

Greek Ancient Rituals and Ritual Dynamics through an Embodied Cognitive Perspective

Veronesi, Daiana

Citation

Veronesi, D. (2024). *Greek Ancient Rituals and Ritual Dynamics through an Embodied Cognitive Perspective*.

Version: Not Applicable (or Unknown)

License: License to inclusion and publication of a Bachelor or Master Thesis,

2023

Downloaded from: https://hdl.handle.net/1887/3729455

Note: To cite this publication please use the final published version (if applicable).

GREEK ANCIENT RITUALS AND RITUAL DYNAMICS THROUGH AN EMBODIED-COGNITIVE PERSPECTIVE

Daiana Veronesi



Research Master Thesis: Ancient History

Supervisor: Kim Berdeen

UNIVERSITEIT LEIDEN 2024

(Caryatid of the Eleusinian Mysteries. From the Archaeological Museum of Eleusis. Photo from the Author)

AKNOWLEDGMENTS

I would like to give a special thanks to my thesis supervisor, Kim Berdeen, for helping me throughout my research and thesis writing and for all the opportunities she helped me to disclose. A special thanks also goes to Luuk de Ligt who has helped me concretize many plans for my thesis. I also want to thank both the LUF and the NIA for allowing me to conduct my research in Greece and for providing me with the proper academic framework to develop it. Lastly, I would like to thank my family, and especially my father, Paolo Veronesi, for having always inspired me and for having always supported me and my studies.

TABLE OF CONTENTS

Introduction	5-8
Aim of this thesis, methodology	8-10
Chapter 1. The procession of the Great Panathenaia	11
1.1 Historical background	12
1.2. Landscape	13
1.3. Architecture	14-15
1.4 Material Objects	16-17
1.5 Discussion.	18-19
Chapter 2. The initiation at the mysteries of Eleusis	20-21
2.1 Historical background	22
2.2. Landscape	23-24
2.3 Architecture	25-26
2.4 Material Objects	26-27
2.5 Discussion	28-29
Chapter 3. The Oracle of Dodona	30
3.1 Historical background	31-32
3.2 Landscape	33-34
3.3 Architecture	35-36
3.4 Material Objects	36-38
3.5 Discussion	39-40
Conclusion	41-44
Appendix	45-52
Rihlingranhy	53-59

INTRODUCTION

The mysteries ... cause sympathy of the souls with the ritual (*dromena*) in a way that is unintelligible to us, and divine, so that some of the initiates are stricken with panic, being filled with divine awe; others assimilate themselves to the holy symbols, leave their own identity, become at home with the gods, and experience divine possession (*entheiadzein*).¹

In the above literary passage, Proclus (412-485 CE) describes the nature and character of some experiences as lived during the mysteries, most likely referring, as Burkert has suggested², to those of Eleusis. Such a passage is interesting because it conveys a strong and definite sense of emotionality, which not only permeates the entirety of this text, but might have pervaded the ritual itself too. This thesis wants to explore ancient ritual dynamics centered around the creation of experiences 'deemed religious'³, often created by this very sense of emotionality. In more practical terms, this thesis will look at how and why certain ancient rituals were structured in the way they were⁴ and how and why such structure provided the ancient participants with very specific experiences (such as panic and awe, as in the case of Eleusis, for example). However, as will be introduced later, this thesis also aims at proposing a different perspective and methodological approach to do so.

HISTORIOGRAPHY: COGNITIVE RELIGION

Questions about ritual structure, emotionality, and religious experiences have already been approached by means of three main theories belonging to the field of cognitive psychology. It is therefore first necessary to briefly address these theories and assess their conclusions. Whitehouse, McCauley-Lawson, and Pyysiäinen are the scholars who have tried to elaborate theories seeking to explain a) why certain rituals contain emotional elements in them and others do not (or, in the words of McCauley & Lawson, why "certain rituals captivate the imagination and others provoke boredom"⁵) and b) why and how they manage to convey religious experiences. In relation to the first question, Whitehouse finds that rituals with high emotionality are the ones based on an 'imagistic' mode of religiosity, which is characteristic of low-frequency rituals.⁶ McCauley and Lawson, by arguing that humans possess a strong cognitive process of agency detection, maintain that the high

¹ Remp. II 108, 17–30 (Kroll). In Burkert 1987, 114 with note 161

² Burkert 1987, 113-114

³ 'Deemed religious' is a term that has been used in order to avoid the preconception that 'religiousness' is an unchanging characteristic built into an experience and that, as the term 'deemed' suggests, can be subjectively interpreted. (Geertz, & Eidinow 2022, 3)

⁴ For "ritual structure" I mean whether rituals were formed by processions, sacrifices, singing or dancing activities etc.

⁵ McCauley & Lawson 2002, 1. They maintain that some rituals (high sensory pageantry rituals) are more emotionally arousing than others (low sensory pageantry ones.

⁶ According to Whitehouse's theory, the more a ritual is repeated (frequent), the lower is its emotional effect. He further distinguished between two types of 'modes of religiosity' within rituals: those that happen frequently will fall into a 'doctrinal' type as they become learned and transmitted through repetition. Those rituals that happen unfrequently will fall into the 'imagistic' type-a distinct mode of religiosity transmitted by strong emotions and shocking acts. I would like to point out the fact that 'memory' here plays a strong role in defining rituals, as their form/sensory pageantry would, for Whitehouse, directly accommodate the way they needed to be learned and remembered. (Whitehouse 2022, 53-58)

sensory pageantry of a ritual is the consequence of having CPS' conceptualized agents⁷ as acting upon the participants⁸. For Pyysiänen, the emotionality of a ritual is determined by the direct contact with the so-called counterintuitive agents⁹, which he mainly explains on the basis of neuroscience. ¹⁰ Although disagreeing over the conditions and elements responsible for the creation of such emotionality and on the modalities of its transmission, Whitehouse and McCauley & Lawson agree on the 'why' this latter was created in the first place: to foster the memorization of the participants, which would have made the ritual survive throughout time. 11 Pyysiänen does not agree with this conclusion but follows these cognitive theorists by supporting the positive contribution that cognitive studies can provide to the study of religion. ¹² To take in consideration these theories first surely means to gain an appreciation of what cognitive psychology, as a field of study, can do regarding the exploration of ancient rituals. Important discoveries in cognition have in fact been very helpful to understand the 'mechanisms' of ancient mentalities, an endeavor made possible by their claim to be 'universal'. The biological make-up we share with our primitive ancestors would in fact constitute the very premise to applying modern theories of cognitive studies to the ancient minds. 13 However, as it has been just shown, cognitive theorists go beyond this claim as they insist that cognitive human capacities act as ritual constraints. That means that understanding how the mind memorizes actions and deals with emotions equates to understanding why and how rituals were assuming a certain form, structure, or frequency. This is also why it is said that religion is a 'natural fit' for human cognitive consumption: religion and ritual exist because human cognition makes them possible and gives them the form they would later be characterized with. ¹⁴ Or, to put it more explicitly, the constituents of religion and of ritual are reducible to cognitive phenomena which have emerged through adaptive evolutionary processes.¹⁵ This thesis does not want to counter-argue the

⁷ CPS agents: culturally postulated superhuman agents. For CPS'actions are intended the presumed activities that divinities fulfil within a ritual. (McCauley& Lawson 2002, 8)

⁸ Following the premise that humans, from a very early age, possess a strong cognitive detection and recognition of agents/actions/patients, McCauley and Lawson argue that the emotionality of a ritual directly stems from having the patients (the worshippers) as perceiving the CPS (divine) actions upon them. The patients of the rituals would further interpret their actions as being permanent, meaning that they successfully managed to bring about a change in the religious world-with no need to undergo such a ritual act again. Permanent are rituals such as baptism, a wedding, or a rite of initiation (again, when CPS are imagined as acting upon patients). Such is also why McCauley& Lawson maintain that their theory is better postulated than that of Whitehouse's frequency: in their opinion, this latter would not be able to explain WHY some rituals are frequent or infrequent in the first place. The frequency of a ritual would not be the determinant, but the direct consequence of having actions performed or not performed by the CPS agents. As opposed to high sensory rituals, those that are not-emotional (low-sensory pageantry rituals) are the ones in which the patients of the rituals are responsible for acting towards the CPS agents (e.g., sacrifices). (McCauley & Lawson 2002, 23-23)

⁹ Counter-intuitive agents: because they have a counter-intuitive nature. For Pyysiänen, a religious experience is 'per definition' in disagreement with cognitive schemata. (Pyysiänen 2001, 132)

¹⁰ For Pyysiänen, is not the frequency of a ritual or the involvement of the CPS actions that determines its emotionality, but the direct contact with the 'counter-intuitive beings' that the worshippers can experience at any crucial moment of the ritual (Pyysiänen 2001, 94). To experience such emotionality would derive from the temporal lobe activity of the brain in contexts of 'divine contact'. (Pyysiänen 2001, 120-128)

¹¹ McCauley & Lawson 2002, 88

¹² Pyysiänen argues that the importance of a ritual is given socially speaking: a wedding is emotional and the effects of it are important because emotional and important is to have a wedding in the first place (Pyysiänen 2001, 94). Again, the actions of the CPS agents do not determine the ritual's emotionality.

¹³ Ustinova 2009, 15

¹⁴ Slone 2014, 3

¹⁵ Engler & Gardiner 2017, 237

validity of the above statements: it wants to address whether the cognitive approach and the cognitive theorists' study-focuses (form, frequency, divine contact) are the only valid ones to understand ritual dynamics and what constitutes a constraint in the creation of ritual experiences.

Since these ritual dynamics have been solely studied from a cognitive perspective, their investigation has been carried out solely through cognitive assumptions. Given the strong influence that evolutionary theories have had on cognitive studies, these presuppositions have a peculiar character, as they are mainly concerned with the modalities of memory transmission and survival of rituals. This is the perspective through which at least the theories of Whitehouse and McCauley & Lawson have explored rituals. ¹⁶ This is because emotionality and sensory pageantry are, from an evolutionary anthropological perspective, the *conditio sine qua* for alerting and triggering the senses in individuals. This 'alertness' is what would in turn constitute the very premise for better remembering and successfully transmitting rituals. ¹⁷ That fear, panic, and similar intense emotions were indeed triggered in many ancient rituals can be gleaned from many sources: Proclus's passage above represents just one example among many. However, to say that triggering these emotions solely served to guarantee their survival is to apply an evolutionary approach that is reductionist on many levels. As it is soon going to be explored, emotions and sensory pageantry might have served different functions too.

Another critique that has been brought forward is that cognitive psychology aims to explain rather than to interpret religion. To do this would mean to try to understand why religion exists, why it originates, and why it develops in the way it does using cognitive models and theories that are deemed to be as objective as possible (because deemed strictly scientific). And although it might be said that such an approach recovers historical studies from personal and subjective interpretations of religion, ¹⁸ it could also be said to overlook those very elements that constitute it: cultural conditions and adaptations, local meanings, and associated religious values. Furthermore, it might also be said that the application of such an 'explanatory paradigm' fails to consider differentiations between different kinds of sensory pageantry in rituals of different civilizations and historical times. ¹⁹ By overlooking local and cultural dynamics, cognitive theorists also leave behind the internal goals of rituals and their world of belief. Together with this, they also tend to identify the emotional moments of rituals with either moments of initiation or with moments of contact with the divinity ²⁰, leaving behind the complex dynamics of ritual building processes that sought to convey different kinds of emotions before, throughout, and after their performance.

¹⁶ Pyysiänen talk about neurophysiological adaptation too but not as a constraint of rituals. (Pyysiänen 2001, 129)

¹⁷ Barrett 2022, 239

¹⁸ Slone 2006, 1

¹⁹ Surely this latter point is not included in the intentions and premises of McCauley and Lawson's theory as the promise of their book was to explain people's perceptions and conceptualizations of actions in rituals (McCauley and Lawson 2002, 8 and ix). However, it constitutes the logical consequence of their discussion: by not addressing different historical times and geographical places, they did not make a distinction between the different ways through which different rituals were constructed and failed to discuss how emotions related to sensory pageantry (from which they allegedly stem).

²⁰ As an example, Pyysiänen identifies moments of emotional salience only in direct contact with divinities (counterintuitive beings) or McCauley and Lawson when CPS agents directly act on participants (e.g., mainly in initiations).

APPLICATION TO THE HISTORY OF (ANCIENT) RELIGIONS

The validity of these theories has already been tested and partially refuted by several ancient historians. Working with various case-studies ranging from the Paleolithic to the Middle Ages and beyond, these scholars have attempted to investigate whether ancient rituals functioned through the cognitive prerogatives of transmission and survival of Whitehouse or McCauley & Lawson. However, the validity of their findings appears to be heavily biased by the way they have approached their historical enquiry. Indeed, the case studies analyzed are not elaborated in great detail: more space is devoted to explaining the cognitive theories to be applied than to their actual testing. Such is the case when T. Biro dedicates only one small chapter to the application of the cognitive theories to post temple Judaism in a non-detailed reference to Asher Yatsar blessing and Birkat ha chaman; or when D. Gregg compared the 'novelty' of Roman mysteries in comparison to the institutionalized Roman religion without any in-depth discussion of both. The results of these explorations are that the ancient rituals do not get studied in the complexity of their ritual dynamics, and that historical discussions and debates are lacking. Another critique that could be posed against these theories' applications concerns their negligence in addressing and questioning the cognitive theories' premises, methodologies, and main focuses. To use cognitive theories uncritically would further imply that historical works in this field use selected ideas from cognitive psychology only as an interpretative frame. 22

INNOVATION AND MAIN QUESTION

After a careful analysis of the cognitive theories in question and of their application to ancient case-studies, this thesis will contribute to the discussion by asking how and why ancient rituals conveyed emotional and high sensory pageantry experiences to ancient participants. To answer this question, this thesis will target three main biases that I believe are present in contemporary scholarship:

- a) the unprofitable exclusive use of cognitive science to understand ritual dynamics
- b) the lack of inclusion of sensorial studies in these discussions
- c) the lack of any discussion on the world of beliefs behind rituals

²¹ Biro, 2013 and Gregg, 2004. It is however important to note that although these scholars did not dedicate much space to a thorough and systematic investigation of their ancient case-studies, they both found strong points of disagreement with the cognitive theorists' premises. In fact, Biro writes that post-Temple rabbinic Judaism was characterized by the absence of special-agent rituals (Biro 2013,133), and the same conclusion is drawn by Gregg when discussing Roman religion (Gregg 2004, 115).

²² Engler & Gardiner 2017, 238

To attempt to answer the 'how', this thesis will combine cognitive and sensory theories in the hope of dismissing the internal biases of cognitive theorists and the biases in their application. These two distinct fields, although presenting a strong dichotomy in their dominions the already found cooperation in the so-called 'embodied cognition' approach, which this thesis will also attempt to do. It must be noted at this point that this approach, when taken up by scholars, has never been used to discuss the questions as formulated by cognitive theorists (e.g., understanding why certain rituals employ emotionality and why or how they manage to convey 'religious' experiences). However, embodied cognition is applied here because of the importance it places on the senses in the perception of external reality: the senses are the tools with which participants could perceive ritual emotionality and sensory pageantry in the first place. A central notion of this dissertation will indeed be the concept of 'embodiment' whereby the body is responsible for triggering mental and cognitive states and translating the notional ideas internal to rituals into corresponding bodily emotions and experiences.

In order to answer the question of 'why', this thesis wants to hypothesize that it is not the frequency, the CPS agents' conceptualized actions, or the direct encounter with a divinity that dictated the level of emotionality and the type of form of a ritual, but the actual ritual goal. By ritual goal, I mean the ultimate experience that was religiously intended to be achieved during or after the ritual. Whether it was a divine epiphany, a newly acquired status after an initiation, or the response to an oracular consultation, the ritual created a specific sensorial and cognitive experience that was suited to living that ritual experience in the most 'efficient' way. As this paper argues, it is the goal of the ritual that determines not the level, but the KIND of cognitive, sensory, and emotional dimensions by which it is characterized. ²⁹

²³ The negative implications that could potentially stem from using cognitive science alone in the exploration of ritual dynamics have already been shown: their strong evolutionary perspective and prerogatives (their tendency to 'explain' ritual by taking only one aspect or dimension of their complexity) contribute to neglect their rich cultural and local

realities. ²⁴ The cognitive occupies itself with thoughts, while the sensory occupies itself with our sensory modalities; the former concerns top-down observations, while the latter bottom-up approaches.

²⁵ The 'Embodied Cognition' approach maintains the view that cognition is highly and directly influenced by how the body in which it is present meets the external world. (Overmann 2019, 458)

²⁶ The application of an embodied cognition approach has already been used in the study of ancient history in order to explain some ritual dynamics, but besides brief mentions, they do not explicitly or directly assess the questions involved in this dissertation. (Patzelt, Ustinova, Bowden, 2022)

²⁷ Embodied cognition does not dismiss cognition, it just re-considers its importance in determining sensations.

²⁸ This theoretical hypothesis relies on the fact that the body and mind are strongly associated and connected. The physical state of the body allows for the control of the mind and can create any desired mental state. For example, the adoption of a body's facial expression can trigger the associated emotion (e.g., a smile can trigger happiness). (Barsalou 2005, 43)

²⁹ McCauley and Lawson do not provide tools to measure the degree of high or low sensory pageantry in a ritual, which is a critique brought forward by Whitehouse too when he wrote: "Is louder music more intense than softer music"? (Whitehouse 2005, 102). This dissertation will not discuss different 'levels' of sensory pageantry in rituals, but only different kinds of them (because triggering different stimuli and helping to attain different ritual goals).

METHODOLOGY AND THESIS' STRUCTURE

The 'embodied cognition' approach has only recently been applied by G. Frigerio when she discussed the cognitive impact of experiences in various ancient Greek oracle centers. Her analysis, while foregrounding cognitive religion, also considers sensory elements that may have actively influenced the experience of ancient worshippers.³⁰ Although she innovatively provides these sensory elements with a further mythological interpretation, she concludes that the different activated experiences in the sanctuaries of Claros and Didyma can be attributed to an attempt to legitimize themselves vis-à-vis the popularity of the panhellenic oracle of Delphi. That is, she explains their use of different sensory and cognitive mechanisms to differentiate themselves from other oracles competing in the religious marketplace. In her conclusion she encourages other scholars to take up her approach and apply it to other rituals, which this thesis takes up and, as already outlined, wants to take further to the development of other questions about rituals.

