



## Medicine and Philosophy in Direct Dialectic Relation During the Classical and Late Antiquity<sup>1</sup>

### Medicina e Filosofia em Relação Dialética Direta Durante a Antiguidade Clássica e Tardia

### Medicina y Filosofía en Relación Dialéctica Directa Durante la Antigüedad Clásica y Tardía

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**Abstract:** Medicine and Philosophy, in classical antiquity mainly, coexisted and joined hands as activities of the human intellect, with one exerting fruitful influence on the other in the course of time. The influence of philosophy on ancient medicine is generally accepted, as the theories of pre-Socratic philosophers from the 6th century BC for the interpretation of the world and human nature were the main inspiration for the formulation of the first medical texts. Natural philosophers from Ionia, such as Thales of Miletus, Anaximander, Anaximenes and Heraclitus, through their theories, laid the foundations towards future medical advances. Hippocrates of Kos, with his medical treatises in “*Corpus Hippocraticum*” was greatly influenced by the philosophical thought. Hippocrates is considered the “father of medicine” because he broadened the medical knowledge of his time and laid the foundations of medicine as science, releasing it from magic and superstitions. Plato and Aristotle refer to Hippocrates in their works and speak with respect about him acknowledging his enormous contribution to the healing of serious diseases. In the ancient world, Asclepius, who was considered a great healer of many serious diseases, was worshiped as the patron god of medicine. In his honor temples were erected and next to them great therapeutic centers, the well known “Asclepieia”, scattered in many cities of Ancient Greece and Asia Minor. In the 5th, 4th and 3rd century BC there are great medical schools that operate, founded by famous medico-philosophers of the time, such as the School of Kos, the Sicilian School, the Medical School of Cnidus, Cyrene, Rhodes, Alexandria, etc. In post-Hippocratic era, medico-philosophical Schools are formed, such as the School of Dogmatics, Empiricists, Methodics in Rome, Pneumatics, and Eclectics, all connected to the philosophical thought and tradition. Among the physicians of late antiquity stands out Galen, whose

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theories influenced Western medicine until the 17<sup>th</sup> century AD. In the Hellenistic period the major philosophical Schools of the Epicureans and the Stoics form a philosophical concept with physical health and psychological well-being as points of reference. Medicine was founded as a science in the period of classical antiquity, 5<sup>th</sup> to 4<sup>th</sup> century BC, and bequeathed its rich background to later centuries, so that today it has come to be regarded as a deeply humanistic and social science with strong philosophical roots and origins.

**Resumo:** Na antiguidade clássica, principalmente, medicina e filosofia coexistiram e uniram esforços na qualidade de atividades do intelecto humano, exercendo influência uma sobre a outra ao longo do tempo. A influência da filosofia sobre a medicina antiga é fato geralmente aceito e as teorias dos pré-socráticos do século VI antes de Cristo foram as principais inspirações na interpretação do mundo e da natureza humana que serviram aos primeiros livros de textos médicos. Filósofos naturalistas da Iônia, tais como Tales de Mileto, Anaximandro, Anaxímenes e Heráclito, por meio de suas teorias, estabeleceram fundamentos para os avanços médicos posteriores. Hipócrates de Cós, com seus tratados médicos do “Corpus Hippocraticum”, foi amplamente influenciado pelo pensamento filosófico. Hipócrates é considerado o “pai da medicina” porque amplificou o conhecimento médico em seu tempo e fundamentou a medicina enquanto ciência, livrando-a de superstições e coções mágicas. Platão e Aristóteles se referem a Hipócrates em seus trabalhos e dele falam com respeito, reconhecendo sua enorme contribuição para a cura de doenças graves. No mundo antigo, Esculápio, que era considerado um grande curandeiro de muitas doenças graves, foi adorado como deus patrono da medicina. Templos foram erigidos em sua honra ao lado de grandes centros de cura conhecidos como “Asclepieia”, espalhados em muitas cidades da Grécia Antiga e Ásia Menor. Nos séculos 5<sup>o</sup>, 4<sup>o</sup> e 3<sup>o</sup> antes de Cristo, existiram grandes escolas médicas, fundadas por médicos-filósofos famosos em seus tempos, tais como a Escola de Cós, a Escola Siciliana, a Escola Médica de Cnidos, Cirene, Rodes, Alexandria etc. Escolas médicas e filosóficas foram formadas na era pós-hipocrática, tais como a escola dogmática, empirista, metódica em Roma, pneumática e a eclética, todas conectadas com o pensamento e a tradição filosófica. Entre os médicos da antiguidade posterior, que se destaca é Galeno, cujas teorias influenciaram a medicina ocidental até o Século XVII AD. No período helenístico, as escolas maiores, epicuristas e estóicas, formam um conceito filosófico com saúde física e bem estar psicológico como pontos de referência. A medicina foi fundada como ciência no período da antiguidade clássica, nos séculos 5<sup>o</sup> e 4<sup>o</sup> AC, e legou seu rico panorama aos séculos posteriores, de forma que hoje tornou-se reconhecida como uma ciência social profundamente humanística com fortes raízes filosóficas.

**Keywords:** Medicine – Philosophy – Antiquity – Hippocrates – Asclepius - Galen.



**Palavras Chaves:** Medicina – Filosofia – Antiguidade – Hipócrates – Esculápio – Galeno.

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Medicine and Philosophy, from their beginnings, have set out as relative and successive activities of human intellect. As a consequence they have coexisted. Fellow travelled, interacted and fed back from one another through time and space<sup>3</sup>.

It is well known that in antiquity sciences were not separate and autonomous but fell under the general title "philosophy". Geometry, physics or astronomy, as current branches of science, were cultivated with great zeal and commitment at the local philosophical schools, and in particular, at Plato's Academy, in Athens, with great success. It was the same with medicine, mainly in early antiquity<sup>4</sup>. The theories of important pre-Socratic philosophers from the 6th century BC on the interpretation of the world and the nature of man, which were put forward within the various philosophical schools, were not only the core but also the inspiration for the formulation of the first medical discourses. As to its theoretical framework, ancient medicine was

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<sup>3</sup> The influence of Philosophy on ancient Medicine is generally accepted and unquestionable. For the relations between philosophy and medicine in classical antiquity see JONES, W.H.S. *Philosophy and Medicine in Ancient Greece*. With an edition of the History of Medicine. Baltimore: Johns Hopkins University Press, 1946; EDELSTEIN, Ludwig. "Ancient Philosophy and Medicine". In: TEMKIN, Owsei; TEMKIN, Lilian. *Ancient Medicine*. Baltimore, Maryland: John Hopkins University Press, 1967; LONGRIGG, J. "Philosophy and Medicine. Some Early Interactions". In: *HSPH*. Vol. 67, 1963, p. 147-175; VAN DER EIJK, P. *Medicine and Philosophy in Classical Antiquity: Doctors and Philosophers on Nature, Soul, Health and Disease*. Cambridge: Cambridge University Press, 2005; CAMBIANO, G. "Philosophy, Science and Medicine". In: ALGRA, Keimpe; BARNES, Jonathan; MANSFELD, Jaap; SCHOFIELD, Malcolm (editors). *The Cambridge History of Hellenistic Philosophy*. Cambridge: Cambridge University Press, 1999, p. 585-616; LONGRIGG, J. *Greek Rational Medicine: Philosophy and Medicine from Alcmeon to the Alexandrians*. London & New York: Routledge, 1993.

<sup>4</sup> TSEKOURAKIS, D. *Hippocrates, on the nature of man*. "Daidalus" – I. Athens: Zacharopoulos, 1996.



greatly influenced by the theories of well known natural philosophers from Ionia, such as Thales of Miletus, Anaximander, Anaximenes and Heracleitus<sup>5</sup>.

It would not be an exaggeration to assume that ancient Greek medicine is closer to modern medicine than any other historical form of medicine worldwide<sup>6</sup>. It is generally accepted that the modern field of medicine would not have existed without its ancient background. This is evidenced by the fact that modern medical terminology relies heavily on Greek language.<sup>7</sup> The value of ancient Greek medicine is timeless and its contribution to the world medical progress indisputable.

During Hippocrates, medicine began to separate from its philosophical envelope, though it was impossible to completely break away from it, and to gradually form an autonomous science, which in many circumstances was confronted with philosophy. The most significant differentiation between medicine and philosophy was that, while philosophy tended, in the study of natural phenomena, to support the formulation of theories on the interpretation of the world with unsubstantiated evidence (assumptions), medicine began to question and often confute these assumptions, and to increasingly rely on the data of observation, the empirical knowledge, ie the so-called empiricism.<sup>8</sup> Physicians began to reject the arbitrary acceptance of theories and started to emphasize the need for evidence and proof in support of their positions. The need for prevention, early diagnosis and treatment of diseases, prompted the ancient physicians to collect information in order to formulate theories on the causes of diseases so that their fellowmen be able to

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<sup>5</sup> On the history and nature of ancient Greek medicine and its theoretical background see, for example: GEORGAKOPOULOS, K. *Ancient Greek Physicians*. Athens: Marathias, 1998; PAPADOPOULOS, G. "Ancient Greek Medicine". In: *Sciences in Ancient Greece, in Byzantium and in Modern Greece*. Athens: Hellenic Open University, 2001, p. 228-259; PAPADOPOULOS, G. "Byzantine Medicine". In: *Sciences in Ancient Greece, in Byzantium and in Modern Greece*. Athens: Hellenic Open University, 2001, p. 321-325; PHILLIPS, E.D. *Aspects of Greek Medicine*. London: Thames & Hudson Ltd., 1973; LONGRIGG, J. *Greek Medicine from the Heroic to the Hellenistic Age*. New York: Bristol Classical Press, 1998; HEROPHILUS. *The Art of Medicine in Early Alexandria*. Cambridge: Cambridge University Press, 1989.

