

New Classicists

Issue 5 - March 2021

The Impact of the Laurel on
Apolline Divination:
Affecting the Mind Without
the Use of Drugs

Giulia Frigerio



The Impact of the Laurel on Apolline Divination: Affecting the Mind Without the Use of Drugs

Giulia Frigerio – University of Kent

1. Introduction

The focus of this article is the analysis of the laurel's cognitive impact on Apolline divinatory practices, considering its usage in a specific time and space. The priestesses reportedly chewed laurel leaves before uttering prophecies¹, and they even occasionally burned the leaves for fumigation.² Scholars have previously suggested that the use of the laurel caused a state of frenzy in the prophetess that inspired her divinations.³ However, no proof of the laurel containing hallucinogenic substances has been found from the chemical analyses of the plant.⁴ My argument is that the engagement with the laurel was affecting the mind of the seer. Nevertheless, it was not because of the chemical substances contained in its leaves but because of its cognitive agency and evocative properties. By wearing laurel on her body, the Pythia personified Daphne and assumed her virginal qualities. Through the act of chewing the laurel, the Pythia's brain prepared her body to welcoming Apollo, following the guidelines of ancient medicine. The case study considered is the Sanctuary of Delphi, which flourished for centuries in the Archaic and Classical periods in mainland Greece. The analysis of the use of the laurel during this ritual will give us a well-rounded presentation of the ways the laurel was affecting the mind of the prophet and the consultants without the intervention of chemical substances, also explaining the reason why this plant was often used in divinatory practices in other sanctuaries.

2. Methodology

If we consider the popular Disney movie 'The Little Mermaid' there is a scene of the mermaid combing her hair with the help of a fork. This is a clear example of how an object and its usage can be misinterpreted when the interpreter comes from a different cultural, geographic, and temporal background. It also shows how an object, its design and physical features interact with the brain of the user to figure out the way of handling and exploiting it. This is also the case for archaeological interpretations and historiographical reconstructions. Therefore, in the process, we need to take into consideration three major factors: first of all, the properties and function of the archaeological object taken into analysis; secondly, the human neural response to these stimuli, and finally, the cultural and ontological background of the case study. In this paper, I will address the laurel plant considering its agency and the neural response to its stimuli. This analysis is going to be set in the appropriate temporal and spatial background with the help of archaeological evidence and primary sources.

¹Parke, 1967.

²Ibidem.

³Holmberg, 1979; Broad, 2006; Graf, 2009.

⁴Harissis, 2014, 355.

In line with Malafouris's⁵ claim that objects have an agency, this paper refutes Gell's⁶ definition of agency, according to which intentionality is a criterion for agency, resulting in the restriction of it to a human property only. As a matter of fact, the latest anthropological studies proved that objects are not passive reflections of the society, but active participants that shape social practices.⁷ Following these new theories, this paper rejects the Cartesian perspective, claiming that agency also pertains to objects and is expressed in many different affordances,⁸ which literally means what the object can offer to the individual. Those properties can be of various types. For instance, they can be spatial assets, which are the physical features of an object, easily noticeable through sight and touch. They can be often used to facilitate perception; the spatial arrangement of the material is intended to amplify the problem-solving process by reducing the complexity of the cognitive task directing the attention to reduce the cost of visual search.⁹ Furthermore, spatial properties can also be used as attention-seeking features. Characteristics like size and colour can make an object easier to notice, identify, and remember.

Material culture may also have symbolical features. It can help with concretising the abstract; allowing the human mind to come to believe things that it would never otherwise conceive. This is also the case with epistemic artefacts, for example the Sumerian clay tokens. As a matter of fact, these objects were able to transform, ground and simplify the problem of numbers and to make the parietal system able to support the representation of exact numbers.¹⁰ The agency of the object can also be conjugated in evocative properties, which means that they can raise emotions or remind the user of a concept or experience. In this paper, the laurel plant is going to be analysed considering all the affordances it could offer to the prophet and the consultants during the ritual of divination in Classical and Hellenistic Greece at Delphi.

