos* and *Telesterion* walls on those who *were* initiated into the cult.

# The Mystery Cult of Demeter and Kore at Eleusis

Initiates (*mystai*) had to complete a series of ritual acts at the Lesser Mysteries in Athens in early springtime. These acts seem to have focused on mentally preparing the initiate for the importance of what lay before them, ensuring their purification. The initiate completed them under the guidance of a *mystagogos* – an already initiated 'sponsor'. <sup>14</sup> The Greater Mysteries (held at Eleusis) happened in the month of Boedromion (September). In advance, Athens sent out special messengers around Greece announcing the Mysteries, asking for a holy truce from all states that used the sanctuary to allow people to attend, as well as dedications – a tithe of First Fruits – for Demeter. <sup>15</sup>

- For the height of the *temenos* walls (and for their successive rebuilds) cf. Pausanias 1.38, Eur. *Supp.* 980–989, Camp 2001: 283–289, Mylonas 1961, Lippolis 2006, Miles 2012, Evans 2002: 236–237, Clinton 1994: 162–163, Travlos 1988: 93–94. For discussion of the unusual architecture (and successive rebuilds) of the *Telesterion*: Evans 2002: 233, Camp 2001: 283, Clinton 1994: 163, Miles 2012: 123, Mylonas 1961: 114–138. For discussion of the internal landscape of the sanctuary: Clinton 1992: 96–97.
- Discussion of what happened inside the sanctuary with the on-initiated was forbidden on pain of death: Thuc. 6.27–29, Plut. *Vit. Alc.* 19–22, Andoc. 1, Lys. 6, Strabo 10.3.9; Camp 2001: 283. While a mystery cult, it was at the same time an official part of the public ritual calendar of the Athenian *polis*: Plut. *Vit. Per.* 12.1; Sourvinou-Inwood 2003: 26, Bowden 2010: 31, Clinton 1994: 162–163
- <sup>13</sup> The high, fortress-like nature of this sanctuary's *temenos* walls has also been explained by Eleusis' place as the westernmost Attic deme on the coast and thus something of an outpost facing the Peloponnese, with the need for substantial defensive fortifications (both of the sanctuary and of the Acropolis): Camp 2001: 283.
- <sup>14</sup> Cf. Clem. Al. Protr. 2.21.2, Strom. 5.11.70.7–71.1; Bremmer 2014: 2, Mylonas 1961: 237, 240, Roussel 1930. This possibly included the discussion of 'secret information' required to be known to even enter the sanctuary at Eleusis: IG 1³ 6.23–31; Larson 2016: 272. Initiation into the Lesser Mysteries was not an absolute pre-requisite for taking part in the Greater Mysteries: Larson 2016: 271–272, Parker 2005: 344 n.74.
- <sup>15</sup> Text of sacred truce: *IG* I<sup>3</sup> 6; Bowden 2010: 31, Mylonas 1961: 244.

Initiates first gathered on the fifteenth of the month of Boedromion in Athens. The initiates were an unusual group: the only requirements for being initiated were that you could speak Greek and that you had not committed murder. The Mysteries were thus open to Athenians and other Greek speakers, to men and women, to slave and free. Most likely, the initiate group each year ran to several thousand individuals. In particular, *mystai* were joined at the Greater Mysteries not only by their *mystagogoi*, but also by the *epoptai* (*mystai* from a previous year who had seen the first part of the Mysteries and were now returning for a higher level of revelation).

This mixed group gathered in the agora to hear the proclamation of the festival. The next day (16 Boedromion), the initiates went to the sea to purify themselves and the sacrificial animals (piglets) they would offer to Demeter. <sup>20</sup> On the morning of 19 Boedromion (after two days' rest, fasting, and other minor sacrifices in Athens), the group of mystai, epoptai, and mystagogoi assembled again in the agora and formed the procession that moved from Athens to the sanctuary of Demeter at Eleusis (some fifteen miles away). 21 This was headed by the Eleusinian dignitaries and accompanied by donkeys carrying provisions and torches required for the festival ahead.<sup>22</sup> They processed during the day over a fifteen-mile route, their progress interrupted by sacred dances, sacrifices, libation pouring, ritual washing, and the singing of hymns. <sup>23</sup> They arrived at Eleusis at nightfall on 19 Boedromion, and spent the night singing and dancing in honour of the goddesses in the outer court, outside the temenos walls of the sanctuary.<sup>24</sup> The initiation – when *mystai*, *mystagogoi* and epoptai went inside the *temenos* walls - happened the next night (20 Boedromion) and perhaps also on the night of 21 Boedromion.<sup>25</sup> Once the initiation was complete (after the

<sup>&</sup>lt;sup>16</sup> Evans 2002: 240, Burkert 1985: 285. 
<sup>17</sup> Cf. Bremmer 2014: 2.

Hdt. 8.65 recounts, at the time of Persian invasion, the story of the sighting of a dust cloud arising as if from a crowd of 30,000 initiates (for discussion Miles 2012: 114–115); Ael. Ar. Orat. 1.257 'thousands of initiates'; Burkert 1985: 285 (most Athenians initiated); Bremmer 2014: 4 (c. 3000 initiates); Bowden 2010: 33–34 (several thousand); Clinton 1992: 85 (only a few hundred initiates). The initiation cost was about 15 drachmas (ten days' wage in the fourth century BCE): Bremmer 2014: 2, Foley 1994: 66.

<sup>&</sup>lt;sup>19</sup> Clinton 1992: 85, Bremmer 2014: 5, Foley 1994: 66.

<sup>&</sup>lt;sup>20</sup> Sea purification: Bremmer 2014: 4, Bowden 2010: 34, Robertson 1999: 1–10, Foley 1994: 66–68, Mylonas 1961: 244–245.

Scholars differ on whether there was one procession (on 19 Boedromion) or two processions (one on the 19th and one on the 20th) cf. Robertson 1999: 19. One procession: Larson 2016: 272, Bremmer 2014: 5, Foley 1994: 66–68, Mylonas 1961: 256. Two processions: Bowden 2010: 36.

<sup>&</sup>lt;sup>22</sup> Bremmer 2014: 5. <sup>23</sup> Cf. Bremmer 2014: 6–7, Camp 2001: 283, Foley 1994: 66–68.

<sup>&</sup>lt;sup>24</sup> Eur. *Ion* 1074.

<sup>&</sup>lt;sup>25</sup> Two nights: Clinton 1992: 126. One night or perhaps two: Mylonas 1961: 258, 274.