To this end, this thesis will discuss three ancient case-studies from the Classical/ early Hellenistic period: the procession of the Panathenaia at Athens, the initiation ritual at Eleusis, and the oracular consultation at Dodona. The reason for selecting rituals with different structures and aims is to show how different rituals employed different means to achieve the emotionality and sensory pageantry necessary to create a specific experience. This comparative character will help to highlight the diversity of rituals and their different cultural dynamics-and to test the approach and hypothesis of this thesis. Each chapter will follow the methodology and structure that G. Frigerio has outlined in her research: each ritual will be discussed considering its historical context, landscape, architectural design, and material objects. Unlike Frigerio, however, a concluding discussion will follow at the end of each chapter, relating the ancient case-study to the various cognitive theories examined above. This discussion will also show how embodiment is achieved in each of these case-studies and for what ritual purpose. In order to make this discussion as historically reliable as possible, this thesis will use a variety of different available sources, including archaeological, literary and epigraphic ones. In using these sources, I will also carefully consider their biases, but their combination will hopefully shed more light on the complex ritual processes and dynamics. This dissertation hopes to contribute to the field of ancient religions, by suggesting a new possible approach to discuss them.

³⁰ Frigerio 2023

³¹ The inclusion of these elements derives from the recognition that cognition, by being situated in a body, is directly influenced by how the body interacts with the external world and with the various external elements constituting the ancient rituals.

THE PROCESSION OF THE GREAT PANATHENAIA

PROCESSIONS AS EMOTIONAL PHENOMENA

In this first chapter, the phenomenon of the procession will be explored through the case study of the Great Panathenaia. This analysis will show how the sensory and cognitive dimensions in such procession can be analysed, how emotions were triggered, and which important emotional effects the procession might have had for its participants. This chapter will further suggest that the emotional dimension of this procession was used to reach the aim of this ritual: the religious honouring of the goddess Athena.

However, some premises are first needed. The validity of including a procession as a case study for this dissertation directly comes from A. Chianotis' suggestion that processions were (and still are) able to create "emotional communities"32. However, as E. Warford notes, Chianotis' work has not focused on the sensory experience of these processions³³, making the inclusion of the Great Panathenaia in this study even more essential. It is important to emphasize here that to study religious processions is important because of their potential to create an assembly of people sharing a strong exceptional experience.³⁴ That processions inevitably entail a high degree of emotionality does not however derive from the exceptionality of their occurrence (which would instead support Whitehouse's theory of frequency) but from the fact that they included a particular form of walking taking place "in concert" with other people and within a specific spatial and cultural-historical context. 35 Indeed, to walk in a procession means to view and experience the surrounding space with a certain bodily rhythm and pace, which is not dictated by the single individual, but by the whole community present in the celebration. Instead of following a predefined choreography, people attune themselves to the rhythm, breathing, movements, and gestures of others, making the act of walking a shareable and highly transformative experience.³⁶ In such a state, the body, and the connected mind, by being in a non-reflexive state of thought, might also be more open and prone to external stimuli. ³⁷ Additionally, the inclusion of a variety of sights, sounds and smells makes processions acquire a more heightened sensory pageantry, making the participants physically and cognitively more involved, and more predisposed to the acquisition of the processions' underlying meanings.³⁸

Within this theoretical framework, it is necessary to stress that processions do and did not only involve participants, but also spectators, whose sensory and cognitive experience might have been surely

³² Chianotis 2013, 212-213. Processions trigger emotions not only at an individual level but also through interpersonal relations.

³³ Warford 2016, 23

³⁴ Stavrianopoulou 2015, 350

³⁵ Platt et al., 2021, 108

³⁶ Kärrholm et al. 2017, 26

³⁷ Edensor 2010, 72

³⁸ Brilliant 1999, 221

different.³⁹ However, because of the limited length of this project, this case-study will only the focus on the participants. This premise therefore justifies the choice of including the Great Panathenaia as a case-study that deals with the key issues as presented in the introduction.

HISTORICAL BACKGROUND

The Panathenaic procession was possibly one of the most important religious events established in ancient Athens. 40 Differing from the "Lesser Panathenaia" in scale and grandeur, the Great Panathenaia took place every four years (πεντετηρίς) instead of annually. Established for the first time in 556 BCE and lasting until 390s AD⁴¹, it included many games and competitions in which participants from the whole Greek world could attend.42 The festival was taking place, according to Proclus, on the third day from the end of the Hecatombaeon⁴³, on the day in which the goddess Athena was thought to be born.⁴⁴ Therefore, the Great Panathenaia's first and main aim is to be recognized in this preliminary information: it was meant to celebrate and honour the city's patron deity. The grand scale of the competition games and of the final procession, with their musical accompaniments and the communal spirit of the event, were therefore primarily functioning to demonstrate the communal religious piety towards the goddess. ⁴⁵ Although this chapter recognizes the fact that political aims might have been pursued in concomitance to the religious one⁴⁶, the political sphere of Athens will not feature as a prominent element in this discussion. This chapter will still tangentially touch upon Athens' mythological sphere and political past, but only as related to the religious phenomenology of the procession-which is its first priority to address.⁴⁷ When these elements will be here instead discussed, it is because they articulated the very spatial sphere in which the sensory and cognitive experiences of the participants were articulated.

What is also important to stress here is that the religious, political, and cultural dimensions of this ritual were not only passively transmitted to the participants attending the festival, because they constituted the very cognitive "prediction engine" through which they could have read and interpreted its meaning. Our mind

³⁹ Warford 2016, 25-26

⁴⁰ Gerding 2006, 391

⁴¹ Shear 2021, 8

⁴² The Great Panathenaia, differently from the Lesser Panathenaia, involved people coming everywhere from the Mediterranean who participated in its games, in its sacrifices, and in its observation (Shear 2021, 116). That this 'Panhellenic' flavour characterized the Panathenaia already from the 5th century BCE is to be further evinced from Plato's mention that Zeno and Parmenides also attended the procession. (Pl. Prm. 127a7–9)

⁴³ Proc. Commentary on Plato's Timaeus, 17b1–4,15

⁴⁴ Anghelina 2017, 175

⁴⁵ Neils 1997, 178

⁴⁶ The interconnectedness of religious and political aims is not specific to the Great Panathenaia: all religious processions, because they were necessarily taking place in a civic and social dimension, made strong references to their city's political past and present times. That 'religious processions' were not only religious but also had a social and political nature is further noted by Kubatzki (Kubatzki 2018, 142)

political nature is further noted by Kubatzki (Kubatzki 2018, 142).

⁴⁷ This choice further derives from the fact that the Panathenaic procession has been mostly looked at from a political and imperialistic perspective.

always makes use of prior assumptions and of expectations when perceiving the external reality. ⁴⁸ So that although we cannot assume that all the participants were religiously involved at the same level, we can surely expect that some of them did feel a deep devotion towards Athena-and that everybody would have been culturally aware of the role that processions and sacrifices would have fulfilled in order to gain the divinities' favours. Such cultural knowledge shared by the participants constituted a social metacognition, by which collectively they might have felt and perceived reality in a very similar way. ⁴⁹

LANDSCAPE

"A procession is not just a journey from A to B; it matters where A and B are located, and who is doing the journey. But to properly be able to elicit what the purpose of procession is, one must consider not only the form, but the total ritual context to which it belongs". 50

Having already provided the historical and cultural context of the Panathenaia, this section wants to assess the character and the cognitive and sensory impact the landscape of the procession might have had for its participants. To explore the procession's landscape is essential, as the procession would have physically moved through it, and it is precisely from this walking movement that the ancient Greeks could have developed a sense of the surrounding space. In fact, as Ingold has shown, making sense of the latter is a direct consequence of placing feet on the ground because such bodily action would allow for a cognitive connection between the two elements. ⁵¹

The processional route of the Great Panathenaia took place along the Panathenaic Way, which had a main route of 1000 m in length and 10-12 m in width. ⁵² The Panathenaic Way was part of what W. MacDonald called a city's "urban armature" ⁵³. Indeed, by intersecting the city of Athens, the Panathenaic Way was surely the "definitive frame of the town's essence" ⁵⁴. Leading from the periphery of Athens to the Agora, it linked public buildings and streets. According to Plutarch, the Panathenaic procession had its start point at the gates of the city at the Kerameikos and it followed the Panathenaic Way until reaching first the Agora and then the Acropolis. ⁵⁵ Through this movement, the participants might have felt as physically and symbolically moving from the 'outside' of the city into its very centre. However, this centripetal movement implied also an 'ascending' one because it moved from the bottom of the city to its very top. Cognitively speaking, this has a strong significance: high places are always opposed to low ones, and the former are also considered to be more

⁴⁸ Frigerio 2023, 60

⁴⁹ Ibid., 128

⁵⁰ Graf 1996, 64

⁵¹ Ingold 2011, 56. Also, recent research has pointed out that walking not only equates to movement, but also to embodiment, meaning that placing feet on the ground makes people feel connected and close to it-because able to make it their own by internalizing it through their bodies. (Platt et al. 2021, 108)

⁵² Warford, 2016, 23

⁵³ MacDonald 1986, 5

⁵⁴ Ibid.

⁵⁵ Plutarch, Demetrios 12.3; For a further comment on this, see Shear 2021, 123.

powerful and prominent than the latter. ⁵⁶ Also, the fatigue involved in walking uphill makes the perception of places even more distant⁵⁷, and in turn, distant places (and the Acropolis might have felt distant from the point of view of the Kerameikos) are also often associated with a remote past. 58 The participants, moving towards its top, might have elaborated this impression in mind too, given the fact that an already strong association between sacrality and the Acropolis already culturally existed. Also, we need to bear in mind that such a journey, although not to be considered as difficult as the one that needed to be conducted in the landscape of the next case-studies, was nonetheless long and followed a relatively steep route. This suggests that participants had to invest a certain physical effort in the walk, perhaps leading to an intensification of expectations about what would happen at its end.⁵⁹ However, this does not necessarily have a negative implication: it is indeed reported that people, when engaging in a challenging and distant walk within a community, find such an activity pleasant and enjoyable. 60 This may well have been the case, as in the 4th century BCE, the number of the participants totalled to at least 1.000.61 In conclusion, the landscape in which the Panathenaic procession was to be performed had a very strong impact on its participants: it allowed them to have an evolving view of the city and to sensorially and cognitively recognize the most sacred point of it. From the very beginning to the end of the procession, the participants were submerged in a unified architectural whole that was properly Athenian in context and in character. By the very act of walking, the singular features of the urban landscape were sensorially and cognitively processed and assimilated.

ARCHITECTURE

Now that I have assessed the nature of the Panathenaic landscape and the effects that it might have had cognitively and sensorially on its participants, I shall turn to architecture. As it is going to be soon assessed, the architectural elements along the Panathenaic Way enacted important narratives and concepts⁶² which were intrinsic to the ritual goal of the Panathenaia. By walking near them, the participants must have found their processional experience as shaped and as reflected upon them.

The processional walking through the city of Athens up to the Acropolis was marked by important monuments and architectural features that conveyed specific messages. To begin with, the participants, when entering the Agora, would have passed by the statues of Harmodius and Aristogeiton, being able to contrast the past era of tyranny against the newly democratic status of Athens. ⁶³ Moving forward and reaching the Stoa Poilike, the

⁵⁶ Frigerio 2023, 30

⁵⁷ Tenhundfeld 2017,1. The distances which are visible on hills are judged as farther than when they are present on flat ground because of the physical fatigue involved.

⁵⁸ Ibid.

⁵⁹ Crust et al., 2011, 16

⁶⁰ Ibid., 14

⁶¹ This number excludes the unknown number of the spectators, the conjectured 100 cows and sheep for the hecatomb that was to be offered to Athena. (Gerding 2006, 392)

⁶² Frigerio 2023, 70

⁶³ Neils 2001, 694

ancient Greeks might have looked at its paintings and shields, being reminded of the many deeds of the Athenians' ancestors. ⁶⁴ When finally walking towards the Acropolis, the participants would have had to walk through the monumental Propylaia. This gateway would have hindered the participants' view of the Acropolis until they reached its very top: this means that their view of the Parthenon and adjacent buildings would not have been gradual but immediate and abrupt-perhaps even heightening their sensorial impression of the site. Once on the top of the Acropolis, scenes and narratives centred around war motives must have been most clearly noticed on the Parthenon, given its function to work as a war memorial. 65 Indeed, given the fact that ancient Greeks would have first seen its west-side, 66 it is possible that they first looked at the sculptural programme of the Amazonomachy, and then, as they moved along the perimeter, also saw the scene of the sack of Troy on the north side, the Centauromachy on the south side, and the Gigantomachy on the east one.⁶⁷ However, what is most interesting and essential to this present discussion is that the Parthenon's frieze depicted the actual procession of the Panathenaia-further and ultimately linking its themes to the penteteric procession. Indeed, on the north and south sides of the monument, the participants would have been able to see the actual sacrificial procession, moving from the Agora to the Acropolis. 68 The frieze appears to be confined by the city's boundaries, it symbolically unifies the periphery of the city to its sacred centre, thus mirroring the movement undertaken by the actual procession.⁶⁹ Reading from west to east, one would have seen the elders, the musicians, and those carrying the sacrificial animals to the Great Altar with various paraphernalia. 70 The presence of musicians there would have sculpturally enacted the rhythmicity and musicality of the procession, 71 which, as it is also documented by Athenian vases, would have followed the sound of pipes and that of the kythar. 72 Therefore, the frieze of the Parthenon not only provides us with information regarding the actual arrangement of the procession, but further tell us about how, sensorially, and cognitively speaking, the viewers would have been able to appreciate it and relate it to the actual procession. This fact is important and must be taken into account. Recent neurological research informs us that people choose and adapt their behaviour based on insights coming from others' movements, gestures, and intentions.⁷³ Therefore, the

⁶⁴ Ibid., 811

⁶⁵ Ibid., 730

⁶⁶ Ibid., 729

⁶⁷ Scholars pointed out that these scenes should be interpreted as signifying not Greek, but Athenian victories. (Shear 2001, 729-730). The Parthenon, by displaying Athenian military accomplishments as framed in mythological narratives, would have carefully conveyed ideas of victory over chaos and savagery, and then ideas of autochthony and of civilization (Inwood 2011, 274). However, this is not to say that the ancient viewers must have recognized every single iconographic detail of the Parthenon's sculptural programme, but that, by being familiar with their aetiological myths and expressions, they would have at least generally recognized them and correctly interpreted them. (On how Greek myths constitute metacognition, see Frigerio 2023, 128).

⁶⁸ Ibid., 253

⁶⁹ Jenkins 1994, 33

⁷⁰ Stevenson 2003, 253

⁷¹ The presence of music in processions, which make up for a strong sensorial dimension, is also emphasized in Aristophanes' Frogs, where both Dionysos and Xhantus recognized the presence of the Underworld procession because they heard the sound of pipes and the smell of torches. (Aristophanes, Frogs 312-5)

⁷² Berlin, Staatliche Museen 1686; ABV 296, 4; G&P 55, fig. 34. (For a further comment see Neils 1997, 181). See figure nr. 5 in the Appendix.

⁷³ Grafton 2009, 112

participants of the Panathenaia, by finding the viewpoints in which they could have looked at the frieze⁷⁴, would have been further encouraged to continue their procession-exactly as the sculptural programme suggested them to do.⁷⁵

MATERIAL OBJECTS

When talking about the Panathenaic procession as embedded in its own architectural framework, discussions about the altar of Athena Polias should be also considered. Recently, H. Gerding has in fact argued that, after the Persian sacking in 479 BCE⁷⁶ the area of the Old Athena Temple ruins had been rebuilt in order to facilitate the gathering of the participants. 77 If this is true, then the rebuilding project would have been well aligned with the practical need of having a space in which people could gather and look at the major sacrifice culminating at the Great Panathenaia: the hecatomb. 78 The sensory overload of the Panathenaic sacrifice must have been definitively high, as it consisted of 100 cattle to be sacrificed to Athena. There, not only the smell⁷⁹, but also the high number of participants, chanting and praying⁸⁰, might have contributed to make the latter as feeling very present in that moment and very aware of a feeling of 'togetherness'. The altar of Athena Polias-a kind of stepped monumental altar⁸¹-also had very important implications in the framing of sensorial and cognitive perceptions. Indeed, one peculiarity of these altar types is given by their high elevation and by the steps that would have reached the top of the sacrificial table. The elevation of these altars would have allowed all the viewers to have the same visibility of the sacrifice taking place on their top. Also, because the sacrificial platform would have been placed on a higher level compared to the one on which the viewers stood, both the officiant operating the sacrifice and the sacrifice itself would have appeared in a towering position. The consequent implication of this is that the sacrificial performance would have been augmented as a central activity within the sanctuary and would have made explicit the physical distance between humans and the goddess Athena. However, the sacrifice, which was the climax of the Panathenaia procession, also made explicit the goddess' supremacy. The religious experience of the procession, which was also closely linked to

⁸¹ 'Stepped-monumental altars' constitute a category of altar types as defined by Yavis, 1949.

⁷⁴ Stilwell proposed that the Parthenon was conceived in a way as to allow its viewers to pause on calculated viewpoints in which they could have looked at the sculptural programme in balanced compositions (Stillwell 1969: 231). If so, the rhythmicity of such representation would have been juxtaposed to that of the actual procession.

⁷⁵ Although G. Marconi has pointed out that the frieze was situated in a way that would have impeded the viewers with a clear visual of its iconographical contents, R. Osborne has instead suggested that the frieze was thus conceived to actively engage the viewer in its reading. (Marconi 2009:163)

⁷⁶ Shear 2001, 216

⁷⁷ Gerding 2006, 391. Figures 3-4 in the Appendix.