Subsequently, the human brain and body response to the object agency will be analysed, by applying some basic concepts of modern neuroscience that explain the human brain's reaction to the material world.¹¹ Specifically, the theories proposed by Malafouris and Vaesen will be the starting point for the reading of the use of the laurel proposed. Having considered the agency of material culture and neuroscience, the third factor to take into consideration is that the brain is culturally constructed. In this regard, the concept of *habitus* as defined by Bourdieu is fundamental for understanding my interpretation of the laurel plant's impact on divination. Bourdieu describes this concept as 'structured and structuring structure'.¹² The *habitus* is structured by an individual's past circumstances, such as family background and education. It is also structuring in that it shapes one's present and future actions and, finally, it is a structure in that it is systematically ordered rather than random, a feature which

⁵Malafouris, 2013, 136.

⁶Gell, 1998.

⁷Preucel, 2009.

⁸Johannsen et Al., 2012; Knappett, 2005.

⁹Renfrew, Malafouris, 2013.

¹⁰Malafouris, 2010, 41.

¹¹Applying modern neuroscience to the ancient brain is possible because from the historical period considered to nowadays the human brain has not been subject to relevant changes. Studies proved that the major modifications to the human brain happened during the development from *homo habilis* to *homo erectus* and finally to *homo sapiens*, whose brain is almost the same as people nowadays (Schachner, 2013); 'Anatomically at least, our brains differ little from those of the people who painted the walls of the Chauvet cave all those years ago' (Robson, 2011); "humans in ancient times were much like humans today, at least in terms of basic biological and psychological mechanisms" (Geertz, 2016).

¹²1994d: 170.

makes it easier for us to analyse it. This system generates perceptions, appreciations, and practices,¹³ directing human actions and cognition.

Moving back to our Little Mermaid combing her hair with a fork, it becomes a clear example of how important it is to consider someone's *habitus* in an archaeological interpretation. The princess is interpreting the object agency handling the fork in accordance with its shape and exploiting the affordances given by the shape of the object. However, the different *habitus* to the designer and common user of the object is evident: she is using the fork as a comb, which is not the function the object was meant to be used for. To combat the risk of differing *habitus* when dealing with archaeological interpretations, this paper looks at the laurel plant through the filter of the primary sources dealing with it. The attempt is to use ancient texts as close as possible to the Classical period. In the cases where this is not possible, later authors are considered if enough elements exist to hypothesise that they are putting into words uses and costumes that were proved by archaeology to exist in the previous centuries too.

3. Discussion

Among its numerous uses, it is common knowledge that, in Ancient Greece, the laurel was sacred to Apollo. In the primary sources, the description of Apollo often includes the laurel.¹⁴ According to Diodorus Siculus, it was Apollo himself who discovered the laurel¹⁵, whilst it is Pausanias who narrates that the most ancient temple dedicated to Apollo in Delphi was first made of laurel.¹⁶ However, my analysis of this sacred plant aims to further develop the investigation of its role in the process of divination.

A first strong evocative affordance of the laurel plant must be ascribed to its mythological background. The myth of Apollo and Daphne gives an aetiological account for the association of laurel with Apollo.¹⁷ Hit by one of Eros' golden arrows, Apollo was bursting with love for Daphne, who had been hit by the lead arrow instead. Wanting to remain unmarried and pure for the rest of her life, the nymph was running away from Apollo who chased after her and desired her body. At this point, the most popular version of the myth narrates that Daphne's father, the river god Peneus, turned her into a laurel tree to save her virginity. From this moment on, Apollo made the plant sacred to him and vowed to wear it as clothing.

