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ARTICLE

# Asclepius' Myths and Healing Narratives: Counter-Intuitive Concepts and Cultural Expectations

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This article suggests a bio-cultural approach to the Asclepius cult in order to explore the attractiveness and memorability of the religious ideas, myths, and narratives about the divine healer. The transformation of Asclepius from a mortal doctor to a divine physician is traced in mythical sagas developed in Greek antiquity. The interference of local religious, political and financial interests in the formation of myths are briefly presented. Then, the focus is shifted to the inner features that were embedded in the myths and attracted people's attention. Following Guthrie's theory (1992), it is suggested that the anthropomorphic perception of the ancient Greek gods was projected onto Asclepius. Boyer's theory (1996, 2001) of counter-intuitive concepts of religious ideas is applied to the myths of Asclepius. It is suggested that his actions, rather than the portrayal of his figure and character, are what violated human-intuitive expectations about the world, grabbing the attention of supplicants and becoming conserved in memory. Further, the correlation of intuitive ontological expectations and mundane knowledge acquired through cultural conditioning is examined. The healing inscriptions from the *asclepieia* seem to support the findings of research conducted by Porubanova-Norquist and her colleagues (2013, 2014), according to which violations of cultural expectations have similar effects in attention and memory processes as the counter-intuitive concepts. It is further suggested that the activity of Asclepius violated cultural expectations shared by people of the ancient Greek world. This activity was particularly salient because it pertained to human experiences of illness and disease, and revealed Asclepius' willingness to help the sick.

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## Introduction

Asclepius was worshipped as a healing deity and enjoyed widespread reverence in Greek antiquity. Mythical sagas specified his position in both the divine and human world. He was related to the Olympian gods, since he was considered the son of Apollo. He was also closely connected with, and concerned about, humans, since he was the offspring of a mortal woman. The myth also determined the field of his expertise. He was trained in the art of medicine and became a great physician.

A cult of Asclepius was established in the sixth century BCE and continued to flourish until the end of Greek antiquity. Sanctuaries devoted to the divine healer, the so-called *asclepieia*, were frequented by people who wished to pray for well-being or sought cures for various diseases. Some of these sanctuaries became particularly popular as places where the god performed marvelous treatments. Among these, the Asclepieion of Epidaurus was widely recognized as the greatest sanctuary of Asclepius and attracted visitors from almost the entire ancient Greek world.<sup>1</sup> Influenced by Epidaurus, the *asclepieia* of Pergamum,<sup>2</sup> Kos<sup>3</sup> and Lebena<sup>4</sup> developed into famous healing centers visited by people from the wider contiguous areas.

Votive inscriptions – the so-called *iamata* unearthed mainly in Epidaurus (*IGIV*, 1, 121–122)<sup>2</sup> and Lebena (*ICr*)—record narratives of supplicants who claimed to be healed by the god. These narratives range from stories of miraculous healings to precise medical treatments. The diverse contents of the inscriptions anticipated and referred to the potential reactions, emotional states and expectations of people who read or heard about these narratives. Further, they implied the unique features of Asclepius which differentiated him from mortal doctors.

This article investigates the features of Asclepius which elevated him to divine status and made his figure particularly attractive for people of the ancient Greek world. A bio-cultural approach is employed in order to shed light on the processes

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<sup>1</sup> See, for example, Roux (1961), Burford (1969) and Riethmüller (2005: 229–240).

<sup>2</sup> See, for example, Deubner (1938), Ziegenaus and De Luca (1968), Habicht (1969), Hoffmann (1998), Jones (1998) and Petsalis-Diomidis (2010, 151–220).

<sup>3</sup> See, for example, Herzog (1928) and Sherwin-White (1978).

<sup>4</sup> See, for example, Melfi (2007).

through which the myths about Asclepius and the healing narratives grabbed attention, were kept in memory, and subsequently recalled by people when they were confronted with health-problems.

### **Asclepius in Myths: A Deified Physician**

The first references to Asclepius present him as a mortal hero.<sup>5</sup> In the *Iliad* (II, 732; IV, 194, XI, 518; XI, 219 = Edelstein and Edelstein, 1998: v. I, T. 135, 164, 50), he is named as the father of two hero-doctors, Machaon and Podalirius, who participated in the Trojan War as heads of the army of Tricca, Ithome and Oechalia. These early references to Asclepius indicate that his figure as well as his medical competence were already known from the second half of the eighth century BCE (Panagiotidou, 2014: 36). Over time, myths about Asclepius began to ascribe divine nascence to him.<sup>6</sup> Hesiod in his *Catalogue* (fr. 123 = Edelstein and Edelstein, 1998: v. I, T. 22), written around 600 BCE, records two genealogies of Asclepius. In both of them, Apollo is presented as his father. There is, however, controversy regarding his mother. One version refers to Arsinoë, daughter of Leucippus from Messene, and the other mentions Coronis, daughter of Phlegyas from Thessaly (Edelstein and Edelstein, 1998: v. II, 24).

From the middle of the fifth century BCE a more elaborate mythical tradition circulated in the ancient Greek world. The *Pythiae* (III, 1–58 = Edelstein and Edelstein, 1998: v. I, T. 1), a poem written by Pindar, is the oldest and best preserved written source of the god's myth. According to this testimony, Asclepius was the son of Apollo and a mortal woman, Coronis. After her intercourse with the god, Coronis, while she was with child, fell in love with a mortal man, Ischys, son of Elatus, and entered into a relationship with him. When Apollo was informed about her infidelity by a raven, he got angry, turned the color of the bird from white to black and sent his sister, Artemis, to kill Coronis. However, when Coronis was set on fire, Apollo could not stand to kill his son. Thus, he intervened, snatched the baby

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<sup>5</sup> There is a debate among scholars regarding whether Asclepius was a heroized and later deified hero or was an originally chthonic deity (for example Kerényi, 1959; Edelstein and Edelstein, 1998: v. II, 65–66). Here we are mainly interested in how ancient literature and mythical sagas present Asclepius.