<sup>6</sup> This is the viewpoint expressed by the Professor of History of Medicine Erwin Ackerknecht on ancient Greek medicine: ACKERKNECHT, E. H. *History of Medicine* (Pref. TZAVARAS, Than; ed. PASXALIS, V; transl. PASXALIS, V; HELIADES, G.; KARATZOULIS, V.). Athens: Marathias, 1998, p. 79.

<sup>7</sup> *Ibid.*, p. 79.

<sup>8</sup> TSEKOURAKIS, D. *Hippocrates, on the nature of man. Op. cit.*, p. 6.

protect themselves. It is obvious that philosophers set purely theoretical goals, while physicians were interested in the immediate implementation of theories in practice.<sup>9</sup>

However, the effects of the philosophical thought on the theories included in the first medical treatises are undisputed. If we refer, for instance, to two well-known treatises whose authorship is attributed to Hippocrates or physicians from the immediate environment of Hippocrates, “*Περὶ ἀρχαίης ἰητρικῆς*” (On Ancient Medicine) and “*Περὶ φύσιος ἀνθρώπου*” (On the Nature of Man), we can easily find that the effects of as well as the objections to the theories of Ionian philosophers are evident. Both treatises exhibit strong Sophistic influence. The first is directed against the invasion of philosophical theories on empirical methods of medicine. The second refutes the theories of Monist Ionian philosophers, who considered only one element to be the origin of the world, as well as the theories of physicians who believed that only one of the four main humors comprises the main substance of the human body.<sup>10</sup> Hippocrates and some of the authors of the Hippocratic texts regarded the four humors (blood, phlegm, yellow bile and black bile) as basic concepts and analyzed the relations between them, their correlation with the elements of nature and their effect on the induction of some diseases.<sup>11</sup> In the treatise “On the Nature of Man”, the theory of the four humors, as priority substances in the human body, is put forward, in imitation of Empedocles theory which refers to four basic elements as the creative energies of the universe. The aforementioned medical treatise influenced the field of medicine in the years after Hippocrates and through Galen until modern times.<sup>12</sup>

Apart from philosophy, rhetoric is also very much related to ancient medicine. Many of the treatises contained in “*Corpus Hippocraticum*”, the Hippocratic Collection, exhibit the influence of rhetoric. The works “*Περὶ τέχνης*” (The Art), “*Περὶ φροσῶν*” (Breaths) and “*Περὶ φύσιος ἀνθρώπου*” (On the Nature of Man) are created at the time medicine raises its rational bases, which coincides

<sup>9</sup> *Ibid.*, p.6.

<sup>10</sup> *Ibid.*, p.5.

<sup>11</sup> PAPAĐOPOULOS, G. *Teaching Notes for the course Introduction to the History of Medicine*. Philosophy and History of Science Dept. (PHS). Athens: National & Kapodistrian University of Athens, 2005, p.2. For a brief reference to the theory of humors see JOLY, R. “Sur une nouvelle édition de la nature de l’homme”. *In: AC*. Vol. 38, 1969, p. 151.

<sup>12</sup> TSEKOURAKIS, D. *Hippocrates, on the nature of man*. *Op. cit.*, p. 6.

with the heyday of Rhetoric, when namely the elaborate rhetorical style had a great influence on ancient Greek prose.<sup>13</sup> The great physicians of antiquity were not substantially affected by rhetorical style. Yet, many medical treatises exhibited strong rhetorical character,<sup>14</sup> literary elements and sophisticated style, as they constitute demonstrations of rhetoric with a view to impress fellow physicians and the wider cultured public of the 5th century B.C., when the writing of the works is placed.<sup>15</sup>

It is worth further noting that religious medicine was widely spread in ancient Greece. The practice of medicine was closely linked to the religious beliefs of the Greeks and therefore, retained its religious orientation throughout the course of Greek history.<sup>16</sup> Many of the Greek Gods were involved both in the appearance and in the healing of the disease. Originally, Apollo was regarded as the god of ailment and healing, and he maintained this role until the 5th century BC, when he was replaced by his son Asclepius, to whom he had delegated the art of medicine.<sup>17</sup>

Asclepius, as the god of medicine, wielded the sacred symbols of the rod and the sacred serpent which is even today the symbol of the medical profession.<sup>18</sup> There were temples in Asclepius honor, which served as shelters and sanatoriums for the poor and those who suffered from severe or incurable diseases, scattered throughout the ancient world, in Greece, in the centers of colonial Greek world, such as Asia Minor and Southern Italy, and later, in Rome and the Roman provinces.<sup>19</sup> The largest and most renowned Asclepieia were those of Epidaurus, Kos, Triki (current Trikala), Sicyon (Corinth) and Pergamon. From the Asklepieion of Epidaurus many later Asclepieia derive their origin. The dispersion of Asclepieia was fast, and soon they covered all Greece and Asia Minor. Some well known Asclepieia were in Athens, Rhodes,

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<sup>13</sup> *Ibid.*, p. 10.

<sup>14</sup> JONES, W.H.S. *Hippocrates*, vol. II. London: Loeb Classical Library / Harvard University Press, 1952, p. xiii.

<sup>15</sup> TSEKOURAKIS, D. *Hippocrates, on the nature of man*. *Op. cit.*, p. 14-15.

<sup>16</sup> ACKERKNECHT, E.H. *History of Medicine*. *Op. cit.*, p. 80.

<sup>17</sup> *Ibid.*, p. 80; EDELSTEIN, Emma; EDELSTEIN, Ludwig. *Asclepius and the dawn of medicine*. Athens: Exantas Publishing SA (Ancient Authors), 1996, p. 13. On the divine origin and the art of medicine of Asclepius see EDELSTEIN, Emma; EDELSTEIN, Ludwig; FERNGREN, Gary (Introduction). *Asclepius: Collection and Interpretation of the Testimonies*, v. I & II. Baltimore and London: The John Hopkins University Press, 1998.

<sup>18</sup> ACKERKNECHT, E.H. *History of Medicine*. *Op. cit.*, p. 80.

<sup>19</sup> *Ibid.*, p. 80.

Kyrenia, Phaistos (Crete), Ephesus, Olympia, Messinia, Paros, Delos and Poros.<sup>20</sup>

Asclepius was known as the god of incubation and dreams. The patient would spend the night in the temple anticipating treatment through the appearance of the God in his dream and through the God's prescription on how to implement healing methods. The votive inscriptions from the temples and sanctuaries of Asclepeia provide a wealth of information on this form of healing.<sup>21</sup> In fact the healing methods relied on the provision of assistance by the physicians of each Asklepieion, on the proper interpretation of patients' dreams by priests who were medicine connoisseurs, and, thus, on the healing through self-suggestion and administration of proper treatment, as well as on the existence of a hot spring site adjacent to or near the temple.<sup>22</sup> Indeed, in Asclepieia, in the 13th century BC, there were used hot springs for therapeutic purposes. Inscriptions, various archaeological findings, places names and other historical sources indicate the existence of organized ancient spa resorts (*thermae*) near famous Asclepieia, where patients would seek therapy through the beneficial properties of the springs in combination, of course, with the assistance provided by the God of medicine. The usual remedies proposed by the God comprised drugs, herbal compresses and baths.<sup>23</sup>

In particular, Asclepius had gained great reputation as the sole inventor of surgery and pharmacology and as the main representative of dietary

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<sup>20</sup> MARKETOS, S. *An Illustrated History of Medicine*. 4th edition. Athens: Zita Publications, 2002, p. 426,429.

<sup>21</sup> ACKERKNECHT, E.H. *History of Medicine, op. cit.*, p. 80. On the medicine of the temple, explanations about treatments and references to the incubation ritual, see EDELSTEIN, Emma; EDELSTEIN, Ludwig. *Asclepius and the dawn of medicine. Op. cit.*, p. 11-34. For general information on Asclepius and religious medicine in antiquity, see. WALTON, A. *The Cult of Asclepius*. Ithaca, NY: Read Books Design, Cornell University 2010; KERENYI, C. *Asclepius: Archetypal Image of the Physician's Existence* (trans. R. Menheim). New York: Pantheon, 1959; HALLIDAY, W.R. "On the Treatment of Disease in Antiquity". In: , *Greek Poetry and Life: Essays Presented to Gilbert Murray*. Oxford: The Clarendon Press, 1936; HAMILTON, M. *Incubation: The cure of disease in pagan temples and Christian churches*. London: Henderson W.C., 1906; KRUG, A. *Ancient medicine – Scientific and Religious medicine in antiquity* 3<sup>rd</sup> ed. Athens: Papademas, 2008.