In another version of the myth¹⁸, Daphne is the name of Teiresias' daughter who was offered to Apollo at Delphi when the Epigoni destroyed Thebes.¹⁹ According to the tale, she had more mantic skills than the father himself and as an inspired speaker of oracles, she was called the Delphic Sibyl, also known as Herophile. Additionally, according to Eustathios²⁰, Daphnis was the daughter of Ladon and Ge; being the first woman on earth, she also became her mother's *promantis* at Delphi before the advent

¹³1990c: 53.

¹⁴ Gow-Page, GP II, IX.525; Eur., *Ion*, 422-424; Callim., *Ia.*, 69

¹⁵And it was Apollo, they say, who discovered the laurel, a garland of which all men place about the head of this god above all others. Diod. Sic. 1-2.34 (Trans. Oldfather, 1933).

¹⁶ They say that the most ancient temple of Apollo was made of laurel. Pausanias. 5.9 (Trans. Jones, 1935).

¹⁷ Paus. 8.20.1; Ov., *Met.* 1

¹⁸ Diod. Sic., 4.66.5-6

¹⁹Paus. 8.20.1; Ov., *Met.* 1

²⁰ on Dionysios Per. 416

of Apollo. This figure as well has probably the same origins as Daphne – Herophile – Artemis.²¹ It is yet to be noticed that these versions of the myth are quite late. They are indeed the final description of a mythological character whose origins are more complex and part of a wider picture, well analysed by Fontenrose in his book ‘Orion: the myth of the hunter and the huntress’.²² Reassessing his analysis, the origins of Daphne can be traced back to the figure of Artemis Daphnaia, who then became known in the tale as Daphne and was considered a distinct person. Just as Artemis, she is, in fact, leader of a band of maiden huntresses.²³ In a hymn attributed to her, the Delphic prophetess calls herself Artemis and claims to be Apollo’s wedded wife, his sister, and his daughter.²⁴

The many mythical backgrounds of the laurel plant are fundamental to understand its agency, as during divination the Pythia was not only carrying laurel branches in her hands but also wearing a laurel wreath.²⁵ Therefore, laurel branches led the Pythia to identify herself as Daphne. Firstly, the Pythia’s need to be chaste and pure corresponds with the virginal status of the nymph. Furthermore, there are multiple myths in the cultural background of ancient Greek people where a god has sexual intercourse with a human being in the shape of an animal or a natural element. In addition, the prophetess was wearing the dress of a maiden, an aspect which matches the nymph’s young age. As a result, the perspective of the chaste Pythia personifying Daphne, who was finally reached and owned by Apollo entering her body in the shape of vapour was probably appealing to the eyes of the worshippers of that time. In the moment of their physical encounter, the priestess, united to Apollo, was inspired by the god and spoke for his desire.

The Pythia’s personification as Daphne is possible if we consider that the brain always keeps track of any changes in body shape and postures to guide actions in space, and in normal conditions we are always fully aware of the position of our body in the surrounding environment. In order to do so, the brain updates its representation of the body, the so-called body schema. It has been suggested that the body schema is plastic, which means that it can incorporate external objects.²⁶ Inside the *adyton*, this can easily relate to the laurel branches. As previously described, the Pythia was wearing a laurel wreath whilst holding a laurel branch.²⁷ We have already mentioned the mnemonic power of this specific kind of tree, which is reminiscent of the myth of the nymph loved and chased by Apollo.²⁸ The leaves on the body of the Pythia and the branch in her hands have the capacity to break the temporal simultaneity and spatial coincidence of her body which is now entwined with the essence of the laurel. Similarly, as the act of a man grasping the sword is more than a mechanical one, but also an act of incorporation ‘which provides a new basis for self-recognition and self-awareness’²⁹, the Pythia is subject to the same process of recognition through objectification. As the man grasping the sword is not a simple man anymore but becomes a knight, in the same way, the Pythia holding laurel branches recognises herself in the figure of Daphne.

²¹Paus. 8.20.1; Ov., Met. 1

²² 1903.

²³ Fontenrose, 1903, 50.