<sup>6</sup> On the myths of Asclepius, see Kerényi (1959: 87–99), Meier (1967: 19–39), Edelstein and Edelstein (1998: v. II, 24–53, 76), Hart (2000: 7–10), Riethmüller (2005: v. I, 33–54) and Nutton (2005: 104).

from his mother's womb, and delivered it to the Magnesian centaur Chiron to raise it and teach it the art of healing mortal men of their painful maladies. Trained by Chiron, Asclepius became a great physician, who offered his aid to suffering people. However, moved by greed, he also dared to cure those who were destined to die. Because of this impiety, Zeus, the king of gods and humans, crushed Asclepius with his thunderbolt and killed him.<sup>7</sup>

Another version of the myth is preserved by Apollodorus in his *Bibliotheca* (III, 10, 3, 5–4, 1 = Edelstein and Edelstein, 1998: v. I, T. 3) with slight variations. Apollodorus briefly mentions Arsinoë as the mother of Asclepius, and he cites the myth of Coronis more extensively. The story follows that of Pindar, but continues beyond the killing of Asclepius by Zeus. Asclepius, raised by Chiron, became a great physician and surgeon as well as a sorcerer. Zeus killed Asclepius, because he was afraid that the latter was going to trample on divine privilege by raising people from the dead and leading them to impiety. Enraged by his son's murder, Apollo killed Cyclops, who had forged the divine thunderbolts, in revenge. In turn, Zeus punished Apollo throwing him into Tartarus, a deep abyss in Hades from which he was saved by his mother's intercession. After that he was compelled to serve in thrall to a mortal man, Admetus, for a full rotation of the sun around the earth, that is, for an *eniautos* (a year). Later, Zeus brought Asclepius back from Hades and made him immortal. From then onwards, Asclepius never again resurrected people from death (Edelstein and Edelstein, 1998: v. I, T. 105–115; Wickkiser, 2008: 44–50).

The various mythical versions seem to have two parameters. On the one hand, Asclepius' ancestry from his mother indicates his connection with the human world. The individual variations of myths regarding his mother reflect political and religious rivalries among the different regions claiming the god's origins. On the other hand, the origin of Asclepius from Apollo connects him with the Olympian gods and legitimates his cult and religious beliefs in his healing powers.

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<sup>7</sup> During the Graeco–Roman era, Ovid (*Metamorphoses* II, 542–648 = Edelstein and Edelstein, 1998: v. I, T. 2) followed the main lines of the myth recorded by Pindar.

## Asclepius' Human Origins and Local Interests

From the first references in the *Iliad*, which presented Asclepius as a mortal king, his figure underwent a significant transformation in ancient Greek mythology. Although archaeological research has not located a specific cult site in Thessalian Tricca, it is highly possibly Asclepius was honored as a hero or chthonian deity in that region.<sup>8</sup> However, as his reputation expanded from the local centers of his cult to neighboring regions and further remote areas, Asclepius developed from a provincial hero or deity into a Pan-Hellenic god, and temples were devoted to him in many Greek cities.<sup>9</sup> Some of these cities developed different versions of his myth in attempts to claim the god's origins (Edelstein and Edelstein, 1998: v. II, 68–69).

The Asclepius cult reached Epidaurus in Peloponnesus quite early, and a first sanctuary was devoted to him there by the end of the sixth century BCE, in the same region where his father, Apollo, was also worshipped (Martin and Metzger, 1992: 105–110). After the establishment of the Asclepius cult in Epidaurus, a mythical saga developed which connected the divine healer with this region. Although the modification of the mythical tradition in Epidaurus has not been preserved in contemporaneous written sources, the saga narrated later by Pausanias—in the second century CE—seems to reflect this early transformation. According to Pausanias (*Descriptio Graeciae*, II, 26, 3–5 = Edelstein and Edelstein, 1998: v. I, T. 7), during his visit to Epidaurus he recorded the story which was told by local people. In this account, Coronis, daughter of Phlegyas, appears to be the mother of Asclepius. While she was pregnant by Apollo, she accompanied her father to Peloponnesus in order to inspect the region. Coronis, who kept her pregnancy hidden from her father, reached Epidaurus and gave birth to the child in the place where the asclepieion was later established. Afterwards, she exposed the baby on the mountains, where he was nourished by a goat and looked after by a dog. When a shepherd, named Aresthanas, found the baby, he was amazed by the lightning that flashed from its

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<sup>8</sup> Julius Ziehen provides some evidence of the cult in his article 'Über die Lage des Asklepiosheiligtums von Triikka', (1892: 195–197). Kastriotis (1918: 65–67) has discovered a stoa in this region. This structure, however, is dated to the late Hellenistic period.

<sup>9</sup> On the geographical expansion of the Asclepius cult see, for example, Riethmüller (2005: vol. 2).

side and realized its divinity. From then onwards, the reputation of Asclepius as a divine healer, who resurrected the dead, spread to all corners of the earth.

Although there are some similarities between this saga and the Hesiodic version, all the violent elements of the story have been eliminated. Apollo did not appear to kill Coronis. The child was not born with the aid of any kind of surgery. Coronis exposed the baby herself.<sup>10</sup> The emphasis on the Epidaurian origins of Asclepius is of major significance, since the god would gradually lose his connection with Tricca (Edelstein and Edelstein, 1998: v. II, 68). Beyond Epidaurus, the southern Peloponnesian city of Messene—where an early sanctuary of the god was established in the archaic era (seventh to sixth century BCE)<sup>11</sup>—sought to claim the origins of the god by suggesting a different descent. According to this version, recorded again by Pausanias (*Descriptio Graeciae*, II, 26, 7 = Edelstein and Edelstein, 1998: v. I, T. 16), Arsinoë, daughter of the king Leucippus, was the mother of Asclepius. Similar claims were made by the Arcadians, who claimed a woman from Arcadia, possibly bearing the same name (Arsinoë) as the mother of the god.<sup>12</sup> Although the sanctuaries of Asclepius in Arcadia were found quite early<sup>13</sup> and the local cult retained its regional significance, the demands of the Arcadians challenged the Messenians' claims and the contention between the two regions was finally settled by the Delphic Oracle. Apollophanes from Arcadia visited Delphi in order to receive an answer about Asclepius' origins. He asked if Asclepius was the son of Arsinoë from Messene and probably expected a response for Arcadia. However, the Pythia replied that the god

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<sup>10</sup> Another ancient mythical version of the Asclepius' divine birth is contained in the *Homeric Hymn to Asclepius* (XVI, 1–5 = Edelstein and Edelstein, 1998: v. I, T. 31) dated probably in the late fifth century BCE. In this saga all the unpleasant and violent elements have already been removed, although the major lines of the Hesiodic myth are followed. This transformation of the myth might have been a result of Asclepius' deification, which would have affected and modified the various sagas developed later at some of his sanctuaries (see Edelstein and Edelstein, 1998: v. II, 68).