⁷⁸ Before the Persian sack, the area of the space was of 525 m2 (35 x 15); during the hecatomb of the Great Panathenaia it must have been overcrowded. (Gerding 2006, 392)

⁷⁹ As Bowden remarked (2022, 38) sacrifices were actions that included strong smell that would have provided a high level of sensory pageantry. However, it must be noted that Bowden, although criticizing McCauley & Lawson theoretical premises, connected the function of the sensory pageantry of smell with that of remembering the ritual sacrificial action-therefore still following one of the implied objectives of cognitive/evolutionist studies.

⁸⁰ Prayers were included in these rituals. These prayers helped the city to call on the goddess and to name who was making the offerings (Shear 2021, 148). That prayers featured in this moment and that also particularly addressed the Athenian victory is also to be read in Hdt. 6.111 where the victory of the Plataeans is said to have been celebrated.

the theme of *charis*, ⁸² would have reached its peak here, where a 'WOW!' factor would have triggered effects of awe and amazement among the participants. ⁸³

The theme of charis and the relationship that was aimed to be established with the goddess Athena among the whole community were further reinforced by the delivery of the peplos⁸⁴. The most interesting fact regarding this object is that it was specially woven for one year by four selected girls, nine months before the Panathenaia. 85 Here, special attention should be given to what C. Growth has called the 'corporeal cognitive dimension' ⁸⁶inherent in this act of creation-the weaving. Recent studies on embodied cognition as applied to 'acts of making' have concluded that 'creating through hands' is an important sensorial mechanism that shapes cognition⁸⁷ and that makes us elaborate emotions. Such is exactly why E. Roberts has interpreted the weaving act of the peplos as a form of haptic belief⁸⁸-of religious expression directed and inspired by touch. To weave this object on a warp-weighted loom must have been an extremely intense labour 89- and the time the girls had to spend on it was exceptionally long. Given their personal, active, physical involvement in the creation of the peplos, the argestinai must have had a completely different experience of the procession than that of the viewers-their contact with the divinity took on a much more concrete dimension-one that got embedded in their sensorial experience. 90 Thus, the bond that was sought to be reaffirmed between the Athenian people and Athena⁹¹ took place even on a small-scale level among this group of girls.⁹² The fact that the peplos was to be carried throughout the procession by Athenian maidens all along the Panathenaic Way, further suggests that it would have been seen by many of the participants who must have at least vaguely known what this object stood for. The ultimate use of the peplos-that of draping it on the cult image of Athena in the Erechteion⁹³would have once again explicitly expressed what was to be achieved during the processional ritual: a strong and reciprocal connection with the goddess Athena.

⁸² "charis" is related to the capability of sacrifices and of other gifts to establish a relationship of reciprocal favours with the divinities. It means rendering pleasure to the divinity. (Shear 2021,18)

⁸³ Kershaw writes that this 'WOW' effect, aimed at producing excessive reactions especially in theatrical performances, was also intrinsically embedded in the Greek altars' architecture. (Kershaw 2003,592)

⁸⁴ This representation is also to be seen in the east Ionic frieze of the Parthenon. (Fangqing 2016, 493)

⁸⁵ Ibid.,491

⁸⁶ Groth 2017, 1

⁸⁷ Ibid. This is because the hands would link the mind with materiality.

⁸⁸ Roberts 2019, 76

⁸⁹ Ibid., 71

⁹⁰ This act could have encouraged the *argestinai* to establish a more personal relationship with the divine. Gordon Lynch has in fact argued that playing with and experiencing religious objects (which constitute for him the materiality of religion) precisely serves people to create relationships with divinities-also teaching them the 'correct' way to approach them. (Roberts 2019, 62)

⁹¹ Roberts 2019, 67

⁹² Additionally, as Euripides mentioned, the *peplos*, was always decorated "with the great deeds of the warlike goddess and the deeds which she accomplished with Zeus against the Giants" (Euripides, Hec. 469-471). Its decoration, representing warlike themes, would have again made the participants even more aware of the meaning of the Panathenaic procession: to win Athena's favour and to embed this religious event within a proper Athenian context.

⁹³ Roberts 2019, 68

DISCUSSION

This chapter has evaluated the main sensorial and cognitive inputs coming from the spatial, architectonic, and material objects of the Great Panathenaic procession. Their analysis has followed the premises of the embodied cognition theory, by which emotions and cognition are directly correlated to how the body engages with the surrounding reality. The former elements have been discussed separately here in order to follow a methodical structure, but they must all have been perceived and recognized by the participants simultaneously and with all their senses. This would have provided them with a high sensory pageantry setting that responded to the specific need of the festival: to celebrate the goddess Athena and to enter into a relationship with her through a Panhellenic festival. Such is why the ritual took the form that it was characterized by and why the sensory pageantry fostered stimuli that would have enhanced civic unity. Strong feelings of 'togetherness' prompting this latter were first created by having the participants walking throughout the Panathenaic Way and ending up all together in front of the Great Altar in the Acropolis. As it has been mentioned already, this feeling of 'unity' and 'synchronicity' would have been primarily prompted by the mere act of walking in unison by adjusting one's body movements to those of the processional group. Their experience-that of honouring Athena- would have been reminded to them once again by the sight of the Parthenon's frieze. Together with this, their hearing and their olfactory senses would have been triggered by the constant music and by the hecatomb sacrificefurther providing them with a festive and cheerful atmosphere-very associable to the theme of charis again. And, as it has been pointed out, a cognitive relationship with the goddess was also brought forward for the argestinai by tactile perception. As this discussion has shown, the senses were in service of emotions and of cognition, making people unconsciously and physically attuning to the specific religious and ideological dimension of this ritual.⁹⁴ Surely this does not mean that the senses were more important than cognition: it implies that the senses were in strict connection with the cognitive stimuli, and such is why they have been explored here in conjunction.

The Great Panathenaia procession, therefore, displayed high sensory pageantry. However, as this discussion has demonstrated, it did not result from the prerogatives of the cognitivists' theories. First of all, sensory pageantry is here strong and high even if the CPS agents were not directly acting on the participants ⁹⁵-in fact, here the contrary statement is valid. The participants (or, in the words of McCauley & Lawson, the "patients") of the ritual were the ones acting on the divinity by participating in the procession, by making the sacrifice, and by weaving the peplos to honour Athena. The religious action is accomplished by the patients towards the deity to celebrate the latter and to invite Athena to create a mutual relationship. The sensory pageantry and emotionality of the ritual did not even stem from the way Pyysiänen conjectured: the deity was not meant to be met through a direct intimate encounter or in any unifying experience. ⁹⁶ Also, although the high degree of emotionality and the recurrence of the Great Panathenaia would apparently support Whitehouse's frequency

⁹⁴ Here Barsalous' research should again be taken into consideration: the body, when in certain postures and activities, can stimulate a desired mental state. Such is why embodiment would be activated in rituals. (Barsalou 2005, 43)

⁹⁵McCauley & Lawson 2022 23, 88

⁹⁶Pyysiänen 2003, 115

theory, this chapter has shown that the former can be explained through other lenses that avoid reducing rituals to one main external prerogative. Indeed, here I suggest that the Great Panathenaia was not high in sensory pageantry because it happened unfrequently but because its participants could physically embody the religious notions that were sought to be conveyed in the procession: the collective honouring of the goddess Athena happened first at the level of the senses and that of their bodies. Against the hypothesis of McCauley& Lawson and of Whitehouse, the procession of the Panathenaia did not then acquire an 'imagistic' mode of religiosity to guarantee its survival, but to make the ancient participants personally involved, sensorially and cognitively, in the celebration of Athena. It is in this light that the sensory pageantry, the kind of emotionality, and the structure of the ritual should be instead explained.

INITIATION AT THE MYSTERIES OF ELEUSIS

INITIATIONS AS EMOTIONAL PHENOMENA

The present chapter will deal with the phenomenon of religious initiation by looking into the mystery cult at Eleusis. This chapter will argue that the sensorial stimuli of initiatory mystery cults allowed for a particular cognitive status of mind by which initiates could experience the unveiling of their mysteries-that is, through the sensorial experience of the ritual, the initiates could embody, and therefore process, the knowledge they ultimately needed to gain. In other words, the knowledge they had to access was inherent and discoverable in the experience itself. Such is precisely why the initiation process at Eleusis allowed for a sensiperceptible 97 version of a theological concept, with which it is meant the ability to somatically experience a commonly non-experienceable phenomenon 98 : the transformation from $\mu \acute{o} \sigma \tau \eta \varsigma$ into $\grave{e} \pi \acute{o} \pi \tau \eta \varsigma$ physically embodied the abstractness of gaining insight into the afterlife. 99

Definition of initiation

For the scope of this discussion, the term 'initiation' is here going to be used in strict relation to its original ancient meaning, roughly, 'to initiate into a mystery cult'. 100 This is an important distinction to make as the concept of initiation has mainly evolved within the field of anthropology, and it is often used as a synonym for rites of passage marking the transition from childhood to adulthood. 101 It is here used for a rite of passage in a more narrow sense: from outsider to initiate. Although initiations into ancient mystery cults had their own local differences and ritual focuses, the feature that seems to characterize them all concerns the change that they sought to bring forward in the religious status of the individual. As it is going to be shown in this discussion, this change took place at a sensorial and cognitive level, which is what ultimately allowed the initiates to experience the eschatological dimension of the cult. 102 Cognitive theorists and recent scholarship have, contrary to this claim, pointed out the following passage from Aristotle:

⁹⁷ Sensiperceptible: that can be perceived and noticed through the senses. (From: Cambridge English Dictionary)

⁹⁸ Jessen has used this term to explain the ritual of the Christian Eucharist: to bodily intake food in the Eucharist would equate to the intake of the Lord's spirit. The bodily process has a similar structure to the theological concept, and the worshippers can experience, bodily speaking, the mystical body of Christ. (Jessen 2013, 47-48)

⁹⁹ Petridou has pointed out that the senses (in particular, viewing) was an essential conceptual framework for many initiatory cults in the Graeco-Roman world, (Petridou 2013, 318.)
¹⁰⁰Graf 2003, 4

¹⁰¹ Ibid.

¹⁰²Van Gennep's has been the first to claim that these rites "mark a change from one type of socially defined status to another." (Van Gennep 1960, 3). Indeed, initiates did share the experience of the initiation together, and the change in their initiation status was, in the aftermath of the cult, socially recognized (Bremmer 2014,16). Such a point is not addressed in the present discussion because of this thesis's main focus on the religious dimension of rituals. It is nonetheless aware that the cognitive and sensorial transformation of the initiates happened both at a communal-social and individual level.

The initiates are not supposed to learn anything but rather to experience and to be disposed in a certain way. 103

Rather than taking this passage as evidence that mystery cults did not involve any kind of doctrinal knowledge, ¹⁰⁴ it could be argued that Aristotle was here referring to the fact that 'learning and understanding' were not components that had to be imparted before the cult, because they were inherent in the process of initiation itself-precisely when the initiates were sensorially, cognitively, and emotionally triggered. Indeed, recent research has shown how the reception of ideas and notions is more efficiently processed when embodied-and when there exists an affinity between their content and the way they become internalized. ¹⁰⁵

Thus, we say that the soul that has passed thither is dead (olôlenai), having regard to its complete (eis to holon) change and conversion. (...) but when that time comes, it has an experience like that of men who are undergoing initiation into great mysteries; and so the verbs teleutân (die) and teleisthai (be initiated), and the actions they denote, have a similarity. ¹⁰⁶

The same concept can be seen as reiterated by Plutarch when he compares the act of dying with the act of being initiated into a mystery cult: the change and the transformation of the initiates embodied the abstract notion of dying-the comprehension of the latter took place in the physical and sensorial body. Together with deriving from specific cultic experiences, the emotionality of initiations into mystery cults also stems from their exclusive character: participants in the mysteries were selected, and their groups would have been bound by the secrecy of what they would have experienced. ¹⁰⁷ This secrecy would have made their participation in the cult even more mysterious and 'special' and accompanying their self-perception throughout the ritual journey. ¹⁰⁸

¹⁰³ Rose 1863, fr. 15.

¹⁰⁴ There is a lot of debate and discussion on this passage. That mystery rituals were devoid of theological content and knowledge is reiterated by many scholars (Zaidman and Pantel 1992,139), further repeated by M.H. Luther's study on Mithraism (Luther 2014, 24-28) and strongly expressed by the research undertaken by McCauley & Lawson. Differently from these views, I do not think this passage supports such hypothesis and if so, I would agree with J. Ustinova who noted that such notion should not be regarded as describing all mysteries and/or rites (Ustinova 2012, 119). The risk in saying that all these rites and mystery cults did not have a theological content or message equates to affirm what McCauley and Lawson also affirmed: that rites only prescribed meaningless ritual actions that created a strong sensory pageantry only to guarantee the survival of the cult.

¹⁰⁶ Plutarch, *Moralia*, 178

 $^{^{107}}$ That the cult was associated with secrecy is further indicated by the etymology of the word "mystes" which derives from "μύω": "to close the lips" or "close the eyes". (Clinton 2003, 50)

¹⁰⁸ Modern research in cognition informs us that expectations condition behaviour (Ustinova 2021,69). Also, the notion of secrecy could have helped to shape a stronger sense of community.

HISTORICAL BACKGROUND

The historical stages of the Eleusinian mysteries extended over a long period of time: the first phase would date back to the Mycenaean period¹⁰⁹ and the last one would conclude in 395 AD, when the sanctuary ceased to be used. Throughout this time, the sanctuary of Eleusis, together with its initiation rite, underwent several changes. Scholars have suggested, for instance, that towards the end of the 5th century BCE the cult was influenced by Orphism, while in Late Antiquity it became allegorized. However, the length of this project and the scarcity of the literary evidence-mainly the Homeric hymn to Demeter, Plutarch, Aristophanes- do not make it possible to enter into such details and to make exactly clear the nature of all its transformations: the majority of the sources would indeed come from Christian authors who lived in a later period and who had strong defamatory intentions towards the cult. Together with this, the essence and contents of the evidence are further hindered by the oath of silence that was taken by the initiates. As such, this chapter cannot endeavour a historical case study but will look at the initiation process from the available information of the Classical and post-Classical period.

An archaeological analysis of the sanctuary of Eleusis reported that the eschatological element of its mystery cult might have made its first appearance only after the beginning of the sixth century. ¹¹³ Further preliminary information regarding the cult of Eleusis comes from a cultic regulation that dates back to 460 BCE. This inscription makes clear that the Greater Mysteries of Eleusis lasted from the 15th to the 23rd of the month Boedromion¹¹⁴ and that they were anticipated by the Lesser Mysteries which took place in the month Anthesterion. ¹¹⁵ Participants could be of different statuses (free or slaves), ages, and genders; and they could have been part of different levels in the 'initiate hierarchy' too. ¹¹⁶ The only requirements asked for them were to speak Greek, not to have committed murder ¹¹⁷, and to have participated in the Lesser Mysteries beforehand. ¹¹⁸ Additionally, the whole initiation ritual at Eleusis, together with its soteriological character, was tied to the divinities of Demeter and of Persephone. ¹¹⁹ It is important to stress that although many people with

¹⁰⁹ Cosmopoulos 2015, 165

¹¹⁰ Bremmer 2014, 2

¹¹¹ Ibid., 1

¹¹² The Athenian state could punish the violation of the oath of silence with death. (Cosmopolous 2015, 1)

¹¹³ This would have happened simultaneously with the appearance of the Hymn to Demeter. Indeed, in the geometrical period of the site, archaeological features indicated open and public access (Scott 2022, 164). The soteriological character of Eleusis could also be explained in this period by an increasing awareness of the role of the individual in the Athenian society and by changes in the ideological attitudes towards death (Scott 2022, 165). Christiane Inwood notes the same thing. (Inwood 2003, 26-28)

¹¹⁴ The mention of the inscription that "the truce is to be in effect in all the cities which make use of the sanctuaries" further gives us insights into the great popularity of the cult. IG I (2) 6, part B. (Stambaugh 2009, 138) ¹¹⁵ IG I (2) 6, part B. (Stambaugh 2009, 138)

¹¹⁶ The *mystagogoi* would have already participated in the whole mysteric experience-the *epoptai* would have been initiated only to the first part of the ritual (*dromena* and *legomena*) while the *mystai*-the group that will constitute the focus of this chapter-would have participated in the initiation for the first time.

¹¹⁷ Scott 2022, 198

¹¹⁸ The fact that prospective initiates had to attend these latter might derive from the fact that during their celebration some preliminary ritual activities had to be conducted. Bremmer suggests that these latter needed to be performed before the Greater Mysteries because they would not have the time to carry them out later. (Bremmer 2014,3) ¹¹⁹ Mylonas 2015, 238

different initiatory statuses could participate into the Greater Mysteries, this chapter will mainly focus on the *mystai* who experienced the rite for the first time.

LANDSCAPE

Before reaching the actual locus of the Eleusinian sanctuary, the estimated 3000 participants had to gather in the Athenian agora in order to hear the proclamation of the festival, and on the second day (Boedromion 16) the mystai were required to purify themselves. These preliminary stages of the ritual already conveyed many sensorial and cognitive stimuli that have not yet been discussed. The cleansing of the initiates had to happen 'into the sea' 120 which is the action referred to by the exhortation "αλαδε μύσται" 121 as pronounced by the heralds. 122 Mylonas has already noted that such an exhortation would have "filled the city", 123 with the possible implication that it would have been very loud and heard by everyone. Following such an order, the *mystai* had to go to the Phaleron coast of the city¹²⁴, immerse themselves in the water, and sacrifice one small piglet each. To be immersed in the sea could have fostered feelings of vulnerability 125 and the additional slaughtering of such a high number of piglets might have created a very intense atmosphere. Indeed, this experience would have been connotated by the loud and squeaky, scared noises of the pigs and by the vision of their blood fluctuating on the surface of the water. Furthermore, by undergoing such an extreme experience into the sea, the initiates would have already directed their bodies and minds towards the eschatological themes of the Greater Mysteries: the sea, in Greek mythology and common imagination, mainly functioned as a passage between life and death. 126 If M. Beaulieu is correct in such an interpretation, to participate in this ritual metaphorically meant to undergo a preliminary symbolic 'death' 127-which already took place in an embodied modality.

