### HISTORY OF MEDICINE $I\Sigma TOPIA$ TH $\Sigma$ IATPIKH $\Sigma$

# The "smart" Asclepieion: A total healing environment\*

For more than eight centuries, the Asclepieia in ancient Greece offerred health care, combining experimental therapeutic methods with a variety of religious and magical elements. This paper argues that neither the location nor the building composition of the Asclepieia were selected at random. Literature sources and excavations indicate that Asclepieia were built in locations of great natural beauty, rich in vegetation, with thermal springs and spectacular views. Buildings such as theaters, gymnasia and hippodromes, used by patients for physical exercise and recreation, were constructed next to the buildings where physicians were practising medicine. Some of the most important Asclepieia are described here, with emphasis on the special qualities of the natural environment and the recreational character of the buildings. It is obvious that the Asclepieia adopted a holistic approach to treatment, recognizing the importance both of the psychological and emotional factors in the healing procedure as well as the activation of the innate healing mechanisms of every human: medical intervention was combined with improvement of the psychological condition of sick people, by providing a pleasant and healthy environment for their residence. What has recently emerged as a major issue and a focal point in hospital design appears to have been a well-established practice in the ancient Greek healing centers.

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Το «έξυπνο» Ασκληπιείο: Μια ολιστική θεραπευτική προσέγγιση

Περίληψη στο τέλος του άρθρου

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Dedicated to Asclepius, the god of medicine and healing in ancient Greek mythology, the Asclepieia were at the not only temples of worship but also medical care centers. Scattered throughout the ancient world, they were over 300 in number, the largest and most famous being those of Trikke, Epidaurus, island of Kos, Athens, Corinth and Pergamon. Archeological findings from some of the largest Asclepieia and accounts from ancient literary sources, such as the comedy "Plutus" by Aristophanes and the works of Pausanias, Strabo, Plutarch, Lucian of Samosata and others, provide valuable information about the operation of these holy institutions.<sup>1</sup> It is known, for instance, that patient treatment was based both on the application of empirical natural methods and on transcendental or mystic rituals, which aimed at reinforcing the patients' faith in the healing god, and stimulating their imagination, in order to induce suggestion or auto-suggestion.1

When the pilgrims arrived at the temple, they first followed certain preliminary procedures, such as catharsis, exercise, massage and fasting. They were then given –depending on

their problem– specific treatment with medicines, natural remedies and even simple surgery. These clearly practical medical procedures, however, were enveiled in a mist of mystery and the supernatural: The patients reposed in the "Abaton" or "Enkoimeterion" (dormitory), where they were put into a hypnotic state, probably with the aid of hallucinogens, and started dreaming. The dreams had a prognostic sense, i.e. they could predict the course and the outcome of the disease. However, it was not unusual, following the "incubation", for the patients to wake up healed, through "divine intervention".

A striking fact is that the Asclepieia adopted a holistic approach to the treatment of patients, emphasizing the therapeutic qualities of the natural environment as well as recognizing the importance of psychological and emotional factors in the healing procedure and in the activation of the innate healing mechanisms of every human being.<sup>3</sup> What has recently emerged as a major issue and a focal point in modern hospital design, appears to have been a well-established practice in the ancient Greek healing

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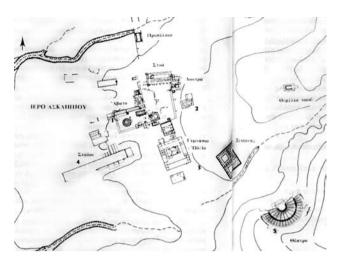
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centers. This becomes evident, in the careful selection of location the Asclepieia, which was usually an idyllic site, with lush vegetation, enchanting views and abundant running water - in certain cases even thermal springs. The Asclepieion of Epidaurus was situated in a valley rich in springs, at the foothill of mount Kynortion. Its facilities spread within the forest, described by Pausanias as "the sacred grove",4 and the spring located near its entrance, supplied the shrine with fresh water, even in its earliest period.5 The Asclepieion of Kos was also located among trees, specifically in the middle of a cypress grove, on a slope overlooking the sea. The Asclepieion of Corinth was built next to the Lerna spring, while the Asclepieion of Gortyn was situated beside the river Loussios. The Asclepieion of Athens was located on the southern slope of the Acropolis, on the most enchanting and easily accessible part of the sacred rock, with spring water, smooth slopes and a magnificent view that is impressive even today.6 In Pergamon, the Asclepieion was built on a flat summit next to a spring. According to Publius Aelius Aristides, the author of oratorical and philosophical texts, this (shrine) can claim to be located at the most beautiful spot on earth.<sup>6</sup> There are also other references to groves of trees growing beside or around other Asclepieia, such as that of Kyros on mount Kyllene, and those of Titane, Phlius and Messene.1