<sup>11</sup> The excavations, headed from 1986 onwards by the archaeologist and professor Petros Themelis, have revealed the earlier phases of the Asclepius' sanctuary in Messene.

<sup>12</sup> The Arcadian mythical version is little known. Some hints are found in Pausanias, *Descriptio Graeciae*, VIII, 25, 11 = Edelstein and Edelstein, 1998: v. I, T. 17. On a possible explanation of the Arcadian claims see Edelstein and Edelstein, 1998: v. II, 68–69; cf. Polybius, *Historiae*, IV, 33.

<sup>13</sup> On the excavations of the asclepieia in Arcadia see Martin and Metzger (1992: 78, 85); cf. Ginouvès (1959).

was the son of Coronis and was born in Epidaurus (Pausanias, *Descriptio Graeciae*, II, 26, 7 = Edelstein and Edelstein, 1998: v. I, T. 16; v. II, 68–69; Nutton, 2005: 104–105). Delphi rejected, therefore, the old Thessalian mythical tradition and promoted the Epidaurian origins of Asclepius.<sup>14</sup>

Some years later, around 300 BCE, under the influence of the Delphic oracle, Isyllus, a Spartan poet, composed a paeon in the honor of the god, in which a woman from Epidaurus called Aigle was presented as Asclepius' mother. According to this poem, Aigle was renamed Coronis because of her unique beauty. Although this mythical account did not replace the older tradition that presented Coronis, daughter of Phlegyas, as Asclepius' mother,<sup>15</sup> the Delphic oracle, nevertheless, prompted Isyllus to inscribe this story on stone and to devote it to the Epidaurian temple (*IG*, IV<sup>2</sup> 1, 128, iii, 32–iv, 56 = Edelstein and Edelstein, 1998: v. I, T 594; v. II, 70).<sup>16</sup>

Thus, through a gradual process motivated probably by political and religious interests and competitions, the belief that Asclepius was born in Thessaly was abandoned and Epidaurus became widely established as the place of the god's origins (Julian, *Contra Galileos*, 200 A–B = Edelstein and Edelstein, 1998: v. I, T. 307; Marinus, *Vita Procli*, Cp. 31 = Edelstein and Edelstein, 1998: v. I, T. 446; Lactantius Placidus, *Commentarii in Statium*, Ad Thebaidem, III, 398 = Edelstein and Edelstein, 1998: v. I, T. 20, 352). Moreover, the Epidaurian sanctuary was elevated to the most significant cult center of Asclepius and expanded its influence to many other areas. This is evidenced in the fact that after the gradual prevalence of the Epidaurian saga other

<sup>14</sup> Edelstein and Edelstein (1998, v. II, 69); There are only a few known ancient references which present Tricca to be the place of the Asclepius' origins. Herondas (*Mimiambi*, IV, 1–95 = Edelstein and Edelstein, 1998: v. I, T. 482), a mime-writer of the third century BCE argues that Asclepius came from Tricca to Kos. Strabo (*Geography*, VIII, 4, 4; IX, 5, 17 = Edelstein and Edelstein, 1998: v. I, T. 715, 714), the geographer of the second century CE, mentions that the most ancient and popular temple of Asclepius was in Tricca, and the Epidaurian sanctuary was a well-known healing and cult center of the god. For further information, see Nutton (2005: 104–105).

<sup>15</sup> For further reading concerning the discussion about Asclepius' mother, see Edelstein and Edelstein (1998, v. II, 70–71) and Riethmüller (2005: v. I, 33–54).

<sup>16</sup> A stele which bears the Isyllus' inscription, dated in third century BCE, is exhibited in the museum of Epidaurus; for further information, see Edelstein and Edelstein (1998: v. II, 70–71) and Hart (2000: 10).



temples of Asclepius relinquished any competing claims concerning the god's mythical origins (Edelstein and Edelstein, 1998: v. II, 71).

Different kinds of sagas connected Asclepius with other important asclepieia, like those in Pergamum and on Kos, which were constructed according to the Epidaurian models. Pausanias (*Descriptio Graeciae*, II, 26, 8 = Edelstein and Edelstein, 1998: v. I, T. 457, 564, 801) records that the cult of Asclepius was brought to Pergamum by Archias, the son of Aristaechmus, who had previously visited Epidaurus and had been healed by the divine healer. On Kos, the medical school established by Hippocrates and preserved by his sons and descendants, was connected with Asclepius and his local sanctuary. Already from the fifth century BCE, doctors and physicians recognized Asclepius as their divine ancestor and patron with the name Asclepiades. Although the Hippocratic school preceded the establishment of the cult, later ancient sources reversed the sequence of events and presented Hippocrates as having drawn his medical knowledge from the healing inscriptions of the Koan asclepieion (Strabo, *Geography*, XIV, 2, 19 [c657]; VIII, 6, 15 [c374] = Edelstein and Edelstein, 1998: v. I, T. 794; 382, 735; Pliny, *Historia Naturalis*, XXIX, 1–4; Hippocrates, *Pseudepigraphic Writings, Epistulae* 2, 10, 17, 25; see also Wickkiser, 2008: 54–55). Stories like these increased the reputation of local sanctuaries by forging special relations to Asclepius without appealing to his origins.