After four preparatory days, the initiates would have formed a procession to reach the sacred place of Eleusis. ¹²⁸ Having already addressed the phenomenon of processions in relation to the Great Panathenaia, I will here only stress the fact that the Eleusinian one would have taken several hours as it had to run across a 15 mile journey. ¹²⁹ Not only did the route demand much physical strength, but the procession itself would have kept bursting into singing and dancing activities. The energies and emotions connected with these latter actions might have been

¹²⁰ Bremmer 2014, 4

¹²¹ "To the Sea, oh Mystai" (Mylonas 2015, 249)

¹²² Mylonas 2015, 249

¹²³ Ibid.

¹²⁴ The actual place is debated. Mylonas also suggests that they could have also gone to the peninsula of the Piraeus. (Mylonas 2015,249)

¹²⁵ Plutarch narrates that during this event, one man's lower parts were devoured by a great fish. (Plut. Phoc. 28.6)

¹²⁶ Beaulieu discusses this in relation to three mythological figures: Danae, Britomartis and Theseus. (Beaulieu 2008, 1)

¹²⁷ That the sea is connected with afterlife themes is further suggested by funerary iconography, where maritime elements suggest the passage to death. Such symbolic death would have allowed to enter into divine contact too. (Beaulieu 2008, 3)

¹²⁸ For a detailed commentary on the rituals taking place in the preceding days, see Mylonas 2015,252.

¹²⁹ Ibid., 6

even more exacerbated by the fact that the *pompe* continued even in the evening before reaching the space in front of the Eleusinian Temenos. When such activities are considered together with their timing-at night, it is possible to conjecture that the *mystai* participating in them might have been very susceptible to creative thinking, feelings of awe, mystery, and of fear-all feelings which automatically become released in a dark environment. At the end of the procession, the fatigued initiates would have found themselves in front of the 580 m Temenos wall, which might have created a very specific symbolism: as the sight of the sanctuary was hidden by the physical wall of the temenos and by darkness, their knowledge of the mysteries was still concealed to them. The wall of the temenos would have further reinforced ideas of sacredness and augmented the initiate's expectations.

However, more importantly, it is outside of the Temenos wall that the ritual act of the *dromena* would have been enacted. Although many scholars would agree that this latter would have been experienced inside the Telesterion, the conjecture that it would have taken place outside better reconciles with the nature and intention of the ritual itself. With *dromena* it is commonly intended a ritual re-enactment of Demeter's search for Persephone. Because the initiates likely participated in this 'search', to make it occur outside would have further strengthened their personal involvement: they would have indeed retraced all the movements undertaken by Demeter wandering around the Sacred Way and on the main terrace of the temple, until reaching the actual place of the Telesterion where the reunion of the two Goddesses would have been performed by chief priests. To re-enact a myth physically speaking and in a concrete, referential spatial setting would have made the initiates feel more close to the events and to the background of the myth of Demeter. By impersonating Demeter and embodying her search, they would have experienced her initial sorrow and final joy too. Such an event would be further referenced by Lactantius when claiming that this search would have

Darkness, by impeding a clear vision of the surroundings, would prompt feelings of fear and danger (Ustinova 2009, 16). On how lack of vision causes changes in the brain psychologically speaking, see also Bruck 2005, 54.

Although we lack much evidence on what would have happened once in front of the Temenos, it has been suggested that the initiates would have danced around the Kallichoron well in its outer court (Longfellow 2012, 136). Aristophanes' Frogs mention that such a dance would have taken place all night long and in praise of Demeter. (Aristoph. Frogs 438). This information is also shared by Pausanias (Pausanias 1.38.6). If such is true, then the engagement in circular dances would have allowed the attainment of ecstatic states of mind (Pócs 2019, 320), intensified by the following fasting (Mylonas 2015, 258) and by the drinking of the kykeon (Homeric Hymn to Demeter 198-211). For a further discussion on this, see Mylonas 2015, 258-268; C. Ruck has further suggested that the kykeon might have also had hallucinogenic effects. (Ruck, C. 2006)

¹³²Petridou 2013, 316. The spatial setting of the Temenos further reinforced the notion that the initiates were about to enter the second phase of the initiation. If in the six preceding days the Eleusis initiation was being prepared in a public space, now the initiates were about to enter into the inner-more sacred space of the sanctuary (Mylonas 2015, 226). The change from publicity to secrecy is also reflected in the paucity of our sources regarding the actual initiation into the Telesterion. (Mylonas 2015, 258)

¹³³ Scott 2022, 202

¹³⁴ Richardson assumes that Demeter's ritual and suffering were just narrated to the initiates, while Ulrich vin Wilamowitz-Moellendorff (1931–1932, 473–4) think that some of the rites were metaphorical (Petridou 2013, 328). ¹³⁵ Mylonas 2015,263

¹³⁶ Scott 2022, 204

¹³⁷ Some of the mimicking acts of Demeter and Persephone would have been impersonated by the priests. Recent research has demonstrated that miming the actions of authorities also means embodying their emotions. (Scott 2022, 207)

¹³⁸ Mylonas 2015, 263

taken place at night, with the addition of lightning equipment. Although this cannot be archaeologically confirmed, we can hypothesize that the use of torches in this ritual enactment (if happening outside the Telesterion) could have been functional in two ways: they would have allowed the initiates to see in the dark, but they would have also altered their perception of the surrounding spaces and objects. These latter, when seen by a flickering light (especially if at night), assume new shadows, lights, and shapes-and can contribute to create a different sensory experience, perhaps even leading people to perceive these objects and spaces with heightened importance.

ARCHITECTURE

It is only after all these preparatory rites and after having underwent a strong physical exhaustion that the initiates could be officially initiated into the Great Mysteries of Eleusis. The following day, sometimes after sunset (21st Boedromion), the initiates would have entered the Temenos walls, in order to then enter the Telesterion. ¹⁴³ As it is going to be soon discussed, the emotions linked with the rituals actions which took place inside this latter would have been highly activated by its architectural features. Over the long history of the Eleusinian Mysteries, the Telesterion went through different programmes of rebuilding. Following this chapter's chronological premises, here it is going to be explored in its phase of reconstruction that took place under Perikles, for it became notably enlarged in order to host a higher number of participants. ¹⁴⁴ The Telesterion was constituted by a square plan and stepped rows of seating ¹⁴⁵would have been placed along its walls, facing the very centre of its internal space in which the Anaktoron was present. ¹⁴⁶ The roof of the Telesterion was then supported by forty-two columns, which would have occupied the whole internal area of the monument. To consider the structural layout of the Telesterion is of extreme importance, as the latter would have immersed the initiates within a powerful sensorial environment. In fact, their vision of the Anaktoron (where the hierophant would have enacted a series of rituals) would have been hindered by the high number of columns, ¹⁴⁷ and their perception would have been further distorted by the pervasive darkness to be found

¹³⁹ Lactantius as well claims that 'during the night they search for Persephone with torches lit, and when they find her, the whole ritual ends with celebration and waving of torches' (Lact. Epit. 18.7). However, because Lactantius is a disputable source, it is not entirely clear when the torches would have been actually used. Scholars however, all seem to agree that they took place in the ritual. (Patera 2010, 264)

¹⁴⁰ At Eleusis, there have been found marble torches possibly representing offerings or sculptural decorations. Figures in vase paintings that depict Demeter and Persephone carrying torches may perhaps allude to the ancients' use of them. (Patera 2010, 265)

¹⁴¹ Patera notes that torches were considered 'necessary equipment for nocturnal rites.' (Patera 2010, 265) That torches were used in the Mysteries is further mentioned by Sophocles OC 1049-1051.

¹⁴² The discussion of Strong on lightning devices as used in the *sed*-festivals in Ancient Egypt is particularly interesting. (Strong 2019, 376)

¹⁴³ Myolans 2015, 261

¹⁴⁴ It would have been able to host 3000 participants. (Clinch 2022, 320)

¹⁴⁵ Serafini 2019, 135

¹⁴⁶ Clinch 2022, 321

¹⁴⁷ Scott 2022, 209

inside. ¹⁴⁸ Modern research confirms that the lack of vision prompts a compensation in the auditory sense. ¹⁴⁹When this fact is considered, it could be assumed that the darkness of the Telesterion would have invited the *mystai* into silence, purposely disposing their senses towards the next ritual act: the *legoumena*. Although there is a lack of evidence about its contents, it is commonly accepted that it consisted of hearing liturgical statements about the previous *dromena*. ¹⁵⁰ If Plutarch's comment on the initiation is correct when he wrote that the holy rites were disclosed to the people when they were also "immediately attentive in awe and silence", then the *legomena* would have been received even more efficiently: a silent environment not only facilitates concentration and cognitive functions but also emotional responses to external stimuli. ¹⁵¹ The silence of the *mystai*, summoned by the dark environment of the Telesterion, would have predisposed them in such a way as to receive the contents of the *logumena* in a more emotional and efficient way-and to perceive them as more 'mysterious' and as sacred. ¹⁵²

MATERIAL OBJECTS

The final part of the initiation in the Telesterion consisted of the ritual of the *deiknoumena*: "the showing of the sacred objects". ¹⁵³ Before such ritual was carried on, scholars agree on the fact that both *mystai* and *epoptai* would have witnessed a ' μ έγα ϕ ốς' ¹⁵⁴ as soon as the Anaktoron was opened and a hierophant emerged from the surrounding darkness. ¹⁵⁵ Surely, this great light must have been, as Clinton also suggests, a very dramatic and special moment in the initiation ritual. ¹⁵⁶ This is because, as Petridou noted, if the darkness in the Telesterion before represented, metaphorically speaking, the lack of knowledge, ¹⁵⁷ now the light might have symbolized for the initiates true knowledge and rebirth. ¹⁵⁸ It is perhaps to this very moment that Plutarch referred when he said that the "terror, anxiety and bewilderment turned to wonder and clarification" ¹⁵⁹. What is definitively sure in from a cognitive perspective, is that the vision of an intense light after a period of time in the dark causes changes in sensitivity ¹⁶⁰: the initiates 'eyes would have been exposed to a trauma-to a sudden

¹⁴⁸ Some scholars have argued that torches would have been extinguished once inside the Telesterion (Bremmer 2014,

^{9).} However, if the torches had remained lit, the internal space of the Telesterion was still in a dimly lit environment). ¹⁴⁹Zaira 2011. 11-12

¹⁵⁰Mylonas 2015, 272 but also Scott 2022, 204. That one of the prerequisites of initiates was to speak Greek can be understood against this auditory context (Mylonas 2015, 273). The chief priests would have delivered the *legomena*. (Scott 2022, 207)

That the initiates had to be in silence is a further reference to the silence ($\mu \dot{\omega} \omega$) of their status as 'mystai'.

¹⁵²The perception of mystery increases in a dark environment. (Montello 2012,393)

¹⁵³ Mylonas 2015, 273

¹⁵⁴ Plutarch, Mor. 8IE "beholding a great light, just as when the Anaktoron is opened". However, it must be noted that Plutarch is referring to Mysteries in general.

¹⁵⁵ The actual word 'hierophants' means not the one who 'shows the holy things' but 'he who makes them appear'. (Clinton 2004, 46)

¹⁵⁶ Clinton 2004, 46. In the Homeric Hymn, light is associated with Demeter and darkness with Hades. (Patera 2010, 261)

¹⁵⁷ Petridou 2013, 313

¹⁵⁸ This would have made the figure of the hierophant appear as an epiphany. (Petridou 2013, 316-321)

¹⁵⁹ Plut. Mor. 47A, 943C

¹⁶⁰ Rider et al., 2019, 34

change in their visual response to the surrounding environment. Through their vision, they practically physically experienced (embodied) an extrasomatic notion-either the vision of the goddess or a metaphorical rebirth from death 161. Furthermore, to look at the *hiera* after such experience, the initiates would have perhaps perceived their display as even more dramatic. These *hiera* (which Clinton identifies with statues), ¹⁶² would have been even more emotionally received by the initiates because the deiknoumena represented the final part of the initiation ritual. However, only the *epoptai* would have had the privilege to look at the *hiera* in order to fully complete their initiation. 163 This fact implies that the epoptai would have been building up their expectations for this moment throughout the two preceding rituals, and that the mystai, precisely because prevented from seeing the hiera, would have had one entire year to do so, before reaching the status of epoptai and experiencing their display. 164 Unfortunately, no existing evidence has clarified the nature of these *hiera*, but a votive plaque found in the sanctuary might suggest that these objects were illuminated from behind. ¹⁶⁵Dedicated by Eucrates, on this plaque there are depicted two eyes and two eyebrows surmounted by the image of Demeter with red sprays radiating out from her head. 166 That Demeter is shown with light might constitute another reference to the hymn of Demeter where she appears with light too, and might also allude to the fact that Eucrates had attained either a vision of the goddess during the deinkoumena or that he had attained ἐποπτεία. 167 However, this votive plaque should not only be seen as a decorative or explanatory paraphernalia: this votive offering, by materially embodying Eucrate's experience, would have allowed the initiates to look at it and to be encouraged to have the same experience. 168 This fact is again suggested by cognitive research: humans mainly tend to mime behaviour rather than create it themselves. 169

¹⁶¹ Petridou maintains that a vision of the goddess might have been offered to the initiates 'at some climactic point' of the initiation (Petridou 2013, 318). However, there is no consensus on what this eschatology consisted of, but it is generally agreed that it involved the notion of the afterlife. (Patera 2010, 668)

¹⁶² Clinton 2004, 89

¹⁶³ Scholars maintain that only the *epoptai* would have had the privilege to see the *hiera* as displayed by the hierophant. The mystai would then have only witnessed the light (Scott 2022, 199-200). If Burkert is right in associating Proclus' passage with the Mysteries of Eleusis, then the ancient author would have further suggested that the *epoptai* would have 'associated themselves to the holy symbols, leave their own identity, become at home with the gods and experience divine possession.' (Cf. Burkert 1987, 114 note 161)

¹⁶⁴ Mylonas, 274

¹⁶⁵ Clinton 2004, 98

¹⁶⁶ The red paint is still recognizable. (Petridou, 2013, 321)

¹⁶⁷ Petridou 2013, 322

¹⁶⁸ Materiality has agency (Malafouris 2013, 458-459) and allows types of embodied behaviour (M. Jessen 2012, 42).

¹⁶⁹ The same point has been made in relation to how the participants of the Great Panathenaia would have been inspired to follow the behaviour of the procession as depicted in the Parthenon' frieze. (Grafton 2009, 112)

DISCUSSION

As it has been implied by the interpretation of Aristotle's' passage above, the initiates in the mystery cult of Eleusis would have learned about Demeter and Persephone and about a certain soteriological knowledge through a rich-embodied experience. That is, it was only through the correlation of bodily sensations and notional abstractedness /eschatological knowledge that the initiates could achieve ἐποπτεία. ¹⁷⁰ In order to achieve this embodied experience, the initiates had their senses and their cognition involved in the cultic rituals from the very beginning. Such is what has been discussed in relation to the initiates in the preliminary sacrifice in the sea: the extreme experience of immersing into its water would have involved all their senses and further embodied death/rebirth themes. After having fatigued their bodies by also participating in the procession, the initiates would have actively participated in the dromena, bodily miming Demeter looking for Persephone outside the Temenos. By spatially contextualizing the search and by involving their bodily movements in it, the initiates could have felt the joy and sorrow of the goddess too. Their senses would have been further stimulated upon entering the Telesterion by the monument's architectural design and its enveloping darkness. These two elements, together with the silent atmosphere they created in the Telesterion, would have made the initiates more receptive to the ritual of the legoumena. Finally, by looking at the intense light from the area of the Anaktoron, the initiates' vision would have been shocked, sensorially realizing the notional dichotomy between darkness and light and the eschatological truth of their initiation. The epoptai, by looking at the sacred objects, would have had the richest initiatory experience. Again, the sensory pageantry to be found in the initiation at Eleusis responded to a specific religious aim: the sensorial and emotional dispositions of the initiates were directed towards the ultimate experience of the μέγα φῶς and its eschatological revelation.

Such study suggests that the ritual stages at Eleusis were to provide the initiates with a tangible, corporeal experience of the abstract religious concepts characterizing the initiation rite. Such is why it could be said that their religious experience was embodied- because it entered into sensorial contact with the patient of the ritual. Therefore, contrary to what Whitehouse would argue, such sensory pageantry did not work through an imagistic mode because happening unfrequently and/or to solely foster the transmission of its ritual. ¹⁷¹ Indeed, the aim of the initiation ritual at Eleusis was not its survival or the attempt to persuade the initiates of the gods' authority, but the mere act of going through this initiation in order to attain ἐποπτεία. To study the initiation at Eleusis through embodied religion can further elucidate on another theoretical hypothesis. Indeed, as this discussion has hopefully shown, the emotionality present at Eleusis did not derive from having the CPS agents as performing actions on the initiates. The initiation was not granted because Demeter and Persephone 'acted' upon the initiates, but because the initiates went through certain ritual prerequisites and experiences. Also, differently from McCauley & Lawson's argumentation, initiates could go through initiation more than once (epoptai) although the emotions involved in the ritual were very intense and the CPS actions could be thought

¹⁷⁰ With this, I mean that the eschatological truth resounded with the way the senses of the initiates made them undergo the initiation process.

¹⁷¹ Whitehouse 1996, 11

of as being 'permanent'.¹⁷² Pyysiänen's claim that emotionality in rituals might derive from an intimate encounter with the divinity¹⁷³ might here find confirmation, if it were confirmed that such an encounter with Demeter and/or Persephone took place during the initiation ritual. Surely, explicit references to this encounter have not been recovered from the ancient sources, but even if this was the case, a direct encounter with the divinities constituted only one of many emotional experiences within the Eleusis mystery ritual. Indeed, this chapter has highlighted how these experiences stemmed from complex and rich ritual processes that managed to trigger both the body and the associated mind. Finally, the way this ritual was formed and shaped did not derive from any pre-existing cognitive conceptualization of ritual action by the ritual patients ¹⁷⁴: the specific shape of this ritual is to be explained in light of how its sensory pageantry allowed for the embodiment of its religious/theological concepts.