<sup>22</sup> EDELSTEIN, Emma; EDELSTEIN, Ludwig. *Asclepius and the dawn of medicine. Op. cit.*, p. 17-18.

<sup>23</sup> *Helios New Encyclopedic Dictionary*, vol. C. Athens: Helios, n.d., p. 782.

medicine.<sup>24</sup> Asclepius was highly honored at Epidaurus<sup>25</sup> and was regarded the patron of the art of medicine and the protector of physicians and their unions. The good physicians, the ones who practiced their profession decently and successfully, and who possibly belonged to certain physician families or unions, were called after his name, Asclepiadae.<sup>26</sup> Noteworthy references to God Asclepius are found in texts of ancient Greek writers such as Plato, Plutarch, Hippocrates and others.<sup>27</sup>

<sup>24</sup> EDELSTEIN, Emma; EDELSTEIN, Ludwig. *Asclepius and the dawn of medicine. Op. cit.*, p. 14.

<sup>25</sup> Strabo in his work “Γεωγραφικῆ” (English: Geography) refers to the town of Epidaurus and to epiphany, that is, the appearance of God in the temple as follows: see. STRABO. “Geography VIII”. In: EDELSTEIN, E.; EDELSTEIN, L. *Asclepius and the dawn of Medicine*. Athens: Exantas Publishing SA (Ancient Authors), 1996.

Ancient Greek

Καὶ αὕτη δ’ οὐκ ἄσημος ἡ πόλις καὶ μάλιστα διὰ τὴν ἐπιφάνειαν τοῦ Ἀσκληπιοῦ θεραπεύειν νόσους παντοδαπὰς πεπιστευμένου καὶ τὸ ἱερόν πληρὸς ἔχοντος αἰεὶ τῶν τε καμνόντων καὶ τῶν ἀνακειμένων πινάκων, ἐν οἷς ἀναγεγραμμέναι τυγχάνουσιν αἱ θεραπείαι, καθάπερ ἐν Κῶ τε καὶ Τρίκκῃ.

Translation

And this town [Epidaurus] is not insignificant, and indeed, because of the appearance of Asclepius, believed to cure all sorts of illnesses and his temple is always full of sick people, and because of the votive signs on which the treatments are written, as it happens in Kos and Trikki.

<sup>26</sup> ACKERKNECHT, E. H. *History of Medicine. Op. cit.*, p. 81.

<sup>27</sup> EDELSTEIN, Emma; EDELSTEIN, Ludwig. *Asclepius and the dawn of medicine. Op. cit.*, p. 60,70:

1. Plutarch, *Συμποσιακά προβλήματα* (Symposiacs) IX, 14,4

Ancient Greek

...καὶ τοὺς ἰατροὺς Ἀσκληπιὸν ἔχοντας ἴσμεν ἡγεμόνα...

Translation

... and we know that physicians have Asclepius as their leader

2. Plato, *Συμπόσιον* (Symposium) 186 D

Ancient Greek

... τοῦτοις ἐπιστηθεὶς ἔρωτα ἐμποιῆσαι καὶ ὁμόνοιαν ὁ ἡμέτερος πρόγονος Ἀσκληπιός, ὡς φασιν οἶδε οἱ ποιηταὶ καὶ ἐγὼ πείθομαι, συνέστησεν τὴν ἡμετέραν τέχνην.

Translation

... our ancestor, Asclepius, founded our art [medicine], because he knew how to transfuse love and concord in them (the elements of the body), as these poets say and I, myself, believe.

3. Hippocrates, *Ἐπιστολαί* (Letters) 20

Ancient Greek



Hippocrates of Kos, arguably considered the "Father of medicine", had been the leading therapist and researcher of his time.<sup>28</sup> His name has become a symbol for the first fundamental period of Greek medicine and has been associated with the superiority and dignity of medicine in every era.<sup>29</sup> Hippocrates was born on the island of Kos around 460 BC and studied with his father in the Asklepieion of Kos, the sanctuary of Asclepius and a great therapeutic centre.<sup>30</sup> His medicine teacher was Herodicus of Selybria, while in philosophy and general education he was instructed by the sophist Gorgias and Democritus of Abdera.<sup>31</sup> In one of his Letters, addressed to Democritus, Hippocrates characterizes philosophy as the sister and cohabitant of Medicine: "Ἱστορίην σοφίης γάρ δοκέω ἰητρικῆς ἀδελφὴν καὶ ζῦνοικον", wishing to emphasize the important contribution of philosophical thought to the proper exercise of

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Ἐγὼ μὲν γὰρ ἰητρικῆς ἐς τέλος οὐκ ἀφῆμαι, καίπερ ἤδη γηραλέος καθεστώς. Οὐδέ γάρ ὁ τῆσδε εὐρετῆς Ἀσκληπιός, ἀλλὰ καὶ αὐτός ἐν πολλοῖς διεφώνησε, καθάπερ ἡμῖν αἱ τῶν ζυγγραφέων βιβλία παραδεδώκασιν.

Translation

I have not perfected myself in the art of medicine, although I have grown old. Indeed [perfect was], neither the inventor of this art, Asclepius, but he also has failed on many occasions, as we are told by the books of the authors.

<sup>28</sup> There is extremely rich literature referring to Hippocrates of Kos, his work and the medical school of Kos, see for example: LYPOURLIS, D. *Hippocratic Collection*, A'. Heraklion: Vikelaia Municipal Library, 1991; LYPOURLIS, D. *Hippocratic Medicine*. Thessaloniki, 1972.; TSEKOURAKIS, D. *Hippocrates, on the nature of man*. "Daidalus" – I. Athens: Zacharopoulos, 1996.; TSEKOURAKIS, D. *Hippocrates, On ancient medicine*. *Op. cit.*; MARKETOS, S. *An Illustrated History of Medicine*. *Op. cit.*, p. 53-74; HIPPOCRATES. *The Collected Works 1-17*. Ancient Greek Literature "The Hellenes". Athens: Kaktos, 1994; LYPOURLIS, D. *Hippocratic Collection*, A. Heraklion: Vikelaia Municipal Library, 1991; SMITH, W.D. *The Hippocratic Tradition*. Ithaca & London: Cornell University Press, 1979; SINGER, H.E. "On Hippocrates". *In: Bull. Inst. Hist. Med.* Vol. 2, 1934, p. 190-213; DAREMBERG, C. *Hippocrate*. Paris: F. Masson, 1844; GUNDELT, B. "Parts and their Roles in Hippocratic Medicine". *In: ISIS*. Vol. 83, 1992, p. 453-465; LONGRIGG, J. "Presocratic Philosophy and Hippocratic Medicine". *In: Hist. Sci.* Vol. 27, 1989, p. 1-39; HEIDEL, H. *Hippocratic Medicine, its Spirit and Method*. New York: Columbia University Press, 1941; JOUANNA, J. *Hippocrate*, v. II 1. Paris: Les Belles Lettres, 1990; JONES, W.H.S. *Hippocrates*, vol. II. London: Loeb Classical Library / Harvard University Press, 1952; JONES, W.H.S. *Hippocrates*, vol. IV. London: Loeb Classical Library / Harvard University Press, 1967; LEVINE, E.B. *Hippocrates*. New York: Twayne Publishers inc., 1971.

<sup>29</sup> ACKERKNECHT, E. H. *History of Medicine*. *Op. cit.*, p. 87.

<sup>30</sup> *Papyrus-Larousse Britannica Encyclopedia*, 30, 2nd ed. Athens: Papyrus, 1996, p. 68.

<sup>31</sup> *Ibid.*, p. 68.

the medical art.<sup>32</sup> This view of his is also reflected in his work which was philosophically based on Ionic enlightenment and, more specifically, was influenced by the worldviews of the pre-Socratic philosophers, Thales of Miletus, Anaximenes and Anaximander, Heraclitus, Empedocles and Pythagoras. His thought was ideologically permeated by Attic humanism and the humanistic dimension in the field of philosophy of the time, which found epigrammatic formulation in the words of the sophist Protagoras: “πάντων χρημάτων ἐστὶν ἄνθρωπος” (Of all things the measure is man). Also, Hippocrates was indirectly influenced by Socrates' ideas on man, Plato's ethics, Pericles' political art, by the existential concerns of the tragic poets, by Herodotus and by the logical historical research of Thucydides.<sup>33</sup> He transfused in the field of medicine the whole ethos and highest notions of classical education and intellect.