### **Asclepius' Divine Origins: Anthropomorphism, Deification and Counter-Intuitive Notions**

Different versions of the Asclepius myth shared consensus on his immediate blood relation to Apollo and his affinity with the Olympian pantheon. The kernel of this idea is located in the anthropomorphic perception of the gods in Greek antiquity. Recent cognitive theories have been articulated which explore the common underpinnings and proclivities of human cognition that underlie the anthropomorphic perception of non-human agents found in the majority of religious traditions. Similar research is conducted in order to throw light on multiple cognitive processes which underlie human perception, thought and behavior generating valuable theoretical insights. The application of such modern theories to ancient cults, religious

traditions and ideas—such as the Asclepius cult—constitutes a recent development in the field of History, which is entitled Cognitive Historiography and uses the findings of recent research in the Cognitive Sciences in order to deepen the understanding of historical agents—their thoughts, actions, choices and behaviors— of past eras.<sup>17</sup>

In particular, Pascal Boyer (1996: 90) has developed a theory regarding the salient features of the religious ideas which make these ideas interesting and memorable for people. In this theoretical framework, Boyer suggests that anthropomorphism mainly consists in the attribution of intentionality to agents, non-human as well as human. According to his theory (2002), religious ideas are particularly memorable because they violate some of our ordinary human expectations about the world. In their encounter with their surroundings, humans categorize their perceptions into major ontological domains (persons, animals, plants, tools and natural objects). Each of these domains triggers a particular set of intuitive expectations on the biological, psychological and physical level. A minimal violation of the domain-specific expectations grabs people's attention, demands low cognitive efforts to be kept in memory, and is easily recalled. Recent research (Porubanova-Norquist, Shaw and Xygalatas, 2013; Porubanova-Norquist et. al., 2014) has shown that violations of the intuitive expectations pertaining to persons are more attractive and memorable than violations pertaining to other ontological categories.

In particular, the ascription of human-like intentionality to non-human agents, on the one hand, appears to have enough inferential potential for an anthropomorphic perception of these agents. The transfer of other human-like biological and physiological characteristics to non-human agents, on the other hand, entails the attribution of intentionality as well (Boyer, 1996: 89). Even when all the other human-like features are absent, non-human agents can still be recognized through their presumed intentional communications and interactions with humans. According

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<sup>17</sup> Cognitive Historiography is a newly developing field of historical research that produces an increasing number of studies which apply modern cognitive theories to ancient historical practices and religious traditions. The *Journal of Cognitive Historiography* has been established as the official publication which promotes the debate and collaboration between researchers from the fields of History, Archaeology and the Cognitive Sciences.

to Stewart Guthrie (1992: 189; Boyer, 1996: 89), symbolic interaction constitutes the indispensable quality of religious anthropomorphism. Guthrie (1992) suggests that anthropomorphism establishes an innate feature of human perceptions of the world, and acquires more elaborate and systematic form in various religious traditions (Guthrie, 1992: 200). According to his view, religion resembles and shares the same purposes with other systems of thought, like science and art as well as common sense, which aim to perceive, conceive and interpret the world. The main difference with religion consists in its assuming the existence of non-human beings which interact with humans in multiple ways (Guthrie, 1992: 178). This assumption derives from the human tendency to detect intentional agents and activity in their surroundings. This innate capacity is an evolutionary adaptation that protects humans from potential threats from other agents. Since the world appears to be a complex and highly organized entity, this organization can hardly be perceived as being random. It must be the result of the activity of an intentional agent, an organizer who might be not human but who has imposed a superior design and order on the world. People cannot imagine, let alone understand, such activity without anthropomorphizing its source (Guthrie, 1992: 186). From this perspective, ancient Greek religion systematized anthropomorphic perceptions of the world. Natural phenomena, like lightning and thunderbolts, fire and rain, plague and disease were interpreted as messages of the gods who interacted and communicated with humans.<sup>18</sup>

The Olympian gods and many other deities of Greek antiquity were classified, in Boyer's terms, in the ontological category of persons that would have activated the physical, psychological and biological expectations pertaining to this category. Therefore, they were usually imagined as physically and anatomically similar to humans. They were gods and goddesses, men- and women-like respectively.

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<sup>18</sup> Such popular ideas are found in mythical sagas preserved in ancient Greek sources; for example in the Hesiod's *Theogony* (70–74, trans. Evelyn-White), Zeus appears 'holding the lightning and glowing thunderbolt, ...and he distributed fairly to the immortals their portions and declared their privileges'; in the *Iliad* (I, 43–67) Apollo is presented as having sent the plague to the Greek camp; describing the elopement of Paris and Helen from Sparta, Apollodorus in the *Epitome* (E. 3, trans. Frazer) mentions that 'Hera sent them a heavy storm which forced them to put in at Sidon'.

They had also human-like biological needs. They ate, drank, slept, made love and had offspring. Furthermore, they possessed emotions and feelings similar to humans. They could feel love and hate, empathy and envy, joy and sadness. And like humans, they had individual personalities, preferences and different fields of expertise. In particular, Asclepius—who concerns us here—was usually presented as a middle-aged, bearded man dressed in a manner similar to that of a human doctor (see, for example, Wickkiser, 2008: 17–18). He was also considered to be a physician who had the knowledge, power and will to cure illnesses and diseases.

In addition to the physiological, biological and psychological similarities with humans, the ancient Greek gods were organized in communities and interacted with each other socially. The myths connected Asclepius with the social community of the Olympian gods. His father, Apollo, was the son of Zeus, the king of the gods, and Leto, a daughter of the Titans. The genealogy,<sup>19</sup> kinship and hierarchy of the gods resembled the social structures of human communities. Asclepius was a distant relative and belonged to the periphery of the Olympian social network. Around him, however, another network developed which shared a common interest in human health. Epione, the daughter of Hercules, was presented as his wife (Hippocrates, *Pseudepigraphic Writings, Epistulae 2*, 10, IX, p. 324, 16L).<sup>20</sup> Her name contains the second compound of Asclepius' name (–epios, in Greek 'mild'), and means 'the alleviation of troubles through the agency of soothing simples' (Cornutus, *Theologiae Graecae Compendium*, Cp. 33 = Edelstein and Edelstein, 1998: v. I, T. 6). Along with his Homeric sons—Machaon and Podalirius—Asclepius had offspring with Epione. Hygeia—the deification of Health—was one of their daughters who became her father's partner in many of his temples.<sup>21</sup> Panacea, Iaso, Aceso<sup>22</sup> and Aigle were also

<sup>19</sup> See, for example, Hesiod, *Theogony*.