²⁴ Paus., 10.12.2

²⁵ Haughton, 2008; Howatson, 2013, 192; The same thing is proved to be true for the prophets of Apollo Koropaio (Dillon, 2017, 351).

²⁶Vaesen, 2012.

²⁷ Haughton, 2008; Howatson, 2013, 192.

²⁸ Cf. p.3-4

²⁹Malafouris, 2009,100.

This cognitive process surely applies to the Pythia in first person. The same cultural background also pertained to the spectators. However, it is worth mentioning that scholars disagree whether or not the Pythia was visible to the consultants during the process of uttering. The majority of scholars claim that despite the *adyton* only being a couple of stairs lower than the room where the spectators were waiting for the prophecy, the Pythia was performing behind curtains and therefore, she would not have been visible to the worshippers.³⁰ However, other scholars argue that people were directly seeing her during the process of divination. Evidence for directly seeing the Pythia is a vase painting which portrays Aegeus consulting Themis (in the figure of the Pythia).³¹ In this image, the consultant is standing directly in front of the prophetess and can clearly see her during the consultation.

The idea of the Pythia not being seen by the spectators aligns with the figures of the priests reporting the words of the prophetess and with the idea of the uniqueness of the union between the god and the woman. Yet, none of the arguments can be claimed to be right or wrong with certainty. In the case of the Pythia not being seen by the consultants, the cognitive processes induced by the laurel branches in the mind of the spectators would be less effective than in the latter option. However, it is also true that people roughly knew what was going on behind the curtains. They had been told stories about the Pythia and the literary sources demonstrates that they were aware of the involvement of the laurel in the process of divination. Laurel wood was also used as fuel of the sacred heath³², which means that the pleasant smell of the burning plant was surrounding the consultants as a constant reminder of its presence. Furthermore, although they did not enter the *adyton* with the prophetess, the consultants participated in the ritual procession from the sacrifice on the altar outside the temple to the cellar of the temple³³, where they saw her entering the room. The fact that the worshippers did not see the priestess during the process of divination itself does not mean they did not see her before or after the contact with Apollo.

Furthermore, a passage of the ritual that prepared the Pythia to the act of divination probably involved the chewing of the laurel³⁴. In earlier centuries, it was believed that chemical substances that could have altered the state of mind of the Pythia could have been contained in the laurel leaves. This hypothesis has been disproved in recent times; the laurel does not have hallucinogenic effects.³⁵ However, the laurel was often associated with the idea of poetical inspiration. Notably, a late authority even claims that the laurel itself when burnt served to induce prophecy.³⁶ From the fifth century BC onwards, there is evidence that chewing the laurel leaves was supposed to bring a person into touch with the gods, as such, it was frequently used by prophets and poets to invoke inspiration.³⁷ Despite the fact that chemical analysis proved the laurel not to contain hallucinogenic substances in a quantity that is high enough to alter one person's consciousness, I argue that this idea of an inspiring plant could have influenced the process of divination to a certain extent. 'A word more clear should be spoken from the laurel branch',³⁸ says Callimachus³⁹, stating the belief in this property specific of the laurel.

³⁰Parke, 1967; Broad, 2006; Graf, 2009.

³¹Bowden, 2005.

³² Parke and Wormell, 1956, 26.

³³ Parke, 1967, 82.

³⁴ Ibidem, 83

³⁵ Harissis, 2014, 355

³⁶ GP, 11.2; Parke and Wormell, 1956.

³⁷ Parke and Wormell, 1956.

³⁸Trans. W. Mair, G. R. Mair, 1921.

³⁹ *Hymn* 4, 94.

Therefore, the chewing of the laurel could have had a placebo effect on the Pythia, causing her to believe that the plant was helping her to be infused with inspiration from the god.