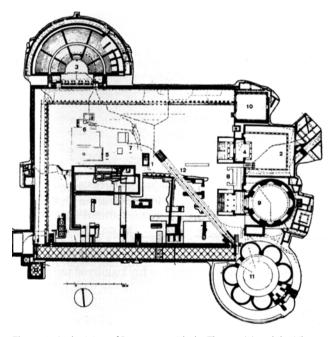
The arrangement of the buildings surrounding the Asclepieia, as well as their type and nature, are further points of interest. Apart from the buildings dedicated purely to worship or medical treatment, such as the temple, the god's statue, the altar and the Enkoimeterion, the shrine was surrounded by a number of facilities that served to keep patients entertained and occupied, to provide physical exercise and ensure a pleasant stay. Buildings such as the Stadium, the Hippodrome, the Gymnasium and the Palaestra, all found near the temples, were used as exercise sites and areas where gymnastic games and entertainment took place (fig. 1).

In Epidaurus, the famous Theater and Odeion were used for musical and theatrical performances and for musical contests. The large library located nearby was another building with a potentially recreational character. The Asclepieion of Pergamon is an equally multifaceted site: On the northern side of the Temenos there is a theater and a large rectangular-shaped library, the walls of which were equipped with niches for scrolls and bookshelves<sup>5</sup> (fig. 2).

The Asclepieion of Athens is yet another case where the connection of the healing temple with artistic and theatrical activities is clearly evident. The Asclepieion forms



**Figure 1.** Asclepieion of Epidaurus with the Abaton (Dormitory) (1), the Baths (2), the Gymnasium and the Odeion (3), the Stadium (4) and the Theater (5). (Reprinted and adapted from *Asklepios kai Asklepieia* [Asclepius and Asclepieia], by Aravadinos AP, 1907).



**Figure 2.** Asclepieion of Pergamon with the Theater (3) and the Library (10). (Reprinted from *Heilkunst und Heilkult: Medizin in der Antike* [in Greek] by Krug A, 1997).

an integral part of the architectural complex of the south slope of the Acropolis, west of the Theater of Dionysus and very close to the Odeia of Pericles and Herodus Atticus. In this case the Asclepieion was not an independent and self-contained entity, like that of Epidaurus, but rather a center incorporated in the city grid. These facilities might have been designed for the entertainment of the inhabitants of the city, but it is safe to assume that they also fulfilled

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the needs of the patients staying at the Asclepieion during their treatment (fig. 3).

Similar examples can be found in several other cases: In Corinth, the Asclepieion was built next to the Gymnasium and in close proximity to the Theater and the Odeion of the Agora; in Sicyon the Asclepieion was directly connected with the theater, while at Troezena the shrine of Asclepius was in the vicinity of the Gymnasium, and an Odeion was built during the Roman period. In Messene and Megalopolis, the Asclepieion appears to form a unified complex together with the Theatre and the Stadium.

The dining and symposium halls were equally important. Most Asclepieia included large halls where the patients could dine, consuming the meat of the sacrifices offered to the god. In Epidaurus there are remains of a large building with many rooms and arcades, which was used as a dinning hall. In Corinth there were three large halls with a small hearth in the middle, destined for communal dinners. In Troezena, the communal dinners took place in halls with stone pedestals for the couches and with built-in tables, and in Athens there were symposium halls located adjacent to the sacred sites (fig. 4).

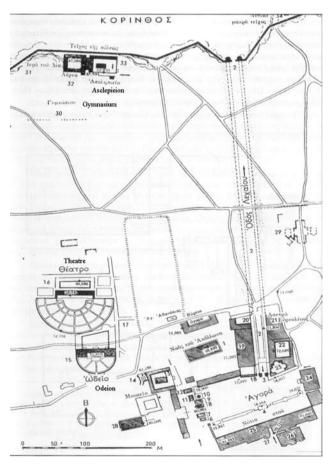
There also appears to be a close connection between the Asclepieia and the baths, which, apart from their therapeutic properties, also offered relaxation for the body and a sense of well-being. In Epidaurus, the "Asclepius baths", mentioned by Pausanias, were located next to the temple and the "Abaton". In Corinth, there was a wash basin right after the Abaton. Facilities of thermal baths were discov-

**Figure 3.** The south slope of Athens Akropolis: Asclepieion (29) with the Theater of Dionysus (38) and two Odeia (35 and 43). (Reprinted from *To iero kai to theatro tou Dionysou: Mnimeia tis notias plevras tis Akropolis* [The Dionysos temple and theater: Monuments of the south slope of the Akropolis], by Papathanasoulopoulos TG, 1993).