20th/21st), the newly-initiated would re-engage with the wider community for a further day of celebrations and feasting on 22 Boedromion at Eleusis, followed by a return to Athens on the 23rd, and there was an Athenian assembly meeting on 24 Boedromion, marking the end of the festival.<sup>26</sup>

What went on inside the *temenos* enclosure during the night(s) of initiation? The general picture seems to have been as follows: having spent the day of the 20th fasting, resting, and purifying themselves, the initiate body drank a ritual drink (the *kykeon*), changed into new clothes they had brought with them for the occasion, and moved into the *temenos* enclosure.<sup>27</sup>

Once inside, initiation was composed of dromena ('things done'), legomena ('things said'), and deiknymena ('things shown').28 The dromena were most probably a presentation of the story of Demeter wandering and wailing in search of her daughter, Kore, situated around the cave and 'mirthless rock' found inside the temenos enclosure, acted out by the chief priests at Eleusis (see Figure 8.1).<sup>29</sup> This night-time performance was perhaps accompanied by the initiates actively having to search for Kore. This aspect of the ritual was new for the mystai, but would have already been seen by epoptai and *mystagogoi*. The lead priest of the Mysteries – the *hierophant* – is thought to have sounded a gong to announce the summoning of Kore and reunification of Demeter and Kore.<sup>30</sup> This performance was most probably accompanied by the legomena - a series of invocations, which enabled initiates to understand what they were seeing.<sup>31</sup> Finally, for the *deiknymena*, the locus of action moved to the *Telesterion* structure. We are uncertain which of the following two scenarios occurred at this point.<sup>32</sup> In scenario one, both *mystai* and epoptai went inside and bore witness to a tremendous, brilliant light streaming from a smaller structure at the heart of the *Telesterion* (the *Anaktoron*), where the sacred objects were kept (see **Figure 8.1**). Subsequently the *epoptai* – in the only part of the initiation that was new to them – came forward to see the sacred objects as displayed by the hierophant, who once again spoke a series of legomena to aid comprehension of what was being seen.<sup>33</sup> In scenario two,

<sup>&</sup>lt;sup>26</sup> Bremmer 2014: 16, Evans 2002: 240, Clinton 1992: 126, Mylonas 1961: 274.

<sup>&</sup>lt;sup>27</sup> Mylonas 1961: 258–261. The kykeon as having a hallucinogenic effect: Ruck 2006.

<sup>&</sup>lt;sup>28</sup> Cf. Evans 2002: 246, Richardson 1974: 302–308, Mylonas 1961: 261–274. Scholars who believe the initiation happened over two nights often place the *dromena* and *legomena* during the first night, and the *deiknymena* on the second night, cf. Bremmer 2014: 9–11.

<sup>&</sup>lt;sup>29</sup> Clinton 1992: 85, 96, Mylonas 1961: 261. <sup>30</sup> Apollod. *FGrH* 244F F 110b.

<sup>&</sup>lt;sup>31</sup> Mylonas 1961: 272.

<sup>&</sup>lt;sup>32</sup> In part this uncertainty relates to whether the *Telesterion* is the same structure as the *Anaktoron*, or whether the *Anaktoron* is the smaller structure within the *Telesterion*. For the ancient sources and discussion see: *IG* II<sup>2</sup> 3709, 3811, Philostr. V S 103 (Kayser), Plut. *Mor.* 81E; Clinton 1992: 126.

<sup>&</sup>lt;sup>33</sup> Bremmer 2014: 11–13.

only the *epoptai* entered the *Telesterion*, with the *mystai* remaining outside.<sup>34</sup> All bore witness to the brilliant light (so brilliant it emanated out of the *Telesterion* via its doorways and hole in the roof), but once again only the *epoptai* saw (and heard about) the sacred objects themselves.<sup>35</sup>

### Prior Expectations of Initiates at Eleusis

What kinds of prior expectations (the top-down input) might the initiate group about to participate in the mystery cult at Eleusis have had? This would depend of course on their ritual status. The *mystagogoi* – taking part again after having already experienced the full revelation of the Mysteries – would know precisely what to expect. The *epoptai* would have full knowledge of the first part of the ceremony (the *dromena* and the *legomena*, known collectively as the *telete*), but less knowledge of the revelations they were returning to receive for the first time (the *deiknymena* and further *legomena*, known collectively as the *epopteia*). And the *mystai* would be experiencing it all for the first time. In what follows, I will principally concentrate on the ritual experience of the *mystai*.

Mystai initiates came from very different backgrounds: Athenian and non-Athenian, men and women, slave and free. Each would have had different experiences of Athenian religious ritual up to this point. Yet all would have been united by the fact that this ritual was outside the realm of their normative experience: both in terms of the company the initiates found themselves in (nowhere else in Athenian society did such a wide social group come together), and in the unusual and secret nature of the ceremony itself.<sup>36</sup> As such, despite their different backgrounds and levels of normative ritual knowledge, we might imagine them all having a fairly similar set of limited prior expectations about this particular ceremony. Crucially, what they did expect would have depended almost exclusively on what was revealed to them during their process of preparation by their trusted mystagogoi.

<sup>34</sup> Clinton 1992: 88-90.

<sup>35</sup> Discussion of brilliant light: IG II² 3811, Plut. Mor. 81E. For a possible fire on top of the smaller interior structure (with smoke/light emitted through 'roof light' in larger 'Telesterion' structure): Foley 1994: 68, Burkert 1985: 288. Nature of sacred objects revealed to epoptai by the hierophant (the chief priest): Hom. Hymn Dem. 473–482; Bremmer 2014: 11–13, Clinton 1992: 89 and 1974: 46.

<sup>&</sup>lt;sup>36</sup> The ceremony was also unusual in that it contained no animal sacrifice (there were no altars inside the sanctuary). The piglets that initiates had to purify in the sea were sacrificed prior to the initiates' entry into the sanctuary at Eleusis; cf. Evans 2002.

The nature of the preparation is likely reflected in the various surviving literary sources that describe the Mysteries. The *Homeric Hymn to Demeter* is one of a collection of thirty-three hymns praising different Greek gods composed in the seventh or sixth centuries BCE, and still well-known and respected in the fifth century BCE, contemporary with the practice of the Mysteries. In this text, it is made clear that he who is initiated at Eleusis is blessed, and that the initiated and uninitiated do not share the same lot in death.<sup>37</sup> In the fourth century BCE, Isocrates, an Athenian political and philosophical commentator, also claimed, as part of one of his political speeches calling for greater unity across Greece, that the initiates have 'sweeter hopes concerning the end of life and all eternity'. 38 According to the fourth-century CE rhetorician and philosopher Sopatros, initiation seemingly changed one's status with the gods and altered one's journey after death.<sup>39</sup> Equally, the experience of going through initiation was marked as a highly emotional one.40 Plutarch comments on how 'terror, anxiety and bewilderment turned to wonder and clarification'. 41 He compares the experience of initiation to death itself: in which panic, shivering, sweat gives way to being 'set free and loose from all bondage'. 42 This emotional impact of initiation is perhaps best underlined by Aristotle's summary of initiation as not being a process of learning (mathein), but an experience of suffering (pathein) leading to a change in state of mind.<sup>43</sup>

# The Eleusis Temenos Walls and the Ritual Experience

As we have seen, the initiate group would have approached the high, fortified temenos walls of the sanctuary tired, in near darkness, accompanied by torchlight, at the end of a fifteen-mile, day-long procession filled with individual ritual events.44 Having spent that night singing and

Hom. Hymn Dem. 473–482.
 Isoc. Paneg. 28. See also Ar. Ran. 154-8, 448–455, Pl. Leg. 7.334b7; Mikalson 1983: 81.