Hippocrates was involved in practical and theoretical research, broadened the medical knowledge of his time, developed rational and scientific therapeutics, and he emancipated medicine from superstition, magic, demonology and from its hieratic adherence.<sup>34</sup> He introduced method and deontology, an ethical code, which is the cornerstone of the medical profession, as it converts "medical art" into the highest spiritual and moral vocation.<sup>35</sup> Distinguishing is the oath taken by the physicians who were members of the Hippocratic team, a text that defines, hitherto, the moral contact and attitude of physicians upon

<sup>32</sup> MARKETOS, S. *An Illustrated History of Medicine. Op. cit.*, p. 69.

<sup>33</sup> *Papyrus-Larousse Britannica Encyclopedia. Op. cit.*, p. 68; E.H. ACKERKNECHT, E. H. *History of Medicine. Op. cit.*, p. 87. On Hippocrates relation with Philosophy see DILLER, H. “Hippokratische Medizin und attische Philosophie”. In: *Hermes*. Vol. 80, 1952, p. 385-409; MOON, R.O. *Hippocrates and his Successors in Relation to the Philosophy of their Time*. London: Longmans, Green And Co, 1923; LONGRIGG, J. “Presocratic Philosophy and Hippocratic Medicine”. In: *Hist. Sci.* Vol. 27, 1989, p. 1-39; LONGRIGG, J. *Greek Rational Medicine: Philosophy and Medicine from Alcmeon to the Alexandrias*. London & New York: Routledge, 1993. Also, on the influence of Thucydides' historical thought on Hippocrates, see LICHTENTHAELER, C. *Thucydide et Hippocrate vus par un historien – médecine*. Geneve: Droz, 1965; LYPOURLIS, D. “Thucydides and Hippocratic prognosis”. In: KAPSOMENOS, S. G. *Filtra*. Honorary volume. Thessaloniki, 1975, p. 87-105.

<sup>34</sup> *Papyrus-Larousse Britannica Encyclopedia. Op. cit.*, p. 69. On the relations of ancient medicine with religion and magic, see EDELSTEIN, L. “Greek Medicine in its Relation to Religion and Magic”. In: *Bull. Inst. Hist. Med.* Vol. 5, 1937, p. 201-246; MARKETOS, S.G.; PAPAECONOMOU C. “Medicine, Magic and Religion in Ancient Greece”. *Humane Medicine*. Vol. 8, 1992, p. 41-44; TEMKIN, O. *Hippocrates in a World of Pagans and Christians*. Baltimore: John Hopkins University Press, 1991.

<sup>35</sup> *Papyrus-Larousse Britannica Encyclopedia. Op. cit.*, p. 69.

exercising their profession.<sup>36</sup> Besides, it is typical that all the great servants of the art of medicine, from the 5th century BC until the Hellenistic period, take an oath to Apollo and Asclepius to exercise their profession with respect and decency.<sup>37</sup>

Hippocrates' work is of medical, philosophical, humanistic and biological interest and of an all-time great nature.<sup>38</sup> Most of the treatises of Hippocratic collection, known by the name "*Corpus Hippocraticum*", were probably written between the years 480 and 380 BC.<sup>39</sup> These treatises are fifty-eight writings included in seventy three books, with some of them written in the Ionic dialect and others in the earlier Attic dialect.<sup>40</sup> The texts of the Hippocratic collection very often express philosophic viewpoints and perceptions either in

<sup>36</sup> Em. EDELSTEIN, Emma; EDELSTEIN, Ludwig. *Asclepius and the dawn of medicine*. *Op. cit.*, p. 60: a short excerpt of the Hippocratic oath is as follows:

Hippocrates, *Oath* 1.

Ancient Greek

Ὀμνῶ Ἀπόλλωνα ἰητρὸν καὶ Ἀσκληπιὸν καὶ Ὑγίαν καὶ Πανάκειαν καὶ Θεοῦς πάντας τε καὶ πάσας...

Translation

I swear by Apollo Physician, by Asclepius, by Health, by Panacea and by all the gods and goddesses ....

Note: Health and Panacea were Asclepius' daughters. For a complete quote of Hippocratic Oath in translation by D. Lymourli, see E.H. Ackerknecht, *History of Medicine*, *ibid*, 89 -90. On the Hippocratic Oath see S.G. Marketos, A. Diamandopoulos, C. Bartsocas, E. Poulakou – Rebelakou, D. A. Koutras, The Hippocratic Oath, *Lancet*, 1, 1996, 101- 102.

<sup>37</sup> Such a characteristic sample of later physicians' oath is found in Galen's text: see Em. Edelstein - L. Edelstein, *Asclepius and the dawn of medicine*, *ibid*, 60:

Galen, *De Sanitate Tuenda (Hygiene)* I, 8,20.

Original text: Οὐ μικρὸς δὲ τοῦ λόγου μάρτυς καὶ ὁ πατριος ἡμῶν Θεὸς Ἀσκληπιός ...

Translation: Not an insignificant witness of word is our ancestral god Asclepius...

<sup>38</sup> MARKETOS, S. *An Illustrated History of Medicine*. *Op. cit.*, p. 73.

<sup>39</sup> ACKERKNECHT, E. H. *History of Medicine*. *Op. cit.*, p. 81.

<sup>40</sup> TSEKOURAKIS, D. *Hippocrates, on the nature of man*. *Op. cit.*, p. 15. On Hippocratic Corpus see p. 13-18. Also, see LYPOURLIS, D. *Hippocrates: medical theory and practice [on ancient medicine, on airs, waters, and places, prognostics, on regimen in acute diseases, on the sacred disease]*. Thessaloniki: Zitros, 2000, p. 19-22; LYPOURLIS, D. *Hippocratic Collection*, A'. Heraklion: Vikelaia Municipal Library, 1991, p. 3-5; MARKETOS, S. *An Illustrated History of Medicine*. *Op. cit.*, p. 63, 65, 69; LLOYD, G.E.R. *Hippocratic Writings* (transl. J. Chadwick & W.N. Mann). Harmondsworth: Penguin Books, 1950; NESTLE, W. "Hippocratica". *In: Hermes*. Vol. 73, 1938, p. 1-38; SMITH, W.D. *The Hippocratic Tradition*. Ithaca & London: Cornell University Press, 1979; WITTEN, R. *Die hippokratische Schrift De morbis i*. Ausgabe. Hildesheim & New York: Übersetzung und Erläuterungen, 1974; CHADWICK, J.; MANN, W.N. *The Medical Works of Hippocrates*, vol. III. OXFORD: Blackwell, 1950.

the sense of natural philosophy or with references to the field of moral philosophy, which is expected since these texts are about medicine and the physician's treatment of the patient.<sup>41</sup> Initially, there were two systematic publications of the Hippocratic collection by Littre and by Ermerins. Subsequently, other systematic publications followed.<sup>42</sup> However, not all the works of the Hippocratic collection were composed by Hippocrates. Many of them are disputed or attributed to other authors or other medical schools.<sup>43</sup>

The view that Hippocrates greatly enjoyed the esteem and respect of the great philosophers of the 5th and 4th century BC is demonstrated by the fact that both Plato and Aristotle, in their works, refer to Hippocrates as a great physician of that time and recognize the important work that takes place in the Asklepieion of Kos in the field of serious disease healing. Plato (428-347 BC) first mentions Hippocrates in "Phaedrus" (270 b - d), where he attempts to compare medicine to rhetoric art,<sup>44</sup> and in "Protagoras" (311 b 6 ff) where

<sup>41</sup> PAPAPOPOULOS, G. *Teaching Notes for the course* Introduction to the History of Medicine. Philosophy and History of Science Dept. (PHS). Athens: National & Kapodistrian University of Athens, 2005.

<sup>42</sup> LITTRÉ, E. *Oeuvres Complètes d' Hippocrate*, vol. 10. Paris: J.B. Bailliere, 1839 – 1861; ERMERINS, F.Z. *Hippocratis et aliorum medicorum veterum reliquiae*, vol.III. Trajecti ad Rhenum, 1859 – 1864; KÜHLEWEIN, H. *Hippocratis opera quae feruntur omnia*, vol. II. Lipsiae: Teubner, 1894 - 1902; HEIBERG, J.L. *Hippocratis opera*, vol. I (Corpus Medicorum Graecorum). Berlin / Leipzig: 1927. Also, some of Hippocrates' works have been published in the English series: The Loeb Classical Library, as well as in the French series: Collection G. Budé (« Les Belles Lettres » ). In Greek there have been published: POURNAROPOULOS, G.K. *Hippocrates, the Collected Works*. Athens: Papyrus Library, 1937-1941 and KAISAR, Emmanuel. *Hippocrates, the Complete works*. Athens: A. Martinos, 1967.

<sup>43</sup> TSEKOURAKIS, D. *Hippocrates, on the nature of man*. *Op. cit.*, p. 14-15; LYPOURLIS, D. *Hippocrates: medical theory and practice [on ancient medicine, on airs, waters, and places, prognostics, on regimen in acute diseases, on the sacred disease]*. *Op. cit.*, p. 20-22; PAPAPOPOULOS, G. *Teaching Notes for the course* Introduction to the History of Medicine, p. 3.

