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Tracing the roots of European bioethics back to the Ancient Greek philosophers-physicians

ABSTRACT

Contrary to the usual claim that Bioethics is a contemporary discipline, I argue that its origins can be traced back to the Ancient Greek philosophers-healers. In classical antiquity philosophy was almost inseparable from medicine not only in the sense that philosophers like Empedocles, Plato and Aristotle contributed to its development, but also in that later philosophers conceived of moral principles and rules in order to prevent the physicians' malpractice and the patients' harassment. From this point of view, the philosophers-physicians Hippocrates, Galen and Celsus have laid the foundations of the science known under the name of "Bioethics".

Keywords: bioethics, ancient Greek medicine, philosophers-physicians, Hippocrates

If we look at the contemporary literature of medical ethics, we get the impression that Bioethics, an interdisciplinary science of about 35-40 years, has its origins in the United States. Gilbert Hottois, for instance, in his book, *Qu' est-ce que la Bioéthique?* argues that it was the American oncologist Van Rensselaer Potter who first used the term "Bioethics" in his article, "Bioethics, the science of survival", which was then included in his book, *Bioethics: Bridge to the Future* in 1971.[1] A number of publications following Potter's introduction of the term further support the idea that it was the American scientists' and philosophers' concern about the ethical dilemmas, raised by the development of medical sciences and technologies, which

[1] Gilbert Hottois, *Qu'est-ce que la Bioéthique?,* J. Vrin, Paris 2004, p. 10. See, also, Van Rensselaer Potter, *Bioethics: Bridge to the Future,* Prentice-Hall, 1971.

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gives rise to this new interdisciplinary science called Bioethics.[2] But if we leave the term aside and, instead, concentrate on the kind of ethical problems which the development of the contemporary biomedical sciences raise, we will realize that, long before Potter, philosophers – physicians like Hippocrates, Galen and Celsus, philosophers like Plato, Aristotle, Immanuel Kant, Friedrich Schleiermacher, Hans Jonas, Albert Schweitzer and, of course, the German theologian and philosopher Fritz Jahr (1895-1953) investigated and attempted to answer the same questions which contemporary American bioethicists contend to have dealt with first. Our contention therefore is that Bioethics is a European discipline and that we must trace it to its roots if we wish to verify this fact.

In studying the origins of the European Bioethics it would be a serious omission if we did not turn to people like Hippocrates, Galen and the Roman Celsus who admittedly laid the foundations of the modern discipline known under the name of Bioethics. For, apart from their strict medical treatises, Hippocrates, Galen and their contemporary physicians composed certain deontological treatises to which almost all the principles of contemporary Bioethics can be traced. However, before one examines the content of the Ancient Greek deontology and the way in which it has influenced contemporary Bioethics, one has to consider the medical art or "science" as it was conceived and practiced in antiquity.

Medicine, connected as it is to man and human nature, appears in a fairly advanced stage of human civilization.[3] In antiquity, when we talk about medicine we do not refer so much to a body of theoretical knowledge, as we do today, but, instead, to certain therapeutic practices. Similarly, the physician is not a scientist who possesses a fair amount of theoretical knowledge which he applies in life, but he is the practical healer who applies certain accepted practices for the healing of a disease or the cure of a wound. To be more precise, we should mention that these medical practices had a divine character. Before we say anything about the practical healers, we should be reminded that it was the soothsayers and augurs who, from the signs of the weather or the intestines of sacrificial animals, could conclude which practice – in the wide sense - could be followed for the cure of the disease or the expiation of the plague which had befallen a community or a royal House. Consequently, it was more the soothsayers' and the augurs' job than that of the practical healers' to find ways to purify the profane action and to expiate the plague. However, the idea of

[2] See, for instance, T. Beauchamp, "Ethical Theory and Bioethics" in T. Beauchamp and L. Walters (eds.), *Contemporary Issues in Bioethics,* Wadsworth, Belmont 1999.