<sup>20</sup> Some sources refer to other women, who are presented as wives of Asclepius; see Edelstein and Edelstein (1998: v. II, 87).

<sup>21</sup> A passage from the Orpheus *Hymn* (LXVII = Edelstein and Edelstein, 1998: v. I, T. 601) mentions Hygeia as being the wife of Asclepius; on Hygeia, see Hart (2000: 29–31); on the relation between Hygeia and Asclepius, see Compton (2002: 329).

<sup>22</sup> Panacea and Iaso were known for their connection to health and recovery before their association with Asclepius. Aceso, however, is only mentioned as the daughter of Asclepius and in many cases was possibly identified with Iaso; see Edelstein and Edelstein (1998: v. II, 88).

considered to be Asclepius' and Epione's daughters (*IG II<sup>2</sup>*, 4962 = Edelstein and Edelstein, 1998: v. I, T. 515; Anonymus, *Paeon Erythraeus in Asclepium* = Edelstein and Edelstein, 1998: v. I, T. 592; Pliny, *Historia Naturalis*, XXXV, 11 (40), 137 = Edelstein and Edelstein, 1998: v. I, T. 665; Scholia in Aristophanem, *Ad Plutum*, 639 = Edelstein and Edelstein, 1998: v. I, T. 278). Panacea was mentioned along with Hygeia in the Hippocratic Oath (Hippocrates, *Ius Iurandum*, 1 = Edelstein and Edelstein, 1998: v. I, T. 337; Hart, 2000: 31) and her name signified the 'universal remedy' which cures every kind of illnesses and diseases (Edelstein and Edelstein, 1998: v. II, 88). Iaso's name comes from the ancient Greek verb 'iasthai'—which means to 'heal' (Scholia in Aristophanem, *Ad Plutum*, 701 = Edelstein and Edelstein, 1998: v. I, T. 285). Aceso also signified healing and health recovery, deriving her name from the verb 'akeomai', which means 'to recover'. Aegle, meaning 'brightness', was possibly connected with the splendid appearance of the healthy body in well-being. In addition to Asclepius' daughters, a minor healing deity named Telesphoros ('the accomplisher'), was related to Asclepius (Damascius, *Dubitaciones et Solutiones*, 245 = Edelstein and Edelstein, 1998: v. I, T. 313) and was added to the divine healing family as one of the god's sons during the Roman era (*IG III*, 1, 1159 = Edelstein and Edelstein, 1998: v. I, T. 287; Hart, 2000: 33).

As becomes obvious, the ancient Greeks imagined their gods as human-like beings that lived, behaved and interacted with each other much as humans do. The crucial distinction, however, that differentiated gods from humans was the gods' immortality, which entailed a violation of the intuitive biological expectation of death of all living beings. This could be considered a minimal counter-intuitive concept, in Boyer's sense, which would arguably have been enough to make the gods particularly attractive and attention-grabbing entities to the ancient Greeks. However, on its own the gods' immortality was not sufficient to give these human-like beings a power of fascination meriting religious devotion and achieving recollection in people's memory. Rather, it was their will and intention to interact socially and symbolically with ordinary people and intervene in humans' affairs that made the stories about gods particularly memorable and significant for people of Greek antiquity.

The Olympian gods were perceived as immortals long before the appearance of the Asclepius cult. Thus, in order for Asclepius to become a deity, the myths articulated the story of his divine origins and his deification by Zeus who elevated the mortal son of Apollo to the status of immortal gods. The characteristic that made his divine figure particularly important for the people of the ancient Greek world was his interference and interaction with humans. Asclepius was perceived as the benevolent healer who was interested in human needs, and was eager to help anyone asking for his aid.

The healing inscriptions mainly preserved from the Epidaurian Asclepieion, record stories about the interaction of Asclepius with his supplicants in dreams or visions during the ritual of incubation, i.e., spending the night sleeping in the temple.<sup>23</sup> Some narratives present Asclepius as human-like in his appearance in discussions with his supplicants (e.g. *IG IV<sup>2</sup> 1, 121, II, IV*), or even depict him laughing and teasing them before he cured them (e.g. *IG IV<sup>2</sup> 1, 121, VIII*). However, patients did not need to meet Asclepius in person in order to be healed by the god. Some stories report cures which were accomplished by Asclepius through seemingly random means. In the case of a man from Kios, for example, who suffered from gout, Asclepius was represented as intervening through a goose which bit the patient's feet 'and by making them bleed, made him well' (*IG IV<sup>2</sup> 1, 122, XLIII = Edelstein and Edelstein, 1998: v. I, T. 423, XLIII* ). Another man, who was lame, was suddenly cured when a boy stole his crutch and was sufficiently healed to chase the thief (*IG IV<sup>2</sup> 1, 121, XVI*). More commonly, Asclepius was conceived as interacting with people in the form of his sacred animals, the dog and the serpent. For example, an inscription presented a serpent as scaring a mute girl who had visited the asclepieion with her parents and, through this fear-inducing act, thus curing her muteness (*IG IV<sup>2</sup> 1, 123, XLIV*). And a blind boy was treated by a dog which cured his eyes (*IG IV<sup>2</sup> 1, 121, XX*).

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<sup>23</sup> Whether the healings recorded in the inscriptions could have been actual experiences or not is not of concern here. The main focus is on the ways in which the inscriptions presented Asclepius interacting with his supplicants.