ered on the island of Kos, while in Gortyn, in Arcadia, there was a significant bath installation in close proximity to the temple of Asclepius. In Pergamon, in the basement of the circular building located at the southeast side of the Temenos, were wash basins, which, alongside the ducts and the extensive piping for the inflow and outflow of water, indicate the extensive use of fresh water.<sup>5</sup>

It is evident, from all the above findings, that those visiting the Asclepieia were offered entertainment, physical exercise, hydrotherapy, spectacles, music and games, all as a necessary complement to the special, according to each disease, practical treatment and religious ceremony.<sup>8,9</sup>

This healing approach might have been established at the Asclepieia, but it is also reflected in the architectural composition of the Amphiaraeia, sanctuaries dedicated to the healer god-soothsayer Amphiaraos. The most important among these is located in Oropos, Attica; built in an idyllic location, next to a hot spring, it functioned as a religious and healing center from the archaic to the Byzantine era.



**Figure 4.** Asclepieion of Corinth (33) with the Gymnasium (30), the Odeion (15) and the Theater (16). (Reprinted and adapted from *Ta Ascleipieia tis Peloponnisou* [The Asclepieia of Peloponnese], by Stavropoulos SG, 2000).

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The archeological excavations on the site have revealed the temple (4th c. BC) but also the altar, the Enkoimeterion, a small-scale theatre (3rd c. BC), indications of a stadium and two thermal baths.

#### CONCLUSION

It is clear from the aforementioned evidence that neither the location nor the building composition of the Asclepieia were selected at random. Built in locations of exquisite natural beauty, with lush vegetation, enchanting views and rich in fresh water, where the temperature, humidity, sunlight and winds were all maintained at the ideal levels, the Asclepieia were ideal healing centers. At all sites, apart from the temple, altar and Enkoimeterion, the excavations around the area also revealed sets of

various other buildings, such as theaters, odeions, sports facilities, libraries, baths and symposium and dining halls. It is therefore obvious that the Asclepieia possessed all the necessary means for the varied entertainment and to ensure the pleasant stay of the pilgrims. The patients had the opportunity to watch or participate in sporting events or musical contests, to attend musical or theatrical performances, to read books and to socialize. In these multifunctional sites, nature, architecture and man worked together to achieve a sense of mental well-being, tranquility and optimism for the patients, which the ancient Greek thought had very wisely deemed as crucial to the efficient and speedy recovery of the patients. Finally, it should not be overlooked that all these practices in the Asclepieia were provided in conjunction with the rational, Hippocratic or Knidian medicine of the time.10

#### ΠΕΡΙΛΗΨΗ

#### Το «έξυπνο» Ασκληπιείο: Μια ολιστική θεραπευτική προσέγγιση

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Για περισσότερους από οκτώ αιώνες στα Ασκληπιεία της αρχαίας Ελλάδας αναπτύχθηκε μια θεραπευτική τέχνη που βασιζόταν τόσο σε ιατρικές θεραπευτικές μεθόδους όσο και σε διάφορες θρησκευτικές ιεροτελεστίες. Φιλολογικές πηγές και ανασκαφικά ευρήματα μαρτυρούν ότι οι αρχιτεκτονικές επιλογές σε ό,τι αφορούσε στους τόπους ανέγερσης αλλά και στην κτηριακή συγκρότηση των Ασκληπιείων δεν ήταν τυχαίες. Η φυσική ομορφιά του περιβάλλοντος, με τα άφθονα νερά, την πλούσια βλάστηση και την εντυπωσιακή θέα, τα καθιστούσε ιδανικούς τόπους θεραπείας. Παράλληλα, πολλά από τα οικοδομήματα που βρίσκονταν μέσα ή σε μικρή απόσταση από τα Ασκληπιεία, όπως θέατρα, στάδια ή ωδεία, χρησιμοποιούνταν για την ψυχαγωγία των ασθενών. Η παρούσα εργασία παρουσιάζει μερικά από τα σημαντικότερα Ασκληπιεία, δίνοντας έμφαση στα χαρακτηριστικά του φυσικού περιβάλλοντος και τον ψυχαγωγικό χαρακτήρα των κτηρίων που τα περιέβαλλαν. Γίνεται προφανές ότι τα Ασκληπιεία υιοθετούσαν μια πιο ολιστική προσέγγιση στη «νοσηλεία» και τη θεραπεία των προσκυνητών που κατέφευγαν σε αυτά για τη θεραπεία των σωματικών τους παθήσεων, συνδυάζοντας την ιατρική πράξη με τη βελτίωση της ψυχολογικής κατάστασης των ασθενών μέσω της παραμονής τους σε ένα ευχάριστο και υγιεινό περιβάλλον.

**Λέξεις ευρετηρίου:** Ασκληπιεία, Αρχαία Ιατρική, Ελλάδα, Ολιστικές θεραπείες

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