¹⁷² McCauley & Lawson 2022, 23-23

¹⁷³ Pyysiänen 2003, 93

¹⁷⁴ Again, McCauley & Lawson's hypothesis is that the form of a ritual heavily depends on prior assumptions people have about actions. Indeed, it is their ability to distinguish the role and the difference between agents and patients that would make them think that divine actions are permanent and most important. (McCauley&Lawson, 10)

THE ORACLE OF DODONA

PROPHECY AND ORACLES AS AN EMOTIONAL PHENOMENA

The interrelationship between senses and cognition is here going to be further explored in relation to the oracle of Dodona. This chapter will argue that the sensorial and connected cognitive dimensions of the oracular process managed to make the petitioners receive the oracle's response in a more receptive and active way. In particular, it is going to be explored how petitioners bodily and cognitively underwent certain experiences that might have eased the emotional process involved in petitioning the oracle (e.g., to be more 'prepared' to face their future, personal situations/dilemmas). As will be addressed, this chapter is going to build upon Frigerio's discussion on ancient oracular centres and practices with the hope of extending some of its theoretical applications.

Definition of oracles and prophecy

Divination, as a concept, has been highly interpreted and debated by scholars. The most prominent theories are, according to Eidinow, functionalist in character: they tend to explain the phenomenon of divination through political and/or social lenses. This kind of analysis usually asks what role divination played in resolving conflict and reaching consensus, 'rationalizing' the 'irrational' process of divining. However, to define divination could be a rather limiting task: because of the many forms and shapes it took took to determine its function and nature 'generally speaking' would mean to prioritize one of its features over the others. For this reason, and for the specific interests of this chapter, divination is going to be discussed in strict relation to oracles and prophecy. In antiquity, these two elements were strictly intertwined and interdependent: without delivered prophecy, oracles could not be received by petitioners. More importantly, ancient sources point out the fact that diviners (such as the Pythia in Delphi) had to de 'divinely inspired' in order to prophesy. Consider the following passage from Plato:

The greatest of all benefits comes to us through mania when it is granted as a gift of the gods. For the prophetess (prophetes) at Delphi and the priestesses (hiereiai) at Dodona, when in a state of mania, have bestowed much of value upon Greece both in private and public affairs, but little or nothing when they have been unemotional; (...).¹⁸⁰

¹⁷⁵ Eidinow 2018, 448-449

¹⁷⁶ To 'rationalise' (make sense) of the 'irrational' divination practices, scholars have placed the latter between the category of 'religion' and 'magic'. (Johnston and Struck 2005, 7)

¹⁷⁷ There were different types of divination in ancient Greece. Xenophon for instance, in his *Memorabilia*, mentions oracles, sacrifices and birds. (Xen. *Mem.* 1)

¹⁷⁸ Dillon 2017, 324

¹⁷⁹ Ibid.

¹⁸⁰ Plato *Phaidr*. 244b, translated by Harold N. Fowler, 1925.

In this passage, Plato highlights that prophetesses, when involved in oracular activities, needed to find themselves in a state of mania-or, as Y. Ustinova has translated, in an altered state of consciousness. 181 Differently from the many publications on the present topic, ¹⁸² this chapter is going to argue that a similar state of mania was, although to a different extent, also elicited to the petitioners. 183 To focus on their experience means to avoid looking at what prophecy was doing for the petitioners and to look at what the petitioners were doing and experiencing through prophecy. Such an attempt is similar to the one undertaken by G. Frigerio's study on the Apolline divinatory practices and to Y. Ustinova's study on suppliants' experiences 184, but different in the sense that here, their sensory and cognitive backgrounds are going to be explored in a more tied relationship with the final aim of the oracular activity. 185 Indeed, in this chapter, I am going to argue that the very act of petitioning was (and still is) a highly emotional procedure: people always tend to anticipate feelings and emotions correlated with the outcome of possible situations in life. 186 For this reason, this present discussion is going to follow the premises of Eidinow's cognitive interpretation of divination: oracles were not only used to get some kind of insight into the future -but to gain an embodied experience of alternative future possibilities and of actions to take- which would have ultimately eased the strong emotionality related to knowing the future. 187

HISTORICAL BACKGROUND

Herodotus, in his *Histories*, recorded that the oracle of Dodona was "held to be the most ancient in Hellas" ¹⁸⁸. Indeed, archaeological evidence from its sanctuary testifies its origins from the early Bronze Age (3000-2000 BCE)-but as an oracular site, it reached the peak of its popularity around the 4th century BCE, when Pyrros made the Epirus region into a centralized kingdom and Dodona its undisputable religious centre. 189 This renewed status permitted the sanctuary to have its architectural layout reconfigured: some of its structures and monuments became enlarged, the most famous example being its stone theatre, which could ultimately seat

¹⁸¹ Ustinova 2017, 56

¹⁸² Many publications have discussed *mania* in relation to prophet (e.g., Aleš Chalupa 2014 in his discussion of the Pythia's mental state).

¹⁸³ To take the petitioner's perspective is important: as N. Martti has argued, oracles existed and 'worked' not only because of the presence of prophets but because there existed a community of people acknowledging their practice and their function (Martti 2017, 4-5). Petitioners certainly did not undergo the same 'altered state of consciousness' the prophets went through (e.g., as in the case of the Delphic Pythia, who became divinely inspired and uttered answers to petitions). Petitioners, however, still achieved a mental state that was out of their ordinary cognitive experiences.

¹⁸⁴ For instance, Ustinova has explicitly argued that suppliants went through an altered state of consciousness in relation to the case-study of Trophonius' oracle and of the Acharaca cave. (Ustinova 2017, 67-70)

¹⁸⁵ Frigerio concludes her research by saving that the sensory landscape of the oracular sanctuaries allowed the consultants "to accept the outcome of the performance of divination" (Frigerio 2023, 159). Here I am going to argue that the embodiment of certain experiences as lived by the consultants served to prepare them to reflect on their future choices and conditions-not merely to accept what the prophetess revealed to them. Theirs was an active engagement.

¹⁸⁶ Newell 2022, 228-229

¹⁸⁷ Eidinow 2018, 452

¹⁸⁸ Hdt. 2.52

¹⁸⁹ Chapinal 2021, 41

17,000 people. ¹⁹⁰ The use of the sanctuary declined after the Classical period; Strabo mentions that it became 'virtually forsaken' after the Roman enslavement of the Epirus' population in 168 BCE. ¹⁹¹ Dodona figures in the writings of many ancient authors, from which it is possible to obtain some preliminary information about its features and peculiarities. In the Iliad, it is narrated that Achilles said:

Lord Zeus, Dodonaian, Pelasgian, dwelling far away

Reigning over wintry Dodona, around whom dwell the Selloi,

Your prophets with unwashed feet who sleep on the ground. 192

From this passage, it is first possible to individuate Zeus as the major deity worshipped and consulted at Dodona. ¹⁹³ However, in the oracular centre, he received the appellative 'Naios' (of the Naiads, nymphs), and in fact he could be worshipped together with the nymph Dione. ¹⁹⁴ What is also to be gathered from this source is the interesting presence of the priests Selloi, who would have originally interpreted the oracle. ¹⁹⁵ Another passage from the Odyssey narrates that:

To hear the will of Zeus from the god's high-peaked oak,

How he could return to the rich land of Ithaka

Either openly or secretly after his long absence. 196

As it can be inferred from the above passage, the peculiarity of the Dodona oracle consisted in hearing the sounds of the oak's tree-the source of the oracular activity that would have provided help and advice to the consultants (in this specific case, to Odysseus). ¹⁹⁷ In modern literature there is some discussion about the instruments through which the oracle would have worked through: some scholars tend to give more importance to the alleged presence of birds (doves), some others to cauldrons or to a mantic spring running under the

32

¹⁹⁰ Dillon 2017, 324

¹⁹¹ Strabo 7.7.9

¹⁹² Hom. Il. 16.233–35, translated by A. T. Murray, 1924.

¹⁹³ For further discussion, see Zolotnikova 2019, 88

¹⁹⁴ Dillon, 324. However, the meaning of the attribute 'Naios' has been long debated. (Chapinal 2017, 19 note 15)

¹⁹⁵ The *Selloi* were the original Zeus' prophets who would have interpreted the divine messages from the oak's tree. That they were described as sleeping on the ground with unwashed feet might refer to their contact with earth. (Chapinal 2017, 22). With time, as the last section of this chapter will discuss, the Selloi were replaced by three prophetesses called *Peleiades*.

¹⁹⁶ Hom. Od. 14.327–30, translated by A.T. Murray, 1919.

¹⁹⁷ Konstantinou 2021, 194

tree.¹⁹⁸ This thesis will support the idea that the acoustic/sensorial dimension of the oracle of Dodona was primarily given by the sound of the oak's leaves and by the presence of the cauldrons-being these the elements mentioned in ancient sources.¹⁹⁹ Given the scant information retrievable before the years of Pyrrhos, this chapter will deal with the oracle of Dodona in reference to the period of his reconstructions, making use of ancient literary accounts and the existent archaeological evidence.

LANDSCAPE

The oracular centre of Dodona was located under a low hill in the valley of Tcharacovitsa, twelve miles distant from present Ioannina. ²⁰⁰ Because of the lack of detailed information from ancient literary sources and the lack of modern phenomenological studies about the oracular site of Dodona, it is difficult to ascertain the actual path consultants likely followed in order to reach its sanctuary. However, following D. Chapelain's suggestion, it is plausible that consultants would have accessed it either by walking across the Tcharacovitsa valley or by crossing the south-eastern slopes of Mount Tomaros. ²⁰¹ Regardless of which specific route they would have taken, the ancient people would have found themselves surrounded by a very defined landscape- a very mountainous and remote one. ²⁰² Homer described it as 'wintry' ²⁰³, likely alluding to its winter cold temperatures and to the high probability of precipitations in that area- much more than in southern and central Greece. ²⁰⁴ Following the premise that the human mind is directly influenced by how the body interacts with the external world, ²⁰⁵ walking across this cold/windy environment would have had a different number of cognitive effects for the petitioners.

Although the only existing ancient information concerning the duration of the consultants' journey derives from a mythological episode²⁰⁶, it is certain that the arrival at the oracular site would have required many days of traveling.²⁰⁷Although consultants from the Epirus area would have covered the trip in a shorter time, those who were coming from other regions of Greece or from foreign countries might have spent even weeks or months to reach the sacred site.²⁰⁸ This chapter cannot, of course, take into consideration all the different,

¹⁹⁸ Georgoudi 2019, 138

¹⁹⁹ Nicol 1958, 139

²⁰⁰ Parke 2014, 94

²⁰¹ Chapinal 2021, 188-189. Parke wrote that until lately it was reached by 'one steep and difficult mountain road studded with hairpin bends' (Parke 2014,94). The mountain Tomaros has a height of 6,500 feet, and its slopes are characterized by torrents and uneven peaks. (Nicol 1958, 128)

²⁰² Konstantinou 2021, 194

²⁰³ Hom. Od. 14.327–30

²⁰⁴ Chapinal 2021, 11

²⁰⁵ Malafouris 2013, 60

²⁰⁶ The only information we have concerning ancient travels to Dodona comes from Dionysus of Halicarnassus, who wrote that Aeneas and his men would have traveled from Ambrakia (Epirus region) to the sanctuary in two days (Chapelain 2021, 166). However, the tablets found on the site record visits by consultants from Tarentum, Apollonia, Epidamnos, Corcyra and other places. (Dillon 2017, 330)

²⁰⁷ Chapinal 2021, 167

²⁰⁸ Chapinal 2021, 167. For a detailed table registering the possible origin of the consultants' travels, see Chapinal 2021, 179.

potential travel experiences consultants went through, but it can nevertheless emphasize that, regardless of their point of origin and the time spent on their journey, the specific, mountainous topography of the Epirus region would have made their experience inevitably physically intense and exhausting. For instance, psychological data reports that, because of the numerous physical challenges, walkers tend to visualize the end of the walk quite often: ²⁰⁹ the ancient consultants, by crossing the arduous, mountainous landscape, might have done just the same-further building up expectations and excitement about their arrival at the site. The difficulties of walking on a mountainous landscape might be even exacerbated by weather conditions: as the oracle could have been visited at every time of the year, it is very likely that the consultants would have experienced, if not always the cold rigid weather²¹⁰, at least its constant rainfalls. Physiologically speaking, both the wind and the rain exposure can cause changes in the body's temperature²¹¹ (e.g. shivering, vasoconstriction), and psychologically speaking, they can both negatively affect the mood.²¹² Although anachronistically, it could be assumed that such physical difficulties might have forced the petitioners to pause their walk for brief moments or even days, not only making their journey longer but also allowing them to pause their bodies and minds. Furthermore, a recent phenomenological research has explored how walkers, in long distant journeys usually tend to lose track of time²¹³, with the possible consequence of being more easily absorbed into the surrounding environment. 214 Precisely because posing petitions to the oracle was their primary goal when embarking on this journey, it could be assumed that the consultants might have found in this long walk also an opportunity to think about the personal concerns they needed to bring forward at the moment of the actual petition.²¹⁵ Not only the reflective cognitive process of the consultants might have started during the walk, but the effects of their physical challenges might have placed their personal questions and problems in a different, more positive perspective. Indeed, as scientific research proved, at the end of a strenuous walk, people feel happy and proud of themselves, aiding to the generation of alternative solutions to problematic/uncertain future actions. 216

²⁰⁹ Visualizing the end of the walk seems to be a strategy employed by many walkers. (Crust et al., 2011, 16)

²¹⁰ Ibid., 166

²¹¹ Castellani 2016, 64

²¹² People are highly conditioned by the weather. Rainy days are generally associated with depression and bad moods. (Klimstra 2011, 1495)

²¹³ We could here consider that in ancient times the time perception would not have been as carefully regulated as nowadays.

²¹⁴ The consultants might have found themselves more attentive and emotionally 'close' to that environment.

²¹⁵ It must be mentioned that we do not have ancient sources mentioning this 'thinking activity'. This is just an assumption. Also, to pose petitions was not the only existing goal associated with Dodona's sanctuary; Chapinal mentions that the festival of the Naia (a competition taking place at the sanctuary between the 4th-3rd century BCE) would have been celebrated there too, and that *agones* would have travelled along the same itinerary. Therefore, this present discussion only applies to those petitioners who went to ask petitions to the oracle (Chapinal 2021, 50).

²¹⁶ Crust et al., 2011, 23. This would be caused by the fact that positive emotions make people more open to new ideas

²¹⁶ Crust et al., 2011, 23. This would be caused by the fact that positive emotions make people more open to new ideas and more creative. (Fredrickson, 2002)

ARCHITECTURE

The contentment experienced after the long, difficult walk²¹⁷ would have been further augmented by the sudden vision of the sanctuary's *temenos* which remained hidden to them throughout their walk.²¹⁸ Even V. Scully, despite following a rather 'romantic' style of writing, described the experience of arriving at the shrine as a very emotional moment, finding a sacred connection between the material architecture and the sky.²¹⁹ However, to reconstruct the sensorial and cognitive dimensions of the architectural features present in the oracular site of Dodona is not as straightforward as it has been with the other ritual spaces analysed in this dissertation: the archaeological evidence is here rather fragmentary²²⁰ (or discussed primarily in Greek) and scholarly research has mainly devoted its attention to the epigraphical sources found within the site. Because no phenomenological research has yet been undertaken in relation to Dodona's oracle (as to my knowledge and despite Scully's personal interpretation)²²¹, I am here proposing one based on some commonly accepted archaeological reconstructions and on the premises of sensorial/cognitive studies.

The architectonic features of the oracular center of Dodona unavoidably changed throughout the two millennia of its existence. 222 Such is why it is crucial to remind that this chapter will primarily deal with Pyrrhos' reconstruction phase. Before entering the sacred space of Dodona, the visitors would have first found themselves facing a high temenos wall. That is, the visitors, after the long walk they undertook, could have gained vision of the sanctuary only after having passed through its main entrance. Here it could be argued that Dodona's temenos walls functioned in the same way as the one from Eleusis: by hindering the internal space of the sanctuary, both the τεμένη must have augmented the visitors' expectations and the notion of the space's sacrality too. As soon as the consultants entered the enclosed area of the temenos, their gaze would have surely noted the stoas, the anathemata, and the honorary statues on their left²²³, but only after having seen the *hiera oikia* situated in front of the gate's entrance. The *hiera oikia*, the place where the oak tree's oracle would have spoken to the priestesses, laid, together with other surrounding temple-like buildings²²⁴, in spots of high visibility: Piccinini has in fact remarked that visitors would have had a very good vision of it from the east, west and south gates of the temenos. 225 However, the feeling of sacredness conferred on the *hiera oikia* was

²¹⁷ Den Berjeen suggests that, generally speaking, walkers often experience the end of the walk 'as a climactic high'. (Den Brejeen 2007, 1424)

²¹⁸ Chapinal, 2021, 188-189

²¹⁹Scully would also consider the difficulties he personally faced on the long walk, and the challenges of the weather. He further remarks that all these components aided the experience 'of the scared' (Scully 1962, 136–137). This is not to suggest that the experience of Scully equated the ancient one, but it nonetheless provides us with another interpretation of it, which still follows the premises of this chapter.