[3] In this paragraph I draw pretty closely to what I am saying in, Eleni Kalokairinou, "Επίμετρο. Η επίδραση της αρχαίας ελληνικής σκέψης στη σύγχρονη Βιοηθική" in Mark G. Kuczewski and Ronald Polansky (επιμ.), *Βιοηθική: Αρχαία θέματα σε σύγχρονους προβληματισμούς,* μτφρ. Μιχ.Κατσιμίτσης, επιμ. και επίμετρο Ελένη Καλοκαιρινού, Travlos, Athens 2007, p. 528-529.

the divine origin of diseases began to give way. The Ancient Greeks soon realized that they were caught into an undesirable dualism and that they could not accept that all "normal phenomena were natural and all abnormal phenomena were divine".[4] They gradually reached the conclusion that all phenomena are natural and divine and that there are always certain elements of a phenomenon which cannot be explained. In this way, philosophy in the end replaces religion, as it tries to provide explanations for diseases which religion itself could not account for.

The kind of relation which exists between ancient medicine and philosophy is one of the most important problems that has engaged and still engages classicists and philosophers. Even though they all admit that ancient medicine and philosophy are related in a rather complicated manner, a number of classicists argue that it was ancient medicine that influenced ancient Greek philosophical thought. However, the dominant view nowadays is that it was the ancient Greek philosophers who laid the foundations of ancient medicine.[5] This view is mainly corroborated by the ancient Greek sources. Thus Aristotle writes in his treatise *On Sense and Sensible Objects*:

> It is further the duty of the natural philosopher to study the first principles of disease and health; for neither health nor disease can be properties of things deprived of life. Hence one may say that most natural philosophers, and those physicians who take a scientific interest in their art, have this in common: the former end in studying medicine, and the latter base their medical theories on the principles of natural science.[6]

Similarly, in the 1st century A.D., the Roman philosopher-physician Celsus in the prooemium of his work, *De Medicina* says:

> At first the science of healing was held to be part of philosophy, so that treatment of disease and contemplation of the nature of things began through the same authorities; clearly because healing was needed especially by those whose bodily strength had been weakened by restless thinking and night-watching. Hence we find that many who professed philosophy became expert

[4] Hippocrates, transl. W. H. S. Jones, The Loeb Classical Library, Harvard University Press and William Heinemann, Cambridge Massachusetts, London 1984, vol. I, General Introduction, p. x-xi.

[5] On this claim see, Michael Frede, "Philosophy and Medicine in Antiquity" in *Essays in Ancient Philosophy,* Clarendon Press, Oxford 1987, pp. 225-242.

[6] Aristotle, On sense and sensible objects 436a19-b1 in *On the Soul, Parva Naturalia, On Breath,* transl. W. S. Hett, The Loeb Classical Library, Harvard University Press and William Heinemann Ltd, Cambridge Massachusetts, London 1986.

> in medicine, the most celebrated being Pythagoras, Empedocles and Democritus.[7]

The Milesian philosophers Thales, Anaximander and Anaximenes were mostly concerned with physics and astronomy and not so much with anthropology and medicine. However, things change as soon as the Pythagoreans were established in Croton of Italy, where there was a medical tradition. Alcmaeon of Croton is a Pythagorean or, at least, belonged to the Pythagorean circle and was the first philosopher who attempted to lay the theoretical principles of medicine and, then, to adapt them to experience. He breaks away from the prevailing view of his time according to which disease was conceived in ontological terms and, instead, he considers it as part of nature. In the extant fragment of his work, *Περὶ φύσεως (On Nature),* he argues that the body consists of a number of opposite elements or forces, i.e. cold-hot, moist-dry, sweet-bitter etc.[8] The harmonious mixing (κρᾶσις) and the balance (ἰσονομία) between these opposite forces of the body constitutes health, whereas the supremacy (μοναρχία) of any of these over the others causes disease.