<sup>&</sup>lt;sup>39</sup> Cf. Sopatros *Rhetores Graeci* 8: 114–115 'I came out of the mystery hall feeling like a stranger to myself; Larson 2016: 268-271. Cf. Foley 1994: 139. For this becoming a more important part of the initiation from the sixth century BCE onwards, as part of a wider set of shifting attitudes to death within Greek society: Sourvinou-Inwood 2003: 26-28.

<sup>&</sup>lt;sup>40</sup> The crucial emotional nature of initiation: Larson 2016: 268, Foley 1994: 69, Evans 2002: 249, Sourvinou-Inwood 2003: 40, Bremmer 2014: 13.

<sup>&</sup>lt;sup>41</sup> Plut. Mor. 47A, 943C, Ael. Ar. Orat. 19.2, Lactant. Div. inst. 23.

<sup>42</sup> Plut. fr. 168 in Stob. Flor. 4.52.49. For discussion of the important emotional shift from terror to wonder within the initiation: Clinton 1992: 87-89.

<sup>&</sup>lt;sup>43</sup> Arist. fr. 15 (Synesius *Dion* 10 p.48a); Foley 1994: 69, Sourvinou-Inwood 2003: 40, Burkert 1985: 89-95.

<sup>&</sup>lt;sup>44</sup> Cf. Bremmer 2014: 6–7.

dancing outside the sanctuary, as well as then recovering and fasting through to the following evening of 20 Boedromion, the initiates would by this point have spent a total of six days preparing/purifying/fasting/travelling/dancing in preparation for their initiation (not counting the Lesser Mysteries from the springtime). This is a significant amount of time in comparison to most other religious festivals with which they would have been acquainted. The investment of their time, the physical and mental journey they had been through, leading them to this moment, according to theories of embodied cognition and predictive processing, would have encouraged amongst the initiates conscious and unconscious forms of imagining of what lay ahead, amplifying the expectations they had already received.<sup>45</sup>

The initiates, arriving at the sanctuary over 19–20 Boedromion, would have been denied any sense of the sanctuary within by the high *temenos* walls (see **Figure 8.1**).<sup>46</sup> This denial of bottom-up sensory information with which to cross-check their amplified and heightened sense of expectation and imagination ensured their inability to challenge those mounting expectations. At the same time the continued denial of information about what the sanctuary was like even when they were now so close to it, may well have magnified even further their anticipation and excitement at what they were (finally) about to experience.

# The Temenos Walls and the Group's Sense of Self

The initiates finally moved through the gateway in the sanctuary's high *temenos* walls on the night of 20 Boedromion. This act, and their resulting time together within the sanctuary, would have strengthened their sense of themselves as a group, and of their separation from the outside world, in four specific ways. First, their very ability to move through a monumental architectural demarcation like the high *temenos* walls (which non-initiates could not pass beyond) would have imbued them with a heightened sense of authority and importance.<sup>47</sup> Second, the darkness of the night environment, complemented by the high walls cutting off the world outside, would, according to theories of grounded cognition, have impacted upon the initiates' perception of themselves and

<sup>&</sup>lt;sup>45</sup> Cf. Eidinow 2018 on the importance of embodied cognition for practices of divination. For studies of embodied cognition itself see: Decety and Grèzes 2016, Decety and Jackson 2004.

<sup>&</sup>lt;sup>46</sup> In Eur. Supp. 980–989, the women remark that, while sitting at the altars of Demeter and Kore outside the sanctuary walls, they can see only the roof of the Telesterion above them.

<sup>&</sup>lt;sup>47</sup> Pucci 2006: 171, Gerstel 2006: 3, Rapoport 1990, Eliade 1987: 25.

one another. Darkness increases people's tendency towards abstract processing, which will have encouraged the initiates to construe themselves as inter-dependent with other members of the group.<sup>48</sup> This interdependent construal of the self, promoted by darkness, in turn influences social behaviour, in particular towards acting more co-operatively. 49 Third, the high temenos walls impacted on initiates' visual perception to strengthen their sense of themselves as a group. The walls prevented the initiates from seeing the outside world and narrowed their visual field instead to looking at one another. As attention studies have shown since the nineteenth century, selective attention to a subset of a visual scene enhances the processing of information from the attended portion. 50 The walls thus cut the initiates off from the outside world and simultaneously encouraged them to focus on, and pay more attention to, one another. Fourth, the high temenos walls, combined with the darkness, also transformed the auditory environment. As demonstrated by attention and sense-deprivation studies, the loss of one sense leads to the brain placing greater emphasis on its input from others.51 The darkness, combined with the smaller visual field, would thus not only have intensified initiates' attention on what they could see, but also encouraged them to rely more on their other senses, in particular what they could hear. At the same time, the high temenos walls would have altered and intensified the soundscape the initiates were listening to. The imposition of a high physical barrier around a group not only removes external ambient noise, increasing the sonic clarity and exclusivity of the noise made by those within the group, but also amplifies the sound coming from within, thus intensifying the auditory experience still further and giving it acoustic 'integrity' - the sense of the auditory experience as being qualitatively different from the normal hustle and bustle of everyday life. 52 As such, the high temenos walls and the darkness worked together to transform the auditory environment both in terms of its intensity and in terms of the sense it offered the group that they had moved into their own separate world.

<sup>&</sup>lt;sup>48</sup> Lakoff and Johnson 1999, Trope and Liberman 2010, Bruce, Green, and Georgesen 2003, Forster, Liberman, and Kuschel 2008, Zhong, Bohns, and Gino 2010, Steidle, Werth, and Hanke 2011.

<sup>&</sup>lt;sup>49</sup> Baumeister and Leary 1995, Zhong, Bohns, and Gino 2010, Steidle, Hanke, and Werth 2013.

<sup>&</sup>lt;sup>50</sup> Purves et al. 2013: 169, Rosenblum 2010: 169, 194, Driver 2001, Lavie 1995, Treisman 1988.

<sup>&</sup>lt;sup>51</sup> E.g. Rosenblum 2010: 33, 279.

<sup>&</sup>lt;sup>52</sup> Cf. Helmer and Chichoine 2013, Hamilakis 2013: 170, Cross and Watson 2006, Yang and Kang 2005, Watson and Keating 1999.

# The Temenos Walls and the Initiates' Engagement with the Ritual

The high *temenos* walls, along with the darkness, also would have increased the initiates' visual attention and focus on the *dromena* that was now enacted before them by the chief priests. Importantly, this was a ritual experience in which vision, the ability to see, was constantly underlined as a crucial part of the experience in several ways. <sup>53</sup> First, visual access was denied to those who were not to be initiated (thanks to the high *temenos* walls). <sup>54</sup> Second, the mythological explanations for the ritual at Eleusis emphasized how Demeter had originally 'revealed' her mysteries to the princes of Eleusis. <sup>55</sup> Third, vision was equated to initiation within the terminology used to describe those involved in the ritual itself. *Mystai*, for example, the term for those about to be initiated, translates as 'those who have been closed'; the *epoptai* as 'those who see'. The meaning of *hierophant*— the chief priest of the Mysteries—is 'he who shows the holy things' and the official name for the revelation of the sacred objects (the *deiknymena*) was the *epopteia* 'the viewing'. <sup>56</sup>

Furthermore, the architecture of the sanctuary, as we have seen above, transformed the auditory environment to create an environment with high acoustic integrity, in which initiates would have been encouraged to focus also on what they could hear. As such, the architecture of the sanctuary would also have encouraged initiates to focus more intently on the other important aspect of initiation – the *legomena* or 'the things said' – which helped initiates to understand what they saw.