²²⁰ This is also partially due to the fact that no ancient author has provided us with detailed information regarding the spatial settings of Dodona. (Piccinini 2016, 153)

²²¹Chapinal has attempted a phenomenological study of the site, but he did not focus on the *hiera oikia* in particular and did not treat cognition together with the senses. (Chapinal 2021, 164-196)

²²² Katsikoudis 2019, 34

²²³ Ibid., 29

These other temple-like buildings (recognized as Λ , Θ , Z, A, and Γ) have been defined as *thesauroi*. They all share the same ground plan-the hiera oikia E1 is the only structure built differently and therefore 'unequivocally' with a 'religious function'. (Piccinini 2016, 163)

²²⁵ Piccinini 2016, 163

not only given by its topographical position within the sanctuary but also by the way it was architectonically structured. As it can be seen in the reconstruction model²²⁶, the hiera oikia would have been approached by three/four steps: the consultants might have again had the feeling of ascending towards it, cognitively linking the building with notions of prominence and importance. 227 Also, if during the 5th and beginning of the 4th century BCE the hiera oikia consisted in just a simple naiskos erected next to the sacred oak, in 350-325 BCE it became assimilated into a wall circuit of 20.80x19.20 m with Ionic colonnades and anticipated by a propylon in antis.²²⁸ Indeed, because of this architectonic structure, the visitors entering the oracular space had to physically go through another entrance: the walls of the building would have represented another smaller temenos, further impeding the visitors' vision of its internal spaces and of the oak tree. Here I argue that such architectonic design did not only accentuate feelings of excitement or the notion of sacredness but actively engaged the visitor's senses. Precisely because of the encircling walls, once inside the hiera oikia, the consultants very likely did not have vision of the outside, surrounding environment. Consequently, the enclosed space of the building, ²²⁹together with the oak tree, became their only sensorial and cognitive referential point, placing them in a context devoid of external (visual and acoustic) stimuli. According to an experiment led by Schlittmeier et al., the absence of acoustic background noise in a space likely leads to a more constant maintenance of attention and to augmented verbal and logical reasoning. ²³⁰The *hiera oikia*'s spatial settings, by keeping the consultants in such sensorial engagement, 231 could have therefore made them focus more on the present, on the actual petitions they needed to pose to the oracle, and to be better predisposed to receive the oracle's response.

MATERIAL OBJECTS

The first object the consultants needed to sensorially and cognitively engage with was the oak tree in the *hiera oikia* enclosure. The prodigious quality of this tree had been described by Aeschylus when saying that it was 'talking'²³² and by Sophocles when narrating the scene of Herakles listening to the ancient oak tree 'which spoke out through the two priestesses there'.²³³ From these two literary passages, it can be inferred that the message of the oracle²³⁴ needed to be interpreted by three priestesses called Peleiades.²³⁵ However, contrary to

²²⁶ See fig. nr. 13 in the Appendix.

²²⁷ Structures and spaces established in high positions are linked with ideas of importance. (Frigerio 2023, 30)

²²⁸ Piccinini 2016, 154

²²⁹ To enclose means "to surround (with walls, fences, or other barriers) so as to prevent free ingress of egress". (Key, 2010)

²³⁰ Schlittmeier et al., 2007, 17

²³¹ Birch, Sinclair 2013, 86.

²³² "αὶ προσήγοροι δρύες." Aeschylus, Prometheus Bound [830], translated by Herbert Weir Smith, 1926.

²³³ "τοιαῦτ' ἔφραζε πρὸς θεῶν εἰμαρμένα τῶν Ἡρακλείων ἐκτελευτᾶσθαι πόνων, ὡς τὴν παλαιὰν φηγὸν αὐδῆσαί ποτε Δωδῶνι δισσῶν ἐκ Πελειάδων ἔφη." Sophocles, Women of Trachis [170], translated by Robert Torrance, 1966 ²³⁴ In Ancient Greece, that natural phenomena could express the gods' will (Addey 2022, 8) might have provided the cognitive pre-condition to believe the oak's divine utterances.

²³⁵ The name of the priestess, Πελειάδες literally means 'doves' (Chapinal, 2017). Herodotus wrote that their name was reflective of the fact that the priestesses were foreigners (from Egypt) and would have uttered 'bird-like noises' (Hdt. 2.54-58.1). Herodotus further informs us that the pearching of a black dove from Thebes on the oak tree was the first

what Nicol has written, the oracular procedure was not 'impersonal' because mediated by the priestesses; ²³⁶ the oracle of Dodona was in fact strongly personally and sensorially engaging, and such is to be understood in light of its acoustic qualities. As it has been mentioned above, this thesis will take the sound of the "manytongued" oak as primarily deriving from the sound of the vibrating cauldrons ²³⁷ and from the rustling of the oak's leaves. Scholars generally agree on the fact that around the 8th century BCE bronze cauldrons would have been placed around the perimeter of the oak²³⁸: by being positioned next to each other, the movement of one, when hit, would have made all the other cauldrons vibrate. 239 Although the number and disposition of the cauldrons might have probably changed after the restructuring of the hiera oikia in the 4th century BCE, 240 their presence would still persist within the building.²⁴¹ Bosman, borrowing the terminology first used by Cook, ²⁴² adopts the word 'gong' when referring to these cauldrons. Although the two objects' sonic properties have not, to my knowledge, yet been compared, the fact that a cauldron could emit a long and persistent sound similar to that of a gong is confirmed by the fact that bronze, as a material, allows for superior and durable sound effects.²⁴³ More interestingly, as can be learned from both ancient and modern science and practices, sound stimuli (as the ones emitted from a gong) can also facilitate altered states of consciousness. 244 Such an effect would be caused by the capability of sound to stimulate the dermatomes and transfer its vibration to the human's body.²⁴⁵ The resulting balanced nervous system of an individual would be more prone to meditation and would make the contents of the mind 'more loose'. 246 This happens because the vibration of a sound, especially if emitted from a gong-like instrument, does not only involve the ear but the whole sensory system of the body, which then privileges its perception against the thinking activity of the mind. 247 That such effects would be achieved for the consultants when finding themselves within the hiera oikia is more than plausible, especially if the leaves' sound is also taken into consideration. In fact, the 'rustling' of a plant's leaves is never a singular sonic phenomenon: leaves respond to multiple natural and external stimuli that result in their final

event that established the oracle of Dodona. (For more information on this, see Nicol 1958, 136-326, or Dillon 2017, 324). The priestesses, as mentioned before, likely replaced the original figures of the *Selloi*.

²³⁶ "Consultation of the Oracle was a somewhat impersonal affair". (Nicol 1958, 140)

²³⁷ There also exists archaeological evidence for cauldrons in Dodona, for a catalogue of them see Piccinini 2012.

²³⁸ Sharon 2018, 3. It is said that the temple at Dodona had no walls, but it was surrounded by a ring of cauldrons made of bronze. (Nicol 1958, 139)

²³⁹ Nicol 1958, 139; Bosman 2016, 185

²⁴⁰ As it has been already mentioned, in the 4th century BCE, the structure of the *hiera oikia* changed, and the cauldrons possibly did not have the same circumscribing nature as before. (Chapinal 2017, 26)

²⁴¹ The other cauldron, which might have substituted the ones of the previous centuries, could have been a present from the Korkyrean people. The cauldron would have stood upon a column and been hit by the statue of a man holding a bronze whip-which would have moved with the wind (Chapinal 2017, 25; Bosman, 185). Contrary to this supposition, Pliny the Elder suggested that the sound in the *hiera oikia* would have been produced by bells. (Plin. HN 36, 19, 92)

²⁴² P. Bosman 2016. Cook was the first to translate γαλκεῖον/ γαλκίον as 'gong'. (Cook 1902:13, 28)

²⁴³ Many bells are in fact composed by bronze material too. (Debut et al., 2016, 545)

²⁴⁴ Gongs have been used from the Bronze Age and still have an important role in Southeast and East Asia in spiritual practices (Pesek 2016, 141). Contrary to this fact, Nicol argued that cauldrons in Dodona's sanctuary mainly functioned in an apotropaic sense. (Nicol 1958, 140)

²⁴⁵ Pesek 2016, 143

²⁴⁶ Ibid.

²⁴⁷ The vibration of sound first relaxes the body and then the mind. The properties of 'healing sounds' are still used for meditation practices all over the world. (Caballero 2013, 88-89)

physical vibration.²⁴⁸ Given the scientific fact that a meditative state of mind is not only allowed but further enhanced when prompted by auditory stimuli connected to a natural environment²⁴⁹, I will here suggest that the senses and cognition of the consultants would have been specifically predisposed by these means in order to attain a more relaxed and calm state of mind. By literally embodying the sound in the form of vibrations, their consequentially relaxed state of mind would have ultimately eased and/or supported their emotional participation in the oracular process.²⁵⁰

Another form of material engagement can be found in the consultants' *praxis* of writing down petitions on strips of lead, only after which the priestess could interpret the oracle's response.²⁵¹ From these tablets, of which there is substantial archaeological evidence, it is possible to first understand the nature of the petitioner's questions.²⁵² Although there is a high variety in their contents, they mainly concern the decisions that the consultants needed to take. Therefore, within these, it is traceable a constant wondering about potential future outcomes with the hope of reaching the best alternative.²⁵³

'Did Thopion steal the silver (or not)?'

'Will there be children for me, if I consult the oracle?',254

As it can be noted from these inscriptions, the questions wonder about the future and on what would be the best decision for the consultants to take. However, another characteristic of these petitions concerns their binary structure: some of them would adopt the formula 'x or y?', which Eidinow deems crucial for the consultants to cognitively participate in the oracular process and to better envision their future actions. Indeed, to express two future possibilities in advance would have meant to simulate potential future scenarios, preparing the consultants for both of them and for the oracle's later response. However, what has not been explored by Eidinow is the aspect of materiality itself: the cognitive process would have been triggered especially because the consultants engaged their hands, and only therefore their brains, in the act of writing their petitions. According to Malafouris's theory of material engagement, that happens because the tools used in such practice (in this case, a stylus and a tablet) are not to be considered only external and functional

²⁴⁸ Plants respond to sounds through the leaves' friction with the air. (Li 2020, 2)

²⁴⁹ Travis 2021, 889

²⁵⁰ Meditation affects the cognitive mechanisms of decision-making processes. (Sai 2015, 1)

²⁵¹ Dillon 2017, 327. It is commonly accepted that the petitioners were the ones writing their questions on the tablets. (Chapinal 2021, 34)

²⁵² In any case, from the past excavations at the site of Dodona, 170 tablets have been recovered with questions and answers-ranging from private to more collective-state-oriented concerns. (Dillon 2017, 328)

²⁵³ Eidinow 2007, 133

²⁵⁴ Ibid., 132. For a better overview of these tablets, see Eidinow 2007, Appendix 1.

²⁵⁵ Eidinow 2018, 454

²⁵⁶ "Engaging the tool shapes the mind'. (Malafouris 2013,174)

instruments for writing but as 'a way of thinking' ²⁵⁷: in order to press the stylus on the surface of the tablet to construct the desired petition, the consultants' minds would have been forced to think about the structuring of the sentence in advance. The consultants' capability to process potential future actions was then given by this reflective thinking *a priori*²⁵⁸ and by the fact that they objectified their potential choices through tangible matter, making them tactile, readable, and visible. By writing their questions on these tablets, the consultants could sensorially engage with the abstractness of their thoughts. ²⁵⁹

DISCUSSION

If for mania we intend a state of deviation from an ordinary state of consciousness, 260 then this chapter has shown how consultants at the oracle of Dodona were induced to attain such a mental state by participating in various physical and sensorial experiences in order to facilitate their personal approach to the act of petitioning itself. First of all, by undergoing a journey that needed to cross a relatively long path, the consultants would have had the time to think and ponder about the petitions they wanted to pose to the oracle-perhaps making their journey also a meditative one. The difficulties and challenges proper to the mountainous landscape would have further contributed to increasing their willingness to arrive at the end of the long walk-which, once reached, might have released in them feelings of happiness and of gratification-emotions that generate more positive thinking towards the imagination of possible future scenarios. After reaching the sanctuary, the consultants would have had to physically traverse two entrances in order to get inside the hiera oikia where Zeus' oak tree would have stood. The act of crossing through two barriers would have unquestionably enhanced their expectations but also increased their feeling of sacredness. The enclosed space of the hiera oikia constructed by means of walls would have also created an isolated, confined area in which the consultants' cognitive processes and concentration would have been heightened and focused on the process of petitioning the oracle. Furthermore, the senses and cognition of the petitioners would have been stimulated by material engagement too: the oak tree, with the sound of its leaves and the vibrating 'gong' sound of the cauldrons, might have made them reach a more relaxed, calm state of mind- all emotional prerogatives that could help them to be more receptive to the answer of the oracle. The entire process of petitioning about the uncertain future would have been further facilitated by writing those petitions on physical tablets: the writing down of thoughts eases cognitive performance. Although in a different phenomenological way, the walk, the

²⁵⁷ Malafouris 2013, 3

²⁵⁸ Eidinow 2018, 454. Eidinow also conjectures that consultants might have spent the night at the oracle before receiving a response to their questions, as it happened at other oracular centres (Amphilochos and Mopsos at Mallos in Kilikia). However, as Eidinow also notes, the existence of only one late source mentioning incubation at Dodona does not represent firm evidence for this kind of ritual practice. (Eidinow 2007, 70-71)

²⁵⁹ This represents, in other words, what Gruth has called the 'corporeal cognitive dimension' (Groth 2017, 1). As it has been argued in relation to the *argestinai* weaving Athenas' *peplos*, to engage the hands materially speaking means to directly shape the mind (and also, a certain experience).

²⁶⁰ Ustinova notes that the state of 'altered consciousness' could have different characteristics and be induced either voluntary or involuntary. (Ustinova 2017, 3)

architectural layout of the *hiera oikia* and the material 'objects' to be found inside the Dodona's sanctuary provided the consultants with an embodied experience of the oracular procedure.

This discussion has important implications for ritual theory. First of all, oracles did not involve either a direct, permanent action from the divine upon the consultants, nor was the divine here the recipient of ritual action from the latter-meaning that the *ritual form hypothesis* cannot explain the level of high sensory pageantry that still permeated the whole experience of the ancient petitioners.²⁶¹ Also, the fact that the oracle of Dodona could be petitioned at every moment of the year (and multiple times too, if the consultant did not come from too far) immediately excludes the theory that the emotionality of attending the oracle depended on how frequently its petition occurred.²⁶² In this case, it could perhaps be argued that, as Pyysiäinen proposed, the emotionality of the event itself created the sensory pageantry of the process: the emotions and feelings associated with the future uncertainties would have surely created part of the 'internal' emotionality of the consultants.²⁶³ However, to support only this suggestion would fail to appreciate the very complex sensory dimension of the oracle of Dodona: the emotions associated with the latter did not only derive from the internal emotional state of the consultants, but from having them as sensorially and cognitively engaging with the physicality of its spatial and material features. Ultimately, it needs to be remarked that, contrary to what both Whitehouse and McCauley& Lawson have assumed, the aim of the oracle of Dodona was not to foster its memorization and survival but to personally involve the consultants in a way as to facilitate the envisioning of their future.

²⁶¹ I would like to remind here that McCauley & Lawson conjectured that a 'ritual' with no direct action stemming from the divine to the ritual patients would result in the so-called 'tedium effect'. (McCauley & Lawson 2002, 1)

²⁶² This would oppose Whitehouse's frequency theory.

²⁶³ Pyysiäinen 2001, 93

CONCLUSION

REVIEW OF ANCIENT CASE-STUDIES

Each ancient-case study in this dissertation has been explored by looking at the ritual's environments and landscapes, architecture settings and objects employed in their activities. The sensorial and cognitive perception of each of them would have made the ancient people not only personally engage with the ritual but would have further made them gain an experience that both sensorially and metaphorically embodied it. Such is what has been argued first in relation to the procession of the Great Panathenaia. The aim of this ritual to collectively celebrate the goddess Athena would have been fostered as an experience 'deemed religious' by having the participants sensorially engage with each of the steps and elements of the procession, which ultimately created a feeling of civic unity. By walking across a defined landscape up until the Acropolis, participants would have personally embodied notions of awe, sacredness, and the feeling of togetherness. The theme of *charis* would have been reminded to them by the many allusions found in the architectural framework of the Parthenon, while materially speaking, the relationship between Athenians and Athena would have been further articulated by the peculiar shape of the sacrificial altar and by the weaving activity of the peplos as performed by the argestinai. In conclusion, the participants of the Panathenaia procession bodily and sensorially felt (embodied) the notions around which this ritual was articulated. The bodily experience envisaged in the mystery rite at Eleusis invested the senses with the same crucial role. For example, as it has been explored in the second chapter, by immersing themselves in the sea, the initiates would have been bodily able to create a metaphor of death/rebirth, and by likely imitating the search of Persephone, they would have managed to personally and emotionally engage with the sorrow and pain of Demeter. The architectural space of the sanctuary would have helped them to spatially contextualize this mythical search, while the structure of the Telesterion helped to orient their sensorial stimuli in the next ritual steps. The acoustic and visual deprivation of the participants-followed by the drastic light they would have ultimately seen, made them embody not only their status from initiates to *epoptai*, but also the soteriological knowledge they had to acquire. Some of them might have become even more engaged with the ritual's experiences by seeing the deiknoumena and by looking at past dedicatory stelae. If the initiation at Eleusis tried to elicit the ancient senses and correlated emotions to make the participants incorporate the doctrinal knowledge and notions that characterized its mysteries, the sensorial environment of the oracle of Dodona did so in order to make the experience of the oracular process as strongly reflective and engaging as possible. As it has been argued in the third chapter, this would have been achieved first by the walk the consultants had to take across the mountainous and wintry Epirus region: the physical stress and fatigue that their bodies went through might have augmented their cognitive predispositions towards the questioning of the oracle and the envisioning of their future. The same result, I argued, might have been consequential of the architectural structure of Dodona's hiera oikia: its confined character might have removed some external visual and acoustic distractions for the consultants. The further presence of the oak tree and of gong-cauldrons would have granted them a space filled with relaxing and vibrating sounds, which, together with the writing down of their petitions on physical tablets, might have contributed to easing their emotions and anxieties or just helped them to clarify their question to the oracle.

THEORETICAL CONTRIBUTION

These results have stemmed from the innovative perspective taken in this dissertation. This discussion has considered the ritual dynamics proper to three different ancient case-studies which concomitant exploration hopefully highlighted their differentiation in cognitive and sensorial stimuli, their local diversities, and their distinct religious dimensions and aims. Also, it is important to note that the ancient Greek rituals here explored had not been discussed in relation to these theoretical questions and methods yet. To study them in detail and to consider them in relation to their surrounding historical debates has tried to dismiss the often-limitative character proper to the application of cognitive theories. These latter, as it has been demonstrated in the introduction of this thesis, generally treat real case-studies in a rather incomplete manner, and when thoroughly explored, they are analysed with an overly positive attitude towards the cognitive theories' postulates. Together with this, this thesis has tried to avoid their bias in looking at rituals only through the lenses of cognition. As it has been argued, cognition can be helpful to recover ancient mentalities and ritual dynamics in their proper context only if paired with a sensorial appreciation of them. 264 Such is why this thesis has taken up the socalled embodied cognition approach. This latter, by arguing that it is the sensorimotor body that structures our thinking, makes it possible to understand rituals not as monolithic experiences but as differently and variously constructed phenomena, their shape and form depending on how ancient worshippers and visitors bodily, sensorially, and cognitively perceived the rituals' external and internal environments and cultic characteristics.