<sup>44</sup> BURNET, J. *Platonis Opera, "Phaidrus"*. Oxford: Oxford University Press, 1968, 270 b – d

Ancient Greek

ΦΑΙ. Πῶς τοῦτο λέγεις ;

ΣΩ. Ὁ αὐτός που τρόπος τέχνης ἰατρικῆς ὅσπερ καὶ ῥητορικῆς.

ΦΑΙ. Πῶς δὴ ;

ΣΩ. Ἐν ἀμφοτέροις δεῖ διελέσθαι φύσιν, σώματος μὲν ἐν τῇ ἐτέρῳ, εἰ μέλλεις, μὴ τριβῆ μόνον καὶ ἐμπειρία ἀλλὰ τέχνη, τῷ μὲν φάρμακα καὶ τροφήν προσφέρων ὑγίειαν καὶ ῥώμην ἐμποιῆσιν, τῇ δὲ λόγους τε καὶ ἐπιτηδεύσεις νομίμους πειθῶ ἢ ἂν βούλη καὶ ἀρετὴν παραδώσειν.

ΦΑΙ. Τὸ γοῦν εἰκός, ὦ Σώκρατες, οὕτως.

ΣΩ. Ψυχῆς οὖν φύσιν ἀξίως λόγου κατανοῆσαι οἶμαι δυνατόν εἶναι ἄνευ τῆς τοῦ ὅλου φύσεως ;

ΦΑΙ. Εἰ μὲν Ἱπποκράτει γε τῷ τῶν Ἀσκληπιαδῶν δεῖ τι πιθέσθαι, οὐδέ περὶ σώματος ἄνευ τῆς μεθόδου ταύτης.

ΣΩ. Καλῶς γάρ, ὦ ἑταῖρε, λέγει· χρὴ μέντοι πρὸς τῷ Ἱπποκράτει τὸν λόγον ἐξετάζοντα σκοπεῖν εἰ συμφωνεῖ.

ΦΑΙ. Φημί.

ΣΩ. Τὸ τοῖνον περὶ φύσεως σκόπει τί ποτε λέγει Ἱπποκράτης τε καὶ ὁ ἀληθὴς λόγος. ἄρ' οὐχ ὧδε δεῖ διανοεῖσθαι περὶ ὅτου οὖν φύσεως....

Translation

PHAE. How do you say that?

SO. It is almost the same manner in the art of medicine, as in rhetoric.

PHAE. Which manner then?

SO. In both arts you have to discern their essence, the body on the one and the soul on the other, if it is, not only with experience but also with art, on the one, to offer health and strength to the body by administering medication and food, and on the other to deliver to the soul any persuasiveness and virtue you will by granting reasons and beneficial acts.

PHAE. In this manner it makes sense, Socrates

SO. So, you think you can worthily of reason comprehend the essence of the soul without the essence of the whole?

PHAE. Of course if, somehow, one has to agree with Hippocrates, one of the Asclepiadae, nor anything related to the body.

SO. Well said, indeed, my fellow-man. But we have to consider whether orthos logos (right reason) agrees with Hippocrates, as well.

PHAI. I admit it.

SO. Examine, then, on the issue of nature, what Hippocrates says, after all, and what the real logos (reason). You should not think, therefore, in that manner for whatever concerns nature ....

The English translation is based on the translation in Modern Greek by Od. Hatzopoulos, PLATO. *Phaedrus (or on love)*, (transl. Od. Hatzopoulos). Kaktos: The Hellenes 170, Athens 1993, p. 173 -174.

Reference to the Socrates - Phaedrus dialogue on the " nature " of the soul is made in the following books or journals: LYPOURLIS, D. *Hippocrates: medical theory and practice. Op. cit.*, p. 17-18; JOLY, R. "La question hippocratique et le témoignage du *Phédre*". In: *Revue des Études Grecques*. Vol. 74, 1961, p. 69-92; VEGETTI, M. "La medicina in Platone, IV: Fedro". In: *Rivista critica di Storia della Filosofia*. Vol. 24, 1969, p. 3-22; HERTER, H. "The Problematic Mention of Hippocrates in Plato's *Phaedrus*". In: *Illinois Classical Studies*. Vol. I, 1976, p. 22-42; JOUANNA, J. "La Collection hippocratique et Platon ( *Phédre*, 269e-272a)". In: *Revue des Études Grecques*. Vol. 90, 1977, p. 15-28; MANSFELD, J. "Plato and the Method of Hippocrates". In: *Greek, Roman and Byzantine Studies*. Vol. 21, 1980, p. 311-362; TSEKOURAKIS, D. "Plato's Phaedrus and the Holistic Viewpoint in Hippocrates' Therapeutics". In: *BICS*. Vol. 38, 1993, p. 162-173; JOLY, R. 'Platon, Phédre et Hippocrate: vingt ans apres στο'. In: *Formes de pensée dans la Collection hippocratique. Actes du Ive colloque international hippocratique*, 1983, p. 407-421.

he considers him to be the equal of the other famous creators of the golden era, Phidias and Polycleitus.<sup>45</sup> Also, in “Theaetetus” (166 e - 167 a) Plato

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From the analysis of “*Phaedrus*” dialogue it can be concluded that Plato was influenced by the Hippocratic method and wanted to expand it on the idea that anyone who is not aware of the nature of the human soul as a whole, cannot perceive the nature of the human body as a whole. This view is expanded by Plato in the “*Republic*” by analyzing the structure and the nature of the human soul with positive methodological approaches, see MARKETOS, S. *An Illustrated History of Medicine. Op. cit.*, p. 77.

This particular passage from “*Phaedrus*” has been the cause of various discussions and approaches. Many scholars, among them Galen, contend that by the term “the whole” Hippocrates refers to the universe and considers the knowledge of the universe as a prerequisite both for exploring the nature of the soul and for knowing the human body. Yet, such an interpretation presupposes that the teaching of Hippocrates is based on theoretical foundations, while we are well aware that he was an empiricist physician who relied on information gained by observation, see. TSEKOURAKIS, D. *Hippocrates, on the nature of man. Op. cit.*, p. 90-91; TSEKOURAKIS, D. “Plato’s *Phaedrus* and the Holistic Viewpoint in Hippocrates’ Therapeutics”. In: *BICS*. Vol. 38, 1993, p. 162-173.

<sup>45</sup> Plato, *Protagoras*, chap. C, 311 b 6 ff

#### Ancient Greek

...ὥσπερ ἂν εἰ ἐπενόεις παρὰ τὸν σαυτοῦ ὁμώνυμον ἐλθῶν Ἴπποκράτη τὸν Κῶνον, τὸν τῶν Ἀσκληπιαδῶν, ἀργύριον τελεῖν ὑπὲρ σαυτοῦ μισθὸν ἐκείνω, εἴ τις σε ἤρето· “εἰπέ μοι, μέλλεις τελεῖν, ὃ Ἴππόκρατες, Ἴπποκράτει μισθὸν ὡς τινι ὄντι;” τί ἂν ἀπεκρίνω; - Εἶπον ἂν, ἔφη, ὅτι ὡς ἰατροῦ. - “Ὡς τί γενησόμενος;” - Ὡς ἰατροῦς ἔφη. - Εἰ δὲ παρὰ Πολύκλειτον τὸν Ἀργεῖον ἢ Φειδίαν τὸν Ἀθηναῖον ἐπενόεις ἀφικόμενος μισθὸν ὑπὲρ σαυτοῦ τελεῖν ἐκείνοις, εἴ τις σε ἤρето· “τελεῖν τοῦτο τὸ ἀργύριον ὡς τινι ὄντι ἐν νῶ ἔχεις Πολυκλείτω τε καὶ Φειδίᾳ,” τί ἂν ἀπεκρίνω; - Εἶπον ἂν ὡς ἀγαλματοποιῶς. - Ὡς τις δὲ γενησόμενος αὐτός;” Δῆλον ὅτι ἀγαλματοποιός. - Εἶεν, ἦν δ’ ἐγώ·

The quotation has been taken from the edition: BURNET, J. *Platonis Opera, “Protagoras”*. Oxford: Oxford University Press, 1922.

#### Translation

Namely, say that you had thought about going to watch your namesake Hippocrates of Kos, of the Asclepiadae generation, paying money for the sake of a reward for his services to you. Someone might ask you: “tell me, Hippocrates, what would you say the other Hippocrates, to whom you are going to pay money, is?” What would your response be then? – “He’s a physician” he said. “So I would say”. – “What would you say you are going to become?” – “Physician” he said. – “Say, again, that you had thought about attending Polycleitos of Argos or Pheidias the Athenian paying them for their services to you, and someone asked you: “In your mind, what are Polycleitos and Pheidias, to whom you are paying this money? What would your answer be then?” – “That they are sculptors”, I would say. – “And in your mind what are you going to become?” – “It is obvious, sculptor”...