However, the visual focus called for by the ritual and encouraged by the sanctuary architecture was also simultaneously frustrated. The *dromena* or 'the things done' were, ultimately, taking place in darkness, with the only light provided by flickering torches. <sup>57</sup> Clinton has argued that the performance may have taken place *inside* a cave within the already dark sanctuary (cf. Figure 8.1). <sup>58</sup> Initiates were thus simultaneously encouraged to focus

<sup>&</sup>lt;sup>53</sup> Cf. Pind. fr. 137.1, Soph. fr 837 (Radt), Eur. Her. 613, Eur. Hipp. 25, Gregory Nazianzus Orations 39.4. Similarly in scholarship about Eleusis: Mylonas 1961: 261–274, Foley 1994: 62, 70, Evans 2002: 245, Bowden 2010: 37, Bremmer 2014: 11, Larson 2016: 268. Equally in ritual more generally: Smith 1987:103–104, Jameson 2014: 270, Mylonopoulos 2006: 93.

<sup>&</sup>lt;sup>54</sup> Cf. Paus. 1.14.3, 1.38.7. Aelian recounts a story of an 'unholy man' who did not wish to become initiated but instead climbed up on the *temenos* walls at Eleusis to witness the festival. He apparently slipped, fell, and died: Ael. F43 (Hercher = 46ab Domingo-Forasté); cf. Dillon 1997: 178.

<sup>55</sup> *Hom. Hymn Dem.* 474–476; Sourvinou-Inwood 2003: 38.

<sup>&</sup>lt;sup>56</sup> For discussion, cf. Clinton 2005: 50.

<sup>&</sup>lt;sup>57</sup> The darkness of the experience (and the impact of the lit torches) e.g. Soph. *OC* 1049–1051, Plut. fr. 168. Cf. Clinton 1974: 68. The darkness of the first stages of the ritual contrasted with the brilliant light of the *epopteia* cf. Clinton 1992: 87.

<sup>&</sup>lt;sup>58</sup> Clinton 1992: 96.

on what they could see and hear, but deprived of detailed visual information by the poor light conditions, which would have intensified their reliance still further on the *legomena* to help them interpret what was (only partially) visible in front of them. As a result, the sanctuary's architectural layout, combined with darkness, created an environment in which high expectations of visual attention, combined with an architectural focusing of visual and aural attention, met with unreliable visual sensory information and thus created additional reliance on aural explanation. <sup>59</sup>

### The Walls and Emotional Contagion

The high temenos walls, combined with darkness, would also have affected the initiates' emotional experience by increasing significantly the potential for emotional contagion within the group. 60 Initiates had been primed via their top-down expectations, as well as their long physical preparations, for this to be an emotional experience. <sup>61</sup> They were confronted inside the sanctuary with the visual and aural performance (by the chief Eleusinian priests) of the sorrow of the goddess Demeter at the loss of her daughter, with the initiates perhaps even being asked to search for Kore themselves, thus imitating the Goddess and being encouraged to mimic her distress. <sup>62</sup> Studies of emotional contagion have shown that we subconsciously tend to mimic the body postures of those we engage with, and as a result 'catch' and 'feel' their emotions. <sup>63</sup> Crucially, studies have shown that we are more likely to 'catch' the emotion of someone if our attention has been focused on them, and that we are more likely to mimic the actions and catch the emotions of the most powerful person in any group. <sup>64</sup> In this instance, there was no-one more powerful, and no-one whose attention initiates would have been more focused on, than the figure of the Goddess herself, on display in front of the initiates, weeping and in sorrow for

Hatfield, Cacioppo, and Rapson 1994, 1993, and 1992.

63 Hatfield, Cacioppo, and Rapson 1994: 5, 10–11, 16, 36–44 and 1992: 153–154.

<sup>&</sup>lt;sup>59</sup> One of only two qualifications to be initiated was the ability to speak and understand Greek, underscoring the importance perhaps of being able to understand what was said during the initiation. Sopatros (*Rhetores Graeci* 8 p. 100 (Waltz)), relates the story of an individual's dream in which he saw the *dromena*, but did not hear the *legomena*, and as a result was not considered as initiated. Cf. Mylonas 1961: 272.

<sup>&</sup>lt;sup>61</sup> Those primed for an emotional experience are more vulnerable to emotional contagion: Hatfield, Cacioppo, and Rapson 1994: 155–160.

<sup>62</sup> Cf. Bremmer 2014: 9–10, Clinton 1992: 85.

<sup>&</sup>lt;sup>64</sup> Catching the emotion of the person on whom attention is focused: Hatfield, Cacioppo, and Rapson 1994: 148. On catching the emotions of the most powerful person in the group: Hatfield, Cacioppo, and Rapson 1994: 175.

the loss of her daughter, a loss initiates were themselves asked to replicate, and thus empathize with, by 'searching' for Kore.

Those emotions of sorrow, picked up by the initiate group from Demeter, would also then have spread and intensified within the initiate group itself. We are also more likely to adopt others' emotions if we have been made to recognize our inter-relatedness to them. The high *temenos* walls and the darkness explicitly worked together to encourage initiates to construe themselves as a connected group separated from the rest of the world. Moreover, emotional contagion is at its most powerful in environments in which there is both a high number, and most importantly, a high density, of people. The large group of initiates, now contained within the high *temenos* walls in a denser environment, would thus have been even more susceptible to high emotional contagion. The sorrow, 'caught' from Demeter, would thus have been amplified and intensified as it was caught and re-caught amongst the large, dense, connected initiate group, almost as if in an 'echo-chamber' of emotions.

The visual, aural, and emotional impacts created by the high *temenos* walls and the darkness of the night-time initiation thus worked together to heighten and confirm a number of the initiates' top-down prior expectations (particularly in terms of their sense of themselves as a group having a highly emotional experience separated off from the rest of the world).<sup>67</sup> The walls and darkness also deprived initiates of the ability to cross-check their top-down expectations with particularly visual bottom-up sensory information, encouraging their susceptibility to both their top-down expectations and what they were told during the ceremony. At the same time, the high degree of emotional contagion amongst the initiates would have, in turn, depleted initiates' executive cognitive resources to effect individual critique of their top-down expectations with the bottom-up sensory information they did receive.<sup>68</sup>

# The Presence of Religious Authority

This reduction of the initiates' ability to interrogate for themselves that which they saw and heard would have been further enhanced by the presence of religious authority. Studies have shown that participants reduce their own executive neural activity in front of trusted authorities. <sup>69</sup> Independent of the 'presence' of the Goddess during the initiation,

Hatfield, Cacioppo, and Rapson 1994: 152, Freedman, Birsky, and Cavoukian 1980: 155.
 Freeman, Birsky, and Cavoukian 1980: 155–156, 160.
 Schjoedt and Jensen 2018: 323–324.
 Schjoedt and Jensen 2018: 327–328.

initiates were in fact never far from a number of trusted religious authorities throughout their initiation experience. These religious authorities came first in the form of the *mystagogoi*, who had been responsible for developing the initiates' sense of expectation in the first place, and who were with them (as were the *epoptai*) experiencing the ritual within the sanctuary. Indeed, the very name of the *mystagogoi* may have incited a degree of trust in them: they were 'the leaders of the *mystai*'. At the same time, the crucial *legomena*, which may have been especially relied on by initiates due to the poor visual conditions, were spoken by the ultimate religious authorities at Eleusis: the chief priests. To The initiates were thus constantly surrounded by, hearing from, and having to rely on, trusted religious authorities whose words and actions they were more likely to accept than question, depriving the initiates of the ability to cross-examine individually their top-down expectations with the bottom-up sensory information they were receiving.