The theory of the opposite constituents which Alcmaeon of Croton introduces was prevailing throughout ancient medicine. But, as Cornford points out, the various medical schools differed on what each took these ultimate constituents to be.[9] Alcmaeon, as we have seen, considered these elements to be opposite powers. But when his theory is accordingly adopted by the medical school of Cos, the powers are replaced by the "fluid substances, the *humours*".[10] This development took place gradually and we can trace it if we study carefully Hippocrates' treatise *On Ancient Medicine* – a treatise in which, as we shall see, the writer complains intensely for the intrusion of philosophy into medicine.[11] He maintains that these opposites are not substances but powers of secondary importance. He further argues that the body is composed of certain opposite *humours* which have properties or powers that influence health more than temperature does. Thus, in the Hippocratic school health is the harmonious blending of these humours (κρᾶσις), whereas the dominance of the one over the others (μοναρχία) is the sign of disease. In the treatise *Nature of Man*

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[7] Aulus Cornelius Celsus, *De Medicina,* Prooemium 6-7, transl. W. G. Spencer, The Loeb Classical Library, William Heinemann Ltd and Harvard University Press, Cambridge Massachusetts, London 1971.

[8] Diels, H. and W. Kranz, *Die Fragmente der Vorsokratiker,* Weidmann 1989, vol. I, 24, B4, [22].

[9] Cornford, F.M., *Plato's Cosmology,* The *Timaeus* of Plato translated with a running commentary, Routledge, London (1937) 2000, p. 332.

[10] Cornford, p. 333. See, also, Hippocrates, vol. I, General Introduction, p.xlvi-xlviii.

[11] See, below, notes 27 and 28.

which Aristotle attributes to Polybus, it is maintained that the humours are four: phlegm, blood, yellow bile and black bile.[12]

On the other hand, thinkers like Empedocles of Croton, who belonged to the Italian and the Sicilian school, followed a different line of thought. Empedocles, for instance, materialized these four ultimate constituents of the body, i.e. fire, air, water and earth, the ῥιζώματα, as he called them. These elements were taken to be the components of the body and of everything else. The analogies with which these different elements are mixed determine not only the different kinds of beings but also the different individual human natures.[13] Given these four components, Philistion of Locri developed a theory of health and disease. Put briefly, there are as follows:

> Philistion holds that we consist of four 'forms' (ἰδεῶν), that is elements: fire, air, water, earth. Each of these has its own power: fire the hot, air the cold, water the moist, earth the dry. Diseases arise in various ways, which fall roughly under three heads. (1) Some are due to the elements, when the hot or the cold comes to be in excess, or the hot becomes too weak and feeble. (2) Some are due to external causes of three kinds: (a) wounds; (b) excess of heat, cold, etc.; (c) change of hot to cold or cold to hot, or of nourishment to something inappropriate and corrupt. (3) Others are due to the condition of the body: thus, he says, 'when the whole body is breathing well and the breath is passing through without hindrance, there is health; for respiration takes place not only through mouth and nostrils, but all over the body…'[14]

Historians inform us that Philistion was practicing at Syracuse and it is almost certain that he influenced Diocles of Carystos in Euboea, who was later regarded as "a second Hippocrates". Diocles practised in Athens and wrote medical treatises on almost every topic between 400-350 B.C.[15] Cornford observes that there is a lot of agreement on many issues between Diocles and Plato, something which leads us to conclude: (a) that they knew of each other's work, and (b) that they both had been influenced by Philistion's teaching.[16] Cornford invokes Plato's *Second Letter* which,

[12] Hippocrates, vol. I, General Introduction, p. xlviii-xlix. See, also, Cornford, p. 333.

[13] Diels, H. and W. Kranz, *Die Fragmente der Vorsokratiker*, vol. I, 31, B 110.

[14] Cornford, p. 333.

[15] Cornford, p. 334.

[16] Cornford, p. 334.

in his opinion, suggests that Philistion attended Dionysius II – and Plato must have met him there during his trip to Italy.[17]

Plato is obviously influenced by Empedocles. In *Timaeus* he describes how the world was created, discusses the creation of man, presents the functions of the human body and the soul and, in the final part, offers an account of diseases. Following roughly Philistion's classification of diseases, he distinguishes three kinds of diseases. There are, first of all, the diseases that are due to the prevalence or the deficiency or even the misplacement of the ultimate constituents.[18] As Plato puts it:

> The origin of disease is plain, of course, to everybody. For seeing that there are four elements of which the body is compacted, – earth, fire, water and air- when, contrary to nature, there occurs either an excess or a deficiency of these elements, or a transference thereof from their native region to an alien region; or again, seeing that fire and the rest have each more than one variety, every time that the body admits an inappropriate variety, then these and all similar occurrences bring about internal disorders and disease.[19]