The English translation is based on the translation in Modern Greek: PLATO. *Protagoras*. Athens: Patakis, n.d.

promotes the view that the duty of the physician is the immediate restoration of patient's health, just as the duty of the pedagogue is the instruction of the learner, and the duty of the politician is the restoration of orderliness in the community.<sup>46</sup> Aristotle, in “Politics” (Book VII, 1326 a 5, 15), makes a brief reference to Hippocrates and describes him as “μειζω ἰατρὸν” (Great Physician).<sup>47</sup> Later, Galen, acknowledging the immense contribution of

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From this excerpt of 'Protagoras' dialogue we can understand that during the second half of the 5th century and early 4th century BC Hippocrates was considered to be a great physician, since Plato makes reference to him along with other famous creators of that golden era, Pheidias and Polycleitos. See: TSEKOURAKIS, D. *Hippocrates, on the nature of man. Op. cit.*, p. 14.

<sup>46</sup> Plato, *Theaetetus*, 166 d,e – 167 a

Ancient Greek

ε. αὐτὸ μὴ τῷ ῥήματι μου διώκει, ἀλλ' ὧδε ἔτι σαφέστερον μάθε τι λέγω. οἶον γὰρ ἐν τοῖς πρόσοθεν ἐλέγχετο ἀναμνήσθητι, ὅτι τῷ μὲν ἀσθενοῦντι πικρὰ φαίνεται ἅ ἐσθλὴ καὶ ἔστι, τῷ δὲ ὑγιαίνουντι τάναντία ἔστι καὶ φαίνεται. σοφώτερον μὲν οὖν τούτων οὐδέτερον δεῖ ποιῆσαι – οὐδὲ γὰρ δυνατόν – οὐδέ κατηγορητέον ὡς ὁ μὲν κάμνων ἀμαθὴς ὅτι τοιοῦτα δοξάζει, ὁ δὲ ὑγιαίνων σοφός ὅτι ἄλλοῖα, μεταβλητέον δ' ἐπὶ θάτερα' ἀμείνων γὰρ ἢ ἐτέρα ἔξις. οὕτω δὲ καὶ ἐν τῇ παιδείᾳ ἀπὸ ἐτέρας ἔξεως ἐπὶ τὴν ἀμείνω μεταβλητέον· ἀλλ' ὁ μὲν ἰατρός φαρμάκοις μεταβάλλει, ὁ δὲ σοφιστὴς λόγοις. ἐπεὶ οὐ τί γε ψευδῆ δοξάζοντά τις τινα ὕστερον ἀληθῆ ἐποίησε δοξάζειν· οὔτε γὰρ τὰ μὴ ὄντα δυνατόν δοξάσαι, οὔτε ἄλλα παρ' ἅ ἂν πάσχη, ταῦτα δὲ αἰεὶ ἀληθῆ.

The quotation has been taken from the edition: DUKE, E.A.; HICHEN, W.F.; NICOLL, W.S.M.; ROBINSON, D.B.; STRACHAN, J.C.G. *Platonis Opera, "Theaetetus" (or on science)*. Oxford: Oxford University Press, 1995.

Translation

Certainly, do not follow my word to the letter, but grasp thus more precisely what I mean. Remember therefore what was mentioned before, that to the patient whatever he eats tastes bitter, while to the healthy man it tastes the opposite. You do not need – neither it is possible - to make wiser either of the two, and we should not express the accusation that the patient is ignorant, for forming such perceptions, while the healthy wise, for forming different. We must instead transform one into the other, because one of the two physical conditions is better. Likewise, in education we must bring about change from one state to the better; the physician certainly induces changes with drugs, while the sophist with reasons. But they did not make someone who had false perceptions to have then true. Nor can one form perceptions either on the non-existent or on situations other than those that exist, and the latter are always true.

The English translation is based on the translation in Modern Greek: PLATO. “Theaetetus”. In: MANDILARAS, V. *Ancient Greek Literature* “The Hellenes” 172. Athens: Kaktos Publications, 1993, p. 143, 145.

<sup>47</sup> Aristotelis, *Politica*, book. VII, 1326 a 5, 15.

Ancient Greek

Hippocrates to medical research and study, wrote that " *Ἱπποκράτης δὲ πάντων ὑπερήνευγε καὶ πρῶτος εἰς φῶς ἐξήνευγε τὴν τελείαν παρ' Ἑλληνισιν ἰατρικὴν ...*".<sup>48</sup>

Aristotle (384-322 BC) and his school, the Aristotelian Peripatos, in general, maintained very close relations with medicine. The philosopher himself exhibited personal interest in medical studies, possibly as a conveyor of paternal legacy, since his father Nicomachus was the personal physician of King Amyntas II of Macedonia.<sup>49</sup> Aristotle, in his treatise "*Περὶ τὰ ζῶα*

...ἔστι γὰρ τι καὶ πόλεως ἔργον, ὥστε τὴν δυναμένην τοῦτο μάλιστ' ἀποτελεῖν, ταύτην οἰητέον εἶναι μεγίστην, οἷον Ἱπποκράτην οὐκ ἄνθρωπον ἀλλ' ἰατρὸν εἶναι μείζω φήσειεν ἂν τις τοῦ διαφέροντος κατὰ τὸ μέγεθος τοῦ σώματος...

The quotation has been taken from: ARISTOTELIS. *Politica* (ed.W.D. Ross) (bks VII, 1326 a 5,15). Oxford: Oxford University Press, 1986.

Translation

Because every city has a destination, so that, greater we should considered the one that can meet [its destination] to the greatest extent. As, for example, Hippocrates one could argue that, not as a man but as a physician, he is greater than anyone else that would be bigger ... The English translation has been based on the translation in Modern Greek: Aristotle, The Collected Works, *Politica*, vol. 3, transl. literary group of Kaktos Publications, (ed. Od. Hatzopoulos). Ancient Greek Literature "The Hellenes" 192, Athens 1993.

From the above evidence we learn that in the time when Aristotle wrote his "*Politica*" (Politics) Hippocrates was considered and was called "great". The reputation of the great physician not only was alive, but perhaps this season began slowly the creation of the legend "Hippocrates", see D. Lypourlis, *Hippocrates: medical theory and practice*, ibid, 18 -19.

<sup>48</sup> Claudius Galenus, tom. XIV, 676

Galenus Introduction or Physician  
*Galeno Ascripta Introductio Seu Medicus*  
 chap. a { Πῶς εὖρηται ἡ ἰατρικὴ }

Ancient Greek

Ἱπποκράτης, ὅς πάντων ὑπερήνευγε καὶ πρῶτος εἰς φῶς ἐξήνευγε τὴν τελείαν παρ' Ἑλληνισιν ἰατρικὴν...

Translation

Hippocrates was superior to everyone, and he was first to make known the perfect medicine to the Greeks.

(There is no official translation of the text in Modern Greek)

Latin

...maxime Hippocrates, qui omnibus facile praececlluit primusque perfectam apud Graecos medicinam in lucem protulit.

The quotations in Ancient Greek and Latin have been obtained from: Κλαυδίου Γαληνού *Ἄπαντα* (Claudius Galenus The Collected Works) (*Clavdii Galeni Opera Omnia*), vol. XIV, 676, ( Medicorum Graecorum Opera Quae Exstant ). KÜHN, C.G. *Claudii Galeni Opera Omnia*, vol.20. Leipzig: C. Knobloch, 1827.

<sup>49</sup> LESKY, A. *History of Ancient Greek literature* 5th ed. Thessaloniki: Kyriakides, 1981, p. 758.



*ἱστορίαι*” (History of Animals) (497 a 32), refers to an illustrated Anatomy (ἐν ταῖς ἀνατομαῖς).<sup>50</sup> At his behest, his student Meno wrote the *History of Medicine* (*Ἱστορία τῆς Ἱατρικῆς*). The *Anonymus Londinensis* (No. P. 2339), a large papyrus of the 2nd century A.D, contains a compendium of the work as well as the works of an important physician of the Sicilian School, Filistiona (5th c. BC) of Locris.<sup>51</sup> More recent research, in particular, has associated Diocles of Karystus (340-260 BC) with Peripatos. Diocles wrote in the Attic dialect and he is considered the most known physician in the period from Hippocrates till the Hellenistic era. Diocles was influenced by the theory of the Sicilian School of Medicine on breath and it is here that his relation to Aristotle can be pinpointed.<sup>52</sup> Among the successors of Diocles stands out Praxagoras (second half of the 4th century BC) as head of Kos Medical School.<sup>53</sup> Metrodorus, Aristotle’s son in law, and Erasistratus, are acknowledged physicians, representatives of the Cnidian School.<sup>54</sup> All the afore-mentioned, eminent physicians belong to the post-Hippocratic period and to different medico-philosophical schools. Dogmatics carry on the Hippocratic tradition and maintain close relations with philosophy. Diocles and Praxagoras were the main representatives of Dogmatic School. Empirics, with Heraclides being the main representative, constitute the opposite of Dogmatics as they rely on experience and they distance themselves from philosophy. Methodics are active in Rome as early as the 3rd century BC and they are later influenced by the theories of Asclepiades (124 BC-1st century BC.) of Prusa.<sup>55</sup> Pneumatics,

<sup>50</sup> *Ibid.*, p. 758.