These trusted authorities would also have contributed to the spread of emotion within the initiate group. In studies of emotional contagion, 'students' have been shown to be far more susceptible to mimicking the actions, and thus catching the emotions, of their 'teachers'.<sup>71</sup> The *mystagogoi*, as well as the chief priests, in terms of how they reacted to the things done and said by and about the Goddess, would thus have been powerful instigators of emotional response, which would subsequently have spread quickly through the group. Such additional intensification of the emotional experience of the event would thus have further depleted the initiates' cognitive resources to sense-check their top-down expectations.<sup>72</sup>

# The Telesterion Walls and the Ritual Experience

The final key part of the Mysteries took place within the *Telesterion* – 'the hall of initiation': this was the *deiknymena* or 'the showing' of the sacred objects, preceded by the revealing of a great light (both undertaken by the chief priest, the *hierophant*). This moment, along with the sounding of the gong announcing the 'finding' of Kore, marked the emotional turning point of the ceremony from darkness to light, from terror to wonder.<sup>73</sup>

One of the few requirements for the *hierophant*, the chief priest at Eleusis, was that he had a 'pleasing and melodious voice', indicating again the importance of what he said (and how he said it) as much as what he did: Clinton 1974: 46.

<sup>73</sup> Cf. Clinton 1992: 87, 97.

From within the solid-walled *Telesterion*, aware that they were further insulated from the outside world by the solid temenos wall, those who entered would have felt distanced even further from the real world (see Figure 8.1). The walls of the *Telesterion*, combined now with a roof, would have created an even darker environment, especially as some scholars have claimed that all lit torches were extinguished when inside the Telesterion.<sup>74</sup> Such architectural and visual conditions would have worked to amplify all the same effects outlined above for the night-time ceremonies within the temenos walls: a further augmented sense of group cohesion (or rather, if only the epoptai entered, then a new sense of an even more exclusive group); a further narrowing down of visual fields and intensifying of visual focus on what could still be seen, accompanied by a further emphasis on what could be heard; an amplifying of sound and creation of further acoustic integrity; and an enhancement of emotional contagion due to the increased density of the crowd (and their increased sense of themselves as a group). At the same time, the darkness would have prevented (just as with the performance of Demeter inside her cave previously) any kind of close visual scrutiny by initiates of the deiknymena to come.

Some of these effects would have been enhanced still further by the interior architecture of the *Telesterion* space (see Figure 8.1). Eight rows of stone seats were set against each wall for participants to sit on. Hollinshead has argued, with regard to monumental steps in sanctuaries, which were often used for the gathering of a group to watch a ritual event, that the very act of gathering prompted by an architecture intensified further the awareness of a shared experience and conferred authority on the event.<sup>75</sup> Here in the *Telesterion*, that process of gathering on the stone benches, and thus the awareness of shared authoritative experience, was highly noticeable because the participants were forced by the architecture to perceive themselves gathering (either by dimly seeing participants gathering on all four sides of the structure, or at the very least, within the contained architectural environment, hearing them doing so). Furthermore the seats all prompted the initiates' (limited) visual focus in the same direction towards the centre of the Telesterion, where a smaller internal structure housed the sacred objects, soon to be revealed by the hierophant. Initiates were once again confronted, at the apex of the initiation, with a trusted religious authority, whose very title was implicit in the act of knowledge revelation, and whose presence would have encouraged participants to

<sup>&</sup>lt;sup>74</sup> Cf. 'the most mystic whiff of torches' within the *Telesterion*: Ar. *Ran.* 314; Bremmer 2014: 9. <sup>75</sup> Hollinshead 2012: 27.

downgrade their neural activity and thus their critical scrutiny of what they were about to (just about) see.

Either to the *mystai* and *epoptai* gathered inside, or to *epoptai* inside and *mystai* outside, was first visible a great burst of light in the moments before the sacred objects were shown. The sudden appearance of this light, given the context of the night-time ritual conducted within the even more dimly illuminated *Telesterion*, would have had huge sensory and emotional impact on both groups. It would also have impacted particularly on the *epoptai* sability to subsequently see in detail the sacred objects that were now revealed, as their eyes attempted to adjust to the shift from darkness to light.

Furthermore, the interior architecture of the *Telesterion* structure worked to deprive those same participants of a clear line of sight of the very thing they were being encouraged to focus on. The roof of the *Telesterion* was supported by a forest of forty-two columns, fragmenting visual access to the actions of the *hierophant* at the centre of the *Telesterion* as he displayed the sacred objects (see Figure 8.1).<sup>77</sup> The structure of the building, in combination with the sudden burst of light appearing in the darkness, thus both encouraged and frustrated greater visual interrogation of the sacred objects at the heart of the Mysteries, just as had happened outside with the performance of Demeter, with the result that participants were once again encouraged to rely more on what they heard.<sup>78</sup> In terms of what was heard, there may have been singing within the *Telesterion* structure, but we also know that the *hierophant* had to speak key phrases as part of the revelation of the sacred objects.<sup>79</sup>

# The Post-ritual Understanding of the Mysteries at Eleusis

Initiation at Eleusis was a highly emotional experience. The participants' top-down expectations were heightened prior to entering the sanctuary through a long process of preparation combined with a frustration of visual

<sup>&</sup>lt;sup>76</sup> Cf. Clinton 2005.

The number of interior columns quoted here (forty-two) corresponds to the version designed by Koroibos and built in the fifth century BCE (we hear of a design by Iktinos that would have had only twenty columns, but this was not built) cf. Mylonas 1961: 113–116. Clinton has argued that participants were allowed to move around in order to have a better view of the sacred objects, or that the *hierophant* himself moved around the internal space with them (but there is no clear evidence for this): Clinton 1974: 46 and 1992: 90.

<sup>&</sup>lt;sup>78</sup> Perhaps we should not be surprised that Plutarch described the participants sitting inside the *Telesterion* in 'awe and silence' since they needed to hear, in as much as they could not clearly see. Plut. *Mor.* 10F, 81E, 943C.