This dissertation has explored ritual dynamics against leading cognitive theories that sought to understand from where emotionality and sensory pageantry stemmed and what kind of function they tried to accomplish in rituals. After such analysis, it is here suggested that these elements did not derive from the cognitive theorists' hypothesized factors and that their presence did not only serve to allow the ritual's survival throughout generations. Indeed, the results of this thesis' discussion suggest that rituals were emotional because of the different kinds of sensory pageantry constructed in each of them, which in turn tried to accommodate their internal specific goal.

²⁶⁴ This directly contradicts the aims of the cognitive theorists, who have explored rituals by examining how individuals processed activities cognitively rather than by sensually engaging with them or their environment.

BEYOND CURRENT THEORIES

What has thus emerged from this discussion is that rituals cannot be categorized only as meaningless actions ²⁶⁵: each ritual step, as it has been argued so far, contributed to make the ancient worshippers live a certain and defined experience 'deemed religious'. Furthermore, this analysis has shown that there should not be any discussion about the levels of sensory pageantry in a ritual, but rather about its kinds. All the cognitive theorists' differentiation of rituals into either high or low sensory pageantry ones only emphasizes binary structures upon which rituals, by their very local and diverse nature, cannot rest. In fact, contrary to what has been maintained, the conclusive remark from the present study is that ritual's experiences always included some form of sensorial engagement, but that its kind and mode of arousal changed depending on the final goal of each ritual. The sensorial involvement of a ritual could not be dictated by the fact that patients conceptualized the ritual's actions to directly stem from the CPS' agents: if such was the case, then the Panathenaia procession would have been characterized by rather unemotional ritual moments. ²⁶⁶ This is also true in relation to the initiation of Eleusis: although the CPS agents might have been granted a crucial role in determining the acquisition of new statuses, the emotionality of the ritual stemmed from having the patients as 'acting' themselves, as undergoing different stages within the initiation process. And the same conclusion can be drawn from the oracle of Dodona: the sensory pageantry of the oracular process did not derive from having the CPS agents as acting on the patients, but from having the latter attuning their senses and minds towards the oracle and to the cognitive process of petitioning. So, the contrary statement of McCauley and Lawson is here instead suggested: it is not really the conceptualized actions of the divine that determine the emotionality of a ritual, but the active role that patients assume in them through the sensorial environment. Whitehouse's proposition that it is the frequency of a ritual conditioning its sensory pageantry does not here find confirmation either: if such were true, then we would not have the record of initiates attending the Eleusis' mystery ritual or the consultants petitioning Dodona's oracle more than once. In fact, following Whitehouse's conjecture, if people attended a ritual frequently, the ritual in question would be characterized by low pageantry and a doctrinal mode of religiosity. Pyysiäinen's suggestions were likewise not recognized by the analysis undertaken in this thesis: the sensorial engagement in a ritual was not to be found only in moments of direct contact with the divinities but was rather constructed and maintained (albeit in different kinds) throughout the ritual process, from its beginning to its very end. Again, such results can only be gained through an embodied cognitive perspective and by the application of a thorough historical investigation: it is only by comparing different rituals of different structures, in different regions and times that their aims and modes of engagement can be appreciated. Such methodology, which combines the world of modern sensorial and cognitive research with the ancient historical one, could be further extended to the exploration of many other rituals (of different

²⁶⁵ McCauley & Lawson 2002, 10

²⁶⁶ The Great Panathenaia, a procession culminating in a sacrifice, would be characterized by McCauley & Lawson as a low sensory pageantry ritual because the patients would be the ones acting on the CPS agents and not the contrary.

structures, kinds, times, and places) throughout the ancient world. As this specific approach has not yet been applied, it would provide a different understanding of their internal dynamics and of their differentiations in sensorial and cognitive stimuli, giving credit, this time, also to their belief dimensions.

In conclusion, this thesis has suggested that rituals did not work in order to be attractive and to survive throughout time but to work ritually speaking. The fact that the popularity of rituals grew over time and that they managed to last for various centuries might perhaps have been a consequence of their capability to make their participants experience what they needed to experience through them. Also, when the sensorial dimension of rituals is taken into account in determining their emotional engagement, it can also be possible to understand why certain rituals took the form that they did: the various constituents of rituals (be that a procession, a sacrifice, an initiation, or an oracle) managed to arise the senses in such a way as to direct the participants' emotions towards their specific aim. The way a procession engaged the senses was different from how the initiation did it, and that is because the procession aimed to foster a sense of community, and an initiation to bring about a change in the symbolic, cultural, and religious status of an individual. These ritual aims took place because religious practices were embodied experiences, 267 managing to make the ancient people corporeally experience religious abstract notions and concepts. Although it can still be maintained that it is virtually impossible to exactly recover any objective and original past sensorial and emotional experience of ancient rituals, this thesis has argued that by taking an embodied cognitive approach to their study and by valuing their religious and inner intentions, it is possible to at least grasp some of their components and crucial dynamics.

²⁶⁷ Patzelt 2022, 120

APPENDIX

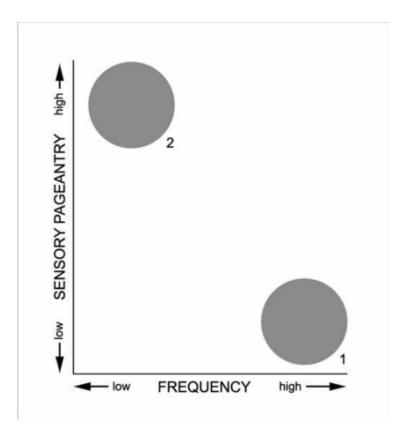


Fig. 1. The representation of the CPS agents' actions determines the ritual's sensory pageantry and frequency. (From McCauley& Lawson 2002: 43, fig. 2.1)

Variable		Doctrinal mode	Imagistic mode
1.	Style of codification	Verbalized doctrine and exegesis	Iconic imagery
2.	Frequency of transmission	Repetitive (routinized)	Periodic (at most every few years)
3.	Cognitive processing	Generalized schemas (semantic memory)	Unique schemas (episodic memory)
4.	Political ethos	Universalistic (imagined community)	Particularistic (face-to-face community)
5.	Solidarity/cohesion	Diffuse	Intense
6.	Revelatory potential	Intellectual persuasion	Emotional and sensual stimulation
7.	Ideological coherence	Ideas linked by implicational logic	Ideas linked by loose connotations
8.	Moral character	Strict discipline	Indulgence, license
9.	Spread by	Proselytization	Group action only
10.	Scale and structure	Large scale, centralized	Small scale, localized
11.	Leadership type	Enduring, dynamic	Passive figureheads
12.	Distribution of institutions	Uniform beliefs and practices	Variable beliefs and practices
13.	Diachronic features	Rigidity (permanent "breaking away")	Flexibility (incremental change/radical innovation)

Fig. 2. The imagistic and doctrinal modes of religiosity explained. Table taken from Whitehouse 1995, 197. (From McCauley& Lawson 2002: 105, fig. 3.1)

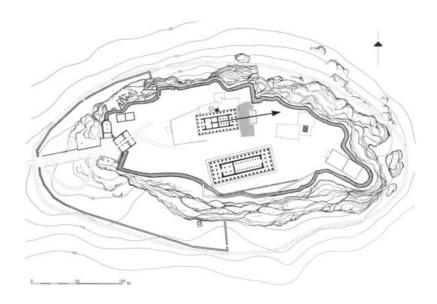


Fig. 3. Map showing the Acropolis before 480 B.C. It is in the grey area that participants would have gathered. (From Gerding 2006: 393, fig.1)

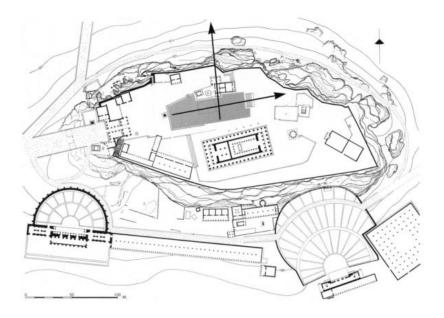


Fig 4. Plan of the Acropolis of the 2nd cent. CE. The grey area is considerably larger. (From Gerding 2006: 394, fig.2)

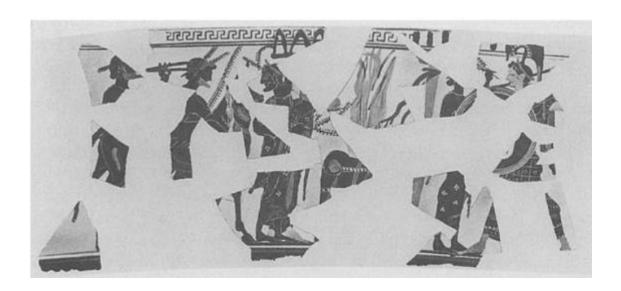


Fig. 5. Attic black figure lekytos ca. 500 BCE Athens. It depicts a musician, a kanephoros, a victim, a branch-bearer, a column with an altar and a deity (Athena). (From Neils 1996: 181, fig. 8.3).



Fig. 6. A picture showing the Panathenaic way which from the Athenian Agora leads to the Acropolis. (From Jenkins 1994: 11, fig. 3)



Fig.7. The view of the Athenian landscape from the Acropolis. (Photo of the Author)

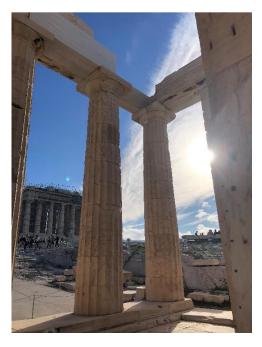


Fig. 8. The immediate view of the Parthenon while exiting the Propylaea. (Photo of the Author)

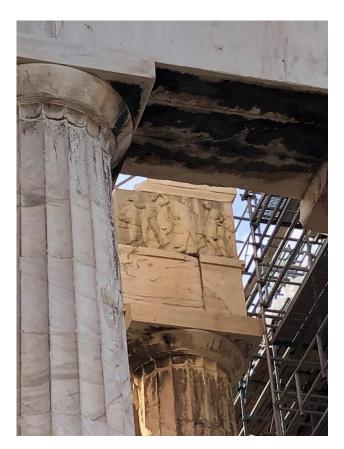


Fig.9. Internal Frieze of the Parthenon. (Photo of the Author)



Fig. 10. The Temenos Wall of Eleusis's sanctuary. (Photo of the Author)

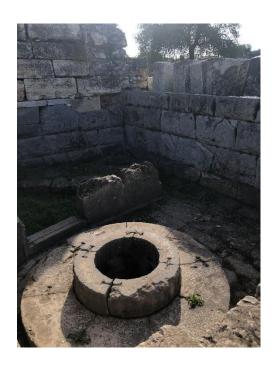


Fig.11. The Kallichoron Well. (Photo of the Author)

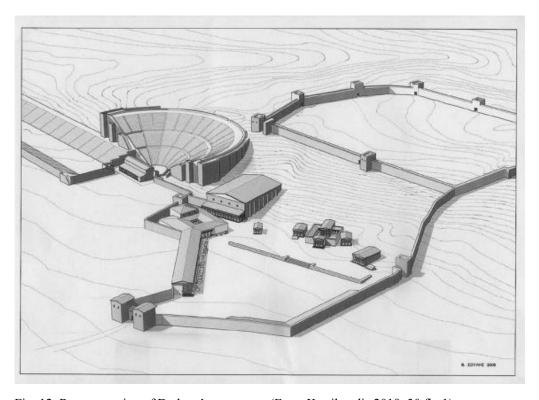


Fig. 12. Reconstruction of Dodona's sanctuary. (From Katsikoudis 2019, 30 fig.1)

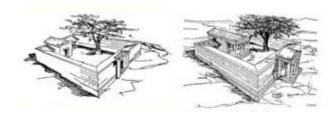


Fig. 13. The reconstruction model of the hiera oikia. (From Katsikoudis 2019, 30 fig.2)



Fig.14. A picture of Mount Tomaros. (From Nicol 1958, 130 fig. a)

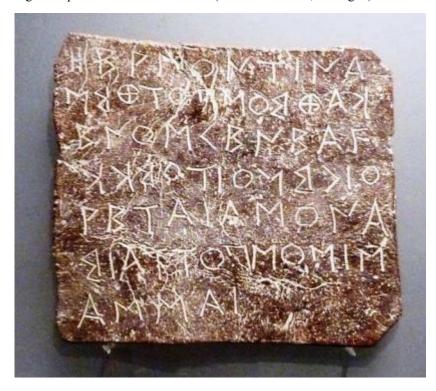


Fig.15. Oracle tablet from Dodona. (From Chapinal 2017, 21 fig. 2)



Fig.16 A modern image of the *hiera oikia* at Dodona. (From Chapinal 2017, 29 fig. 3)

BIBLIOGRAPHY

PRIMARY SOURCES

Aeschylus. Prometheus Bound. Translated by Herbert Weir Smyth (Harvard, 1926).

Anonymous. The Homeric Hymns. Translated by Hugh G. Evelyn-White, Perseus Digital Library (Cambridge, 1914).

Aristophanes. Frogs. Translated by Matthew Dillon, Perseus Digital Library (Cambridge, 1995).

Attic Inscriptions Online. https://www.atticinscriptions.com/

Euripides. Euripides: Hecuba, Iphigenia in Aulide, Iphigenia Taurica, Helena, Andromacha, Cyclops, Phoenissae, Orestes. Part 1. Edited by G. Hermann (Cambridge, 2015).

Herodotus, Histories. Translated by A. D. Godley, Perseus Digital Library (Cambridge, 1920).

Homer. The Iliad. Translated by A. T. Murray, Perseus Digital Library (Cambridge, 1924).

Homer. The Odyssey. Translated by A. T. Murray, Perseus Digital Library (Cambridge, 1919).

Lactantius. Epitome of the Divine Institutes. Translated by E.H. Blakeney (Cambridge, 1950).

Pausanias. *Description of Greece*. Translated by W.H.S. Hones and H.A. Ormerod, Perseus Digital Library (Cambridge, 1918).

Plato. Phaedrus. Translated by H. Yunis (Cambridge, 2011).

Plato. Plato in Twelve Volumes. Translated by Harold N. Fowler (Cambridge, 1925).

Pliny the Elder. *The Natural History*. Translated by H. T. Riley (London, 1816-1878).

Plutarch. Moralia. Edited and translated by F.H. Sandbach, Loeb Classical Library vol.15 (Harvard 1969).

Plutarch. Plutarch's Lives. Translated by B. Perrin (Cambridge, 1920).

Proclus and Harold, T. Proclus: commentary on Platos' Timaeus (Cambridge, 2007).

Sophocles. The Oedipus at Colonus of Sophocles. Edited and translated by Sir Richard Jebb (Cambridge, 1889).

Sophocles. Trachiniae. Translated by Robert Torres, 1966.

Strabo. The Geography. Translated by H. Leonard James (London, 1961).

Xenophon. Memorabilia. Translated by E. C. Marchant (London, 1923).

SECONDARY SOURCES

Anghelina, Catalin. "Athena's Birth on the Night of the Dark Moon." *The Journal of Hellenic studies* 137 (2017): 175–183.

Barrett, Justin L. The Oxford Handbook of the Cognitive Science of Religion. 1st ed. Oxford, 2022.

Barsalou, Lawrence, Aron Barbey, W. Kyle Simmons, and Ava Santos. "Embodiment in Religious Knowledge." *Journal of Cognition and Culture* 5, 1-2 (2005): 14-57.

Beaulieu, Marie-Claire Anne. "The Sea as a Two-Way Passage between Life and Death in Greek Mythology." PhD dissertation (University of Austin, 2008).

Birch, Robert. Sinclair, Brian. "Spirituality in Place: Building Connections between Architecture, Design, and Spiritual Experience." *ARCC Conference Repository*, 23-28, 2013.

Biro, Tamas. "When Judaism became Boring: the McCauley and Lawson Theory, Emotions and Judaism." In Ross, Sarah, Gabriel Levy, and Soham Al-Suadi (eds.), *Judaism and Emotion: Texts, Performance, Experience*. 1st ed. Vol. 7. New York, 2013.

Bosman, Philip. "The Dodona Bronze Revisited." Acta Classica 59 (2016): 184–92.

Bowden, Hugh. "A Cognitive Approach to Ancient Greek Animal Sacrifice." In Geertz, Armin W., John North, and Esther Eidinow (eds.), *Cognitive Approaches to Ancient Religious Experience*, 19–43, 2022.

Bremmer, Jan N. "Initiation into the Eleusinian Mysteries: A 'Thin' Description." In Turner, John D., Liv Lied, and Christian H. Bull (eds.), *Mystery and Secrecy in the Nag Hammadi Collection and Other Ancient Literature: Ideas and Practices*, 76:375–397. Leiden, 2012.

Brilliant, Richard. "Let the Trumpets Roar! The Roman Triumph." In Bergmann, Bettina, and Christine Kontoleon (eds.), *The Art of Ancient Spectacle*, 221–9. Washington, 1999.

Burkert, Walter. Ancient Mystery Cults. Cambridge, 1987.

Caballero, Rodrigo. "Resounding body: Epistemologies of Sound, Healing, and Complementary and Alternative Medicine on Canada's West Coast." PhD dissertation (University of British Columbia, 2013).

Castellani, John W, and Andrew J Young. "Human Physiological Responses to Cold Exposure: Acute Responses and Acclimatization to Prolonged Exposure." *Autonomic Neuroscience* 196 (2016): 63–74. Cattaneo, Zaira and Tomaso Vecchi. *Blind Vision: The Neuroscience of Visual Impairment*. Cambridge, 2011.