Stories like these indicate the human tendency to trace intentional communication and meaning in things and events unfolding in their surroundings. Prompted by their own interests and concerns, patients who visited the *asclepieia* would have been predisposed to recognize divine interventions and messages in seemingly accidental events.<sup>24</sup> The search for such interventions and messages presupposed that Asclepius was understood to be a human-like agent who communicated with his supplicants.

### **Resurrecting the Dead: Violation of Intuitive Ontology and Cultural Expectations**

As has already been mentioned, the ascription of immortality to gods by the ancient Greeks constituted a violation of intuitive expectations attributed to the ontological category of persons. The immortality of Asclepius was a prerequisite for his deification. However, this would not have been the crucial element that would have attracted people's attention towards Asclepius as a significant religious figure. Rather, his deification by Zeus followed the astonishing achievements that Asclepius accomplished as a mortal man. The mythical sagas presented Asclepius as having received his medical training from the centaur Chiron. In ancient Greek mythology, Chiron was considered to be the first doctor; he invented herbal medicine and used drugs to cure illnesses and diseases. Educated by him, Asclepius became the greatest human physician, 'the most gentle bestower of painlessness and health' (Scholia in Pindarum, *Ad Pythias*, III, 102b = Edelstein and Edelstein, 1998: v. I, T. 55). His medical knowledge and competence was so great that he was even able to resurrect people from death.

Asclepius' ability to resurrect the dead, however, entails a double violation of our expectations: it violates both intuitive and cultural expectations that pertain to human existence and experience. There is nothing counter-intuitive about Asclepius being classified in the ontological category of persons. He is also ranked

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<sup>24</sup> On the cognitive processes which would have mediated the assignment of salience and divine meanings to seemingly random events at the *asclepieia*, see Panagiotidou (2014: 162–170).

in the cultural category of doctors because of his training and qualifications. People of the ancient Greek era would have shared common intuitive expectations of what humans can accomplish and further cultural expectations—formulated through cultural conditioning—of what medical art can achieve. Patients who asked for the help of physicians were not always healed by them. They were aware that the art of medicine had certain limitations that were imposed by human nature. The author of *The Art of Medicine* (8) explicitly admits these limitations:

For if a man demand from a techne anything that does not belong to that techne, or from nature anything does not belong to nature, his ignorance is closer to madness than to lack of knowledge. For in cases where we have control due to our techne or to nature, there can be craftsmen, but not otherwise.

(trans. Wickkiser, 2008: 25, note 55, 119).

By raising the dead, however, Asclepius would have violated cultural expectations shared by the ancient Greeks about the power of medical art which in turn would have violated the intuitive expectations shared by humans concerning the human inability to surpass the inevitability of death. Narrated in various myths, his punishment by Zeus reveals the magnitude of that violation. I would suggest that the deification of Asclepius described in these stories was not what we might call, following Boyer's (2002) analysis, the decisive counter-intuitive idea which would have made his figure particularly attractive and memorable to the ancient Greek populace. Rather, Asclepius' deification seems more congruent with the cultural expectation shared by people of the ancient Greek world according to which agents with superhuman powers were elevated to the status of gods. Gods constituted a specific cultural category at this time and immortality was the distinctive feature of this category. Thus, Asclepius was recognized as a god and thereby immortal because of his superhuman achievements as a mortal doctor.



The contemporary portrayal of Asclepius' character was almost entirely anthropomorphized. In many healing inscriptions he is described as a man who interacts with his supplicants, usually in their dreams or in visions. After his deification, he abides by the limits of his art and does not save people destined to die. He is also subject to further spatial and temporal restrictions which governed the activity of mortal doctors. An Epidaurian inscription (*IG IV<sup>2</sup> 1, 122, XXIII*) is a good example of these restrictions:

Aristagora of Troizen. She had a tapeworm in her belly, and she slept in the Temple of Asclepius in Troezen and saw a dream. It seemed to her that the sons of the god, while he was not present but away in Epidaurus, cut off her head, but being unable to put it back again, they sent a messenger to Asclepius asking him to come. Meanwhile day breaks and the priest clearly sees her head cut off from the body. When night approached, Aristagora saw a vision. It seemed to her that the god had come from Epidaurus and fastened her head on to her neck. Then he cut open her belly, took the tapeworm out, and stitched her up. And after that she became well.

(trans. Edelstein and Edelstein, 1998: v. I, T. 423, II 23).

As Henk S. Versnel (2011: 403–404) aptly remarks, 'The somewhat naive emphasis on the restrictions in the freedom of action and spatial scope of the god and the necessity of travelling if his specific expertise is required elsewhere is obviously inspired by the human perspective in which his medical activity is being viewed. Doctors are always engaged elsewhere when your head needs readjustment'.

However, it was Asclepius' extraordinary powers as a physician that were situated at the core of his cult. Although he appeared to share the same practices and methods with his mortal counterparts, he applied these techniques in unusual ways and even undertook extreme cases of illness and affliction. Asclepius became popular as a healer of chronic or incurable illnesses and diseases (Wickkiser, 2008: 58–61). Patients who resorted to his temples might have previously experienced rejection by human doctors (e.g. *Anthologia Palatina*, VI, 330 = Edelstein and Edelstein, 1998: v. I, T. 404).

Bronwen Wickkiser (2008) argues that ancient Greek doctors used to refuse treatments to patients whose illnesses or diseases were beyond the limits of the physicians' art. This attitude, expressed in the Hippocratic texts,<sup>25</sup> was accompanied by a recognition of Asclepius' healing power by mortal physicians<sup>26</sup> and would have encouraged patients to visit the god's temples in cases for which they could not be cured by ordinary medical practice. Contrary to his mortal peers, Asclepius did not reject the treatment of patients afflicted with the most debilitating conditions. The healing narratives confirmed the god's willingness and competence in healing illnesses and diseases which were considered incurable by human doctors. The earliest Epidaurian inscriptions in particular record stories of miraculous healings performed by the god. For instance, the story of Ambrosia from Athens (*IGIV*<sup>2</sup> 1, 121, IV), who was blind in one eye, records such a miracle:

She came as a suppliant to the god. As she walked about in the Temple she laughed at some of the cures as incredible and impossible, that the lame and the blind should be healed by merely seeing a dream. In her sleep she had a vision. It seemed to her that the god stood by her and said that he would cure her, but that in payment he would ask her to dedicate to the Temple a silver pig as a memorial of her ignorance. After saying this, he cut the diseased eyeball and poured in some drug. When the day came she walked out sound.