<sup>&</sup>lt;sup>79</sup> Cf. Clinton 1992: 89, Bremmer 2014: 13.

access to the sanctuary until they began the initiation. The enclosed nature of the architectural environments creating high density amongst the large number of participants, and the ways in which the participants were encouraged to focus their attention on one another, as well as relate to one another because of the darkness, would have created an ever-increasing echo-chamber of emotional contagion. And the participants would have caught the emotions – of sorrow and terror changing to relief and happiness – from the multiple religious authorities (the Goddess, the chief priests, their *mystagogoi*, and *epoptai*) who were their constant companions in the experience, and on whom (especially the Goddess and the chief priest) they were encouraged by the sanctuary's architecture to focus.

The initiates emerged also with a sense of their altered place in the world. The sanctuary architecture encouraged and intensified a sense of the initiates as a group with their own special identity (and potentially a subgroup identity for the *epoptai*), that they had not had prior to initiation, by allowing them and only them access to a series of restricted spaces, and by controlling their visual and aural environments to make them feel physically separated off from the world. In addition, as we have seen, that same architecture, alongside the presence of the Goddess and trusted religious figures, had contributed to the swift, intense spread of emotion within the group through the initiation. High emotional contagion leads in turn to a greater sense of closeness and solidarity amongst the group who have, effectively, bonded through the emotions they have mimicked and 'caught' from one another. 80 As such, the sense of the initiated as a now special group, and its individuals as thus having been somehow changed by initiation, would, I argue, have been strongly felt in the aftermath of the event.

But what about their sense that their fate after death had changed? Here, I think, the predictive coding model shows us convincingly how initiates could have emerged with this top-down expectation (given to them in preparation by their trusted *mystagogoi*) intact. Through the process of initiation, we have seen multiple layers and forms of deprivation of sensory input and depletion of executive cognitive resources experienced by the initiates, in large part thanks to the architecture of the sanctuary, the darkness in which the initiation was undertaken, and the constant presence of various forms of trusted religious authority, which would have constrained the participants from challenging their top-down model of expectations at the time of the event. This inability to challenge the model

<sup>80</sup> Freedman, Birsky, and Cavoukian 1980: 155.

has been argued to create 'metacognitive gaps' in understanding that the brain is encouraged to fill in one of two ways: by the acceptance of the preestablished narratives as an accepted version of what happened, and/or the acceptance of post-narrative explanations provided by the group/society at large.<sup>81</sup>

Those pre-established narratives – in particular about initiation leading to a change in status after death – had been given to participants by those who had themselves been through the process (their trusted *mystagogoi*) and could not be challenged by anyone who had not experienced the initiation (thanks to the high *temenos* walls of the sanctuary and the enclosed *Telesterion* structure ensuring that no-one else could see it). Nor could they be discussed, on pain of death, in post-ritual discussions with anyone who had not taken part in the very same process. The rules of the mystery cult at Eleusis thus created a closed system for participants' understanding of what had happened. They formed a ritual echo-chamber, whose apex took place, as we have seen, within an architectural echo-chamber of senses and emotions, and which would, I argue, have strongly encouraged participants to accept the understanding given to them that this experience would change their fate after death.

Indeed, it was perhaps this combination of high emotion and forced reliance on a closed system of pre- and post-ritual understanding that made the Mysteries such a powerful transformative interaction with the divine. Recent studies of emotion have shown how much emotion impacts on memory within the individual brain, thanks to the ways in which the amygdala – the emotion centre in the brain – has high levels of connectivity to multiple areas of cognition processing. In relation to memory, studies have shown that high emotion intensifies the process of memory encoding and retention, as well as the consolidation of memories in the hippocampus. Yet, at the same time, those same studies have shown that high emotion, while making memories 'stronger', does not improve the accuracy of the memory; rather it increases the individual's sense of that memory's vividness and their own perception of its accuracy. We remember more vividly – but not necessarily more accurately – experiences we have undergone in high emotional states.

<sup>81</sup> Schjoedt and Jensen 2018: 325–326.

<sup>&</sup>lt;sup>82</sup> Phelps 2006: 28–32, Anderson and Phelps 2000, Whalen 1998.

<sup>83</sup> Phelps 2006: 33-34, Craik et al. 1996, Easterbrook 1959, Knowlton and Fanselow 1998, Squire and Zola-Morgan 1991.

<sup>&</sup>lt;sup>84</sup> Phelps 2006: 35, Talarico and Rubin 2003, Neisser and Harsh 1992.

Our initiates would thus, in the morning after the night(s) before, within, and only within, their newly bonded group as the initiated, be filling metacognitive gaps with pre-event expectations and post-ritual explanations to form an understanding of an event, which, due to its highly emotional nature, was likely to have been encoded and retained in their brains as an incredibly vivid memory, which the individual at least thought they could remember with a high degree of accuracy. While there may well have been some spectrum of response among initiates – some more sceptical, some uncertain, as well as those who believed that their fates truly had changed – that spectrum would have been biased towards belief by the multiple predictive coding processes outlined above. It is, in fact, I think, little wonder that initiation into the Mysteries at Eleusis was felt to be such a life-changing moment in the life of an ancient Greek: 'as the most frightening and most resplendent of all that is divine for humankind.'

#### BIBLIOGRAPHY

Anderson, A. K. and E. A. Phelps. 2000 'Perceiving Emotion: More than Meets the Eye', *Current Biology* 10: 551–554.

Baumeister, R. F. and M. R. Leary. 1995 'The Need to Belong: Desire for Interpersonal Attachments As a Fundamental Human Motivation', *Psychological Bulletin* 117 (3): 497–529.

Bergquist, B. 1967. The Archaic Greek Temenos: A Study of Structure and Function. Lund.

Bowden, H. 2010. Mystery Cults of the Ancient World. Princeton, NJ.

Bremmer, J. 2014. Initiation in the Mysteries of the Ancient World. Berlin.

Bruce, V., P. Green, and M. Georgesen. 2003. Visual Perception: Physiology, Psychology and Ecology. New York, NY.

Burkert, W. 1985. Greek Religion: Archaic and Classical. Oxford.

Camp, J. 2001. The Archaeology of Athens. Yale, CT.

Clinton, K. 1974. The Sacred Officials of the Eleusinian Mysteries. Philadelphia, PA.

1992. The Iconography of the Eleusinian Mysteries. Stockholm.

1993. 'The Sanctuary of Demeter and Kore at Eleusis', in N. Marinatos and R. Hägg, eds. *Greek Sanctuaries: New Approaches*, 110–124. London.

1994. 'The Eleusinian Mysteries and Panhellenism in Democratic Athens', in W. Coulson, O. Palagia, T. L. Shear Jr, H. Shapiro, and F. Frost, eds. *The Archaeology of Athens and Attica under the Democracy*, 161–172. Oxford.

2005. 'Stages of Initiation in the Eleusinian and Samothracian Mysteries', in M. Cosmopoulos, ed. *Greek Mysteries: The Archaeology and Ritual of Ancient Greek Secret Cults*, 50–78. Oxford.

<sup>&</sup>lt;sup>85</sup> Ael. Ar. *Orat.* 19.2.