There are, secondly, "diseases of the secondary tissues", as Cornford calls them.[20] Plato has in mind here the tissues which are composed of some or of all the ultimate constituents. Such tissues are marrow, bone, sinew and flesh. This second type of disease appears when the normal process of nourishment is reversed. In this case, instead of building up in the tissues the appropriate substances which are in the blood in order to repair the waste and to fight corruption, the flesh breaks down and discharges the substances back into the blood. Poisonous kinds of humours may be secreted and the damage may further affect the bones and the marrow.[21] Plato describes the second type of diseases as follows.

> Again in the structures which are naturally secondary in order of construction, there is a second class of diseases to be noted…Now when each of these substances is produced in this order, health as a rule results; but if in the reverse order, disease. For whenever the flesh is decomposed and sends its decomposed matter back again into the veins, then, uniting with the air, the blood in the veins, which is large in volume and of every variety, is diversified

[17] Cornford, p. 334, note 1.

[18] Cornford, p. 334.

[19] Plato, *Timaeus* 82 A in *Timaeus, Critias, Cleitophon, Menexenus, Epistles* transl. by R.G. Bury, The Loeb Classical Library, William Heinemann and Harvard University Press, London, Cambridge Massachusetts 1981.

[20] Cornford, p. 335.

[21] Cornford, p. 335-6.

> by colours and bitter flavours, as well as by sharp and saline properties, and contains bile and serum and phlegm of every sort. For when all the substances become reversed and corrupted, they begin by destroying the blood itself, and then they themselves cease to supply any nourishment to the body.[22]

Thirdly, there are the diseases which are related to: (a) breath, (b) phlegm and (c) bile.[23] These are diseases which are mainly due to respiration problems, to the blockage of air inside the body. They are further due to the formation of noxious humours, such as phlegm and bile.

As may well be expected, Plato concludes his treatment of diseases in the *Timaeus* by discussing a further category, that of the diseases of the soul. These may be due either to the bad condition of the body or to the asymmetry which could exist between the soul and the body.[24] It is beyond our present purposes to examine the way Plato conceived of these diseases. However, it remains noteworthy that so long ago Plato was well aware of what we today would call mental illness.

Plato's pupil, Aristotle, though he did not follow his father's profession, esteemed medicine highly. Medicine is quite often employed by him as a model paradigm for developing his ethical and political ideas. The reader of the *Nicomachean Ethics* will soon realize the wide use of medical examples Aristotle makes in his discussion of ethical issues. Among his writings are included treatises which show his genuine interest in issues concerning man's physiology and pathology. Treatises like, *On the Soul, On Sense and Sensible Objects, On Memory and Recollection, On Sleep and Waking, On Dreams, On Prophecy in Sleep, On Length and Shortness of Life, On Youth and Old Age, On Life and Death, On Respiration* and others express his concern for medical and anthropological matters which he, as a philosopher, was in much more competent position to discuss than a mere physician. Aristotle's contribution to medicine has convinced almost everyone that philosophy and medicine were two inextricably related disciplines since neither philosophers can avoid studying medicine nor can physicians get their reasoning started unless they invoke the first principles of natural philosophy.[25] As he writes:

> As for health and disease it is the business not only of the physician but also of the natural philosopher to discuss their causes up to a point. But the way in which these two classes of inquirers differ and consider different problems

[22] Plato, *Timaeus*, 82 C - 83 A.

[23] Plato, Timaeus, 84 D; Cornford, p. 340.

[24] Plato, *Timaeus*, 86 B – 87 B and 87 B – 89 D; Cornford, p. 343-352.

[25] On the relations between ancient medicine and philosophy see my article, "Ancient Medicine and Philosophy: A philosopher's perspective" forthcoming in the proceedings of the conference, Medicine in the Ancient Mediterranean world, Nicosia 27-29 September 2008, ed. D. Michaelides, Oxbow Books, Oxford.