(trans. Edelstein and Edelstein, 1998: v. I, T. 423, I 4).

In this narrative Asclepius appears to apply medical techniques known to human physicians, but in ways that surpassed the abilities of mortal doctors. Another story (*IGIV*<sup>2</sup> 1, 121, IX) offers an ostensibly more extreme example:

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<sup>25</sup> For example, the author of the *On The Art of Medicine*, 14 admits that 'the practice of medicine is powerless in some cases' (trans. Wickkiser, 2008: 25).

<sup>26</sup> The mortal doctors presented themselves as descendants of Asclepius, who was considered to be the founder of the art of medicine, and, as mentioned above, were called Asclepiades after him. See, for example, Plato, *Protagoras*, 311 b–c; see Edelstein and Edelstein (1998: v. I, 53–64), Jouanna (1999: 10–2), Wickkiser (2008: 54).

A man came as a suppliant to the god. He was so blind that of one of his eyes he had only the eyelids left—within them was nothing, but they were entirely empty. Some of those in the Temple laughed at his silliness to think that he could recover his sight when one of his eyes had not even a trace of the ball, but only the socket. As he slept a vision appeared to him. It seemed to him that the god prepared some drug, then, opening his eyelids, poured it into them. When day came he departed with the sight of both eyes restored.

(trans. Edelstein and Edelstein, 1998: v. I, T. 423, I 9).

In this story, Asclepius similarly appears to use drugs—as did human doctors at the time—but the outcome of his medical treatment had previously been considered impossible by both doctors and other people.

Versnel (2011: 406–407) points out an internal difference between these two narratives. The first narrative presents Asclepius as treating a disease which mortal doctors could not cure. Thus, the god appears to transcend the human abilities of the ancient Greeks and therefore to possess 'superhuman' powers. The second narrative goes even further, presenting Asclepius as healing a disability that was 'inconceivable' not only in terms of the human powers required to treat it but also in terms of natural law. In this story the 'supernatural' powers of Asclepius derive not so much from his competence in medical art as from his divine nature.

Stories like these—reported mostly in the earliest healing inscriptions—seem to reflect a double violation similar to that traced in the mythical sagas. During everyday interaction with their surroundings, people would have shared common intuitive expectations about the world that conformed to their perceivable reality. By creating, for example, an eye *ex nihilo*, Asclepius would have violated human intuitive expectations about nature. This violation is explicitly indicated in the story of the blind man which reports the reaction of other people who are described as laughing at the suppliant who hoped to be cured, while there was no eyeball beneath his eyelids. The suppliant's expectation of healing was therefore entirely counter-intuitive to a contemporary understanding of ancient Greek medicine, as well as being physically

inconceivable. By accomplishing this task, Asclepius broke natural law and violated intuitive human expectations: an act that would have attracted people's attention and can be read as contributing towards his popularity as a cult figure worthy of devotion and supplication. We can further surmise that people of the ancient Greek world would have formed certain expectations about human doctors and their powers, knowledge and abilities to cure illnesses and diseases through cultural conditioning. Asclepius' competence as a physician violated these cultural expectations pertaining to the art of medicine. The story of Ambrosia challenges such cultural expectations about the possibility of a cure. Dreaming was not a common therapeutic technique employed by doctors (see Holowchack, 2002: 382–299; Petridou, 2014: 297; cf. *Regimen*, IV). Therefore, healing 'by merely seeing a dream' was considered 'incredible'.

The healing narratives reported in the inscriptions of the *asclepieia* gradually became more 'superhuman' than 'supernatural'. Contrary to the counter-intuitive healings, which mostly prevailed in the earliest inscriptions, later narratives presented treatments that violated cultural expectations. This can be interpreted as a result of developments in the art of medicine by the Hippocratic doctors. The work of Hippocrates in the fifth century BCE is considered a milestone in the development of Greek medicine. Hippocrates' reputation as a doctor spread throughout the ancient Greek world during his lifetime. He was recognized as a descendant of Asclepius who liberated medicine from its previous supernatural and divine elements, biases and superstitions. Although he possibly traveled to various cities offering his services and teaching his theories, the medical school that Hippocrates established at his birthplace on Kos created a medical tradition which lasted long after his death (Wickkiser, 2008: 21–22). Hippocratic doctors perceived the human body as an organic whole and attempted to regulate the internal balance, mixture and movement of the bodily humors in order to restore health. Their therapeutic methods focused on the whole body and not just on the inflicted bodily parts, and included diet, exercise and taking baths as part of a wider regimen for health regulation (see e.g. Jouanna, 1999: 325–327; Rynearson, 2003: 5). Under the influence of the Hippocratic healing methods,

dietetics evolved into 'an almost independent part of medicine' in the fourth century BCE (Nutton, 2005: 141). The general attitudes as well as the perception of health and disease by the Hippocratic authors thus shaped the wider conceptual context in which medicine continued to develop during the Graeco–Roman period. Furthermore, the treatises of the *Hippocratic Corpus* laid the foundations for further consideration of the causes of diseases and for observations of certain properties of medicinal plants and drugs which could restore the appropriate internal balance and functioning of the human body. Pharmacology emerged as a specialized sector of medicine and, along with the field of surgery, underwent the most significant progress in the Hellenistic and Roman periods (Nutton, 2005: 141–142).