<sup>51</sup> *Ibid.*, p. 797 – 798. Several books and articles refer to papyrus *Anonymus Londinensis* and its content. For example: JONES, W.H.S. *The Medical Writings of Anonymus Londinensis*. Cambridge: Cambridge University Press, 1949; DIELS, H. *Anonymi Londinensis ex Aristotelis iatricis Menoniis et aliis medicis eclogae*. Berlin: 1839; WELLMAN, M. *Der Verfasser des Anonymus Londinensis*. Cambridge: Cambridge University Press, 1947; STECKERL F. “Plato, Hippocrates and the Menon Papyrus”. In: *CPH*. Vol. 40, 1945, p. 166-180.

<sup>52</sup> LESKY, A. *History of Ancient Greek literature*. *Op. cit.*, p. 798. On Diocles of Carystus and his work see. JAEGER, Werner. *Diokles von Karystos*. Berlin: W. De Gruyter & Co., 1938.

<sup>53</sup> On the fragmentary work of Praxagoras of Kos see STECKERL, F. *The Fragments of Praxagoras of Cos and his School*. Leiden: Brill, 1958.

<sup>54</sup> On Erasistratus of Kos and his work see GAROFALO, I. *Erasistratus*. Pisa: Giardini editori e stampatori, 1988; DOBSON, J.F. “Erasistratus”. In: *Proc. Royal Soc. Med.* Vol. 20, 1927, p. 2-28; FRASER, P.M. “The Career of Erasistratus of Ceos”. In: *Rendiconti*. Vol. 103, 1969, p. 518-537; LONIE, I.M. “Erasistratos, the Erasistrateans and Aristotle”. In: *Bulletin of History of Medicine*. Vol. XXXVIII, 1964, p.426-443.

<sup>55</sup> Asclepiades of Prusa in Bithynia, educated in Athens and Alexandria, is the first Greek who officially practiced medicine in Rome and acquired great reputation following mechanistic views of the human body, pleasant and enticing treatments for the patients see:

influenced by the Stoics, believed that *pneuma*, or spirit, plays a predominant role in the functions of the human organism. Eclectics adopt therapeutic methods of various schools. To them Galen also belongs.<sup>56</sup>

During the 5th and 4th centuries BC and later, the most significant medical schools were: the School of Kos, the Sicilian School founded by Empedocles of Agrigento (493-433 BC) and the Medical School of Cnidus founded by Euryphon (mid 5th century BC), on the coast of Asia Minor, opposite the island of Kos.<sup>57</sup> The last School constituted the antipode of the Hippocratic School.<sup>58</sup> Other well known Medical Schools were the School of Cyrene and the School of Rhodes.<sup>59</sup>

In the Hellenistic years, significant physicians were Herophilus (third century BC) and Erasistratus (born in 330 BC), founders of the Alexandrian School of Medicine.<sup>60</sup> In Roman times, worth noticing are Celsus, the Encyclopaedist,

MARKETOS, S. *An Illustrated History of Medicine. Op. cit.*, p. 95-97; PAPADOPOULOS, G. *Teaching Notes for the course Introduction to the History of Medicine. Op. cit.*, p. 17. On Asclepiades, also see: GREEN, R.M. *Asclepiades: His Life and Writings*. New Haven: Elizabeth Licht, 1955; RAYNAUD, A.G.M. *De Asclepiade Bithyno medico ac philosopho*. Paris: Didier, 1862; VALLANCE, J.T. *The lost theory of Asclepiades of Bithynia*. Oxford: Clarendon Press, 1990.

<sup>56</sup> On the Schools of Medicine that were founded after Hippocrates see: ACKERKNECHT, E. H. *Op. cit.*, p. 98-106; PAPADOPOULOS, G. *Teaching Notes for the course Introduction to the History of Medicine. Op. cit.*, p. 15-19.

<sup>57</sup> On the most renowned Medical Schools in antiquity see ACKERKNECHT, E. H. *Op. cit.*, p. 82; TSEKOURAKIS, D. *Hippocrates, on the nature of man. Op. cit.*, p. 15; MARKETOS, S. *An Illustrated History of Medicine. Op. cit.*, p. 55.

<sup>58</sup> The two medical schools have considerable differences. The school of Kos adopts a holistic approach to the treatment of diseases and emphasizes nutrition, prognosis and the self-healing ability of the body. The school of Knidos is more concerned with diagnosis and attempts to cure each disease separately, see TSEKOURAKIS, D. *Hippocrates, on the nature of man. Op. cit.*, p. 16-17. On the medical theories and practices of the two schools see SUDHOFF, K. *Kos and Knidos*. Munchen: Verlag der Munchener Drucke, 1927; THIVEL, A. *Cnide et Kos? Essai sur les doctrines médicales dans la Collection Hippocratique*. Paris: Les Belles Lettres, Paris 1981; JOUANNA, J. *Hippocrate. Pour une arborescence de l'cole de Cnide*. Paris: Les Belles Lettres, 1974; LONIE, I.M. "Cos Versus Cnidus and the historians". *In: Hist. Science*. Vol. 16, 1978, p. 42-75, p. 77-92; LONIE, I.M. "The Cnidian treatises of the Corpus Hippocraticum". *In: Class. Quart.* Vol. 15, 1965, p. 1-30.

<sup>59</sup> ACKERKNECHT, E. H. *History of Medicine. Op. cit.*, p. 82.

<sup>60</sup> On Herophilus and the art of medicine in the early years of the School of Alexandria see VONSTADEN, H. *Herophilus: the Art of Medicine in Early Alexandria*. Cambridge: Cambridge University Press, 1989; KUDLIEN, F. "Herophilus und der Beginn der Medizinischen

and the Greek military surgeon serving under Nero, Dioscorides (*circa* 1st century AD), who is rightly regarded as the greatest pharmacologist of antiquity.<sup>61</sup> The best-known personality of late antiquity in medicine was Galen,<sup>62</sup> the most prominent physician of the 2nd century AD, who also served as the personal physician of Emperor Marcus Aurelius.<sup>63</sup> As Galen himself confesses, he was initially educated in philosophy and studied medicine later, “οὐ πρῶτον εἰς ἰατρὸν φοιτᾶν ἠρξάμην ἀλλὰ εἰς φιλοσόφους”. He studied at the famous Asklepieion of Kos and enriched his knowledge in Alexandria, a major center of the time for anatomy studies.<sup>64</sup> In his homeland, Pergamon, Galen undertook the task of being the gladiators’ physician. Distinguishing is his view that the good physician must possess knowledge on physics, logic and ethics by studying near philosophers. He is indeed perfectly accordant with the opinion of Aristotle that the efforts of physicians and philosophers are "contiguous".<sup>65</sup> For this reason, Galen takes care that his medicine have firm philosophical underpinnings and his writings have logical structure, clarity and coherence without generalities and contradictions, which

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Skepsis”. In: *Gesnerus*. Vol. 21, 1964, p. 1-13. For more general information on Herophilus and Erasistratus see MARKETOS, S. *An Illustrated History of Medicine*. *Op. cit.*, p. 85-91.

<sup>61</sup> On Dioscorides’ contribution to botanology and pharmacology, as well as on the writings of Celsus as researcher of ancient Greek medicine see ACKERKNECHT, E. H. *History of Medicine*. *Op. cit.*, p. 103,105- 106; MARKETOS, S. *An Illustrated History of Medicine*. *Op. cit.*, p. 103-105.

<sup>62</sup> The full name of Galen in Latin was Claudius Galenus. “Galen” is derived from the Greek word “γαλήνιος”, serene, (dispassionate, calm, quiet). The title “Clarissimus” (most glorious) was awarded to Galen by the Emperor Marcus Aurelius and demonstrates the great reputation he had acquired in Rome see: MARKETOS, S. *An Illustrated History of Medicine*. *Op. cit.*, p.115.

<sup>63</sup> *Papyrus-Larousse Britannica Encyclopedia*, 16, 2nd ed. Athens: Papyrus, 1996, p. 62.

<sup>64</sup> *Ibid.*, p. 62. On Galen, the publications of his work and the studies on it, see KÜHN, C.G. *Claudii Galeni Opera Omnia*, vol. 20. Leipzig: C. Knobloch, 1827; ALEXANDERSON, B. *Galenos: Περὶ Κρίσεων*. Gothenburg: Uberlieferung und Text, 1967 MARQUARDT, J.; MULLER, I.; HELMREICH, G. *Claudii Galeni Scripta Minora*, t. III. Leipzig: B.G. Teubneri, 1884 – 1893; HANKINSON, R.J. *Galen on the Therapeutic Method* (bks I & II). Oxford: Clarendon Press, 1991; SARTON, G. *Galen of Pergamos*. Kansas: University of Kansas Press, 1954; WALZER, R. *Galen on Medical Experience*. Oxford: Oxford University Press, 1944; SIEGEL, R.E. *Galen’s System of Physiology and Medicine*. New York: Basel, 1968.