> must not escape us, since the facts prove that up to a point their activities have the same scope; for those physicians who have subtle and inquiring minds have something to say about natural science, and claim to derive their principles therefrom, and the most accomplished of those who deal with natural science tend to conclude with medical principles.[26]

Physicians and philosophers were very much convinced in the 4th century B.C. of the close relationship between philosophy and medicine. This relationship becomes even more obvious in the treatise attributed to Hippocrates. Hippocrates of Cos is a major physician of the 5th century B.C. to whom more than sixty extant medical treatises are attributed. Classicists disagree as to whether or not all these treatises have been written by the same person; instead they prefer to talk of the treatises of the *Corpus Hippocraticum.* Leaving aside the issue of authorship, what is interesting is that while in certain treatises Hippocrates explains certain medical phenomena by arguing from given hypotheses or axioms to conclusions, as philosophers do, in certain other treatises this method is criticized. Thus, in the treatise *On Ancient Medicine* Hippocrates first criticizes those who deduce medical conclusions from first principles and then he puts forward his own view. He writes:

> All who, on attempting to speak or to write on medicine, have assumed for themselves a postulate as a basis for their discussion – heat, cold, moisture, dryness, or anything else that they may fancy - who narrow down the causal principle of diseases and of death among men, and make it the same in all cases postulating one thing or two, all these obviously blunder in many points even to their statements, but they are most open to censure because they blunder in what is an art, and one which all men use on the most important occasions, and give the greatest honours to the good craftsmen and practitioners in it.[27]

And he adds:

> But my view is, first, that all that philosophers or physicians have said or written on natural science no more pertains to medicine than to painting.[28]

The first impression one gets from the above quotation is that in the treatise *On Ancient Medicine* Hippocrates attacks philosophy. This is how it was interpreted in antiq-

[26] Aristotle, *On Respiration,* 480 b 22-31 in *On the Soul, Parva Naturalia, On Breath,* transl. W. S. Hett, The Loeb Classical Library, Harvard University Press and William Heinemann Ltd, Cambridge Massachusetts, London 1986.

[27] Hippocrates, vol. I, *On Ancient Medicine*, I, 1-11.

[28] Hippocrates, vol. I, *On Ancient Medicine*, XX, 9-10.

uity. This interpretation was being held until recently. Celsus, for instance, in the prooemium of his work *De Medicina* writes that it was Hippocrates, a man of philosophical skill and medical talent, "who separated this branch of learning from the study of philosophy".[29] In light of further research, however, classicists, philosophers and physicians have come to conclude that this is not necessarily what Hippocrates has been doing. G. E. R. Lloyd in his article "Who is attacked in *On Ancient Medicine?*" is raising the question, whether the author of the treatise is attacking all the thinkers who reduced medical questions to philosophical questions of first principles, whether he is attacking the whole medical school, or just a particular individual.[30] The conclusion which contemporary scholars and classicists tend to reach is that Hippocrates in the particular treatise is attacking a certain medical school, namely the Dogmatists, who behind the manifest symptoms of a disease, assumed the existence of the hidden causes of it, which to a great extent determined the kind of treatment to be applied to the particular patient. This does not mean that Hippocrates is combating philosophy as such, since the other medical schools of his days were also influenced by other philosophical schools. Thus the Empiricists, for instance, were influenced by the skeptic school, the Methodists were influenced by the atomic philosophers, whereas the fourth major school, the Pneumatists, were mainly eclectic and were equally influenced by the Stoic school and the theory of the four humours.[31]

It is no doubt that ancient Greek physicians turned to philosophy in order to ask its support in the theory of knowledge, logic and natural philosophy. However, in the 5th century B.C. the character of philosophy changes. From cosmos - and nature-orientated, which was so far, philosophy becomes man-orientated, it is focused on the study of man, it becomes primarily "anthropological". This is why in the 5th and 4th centuries B.C. philosophy's main object of research is man, and the branches of philosophy which mainly flourish then are moral and political philosophy. Philosophy influences medicine again but this time in a different manner.

We can find examples of the way philosophy influences medicine during this period in Hippocrates' deontological treatises, *The Oath (Ὅρκος), The Physician (Περὶ ἰητροῦ), Law (Νόμος), Decorum (Περὶ εὐσχημοσύνης), Precepts (Παραγγελίαι) and On Ancient Medicine (Περὶ ἀρχαίης ἰητρικῆς),* in Galen's brief treatise, *That the excellent physician is a philosopher (Ὅτι ὁ ἄριστος ἰητρὸς καὶ φιλόσοφος)* and in the Roman Celsus' treatises and in Sextus Empiricus' work.