Another interesting feature of the laurel is highlighted in the medical literature of the Classical period. As a matter of fact, holy trees in general represented fecundity and fertility.⁴⁰ For instance, the fig tree at Mochlos was carrier of these ideas, and the priestess gazing at it was an indicator of oracular invocation.⁴¹ In the same way, other oracular shrines shared the common element of the holy tree, e.g. Phaistos, Gournia and Dodona. In the specific case of the laurel, the plant is mentioned more than once in the Hippocratic corpus (end of the 5th century – beginning of the 4th century BC) with the following uses: to help expelling a foetus after an abortion⁴²; to help in case a woman failed to become pregnant⁴³; as a medication in case a woman's uterus twisted upon itself⁴⁴; and to broaden the mouth of the uterus⁴⁵. Therefore, at that time, the laurel was believed to have properties that helped women with gynaecological disorders, specifically, disorders that concerned the obstruction of the vagina. In this regard, it is also noteworthy that Ancient Egyptian medicine believed that all the orifices of a woman's body were connected and communicated through an open channel. The Egyptian medical papyri⁴⁶ claim that the channel between the vagina and the mouth had to be free from obstructions, otherwise the woman could not conceive. They also report that the bodily channel of a woman was free if it was possible to smell from her mouth the garlic put in her vagina the day before.⁴⁷ This belief is also found in the Hippocratic tradition and in Soranus' *Gynecology*⁴⁸, in a period following the Archaic and Classical. However, as this information was already known in Egypt since at least the late Dynastic period (7th-4th century BC) it suggests that it might similarly have equally been known in Archaic Greece too.

This aspect brings our attention not only to the centrality of the female anatomy in the Delphic process of divination, but also to the modality of the encounter between the god and the prophetess. In fact, the tripod the Pythia sat on was positioned right above the opening in the earth where the sacred smoke representing Apollo was coming from.⁴⁹ If the laurel opens the main channel in a woman's body and in a healthy body the genitals were believed to be directly connected to the mouth, we could argue that whatever entered the genitals would come out from the mouth. In medical literature, the smoke from fumigations⁵⁰, while in this case it is Apollo himself as smoke, coming out from the mouth of the Pythia. Therefore, the presence of the laurel might also have been seen as an ulterior aid for the Pythia to welcome Apollo inside her body. In fact, not all the laurel's associations presented in this section would have been present to the mind of each worshipper as it would have depended on their age, gender, and culture. However, each aspect makes the plant fundamental for a successful rite of

⁴⁰ Dedes, 2015, 124

⁴¹ Ibidem, 132

⁴² Virg. 29

⁴³ *Nat. Mul.* 7

⁴⁴ *Mul.* 2. 280

⁴⁵ *Mul.* 32

⁴⁶ P. Carlsber VIII verso, col. 1 xx + 4-x + 6. Iversen 1939: 1-31. See also the similar P. Kahun 3, 17.19, case 28 in Westendorff 1999: 434, n. 768.

⁴⁷ Nifosi, 2019.

⁴⁸ I.IX.35

⁴⁹ Parke, Wormell, 1956, 19.

⁵⁰ King, 1993.

divination. As a matter of fact, independent magicians prophesizing in the name of Apollo reportedly held a laurel branch and wore a laurel crown too, just as the Pythia did.⁵¹

It is also interesting to note that the laurel was used in the process of divination at other sanctuaries dedicated to Apollo, such as the sanctuary of Didyma. However, with Didyma, we are dealing with a different time and space: Asia Minor in the Hellenistic period. The properties of the laurel were not as strong as they were at Delphi because a single branch in the hand of the prophet was no longer sufficient, a thick bay grove had to be recreated inside the *adyton* to grasp the oracle's attention. The aspects of the process of divination at Didyma based upon the Delphic ones helped the minds of the prophet and of the worshippers to feel comfortable inside the defined area of the established tradition. Specifically, the material culture at the sanctuary of Didyma had a strong impact on the consultants' cognition due to the power of imitation of an official model. The process of divination at the oracle of Delphi was well known and trusted and had become a paradigm fixed in the minds of Greek people. After the renovation of the sanctuary that started around 334 BC, Delphic material culture was brought to Didyma's *adyton* along with a few of its associated meanings, including the most symbolical ones. The process of divination at Didyma was accepted and justified by centuries of mundane knowledge⁵² and cultural background that was pertaining to their brains. Therefore, we can claim that the presence of the laurel at Didyma had a symbolical importance more than evocative, as it was at Delphi. However, the laurel still had a cognitive impact on the minds of the prophetess and the consultants.