- Cole, S. 2004. Landscape, Gender and Ritual Space: The Ancient Greek Experience. Berkeley, CA.
- Craik, F., R. Giovanni, M. Naveh-Benjamin, and N. D. Anderson. 1996. 'The Effects of Divided Attention on Encoding and Retrieval Processes in Human Memory', *Journal of Experimental Psychology: General* 125: 159–180.
- Cross, I. and A. Watson. 2006. 'Acoustics and the Human Experience of Socially-Organised Sound', in C. Scarre and G. Lawson, eds. *Archaeoacoustics* 107–116. Cambridge, UK.
- de Polignac, F. 1995. Cults, Territory and the Origins of the Greek City-State (2nd ed.). Chicago, IL.
- Decety, J. and J. Grèzes, 2016. 'The Power of Simulation: Imagining One's Own and Other's Behaviours', *Brain Research* 1079: 4–14.
- Decety, J. and P. L. Jackson, 2004. 'The Functional Architecture of Human Empathy', *Behavioural and Cognitive Neuroscience Reviews* 3: 71–100.
- Dillon, M. 1997. Pilgrims and Pilgrimage in Ancient Greece. London.
- Driver, J. 2001. 'A Selective Review of Selective Attention Research from the Past Century', *British Journal of Psychology* 92: 53–78.
- Easterbrook, J. A. 1959. 'The Effect of Emotion on Cue Utilisation and the Organisation of Behavior', *Psychological Review* 66 (3): 183–201.
- Eidinow, E. 2018. 'A Feeling for the Future: Ancient Greek Divination and Embodied Cognition', in A. Klostergaard Petersen, I. S. Gilhus, L. H. Martin, J. Sinding Jensen, and J. Sørenson, eds. *Evolution, Cognition, and the History of Religion: New Synthesis. Festschrift in Honour of Armin W. Geertz*, 447–460. Leiden.
- Ekroth, G. In press. 'A Room of One's Own?' Exploring the *Temenos* Concept As Divine Property', in J. Wallenstein, M. Haysom, and M. Mili, eds. *Stuff of the Gods: The Material Aspects of Religion in Ancient Greece*. Stockholm.
- Eliade, M. 1987. The Sacred and the Profane: The Nature of Religion. New York, NY.
- Evans, N. 2002. 'Sacrifices and the Eleusinian Mysteries' *Numen* 49 (3): 227–254.
- Foley, H. ed. 1994. The Homeric Hymn to Demeter. Yale, CT.
- Forster, J., N. Liberman, and S. Kuschel. 2008. 'The Effect of Global Versus Local Processing Styles on Assimilation versus Contrast in Social Judgement', *Journal of Personality and Social Psychology* 94 (4): 579–599.
- Freedman, J., Birsky J., and A. Cavoukian. 1980. 'Environmental Determinants of Behavioural Contagion: Density and Number', *Basic and Applied Social Psychology* 1 (2): 155–161.
- Friston, K. 2010. 'The Free-Energy Principle: A Unified Brain Theory?', *Nature Reviews Neuroscience* 11 (2): 127–138.
- Friston, K. and S. Kiebel. 2009. 'Predictive Coding under the Free-Energy Principle', *Philosophical Transactions of the Royal Society of London B: Biological Sciences* 364 (1521): 1211–1221.
- Frith, C. 2007. Making Up the Mind: How the Brain Creates Our Mental World.

  Oxford.

- Gerstel, S. ed. 2006. Thresholds of the Sacred: Architectural, Art Historical, Liturgical, and Theological Perspectives on Religious Screens. Cambridge, MA.
- Goette, H. 2001. Athens, Attica and the Megarid: An Archaeological Guide. Oxford.
- Hamilakis, Y. 2013. Archaeology of the Senses: Human Experience, Memory and Affect. New York, NY.
- Hatfield, E., J. Cacioppo, and R. Rapson. 1992. 'Primitive Emotional Contagion', in M. S. Clark, ed. *Review of Personality and Social Psychology, Vol. 14. Emotion and Social Behaviour*, 151–177. Thousand Oaks, CA.
  - 1993. 'Emotional Contagion', Current Directions in Psychological Science 2 (3): 96–99.
  - 1994. Emotional Contagion. Cambridge, UK.
- Helmer, M. and D. Chicoine. 2013. 'Soundscapes and Community Organisation in Ancient Peru: Plaza Architecture at the Early Horizon Centre of Caylan', *Antiquity* 87: 92–107.
- Hewitt, J. 1909. 'The Major Restrictions on Access to Greek Temples', Transactions of the American Philological Association 40: 83–91.
- Hollinshead, M. 2012. 'Monumental Steps and the Shaping of Ceremony' in B. Wescoat and R. Ousterhout, eds. Architecture of the Sacred: Space, Ritual and Experience from Classical Greece to Byzantium, 27–65. New York, NY.
  - 2015. Shaping Ceremony: Monumental Steps and Greek Architecture. Madison, WI.
- Jameson, M. H. 2014. 'The Spectacular and the Obscure in Athenian Religion', in M. H. Jameson, *Cults and Rites in Ancient Greece: Essays on Religion and Society*, 270–290. Cambridge, UK.
- Jones, L. 2000. *The Hermeneutics of Sacred Architecture* (vols. 1 & 2). Cambridge, MA.
- Knowlton, B. J. and M. S. Fanselow. 1998. 'The Hippocampus, Consolidation and On-Line Memory', *Current Opinion in Neurobiology* 8 (2): 293–296.
- Lakoff, G. and M. Johnson. 1999. Philosophy in the Flesh: The Embodied Mind and Its Challenge to Western Thought. New York, NY.
- Larson, J. 2016. Understanding Greek Religion: A Cognitive Approach. London.
- Lavie, N. 1995. 'Perceptual Load As a Necessary Condition for Selective Attention', Journal of Experimental Psychology: Human Perception and Performance 21: 451–468.
- Lippolis, E. 2006. Mysteria: Archeologia e culto del santuario di Demetra a Eleusi. Milan.
- Mallwitz, A. 1972. Olympia und seine Bauten. Munich.
- Maran, J. 2006. 'Mycenaean Citadels As Performative Spaces', in J. Maran, C. Juwig, H. Schwengel, and U. Thaler, eds. *Constructing Power: Architecture, Ideology and Social Practice*, 75–92. Hamburg.
- Mattern, T. 2006. 'Architektur und Ritual. Architektur also funktionaler Rahmen antiker Kultpraxis', in J. Mylonopoulos and H. Roder, eds. *Archäologie und Ritual auf der Suche nach der rituellen Handlung in den antiken Kulturen Aegyptens und Griechenlands*, 167–183. Vienna.