During these developments, doctors were recognized as professional practitioners who were trained, and who transmitted their knowledge from generation to generation. Some cities appointed public doctors in order to offer their services to their local communities (Jouanna, 1999: 77–78; Wickkiser, 2008: 16). People who were afflicted by illnesses and diseases could consult public physicians or pay for the treatments offered by medical professionals. In this way, many patients would have been conditioned by public views and private experiences of medicine, forming certain expectations about medical practices and techniques. This familiarization with the craft of medicine would have influenced the healing practices of the *asclepieia*, which is reflected in the inscriptions. Contrary to the Epidaurian iamata (mainly dated in the fourth century BCE), which presented Asclepius as applying unnamed or unknown drugs and performing 'inconceivable' surgeries, the healing inscriptions from Lebena (dated in the second and first century BCE) present Asclepius as appearing to use medical tools, such as cupping instruments (e.g. *ICr* I, xvii, no 9), using specific plants and prescribing known medical remedies to his supplicants (e.g. *ICr* I, xvii, no 17, 18, 19).

Consequently, people of the ancient Greek world would have formed certain expectations pertaining to the cultural category of doctors. These expectations can therefore be understood as being projected onto a religious figure like Asclepius, who was considered to be the supreme authority in the art of medicine. Asclepius would

have been expected to act as a doctor by people of the ancient Greek world. The cause of his unique attractiveness to supplicants as a memorable figure worthy of devotion would thus have been the violation of normative cultural expectations about the effectiveness of human medicine. The research of Michaela Porubanova-Norquist and her colleagues (Porubanova-Norquist, Shaw and Xygalatas, 2013; Porubanova-Norquist et al, 2014) has shown that violations of cultural expectations have similar effects upon the attention of supplicants and their processes of memory as violations of intuitive expectations. Asclepius shared the same means and methods with his mortal counterparts, but he was credited in contemporary accounts with successfully applying them even to the most difficult health conditions. Where human doctors failed, Asclepius succeeded. The stories of successful treatments offered by Asclepius would have grabbed the attention of patients who, disappointed by the limitations of human craft, would have sought alternative healing practices.<sup>27</sup>

It is my argument that embedded within the religious depiction of Asclepius were certain features which made him a particularly interesting and attractive figure for a religious cult. In principle, his divine, yet anthropomorphized, characteristics fitted what we might call an intuitive ontology shared by humans generally, as well as the cultural knowledge shared by people of the ancient Greek world. Moreover, Asclepius' recorded attributes subtly violated either intuitive or cultural expectations and it is this unexpected violation that attracted attention among the Greek population, since Asclepius simultaneously minimally breached their cognitive perceptions and their cultural conceptions of the known world. Finally, the narratives about Asclepius pertained to an extremely personal and emotionally significant domain of human experience. People who were afflicted by an illness or a disease would have been desperately keen to be cured. At this critical moment, when intuitive and mundane knowledge ruled out any possibility of cure, Asclepius' 'superhuman' and 'supernatural' powers opened up a new opportunity for healing.

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<sup>27</sup> Again, we are not interested in whether the healing stories recorded in the inscriptions could have been actual cures. What mainly concerns us here is the fact that the inscriptions presented these stories as healings performed by Asclepius in the past, therefore, propagating his healing power.

## Conclusion

The Asclepius cult flourished throughout Greek antiquity. Some of the *asclepieia* developed into significant healing centers which attracted visitors for almost a millennium. Massive numbers of supplicants to the sanctuaries increased the prosperity of the local priesthoods and contributed to the economic growth of the wider regions in which its cult centers were established. These financial interests would have led some cities to claim the god's origins, and to establish temples to Asclepius' honor. The mythical sagas and healing narratives about Asclepius were widely known among people of the ancient Greek world. As I have argued in this article, the salience and memorability of these stories can be traced in the counter-intuitive notions embedded within depictions of Asclepius' miraculous powers of healing, as well as the way in which such powers violated cultural expectations. As shown above, the myths presented Asclepius as a mortal doctor who resurrected the dead, incited punishment from Zeus, and was finally elevated to the realm of the gods by gaining immortality. Asclepius' ability to resurrect the dead would therefore have been the key religious attribute which, more than his deification, would have drawn the attention of people who will subsequently have taken the decision to visit the *asclepieia* as supplicants: because it violated either intuitive expectations of death (in terms of Boyer's theory) or cultural expectations of a medicinal cure by human doctors (in terms of the research conducted by Porubanova-Norquist, et al.). In addition, the healing narratives recorded in the inscriptions discussed do not explicitly refer to Asclepius' immortality. This was a tacit assumption which was ascribed to him because he was ranked in the category of gods. What would have been more pertinent to potential supplicants were the 'superhuman' or even 'supernatural' cures reportedly performed by Asclepius.

Both as a mortal doctor in the myths and as a divine healer in the inscriptions, Asclepius thus violated intuitive expectations pertaining to nature and human physicality, as well as the cultural expectations of ancient Greeks concerning doctors and medicine. As has been suggested by Boyer (2001) and Porubanova and her

colleagues (Porubanova-Norquist, Shaw and Xygalatas, 2013; Porubanova-Norquist et al, 2014), agents who violate either intuitive ontology or expectations induced through cultural conditioning become particularly memorable as figures inspiring religious cults and gaining the attention of supplicants. However, the mythical sagas and the healing narratives concerning Asclepius focus less on his figure as a divine agent than on his activity and achievements. It is mainly through his actions, therefore, that Asclepius exceeded the limits of both medicine and human nature. More significant than his divinity and immortality or the form in which Asclepius chose to appear, his will and eagerness to help his supplicants, even those who disputed his powers, made him a particularly salient and important agent. And given his willingness to help humans, the fact that he was also able to perform impossible and inconceivable treatments increased views of his importance in people's lives. This observation supports Guthrie's suggestion (1992) that superhuman agents are significant because they intend and desire to communicate with humans in symbolic ways. This possibility of communication becomes even more important when people feel the need for divine help. We can therefore assert that Asclepius would have been perceived as an important agent in the ancient Greek world because his powers and actions were related to the domain of human health. In the most difficult conditions, people who experienced health issues and were confronted with the possibility of chronic disease and pain, or even death, could turn to Asclepius, the superhuman agent who had both the power to overcome mortal illness and doctors' insufficiencies as well as the will to offer salvation.

### **Competing Interests**

The author declares that they have no competing interests.

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