[29] Celsus, *De Medicina,* Prooemium, 7-8.

[30] G.E. R. Lloyd, "Who is attacked in *On Ancient Medicine?*", *Phronesis* 8 (1963), p. 108-126.

[31] Paul Carrick, *Medical Ethics in the Ancient World,* Georgetown University Press, Washington 2001, p. 41.

If we study these treatises carefully, we will see that their author is not concerned so much with putting forward a theory of health and disease or a physiological theory of the functions of the human body. Instead, what interests him is to bring out the importance the physician's character has for the diagnosis and the cure of the disease. Put differently, the authors of these treatises do not see the physician merely as a mere "engineer", i.e. as a technocrat who knows how to apply specialized knowledge and practices in order to cure the disease. Instead, they see him as the good, wise man who cares for and respects the patient as a human being. It is worth recalling what Hippocrates says on this matter in the most ancient text of medical deontology, the *Oath*:

> I will use treatment to help the sick according to my ability and judgment, but never with a view to injury and wrong-doing.[32]

And a few lines afterwards he adds:

> Into whatsoever houses I enter, I will enter to help the sick, and I will abstain from all intentional wrong-doing and harm, especially from abusing the bodies of man or woman, bond or free.[33]

The apprentice physician should not only be taught the medical art but he should also exercise his character so as to be well-disposed towards the patient. So, as the author of the *Oath* declares, the young physician swears to leave every injustice and harm aside (the contemporary principle of non-maleficence) and to enter the house of the patient with the aim to help the sick (the contemporary principle of beneficence).[34] And not only this. The young physician also swears to be trustworthy and never reveal what he sees or hears while practising his art, proving in this way to be the earliest initiator of what in contemporary medical deontology and bioethics we call the principle of confidentiality. Hippocrates writes in this respect:

> And whatsoever I shall see or hear in the course of my profession, as well as outside my profession in the intercourse with men, if it be what should not be published abroad, I will never divulge, holding such things to be holy secrets.[35]

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[32] Hippocrates, vol. I, *The Oath,* 16-18.

[33] Hippocrates, vol. I, *The Oath,* 24-28.

[34] Hippocrates, vol. I, *The Oath,* 24-28. It is interesting to point out that the contemporary bioethicists who support the four-principles approach to Bioethics, otherwise known as principalism, among their basic principles include the two bioethical principles stated above by Hippoctates. Thus, the American T.L. Beauchamp and J. F. Childress in their book, *Principles of Biomedical Ethics* put forward the principle of respect for autonomy, the principle of beneficence, the principle of non-maleficence and the principle of justice. Whereas the British Raanan Gillon in his own work entitled, *Philosophical Medical Ethics,* also includes these two Hippocratic principles among the other bioethical principles he propounds.

[35] Hippocrates, vol. I, *The Oath,* 29-32.

The physician will approach his patient with the required respect, he will consider his case carefully and he will appreciate the difficult circumstances he and his family are in, showing in this way that he deserves his patient's trust who puts into his hands the most sacred thing he has, his life. As Hippocrates writes in another, equally famous, deontological treatise, *The Physician*:

> The intimacy also between physician and patient is close. Patients in fact put themselves into the hands of their physician, and at every moment he meets women, maidens and possessions very precious indeed. So towards all these self-control must be used.[36]

In all these encounters with his patients and their families the physician should behave with continence and self-control. As Hippocrates puts it:

> Such then should the physician be, both in body and in soul.[37]

If what is of greatest importance is the patient's well being, then the physician should not try to exact his payment right from the start. Such a thing may lead the patient to believe that if the right agreement does not take place between the two, the physician will go away. On the contrary, the physician must be compassionate and must take into account the patient's financial situation. And if need be to offer his services for free, he should not hesitate to do it, bringing to mind the benefits he has already received, and his good name. He should not hesitate to offer his help to a stranger or to a needy. As he writes:

> For where there is love of man, there is also love of the art.[38]

Consequently, medical knowledge and skillfulness on their own do not contribute to the patient's cure, if the physician is not a good and charitable character. It is a happy coincidence if the physician is both good at his art as well as a good character. But where such a thing is not possible, then it is better if he is a good man and not particularly a good physician than the other way around. For, whereas the good character compensates for the deficient art, the bad character corrupts and damages the most perfect art.