4. Conclusion

Whilst it is true that consciousness differentiates between the human sense of agency and agency proper, it is not necessarily the human that is the cause of something happening.⁵³ As stated, objects can activate areas of our brain by causing some sort of uncontrolled response. We do not have direct command over the ideas and emotions that objects generate in our mind at first sight. The totality of the properties of material culture described proves that each object has affordances in itself.⁵⁴ Inside the *adyton* at the Sanctuary of Delphi, each one of the objects involved in divination embodies strong mnemonic potential. The material culture is not simply decorating the room but has a consistent cognitive biography. The analysis of the laurel carried on in this paper highlights the fact that symbolical and evocative properties of this plant affected the mind of the Pythia assisting her in feeling a real contact with the god. The laurel branches helped the Pythia to identify with the very character of Daphne. Additionally, they suggested the idea of divine inspiration and they physically opened the channels of the female body to make it ready to welcome Apollo. Concluding, I argued that the laurel plant was affecting the mind of the oracles not only at Delphi but in many rituals dedicated to Apolline divination.

⁵¹ Johnston, 2008, 153.

⁵² Catechetical instruction and repetitive reinforcement of belief, typical features of religious transmission, become encoded in our explicit memory system, generating precise schema of knowledge and a coherent system of beliefs. This system can be organised into different categories and once an object has been put in one of them, categorical knowledge provides rich inductive inferences that guide the interactions with it. This phenomenon has been defined as mundane knowledge (Barsalou et Al., 2005) as it helps our orientation in the social system and in the world in general.

⁵³ Renfrew, Malafouris, 2013, 215.

⁵⁴ Johannsen et Al., 2012; Knappett, 2005.

References

Primary Sources

- Apollodorus. *The Library*, Volume I: Books 1-3.9. Translated by James G. Frazer. Loeb Classical Library 121. Cambridge, MA: Harvard University Press, 1921.
- Callimachus, *Lycophron, Aratus. Hymns and Epigrams*. Lycophron: Alexandra. Aratus: Phaenomena. Translated by A. W. Mair, G. R. Mair. Loeb Classical Library 129. Cambridge, MA: Harvard University Press, 1921.
- Diodorus of Sicily, *The library of history*, Harvard University Press, Cambridge MA, 2014.
- Diodorus Siculus. *Library of History*, Volume I: Books 1-2.34. Translated by C. H. Oldfather. Loeb Classical Library 279. Cambridge, MA: Harvard University Press, 1933.
- Diodorus Siculus. *Library of History*, Volume III: Books 4.59-8. Translated by C. H. Oldfather. Loeb Classical Library 340. Cambridge, MA: Harvard University Press, 1939.
- Hippocrates. *Generation. Nature of the Child. Diseases 4. Nature of Women and Barrenness*. Edited and translated by Paul Potter, Harvard University Press, 2012.
- Pausanias. *Description of Greece*, Volume IV: Books 8.22-10 (Arcadia, Boeotia, Phocis and Ozolian Locri). Translated by W. H. S. Jones. Loeb Classical Library 297. Cambridge, MA: Harvard University Press, 1935.
- Soranus, *Gynecology*, Translated by Owsei Temkini, The Johns Hopkins University Press, Baltimore and London, 1956.