- Mikalson, J. 1983. Athenian Popular Religion. Chapel Hill, NC.
- Miles, M. 2012. 'Entering Demeter's Gateway: The Roman Propylon in the City Eleusinion', in B. Wescoat and R. Ousterhout, eds. *Architecture of the Sacred: Space, Ritual and Experience from Classical Greece to Byzantium*, 114–151. New York, NY.
- Mylonas, G. 1961. Eleusis and the Eleusinian Mysteries. Princeton, NJ.
- Mylonopoulos, J. 2006. 'Greek Sanctuaries As Places of Communication through Rituals: An Archaeological Perspective' in E. Stavrianopoulou, ed. *Ritual and Communication in the Graeco-Roman World*, 69–110. Liège.
  - 2008. 'The Dynamics of Ritual Space in the Hellenistic and Roman East', *Kernos* 21: 49–79.
  - 2011. 'Divine Images behind Bars: The Semantics of Barriers in Greek Temples', in M. Haysom and J. Wallensten, eds. *Current Approaches to Religion in Ancient Greece*, 269–292. Athens.
- Neisser, U. and N. Harsch. 1992. 'Phantom Flashbulbs: False Recollections of Hearing News about the Challenger', in E. Winograd and U. Neisser, eds. *Affect and Accuracy in Recall: Studies of 'Flashbulb' Memories*, 9–31. London.
- Parker, R. 2005. Polytheism and Society at Athens. Oxford.
- Parker-Pearson, M. and C. Richards. eds. 1994. Architecture and Order: Approaches to Social Space. Oxford.
- Phelps, E. 2006. 'Emotion and Cognition: Insights from Studies of the Human Amygdala', *Annual Review of Psychology* 57: 27–53.
- Pucci, M. 2006. 'Enclosing Open Spaces: The Organisation of External Areas in Syro-Hittite Architecture', in J. Maran, C. Juwig, H. Schwengel, and U. Thaler, eds. *Constructing Power: Architecture, Ideology and Social Practice*, 169–175. Hamburg.
- Purves, D., R. Cabeza, S. Huettel, K. LaBar, M. Platt, and M. Woldroff. 2013. *Principles of Cognitive Neuroscience*. New York, NY.
- Rapoport, A. 1990. The Meaning of the Built Environment. A Nonverbal Communication Approach. Beverley Hills, CA.
- Richardson, J. H. 1974. The Homeric Hymn to Demeter. Oxford.
- Robertson, N. 1999. 'The Sequence of Days at the Thesmophoria and at the Eleusinian Mysteries', *Classical Views* 43 (18): 1–35.
- Rosenblum, L. 2010. See What I'm Saying: The Extraordinary Powers of our Five Senses. New York, NY.
- Roussel, P. 1930. 'L'initiation prélable et le symbole Éleusinien', *Bulletin de correspondance hellénique* 54: 51–74.
- Ruck, C. 2006. Sacred Mushrooms of the Goddess. Berkeley, CA.
- Schjoedt, U. 2019. 'Predictive Coding in the Study of Religion: A Believer's Testimony', in A. K. Petersen, I. Gilhus, L. Martin, J. Jensen, and J. Sørenson, eds. *Evolution, Cognition, and the History of Religion: A New Synthesis*, 364–379. Leiden.
- Schjoedt, U. and J. S. Jensen. 2018. 'Depletion and Deprivation: Social Functional Pathways to a Shared Metacognition', in J. Proust and M. Fortier, eds. *Metacognitive Diversity: An Interdisciplinary Approach*, 319–342. Oxford.

- Schjoedt, U., K. L. Nielbo, D. Xygalatas, P. Mitkidis, and J. Bulbulia. 2013a. 'Cognitive Resource Depletion in Religious Interactions', *Religion, Brain & Behavior* 3 (1): 39–55.
  - 2013b. 'The Resource Model and the Principle of Predictive Coding: A Framework for Analyzing Proximate Effects of Ritual', *Religion, Brain & Behavior* 3 (1): 79–86.
- Scott, M. 2010. Delphi and Olympia: The Spatial Politics of Panhellenism in the Archaic and Classical Periods. Cambridge, UK.
  - 2012. Space and Society in the Greek and Roman Worlds. Cambridge, UK.
  - 2015. 'Temples and Sanctuaries' in E. Eidinow and J. Kindt, eds. Oxford *Handbook to Ancient Greek Religion*, 227–240. Oxford.
- Smith, J. Z. 1987. To Take Place: Towards Theory in Ritual. Chicago.
- Snodgrass, A. M. 1986. 'Interaction by Design: The Greek City-State', in C. Renfrew and J. F. Cherry, eds. *Peer-Polity Interaction and Socio-Political Change*, 47–58. Cambridge, UK.
- Sourvinou-Inwood, C. 2003. Mysteries: Aspects of the Eleusinian Cult', in M. Cosmopoulos, ed. *Greek Mysteries: The Archaeology and Ritual of Ancient Greek Secret Cults*, 25–49. Oxford.
- Spawforth, A. 2006. The Complete Greek Temples. London.
- Squire, L. R. and S. Zola-Morgan. 1991. 'The Medial Temporal Lobe Memory System', *Science* 253 (5026): 1380–1386.
- Steidle, A, L. Werth, and E-V. Hanke. 2011. 'You Can't See Much in the Dark: Darkness Affects Construal Level and Psychological Distance', *Social Psychology* 42 (3): 174–184.
- Steidle, A, E-V. Hanke, and L.Werth. 2013. 'In the Dark We Cooperate: The Situated Nature of Procedural Embodiment', *Social Cognition* 31 (2): 275–300.
- Talarico, J. M. and D. C. Rubin. 2003. 'Confidence, Not Consistency, Characterises Flashbulb Memories', *Psychological Science* 14: 455–461.
- Tilley, C. 2004. The Materiality of Stone: Explorations in the Landscape Phenomenology. Oxford.
- Tomlinson, R. 1976. Greek Sanctuaries. London.
- Travlos, J. 1988. Bildlexicon zur Topographie des antiken Attika. Tubingen.
- Treisman, A. 1988. 'Features and Objects: The Fourteenth Bartlett Memorial Lecture', *Quarterly Journal of Experimental Psychology* 40A: 201–237.
- Trope, Y. and N. Liberman. 2010. 'Construal-level Theory of Psychological Distance', *Psychological Review* 117 (2): 440–463.
- Watson, A. and Keating, D. 1999. 'Architecture and Sound: An Acoustic Analysis of Megalithic Monuments in Prehistoric Britain', *Antiquity* 73: 325–336.
- Wescoat, B. and R. Ousterhoust. eds. 2012a. Architecture of the Sacred: Space, Ritual and Experience from Classical Greece to Byzantium. New York, NY.
- Wescoat, B. and R. Ousterhoust. 2012b. 'Preface' in B. Wescoat and R. Ousterhout, eds. Architecture of the Sacred: Space, Ritual and Experience from Classical Greece to Byzantium, xxi–xxiv. New York, NY.

- Whalen, P. J. 1998. 'Fear, Vigilance and Ambiguity: Initial Neuroimaging Studies of the Human Amygdala', *Current Directions Psychological Science* 7: 177–188.
- Yang, W. and J. Kang. 2005. 'Acoustic Comfort Evaluation in Urban Open Public Spaces', *Applied Acoustics* 66: 211–229.
- Zhong, C-B., V. K. Bohns, and F. Gino. 2010. 'Good Lamps Are the Best Police: Darkness Increases Dishonesty and Self-Interested Behaviour', *Psychological Science* 21 (3): 311–314.