<sup>65</sup> *Papyrus-Larousse Britannica Encyclopedia*, 16, p. 63. His father, well known architect and geometer, instilled in him the love for philosophy. "He initiated him first in Platonic, Aristotelian, Stoic and Epicurean philosophy", see: MARKETOS, S. *An Illustrated History of Medicine*, p. 117.

ensured the impact of his work on the following generations,<sup>66</sup> as his theories dominated and influenced Western medicine until the 17th century.

Ancient Greeks believed that a strong, healthy body gives to man a psychical well-being and constitutes a fundamental prerequisite for spiritual exaltation and bliss. “Reflecting”, (“στοχάζεσθαι”), “reasoning” (“συλλογίζεσθαι”) and “philosophizing” (“φιλοσοφεῖν”) presuppose and require liberation from physical pain and mental afflictions; a clear, robust and prolific spirit, capable of leading to high spiritual and cultural achievements. The above philosophical notion aiming at the achievement of virtue constitutes a way of life for man to achieve “welfare” (“εὐζωία”) and “blissful living” (“ζῆν μακαριῶς”). “Welfare” and “blissful living” form, later, the fundamentals of Stoic and Epicurean philosophy.<sup>67</sup>

The two major philosophical schools of ancient Athens, the Academy of Plato and the Peripatos of Aristotle, gave priority to the problem of individual happiness and virtue. However, they believed that the basic requirements for ensuring perfect happiness were the favor of fortune, physical and mental wellbeing, and material comfort.<sup>68</sup> According to Aristotle the purpose of any human action is happiness that is based on virtue. Poverty, illness and misfortune disturb happiness and bliss, and distance man from his objective: the implementation of the good and the beautiful that gladdens his soul.<sup>69</sup> Aristotle defines moral virtue as an attribute of will based on the befitting-our-nature concept of average (golden mean) perception, which the philosopher

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<sup>66</sup> PAPAPOPOULOS, G. *Teaching Notes for the course* Introduction to the History of Medicine. *Op. cit.*, p. 19.

<sup>67</sup> On Stoic and Epicurean philosophy see, indicatively: BRUN, J. *Stoicism*, Que Sais -je? series No 67. I. Athens: Zaharopoulos, 1965; LONG, A.A. *Hellenistic Philosophy: Stoics, Epicureans, Sceptics*. Athens: M.I.E.T.(National Bank of Greece Cultural Foundation), 1990; *The History of the Greek People, E'*. Athens: Ekdotike Athenon, 1974, p. 287-301; EPICURUS. *Ethics*. ZOGRAFIDES, G. (transl.; intr.- comm.). Athens: Exantas 1991; THEODORIDES, C. *Epicurus. The true face of the ancient world*. Athens: Hestia Bookstore, 1999; PELEGRINIS, T. *Moral Philosophy*. Athens: Ellinika Grammata Publishing, 1997; WINDELBAND, W. *A Handbook of the History of Philosophy*. Athens: M.I.E.T. (National Bank of Greece Cultural Foundation), 1980.

<sup>68</sup> WINDELBAND, W. *A Handbook of the History of Philosophy*. *Op. cit.*, p. 192.

<sup>69</sup> ZELLER, Eduard; NESTLE, Wilhelm. *Outlines of the The History of Greek Philosophy*. 13<sup>th</sup> ed. Athens: Hestia Bookstore, 1980, p. 242-243.



derived, partly, from the popular ancient Greek ethics of mean, but mostly by the dietary and therapeutic theories of the Hippocratic physicians.<sup>70</sup>

The subsequent philosophical schools of the Hellenistic years deal in the core of their theories with ensuring physical and mental human health as a means of achieving bliss and moral perfection. The Stoic philosophy, with its main representative, Zeno of Citium (334-262 BC), proclaims the liberation from the passions, the “apatheia”, so as for virtue to dominate and for man, free from irrational passions and impulses, to conquer wisdom, which is the ideal of perfection and the main condition of actualization of bliss.<sup>71</sup>

Epicurus (341-270 BC) modulates a philosophical view according to which the highest good is the earthly life itself, the tranquility of soul, known as “ataraxia”, and self-sufficiency, the moderate enjoyment of possessions.<sup>72</sup> The Epicurean philosophy places special emphasis on mental health and well-being and considers that the only absolute good, sought by all animate beings, is pleasure, while the only absolute evil, avoided by all, is ache (pain). Epicurus, by setting pleasure as the goal of life, does not advocate the resorting to temporary pleasures and prodigality, but the opportunity, through this, for the body not to ache and the soul not to be disturbed.<sup>73</sup> The serenity of the “thymic” (calmness) is the highest virtue that serves as a key condition for the attainment of bliss.<sup>74</sup>

It is a fact that medicine, as a profoundly humanistic and social science, has its own philosophy. The German philosopher of the 18th century, Kant, very aptly observes that the final goal is not only the philosophy of medicine but also, the 'philosophizing' on medicine.<sup>75</sup> The best people to philosophize on medicine are the physicians themselves, the clinical researchers, the ones who daily "experience" the breakdown of physical health, human suffering and the threat of death for the seriously ill or those suffering from an incurable disease.<sup>76</sup> The view of Hippocrates “ἡτρὸς γὰρ φιλόσοφος ἰσόθεος”<sup>77</sup> (the

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<sup>70</sup> *Ibid.*, p. 243.

<sup>71</sup> *Ibid.*, p. 281-282.

<sup>72</sup> THEODORIDES, C. *Introduction to Philosophy*. 2<sup>nd</sup> ed. Athens: Hestia Bookstore, 1982, p. 39-40.

<sup>73</sup> *The History of the Greek People. Op. cit.*, p. 290.

<sup>74</sup> ZELLER, Eduard; NESTLE, Wilhelm. *Outlines of the The History of Greek Philosophy. Op. cit.*, p. 305-306.

<sup>75</sup> MARKETOS, S. *An Illustrated History of Medicine. Op. cit.*, p. 6.

<sup>76</sup> *Ibid.*, p. 6.

philosopher physician is equal to Gods) is always up to date and has firm, everlasting power and value, as it underlines the great importance of philosophical education to the training of physicians, the humanistic culture and the broadening of medical thought with the aim to exercise the medical profession in an excellent and flawless way.

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<sup>77</sup>The phrase has been obtained from the following quotation:

Hippocrates, ( *Περὶ Ἐὐσχημοσύνης*, L. 9, 232 ), (*On Decorum*)

### Ancient Greek

« Διὸ δεῖ ἀναλαμβάνοντα τουτέων, τῶν προειρημένων ἕκαστα, μετὰγειν τὴν σοφίην ἐς τὴν ἰητρικὴν καὶ τὴν ἰητρικὴν ἐς τὴν σοφίην· ἰητρός γάρ φιλόσοφος ἰσόθεος· οὐ πολλὴ γάρ διαφορὴ ἐπὶ τὰ ἕτερα καὶ γάρ ἐνὶ τὰ πρὸς σοφίην ἐν ἰητρικῇ πάντα, ἀφιλαργυρίη, ἐντροπή, ἐρυθρίησις, καταστολή, δόξα, κρίσις, ἡσυχίη, ἀπάντησις, καθαριότης, γνωμολογίη, εἶδησις τῶν πρὸς βίου χρηστῶν καὶ ἀναγκαιῶν, ἀκαθαρσίης ἀπεμπόλησις, ἀδεισιδαιμονίη, ὑπεροχὴ θεία. Ἔχουσι γάρ ἅ ἔχουσι πρὸς ἀκολασίην, πρὸς βαναυσίην, πρὸς ἀπλησίην, πρὸς ἐπιθυμίην, πρὸς ἀφαιρέσιν, πρὸς ἀναιδείην. Αὕτη γάρ ἡ γνῶσις τῶν προσιόντων καὶ χρήσις τῶν πρὸς φιλίην, καὶ ὡς καὶ ὁμοίως τὰ πρὸς τέκνα, πρὸς χρήματα. Ταύτη μὲν οὖν ἐπικοινωνὸς σοφίη τις, ὅτι καὶ ταῦτα τὰ πλεῖστα ὁ ἰητρός ἔχει ».

The text in Ancient Greek has been taken from: HIPPOCRATES. *Decorum*, Loeb Classical Library. Cambridge – Massachusetts – London: Harvard University Press, 1923.

### Translation

Thus, taking into account what we have mentioned, one should elevate philosophy to medicine and medicine to philosophy; the physician - philosopher is equal to the Gods. There is little difference between them. All elements of philosophy are found in medicine: unselfishness, modesty, blushing, shyness, opinion, judgment, calm, wittiness, cleanliness, opinion status, knowledge of the useful and the necessary for living, abandonment of impurity, exemption from superstition, divine superiority. These properties are opposed to debauchery, cruelty, greed, lust, theft and insolence. Such learn those who socialize with them and such they use towards their friends, as well as towards their children and their belongings. In these a certain philosophy is shared and the physician holds most of these.

The English translation has been based on the translation in Modern Greek: HIPPOCRATES. *The Collected Works 1, General Medicine*. Ancient Greek Literature: The Hellenes 93. Athens: Kaktos, 1993.



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