Chalupa, Aleš. "Pythiai and Inspired Divination in the Delphic Oracle: Can Cognitive Sciences Provide Us with an Access to 'Dead Minds'?" *Journal of Cognitive Historiography* 1, no. 1 (2014): 24–51.

Chapinal-Heras, Diego. "Between the Oak and the Doves: Changes in the Sanctuary of Dodona over the Centuries." In Marchesini, Simona and James N. Novoa (eds.), Simple Twists of Faith. Changing Beliefs, Changing Faiths: People and Places, 2017.

Chapinal-Heras, Diego. Experiencing Dodona: The Development of the Epirote Sanctuary from Archaic to Hellenistic Times. Berlin, 2021.

Chianotis, Angelos. "Rituals between Norms and Emotions: Rituals as Shared Experience and Memory." Liège, 2013.

Christiane Sourvinou Inwood "Festival and Mysteries: aspects of the Eleusinian Cult." In Cosmopolous, Micheal B. (ed.), *Greek Mysteries: The Archaeology and Ritual of Ancient Greek Secret Cults*. London, 2003.

Clinch, Alice. "Ecstasy and Initiation in the Eleusinian Mysteries." In Stein, Diana L., Sarah Kielt Costello, and Karen Polinger Foster (eds.), *The Routledge Companion to Ecstatic Experience in the Ancient World*. London, 2022.

Clinton, Kevin. "Epiphany in the Eleusinian Mysteries." Illinois Classical Studies 29 (2004): 85-109.

Clinton, Kevin. "Stages of Initiation in the Eleusinian and Samothracian Mysteries." In Cosmopolous, Michael B. (ed.), *Greek Mysteries: The Archaeology and Ritual of Ancient Greek Secret Cults*. London, 2003.

Cook, Arthur B. 'The Gong at Dodona.' The Journal of Hellenic Studies 22 (1902): 5-28.

Cosmopoulos, Michael B. *Bronze Age Eleusis and the Origins of the Eleusinian Mysteries*. 1st ed. New York, 2015.

Crust, Lee, Richard Keegan, David Piggott, and Christian Swann. "Walking the Walk: A Phenomenological Study of Long Distance Walking." *Journal of applied sport psychology* 23, no. 3 (2011): 243–262.

Crystal, Addey. "Introduction: Divination and Knowledge in Ancient Greek and Roman Cultures." In Crystal, Addey (ed.), *Divination and Knowledge in Greco-Roman Antiquity*. London, 2022.

Debut, Vincent, Miguel Carvalho, Elin Figueiredo, José Antunes, and Rui Silva. "The Sound of Bronze: Virtual Resurrection of a Broken Medieval Bell." *Journal of cultural heritage* 19 (2016): 544–554.

Den Breejen, Lysiane. "The Experiences of Long Distance Walking: A Case Study of the West Highland Way in Scotland." *Tourism management (1982)* 28, no. 6 (2007): 1417–1427.

Dillon, Matthew. Omens and Oracles: Divination in Ancient Greece. 1st ed. London, 2017.

Edensor, Tim. "Walking in Rhythms: Place, Regulation, Style and the Flow of Experience." *Visual Studies*, 25:1 (2010): 69-79.

Eidinow, Esther. "A Feeling for the Future: Ancient Greek Divination and Embodied Cognition." In Geertz, Armin W. (ed.), *Evolution, Cognition, and the History of Religion: A New Synthesis*, 13:447–460. Leiden, 2018.

Eidinow, Esther. Oracles, Curses, and Risk Among the Ancient Greeks. Oxford, 2007.

Engler, Steven, and Mark Quentin Gardiner. "A Critical Response to Cognitivist Theories of Religion." *Religion, Theory, Critique*, 237-246. New York, 2017.

Fangqing, Lu. "Architecture as Spatial-Textile Storytelling: Metamorphosis of Frieze as a Narrative Medium Mediating the Panathenaia Festival." *Frontiers of architectural research* 5, no. 4 (2016): 489–498.

Fredrickson, Barbara. "Positive emotions." In Snyder, Charles, and Shein J. Lopez (eds), *Handbook of positive psychology*, 120-134. New York, 2002.

Frigerio, Giulia. *A Cognitive Analysis of the Main Apolline Divinatory Practices: Decoding Divination*. Abingdon, 2023.

Geerts, Armin W., John North, and Esther Eidinow. *Cognitive Approaches to Ancient Religious Experience*. 1st ed. Cambridge, 2022.

Georgoudi, Stella. "Sources and Fountains in the Oracular Sanctuaries: a "Mantic" Water." Les Études classiques 87 (2019): 125-150.

Gerding, Henrik. "The Erechtheion and the Panathenaic Procession." *American Journal of Archaeology* 110, no. 3 (2006): 389–401.

Graf, Fritz. "Initiation: A Concept with Troubled History." in Dodd, David B., and Christopher A. Faraone, (eds.), *Initiation in Ancient Greek Rituals and Narratives: New Critical Perspectives*. London, 2003.

Graf, Fritz. "Pompai in Greece: Some consideration about Space and Ritual in the Greek Polis". In Hägg, Robin (ed.), *The Role of Religion in the Early Greek Polis: Proceedings of the Third International Symposium on Ancient Greek Cult.* Stockholm, 1996.

Grafton, Scott T. "Embodied Cognition and the Simulation of Action to Understand Others." *Annals of the New York Academy of Sciences* 1156, no. 1 (2009): 97–117.

Gragg, Douglas, L. "Old and New in Roman Religion: A Cognitive Account." In Whitehouse, Harvey, and Luther H. Martin (eds.), *Theorizing Religious Past*. Oxford, 2004.

Groth, Camilla. Making Sense Through Sense. Design and craft practice analysed as embodied cognition. Helsinki, 2017.

Ingold, Tim. Being Alive: Essays on Movement, Knowledge and Description. Abingdon, 2022.

Jenkins, Ian. The Parthenon Frieze. London, 1994.

Jessen, Mads Dengsø. "Material Culture, Embodiment and the Construction of Religious Knowledge." In Sørensen, Stig, Marie Louise., and Katharina. Rebay-Salisbury (eds.), *Embodied Knowledge: Historical Perspectives on Belief and Technology*. Oxford, 2013.

Johnston, Sarah Iles, and Peter T. Struck. Mantik Studies in Ancient Divination. Leiden, 2005.

Kärrholm, Mattias, Maria Johansson, David Lindelöw, and Inês A. Ferreira. "Interseriality and Different Sorts of Walking: Suggestions for a Relational Approach to Urban Walking." *Mobilities* 12, no. 1 (2017): 20–35.

Kay, C. E. A. The Oxford English dictionary. Oxford, 2019.

Kershaw, Baz. 'Curiosity or Contempt: On Spectacle, the Human, and Activism.', *Theatre Journal* 55, no.4 (2003):591-611.

Klimstra, Theo A., Tom Frijns, Loes Keijsers, Jaap J. A. Denissen, Quinten A. W. Raaijmakers, Marcel A. G. van Aken, Hans M. Koot, Pol A. C. van Lier, and Wim H. J. Meeus. "Come Rain or Come Shine: Individual Differences in How Weather Affects Mood." *Emotion (Washington, D.C.)* 11, no. 6 (2011): 1495–1499.

Konstantinou, Katerina. "The Oracle of Dodona: Contestation over a 'Sacred' Archaeological Landscape." In Solomon, Esther, (ed.), *Contested Antiquity: Archaeological Heritage and Social Conflict in Modern Greece and Cyprus*, 194–218. Indiana, 2021.

Kubatzki, Jana. 'Processions and Pilgrimage in Ancient Greece: Some Iconographical Considerations.' In Ute, Luig (ed.), *Approaching the Sacred Pilgrimage in Historical and Intercultural Perspective*. Berlin, 2018.

Li, Mengmeng, and Jian, Kang. "Influence of Leaf Physical Properties on Single-Leaf Vibrational Response to Sound." *Forests*, 11 (1), Article 115 (2020).

Longfellow, Brenda. "Roman Fountains in Greek Sanctuaries." *American journal of archaeology* 116, no. 1 (2012): 133–155.

MacDonald, William. The Architecture of the Roman Empire II: An Urban Appraisal. Yale, 1986.

Malafouris, Lambros. How Things Shape the Mind: A Theory of Material Engagement. Cambridge, 2013.

Marconi, Clemente. "The Parthenon frieze Degrees of visibility." *Res: Anthropology and Aesthetics* 55/56 (2009): 156-173.

Martin, Luther H. *The Mind of Mithraists: Historical and Cognitive Studies in the Roman Cult of Mithras*. London, 2016.

McCauley, Robert N., and E. Thomas Lawson. *Bringing Ritual to Mind: Psychological Foundations of Cultural Forms*. Cambridge, 2002.

Montello, Daniel R. and Moyes Holley. "Why Dark Zones are Sacred" in Holley, Moses (ed.), *Sacred Darkness: A Global Perspective on the Ritual Use of Caves*. 1 edition. Colorado, 2012.

Mylonas, George Emmanuel. Eleusis and the Eleusinian Mysteries. Princeton, 2015.

Neils, Jennifer. Worshipping Athena: Panathenaia and Parthenon. Wisconsin, 1996.

Newell, Ben R. "Emotional Influences on Decision Making." In Newell, Benjamin R., David A. Lagnado, and David R. Shanks (eds.), *Straight Choices: The Psychology of Decision Making*. Third edition. London, 2022.

Nicol, D. M. "The Oracle of Dodona." Greece and Rome 5, no. 2 (1958): 128–143.

Nikolaos T. Katsikoudis "The Stoas of the Sanctuary at Dodona." In *Listening to the Stones: Essays on Architecture and Function in Ancient Greek Sanctuaries in Honour of Richard Alan Tomlinson*. Oxford, 2019.

Nissinen, Martti. Ancient Prophecy: Near Eastern, Biblical, and Greek Perspectives. Oxford, 2017.

Overmann, Karenleigh A., and Thomas Wynn. "Materiality and Human Cognition." *Journal of archaeological method and theory* 26, no. 2 (2019): 457–478.

Parke, H. W. The Oracles of Zeus: Dodona, Olympia, Ammon. Harvard, 2014.

Patera, Ioanna. "Light and Lightning equipment in the Eleusinian Mysteries." In Christopoulos, Menelaos., Euphēmia D. Karakantza, and Olga Levaniouk (eds.), *Light and Darkness in Ancient Greek Myth and Religion*. Lanham, 2010.

Patzelt, Maik. "Chanting and Dancing into Dissociation: The Case of the Salian Priests at Rome." In Eidinow, Eshter, Armin W. Geertz and John North (eds.), *Cognitive Approaches to Ancient Religious Experience*. Cambdrige, 2022.

Pesek, Albinca, and Tomaz Bratina. "Gong and Its Therapeutic Meaning." *Muzikološki zbornik* 52, no. 2 (2016): 137–161.

Petridou, Georgia. "Blessed Is He, Who Has Seen': The Power of Ritual Viewing and Ritual Framing in Eleusis." *Helios (Lubbock)* 40, no. 1 (2013): 309–341.

Piccinini, Jessica. "Renaissance or Decline? The Shrine of Dodona in the Hellenistic Period." In Melfi, Milena (ed.) and Olympia Bobou. *Hellenistic Sanctuaries*. Oxford, 2016.

Piccinini, Jessica. The Costumers of the Oracle of Dodona through the Analysis of the Literary and Archaeological Evidence up to the Mid-4th Century BC. Oxford, 2012.

Platt, Louise, Dominic Medway, and Chloe Steadman. "Processional Walking: Theorising the 'place' of Movement in Notions of Dwelling." *Geographical research* 59, no. 1 (2021): 106–117.

Pócs, Éva. "Circular Movement in ASC, Legends and Magical Practices." In Pócs, Éva (ed.), *Body Soul Spirits Supernatural Communication*. Cambridge 2019.

Pyysiäinen, Ilkka. "Cognition, Emotion, and Religious Experience." In Andresen, Jensine (ed.), *Religion in Mind: Cognitive Perspectives on Religious Belief, Ritual, and Experience*. Cambridge, 2001.

Ray, Travis N., Scott A. Franz, Nicole L. Jarrett, and Scott M. Pickett. "Nature Enhanced Meditation: Effects on Mindfulness, Connectedness to Nature, and Pro-Environmental Behavior." *Environment and behavior* 53, no. 8 (2021): 864–890.

Rice, David Gerard, and John E. Stambaugh. Sources for the Study of Greek Religion. Missoula, 1979.

Rider, Andrew T., Bruce Henning T., and Andrew Stockman. "Light Adaptation Controls Visual Sensitivity by Adjusting the Speed and Gain of the Response to Light." *PloS one* 14, no. 8 (2019).

Roberts, Ellie Mackin. "Weaving for Athena: The Arrhephoroi, Panathenaia, and Mundane Acts as Religious Devotion." *Journal of Hellenic Religion* (2019), 61-84.

Rose, Valentin. Aristoteles Pseudepigraphus, Pars Prima: Fragmenta Aristotelis Philosophica. Leipzig, 1863.

Ruck, Carl. Sacred Mushrooms of the Goddess: The secrets of Eleusis. Berkeley, 2006.

Schlittmeier, SJ., Liebl, A., Hellbrück, J., Thaden, R., Vorländer, M. "Background Speech Varying in Intelligibility- Effects on Cognitive Performance and Perceived Disturbance." *19th International Congress on Acoustics*. Madrid, 2007

Scott, Michael. "Walls and the Ancient Greek Ritual Experience: The Sanctuary of Demeter and Kore at Eleusis." In Geertz, Armin W., John North, and Esther Eidinow (eds.), *Cognitive Approaches to Ancient Religious Experience*, 193–217, 2022.

Scully, Vincent. The Earth, the Temple and the Gods: Greek Sacred Architecture. Yale, 1979.

Serafini, Tommaso. "Telesterion: Contributo alla Definizione di una Tipologia Architettonica e Funzionale." In *Annuario della Scuola Archaeologica di Atene e delle Missioni Italiane in Oriente*, vol. 97 (2019): 130-156.

Shear, Julia Louise. "Polis and Panathenaia: The History and Development of Athena's Festival." PhD dissertation (University of Pennsylvania, 2001).

Shear, Julia Louise. "The Panathenaia and Local Festivals." In *The Oxford Handbook Sport and Spectacle in the Ancient World*. Oxford, 2021.

Slone, D. Jason. Religion and Cognition: A Reader. Abingdon, 2014.

Sourvinou-Inwood, Christiane. "Athena Polias, Panathenaia, and the Peplos." In Sourvinou-Inwood, Christiane, and Robert Parker (eds.), *Athenian Myths and Festivals*. Oxford, 2011.

Stavrianopoulou, Eftychia. "The Archaeology of Processions." In Raja, Rubina, and Jörg Rüpke (eds.), *A Companion to the Archaeology of Religion in the Ancient World*, 349–361. Chichester, 2015.

Stevenson, R. Tom. The Parthenon Frieze as an Idealized, Contemporary Panathenaic Festival. Swansea, 2003.

Stillwell, Richard. "The Panathenaic Frieze: Optical Relations." Hesperia 38 (1969): 231–241.

Strong, Meghan. "Smelling Fat and Hearing Flame: Sensory Experience of Artificial Light in Ancient Egypt." In Schellenberg, Annette and Thomas Krüger (eds.), *Sounding Sensory Profiles in the Ancient Near East*, 259–77, 2019.

Sun, Sai, Ziqing Yao, Jaixin Wei, and Rongjun Yu. "Calm and Smart? A Selective Review of Meditation Effects on Decision Making." *Frontiers in psychology* 6 (2015): 1059–1059.

Tenhundfeld, Nathan L., and Jessica K. Witt. "Distances on Hills Look Farther Than Distances on Flat Ground: Evidence from Converging Measures." *Attention, perception & psychophysics* 79, no. 4 (2017): 1165–1181.

Ustinova, Julia. "To the Nethelrworld and Back: Cognitive Aspects of the Descent to Trophonius." In Geertz, Armin W., John North, and Esther Eidinow (eds.), *Cognitive Approaches to Ancient Religious Experience*, 44–66, 2022.

Ustinova, Yulia. "Imaginary Phrygians: Cognitive Consonance and the Assumed Phrygian Origin of Greek Ecstatic Cults and Music." *The Journal of Hellenic studies* 141 (2021): 54–73.

Ustinova, Yulia. "Madness into Memory: Mania and Mnēmē in Greek Culture." *Scripta Classica Israelica* Vol. 31, 2012.

Ustinova, Yulia. Caves and the Ancient Greek Mind: Descending Underground in the Search for Ultimate Truth. Oxford, 2009.

Ustinova, Yulia. Divine Mania: Alteration of Consciousness in Ancient Greece. New York, 2017.

Van Gennep, Arnold. *The Rites of Passage*. Translated by Monika B. Yizedom and Gabrielle L. Caffee. Chicago 1960.

Warford, Erin. "Performing Piety: A Phenomenological Approach to Athenian Processions." In Friese, W., S. Handberg & T. M. Kristensen (eds.), *Ascending and Descending the Acropolis. Sacred Travel in Ancient Attica and its Borderland* (Monographs of the Danish Institute at Athens 21). Aarhus, 2016.

Whitehouse, Harvey. "Emotion, Memory and Religious Rituals: An Assessment of Two Theories." In Milton, Kay, and Maruška Svašek (eds.), *Mixed Emotions: Anthropological Studies of Feeling*. Oxford, 2005.

Whitehouse, Harvey. *The Ritual Animal: Imitation and Cohesion in the Evolution of Social Complexity*. 1st ed. Oxford, 2022.

Yavis, G. Constantine. Greek altars: Origins and typology. Saint Louis, 1949.

Zaidman, Louise Bruit, and Pauline Schmitt Pantel. Religion in the Ancient Greek City. Cambridge, 1992.

Zolotnikova Olga A. "The sanctuary of Zeus in Dodona: Evolution of the religious concept." *Journal Of Hellenic Religion*, Vol. 12, (2019): 85-132.