It is becoming obvious now why, according to Galen, the man who was preparing to become a physician had to receive not only medical teaching and training, but he had also to study the liberal arts or what we would call today the humanities.[39] According to

[36] Hippocrates, vol. II, *The Physician,* 24-28.

[37] Hippocrates, vol. II, *The physician,* 28-29.

[38] Hippocrates, vol. I, *Precepts,* VI, 6-7: ""Ην γὰρ παρῇ φιλανθρωπίη, πάρεστι καὶ φιλοτεχνίη".

[39] Galen, *On The therapeutic Method,* Books I and II, transl., introd. and comment. R. J. Hankinson, Clarendon Press, Oxford 1991, Book I, 1.4-5, 3.15, 4.1-3, Book II, 6.14.

the Ancient Greeks, the medical teaching and training provided the students with the necessary knowledge and experience for treating the disease, in the same way as the teaching of an art, i.e. shipbuilding or the art of war, equipped the young with the necessary knowledge for building ships or winning a war. The liberal arts or the humanities, on the other hand, did not teach him a particular art. On the contrary, they addressed the student's character and contributed to the cultivation of his feelings and the development of his abilities and his virtues. By arousing his self-consciousness and his good will, the liberal arts urged him to perform prudent, just and brave acts and, in this way, to become himself prudent, just and brave, in a word *wise.* But, as he became wise, he at the same time became a better physician. It is in this sense that Hippocrates argues that the physician who is a philosopher amounts to being a god. As he puts it:

> For a physician who is a lover of wisdom is the equal of a god. Between wisdom and medicine there is no gulf fixed; in fact medicine possesses all the qualities that make for wisdom. It has disinterestedness, shamefastness, modesty, reserve, sound opinion, judgment, quiet, pugnacity, purity, sententious speech, knowledge of the things good and necessary for life, selling of that which cleanses, freedom from superstition, pre-excellence divine. What they have, they have in opposition to intemperance, vulgarity, greed, concupiscence, robbery, shamelessness.[40]

Today things, to be sure, are much more complicated. The bioethical principles which the classical deontologists propounded had to be further supplemented with more elaborate principles and rules so as to handle efficiently the complex problems which contemporary medical science and technology creates. Furthermore, our crowded contemporary societies could not just rely upon the physician's good character, as was the case in antiquity. They had to establish all the right social structures and mechanisms for protecting the patients and their families. Be that as it may, the truth remains that the basic principles and rules which are often invoked in serious discussions of bioethical issues are not modern and recent as one may at first think. Even though the term "Bioethics" was introduced in the 20th century, nevertheless the actual discipline of Bioethics, under any name whatever, was first conceived and widely practised some twenty-five centuries ago.

[40] Hippocrates, vol. II, *Decorum,* V, 1-13: "ἰητρὸς γὰρ φιλόσοφος ἰσόθεος· οὐ πολλὴ γὰρ διαφορὴ ἐπὶ τὰ ἕτερα· καὶ γὰρ ἕνι τὰ πρὸς σοφίην ἐν ἰητρικῇ πάντα, ἀφιλαργυρίη, ἐντροπή, ἐρυθρίησις, καταστολή, δόξα, κρίσις, ἡσυχίη, ἀπάντησις, καθαριότης, γνωμολογίη, εἴδησις τῶν πρὸς βίον χρηστῶν καὶ ἀναγκαίων, καθάρσιος ἀπεμπόλησις, ἀδεισιδαιμονίη, ὑπεροχὴ θείη. ἔχουσι γὰρ ἃ ἔχουσι πρὸς ἀκολασίην, πρὸς βαναυσίην, πρὸς ἀπληστίην, πρὸς ἐπιθυμίην, πρὸς ἀφαίρεσιν, πρὸς ἀναιδείην".