Secondary Sources

- Bowden, H. 2005. *Classical Athens and the Delphic Oracle. Divination and Democracy*, Cambridge University Press, Cambridge, UK.
- Bowden, H. 2013. 'Seeking Certainty and Claiming Authority: The Consultation of Greek Oracles from the Classical to the Roman Imperial Periods' in V. Rosenberger (ed). *Divination in the Ancient World: Religious Options and the Individual*. Stuttgart, pp.41-60.
- Broad, W.J. 2006. *The Oracle. Ancient Delphi and the science behind its lost secrets*, Penguin Groups, New York, NY.
- Eidinow, E., Kindt, J., Osborne, R. 2016. *Theologies of Ancient Greek Religion*, Cambridge University Press, Cambridge, UK.

- Etioppe, G., Papatheodorou, G., Christodoulou, D., Geraga, M. and Favali, P., 2006. 'The geological links of the ancient Delphic Oracle (Greece): a reappraisal of natural gas occurrence and origin', *Geology*, 34(10), pp.821-824.
- Fontenrose, J. 1988. *Didyma: Apollo's oracle, cult and companions*. Berkley, CA.
- Fontenrose, J. 1978. *The Delphic Oracle*. Berkley, CA.
- Graf, F. 2009. *Apollo*. London.
- Graf, F., Johnston, S.I. 2007. *Ritual Texts for the Afterlife: Orpheus and the Bacchic Gold Tablets*. London.
- Grenfell, M. 2012. *Pierre Bourdieu. Key concepts*. London.
- Haughton, B. 2008. *Haunted Spaces, Sacred Places: A field guide to stone circles, crop circles, ancient tombs and supernatural landscapes*, Franklin Lakes, NJ.
- Harissis, H. V. 2014. 'A Bittersweet story: the true nature of the laurel of the Oracle of Delphi', *Perspectives in Biology and Medicine*, Vol 57, No 3, pp. 351-360.
- Howatson, M.C. 2013. *The Oxford Companion to Classical Literature*. Oxford.
- King, H. 1993. *Hippocrates' Woman. Reading the female body in Ancient Greece*. London.
- Malafouris L. 2010. 'The brain artefact interface (BAI): a challenge for archaeology and cultural neuroscience', *Social cognitive and affective neuroscience*, 5 (2-3): 264-273, June-September 2010, Published online 2010 Jan 19.
- Marchais-Roubelat, A., Roubelat, F. 2011. 'The Delphi Method as a ritual: inquiring the Delphic Oracle', *Technological Forecasting & Social Change*, pp. 1491-1499.
- Mendoça de Carvalho, L., Bowden, H. 2011. 'Oracle trees in the ancient world', *Harvard Papers in Botany*, 16 (2), pp. 425-427.
- Murray, G. 2002. *Five stages of Greek Religion*. Mineola, NY.
- Nifosi, A. 2019. *Becoming a woman and mother in Graeco-Roman Egypt. Women's bodies, society and domestic space*. London.
- Parke, H.W. 1967. *Greek Oracles*. London.
- Parke, H. 1986. 'The temple of Apollo at Didyma: the building and its function', *Journal of Hellenistic Studies* CVI, pp. 121-131.
- Parke, H.W., Wormell, D.E.W. 1956. *The Delphic Oracle, Vol.1*. Oxford.
- Piccardi, L. 2000. 'Active faulting at Delphi, Greece: seismotectonic remarks and a hypothesis for the geologic environment of a myth', *Geology*, 28, pp. 651-4.
- Renfrew, C., Malafouris, L. 2013. *How things shape the mind: A theory of Material Engagement*. Cambridge, MA.

Roark, K.A. 2018. *A Crisis of Wisdom: The Early Enoch Apocalypses and the Cultural Politics of Knowledge in the Hellenistic Age*. Tallhassee, FL.

Slaughter, M.M. 2011. *The Hippocratic Corpus and Soranus of Ephesus: Discovering Men's Minds Through Women's Bodies*, University of South Florida, ProQuest Dissertations Publishing, 1502037.

