
MEDICAL PHILOSOPHY IN A HISTORICAL PERSPECTIVE

Human nature: Balancing the Unbalanced

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Abstract

Galen's understanding of human nature appears to be very specific from many points of view. According to Galen's concept "*vis medicatrix naturae*," the physician appears to be the assistant of nature. He balances between opposites as well as nature. What we find particularly significant in Galen's view on human nature is a lack of "big ideas" and of a strong theoretical approach, which burdened for instance Plato and members of the Methodists school. Galen realized the whole complexity and relativity of human health and, first of all, realized its dependence on many agents: four qualities and four fluids, air, water, earth, etc. That is why he stated that the treatment of the patient had to be individual. Theory cannot cure. It is only the physician who cures on the basis of some theoretical ideas, but firstly on the basis of his experience. Galen's idea that throughout the treatment of a patient, it is of utmost importance to take into consideration his personal humor, physical condition, and his lifestyle in the present and the past, today has to be a main marker for the further development of medicine. Thus the aim of this paper is not only to better understand Galen's concept of human nature, but to contribute to present-day debates on health and illness, and the societal role of medicine and the doctor.

Galen's understanding of human nature appears to be very specific from many points of view. He was firstly not inclined to consider human nature as something solid and steady. On the contrary, human nature is constantly on the move and is trying to achieve balance between opposites. On the other hand, Galen's attitudes in certain parts of his writings often changed and they were very dependent on his humors (*humori*), that is on the overall atmosphere in which he was living and working. He did not bother to hide the changes in his claims. When we take a look at the problem of nature from the doctor's point of view, we get a similar picture. Ac-

cording to Galen's concept "*vis medicatrix naturae*," the doctor appears to be the assistant of nature. He attempts to achieve balance between opposites as well as nature. But, before we consider some aspects of Galen's understanding of human nature, we would like to stress that Galen (129-200 A.D.), a doctor and philosopher from Pergamum in Asia Minor is considered one of the key founding fathers of western medicine. His influence was prevalent in the history of European medicine until the second half of the 19th century. In Galen's awe-inspiring opus (about 500 writings), we can find an equal amount of both medicine and philosophy. Relying on various traditions, he developed a very original and powerful synthesis which made him an authority in both Christian and Islamic medical tradition in the centuries that followed. At the same time, there are places in his theory filled with inconsistency, contradictions and unresolved difficulties. The aim of this paper is to explore Galen's theory of human nature and to deal with its contradictions and unresolved difficulties.

Galen's conception of human nature appears to be fundamental for the entirety of his scientific work. A profound insight into his essential writings sheds light not only on Galen and his time, but also on the whole history of medicine on which he made such a strong impact. However, this paper aims not solely to comprehend Galen's understanding of man better, but to contribute to current debates on the essence of human health and illness as well, that is, to determine the contemporary social role of medicine and the doctor.

For centuries, until well into the 19th century, Galen's work was prevalent in medical theory and practice. The works attributed to the so-called *Hippocratic Corpus* (*Corpus Hippocraticum*) have been preserved mainly inasmuch as they were admired and often commented upon by Galen. Even today, Galen's works, as well as the works of other doctors and philosophers of the age, offer remarkable material for delving into important issues on the ways medicine, both in theory and practice, worked within the intellectual and socio-cultural context of the time. What we have in mind here is, above all, the status of medicine as a "rational" skill, its interaction with the philosophical tradition, as well as the moral and social issues such as the authority of the doctor and the doctor-patient relationship. It was at a certain point a little before and after 1980 that an intensive study of Galen's works recommenced, in the works of M. Frede and G. E. R. Lloyd.¹ Concurrently, J. Barnes and P. J.

¹ For instance: M. Frede, "On Galen's Epistemology," in *Essays in Ancient Philosophy*

Hankinson did a great deal to explain Galen's conception of medicine, with the special stress on his particular ideal of philosophical medicine, or medical philosophy, as it could be phrased, as well.² V. Nutton and H. von Staden have been focused more on medical aspects, and have contributed significantly to our knowledge of Galen's work.³

Nevertheless, many conundrums and issues related to him have yet to be resolved. One such issue is certainly the question of the coherence of Galen's anthropology, especially if we have in mind the wide variety of perspectives Galen used in order to study this problem, i.e. having in mind his multidisciplinary approach. However, grasping Galen's anthropology seems crucial for the comprehension of his overall understanding of medicine, and also necessary in order to understand the subsequent history of medicine, where he, his works, and his attitudes regarding key medical issues have been considered indispensable.

Having considered the status of these issues, the exploration of the desired topic here would commence from that which is known within Galen's medico-philosophical cognitive context, out of which, in fact, stem the issues related to the central question that is to be posed here what is the essence of human nature, considering both historical and universal significance?

Namely, Galen approaches the study of human nature from several different points of view:

1. Anatomical and physiological: referring to the fact that he establishes what the main organs (i.e. principles, *archai*) within the human organism are.

(Minneapolis: University of Minnesota Press, 1987); G.E.R. Lloyd, "Galen and his contemporaries," in R.J. Hankinson, ed., *The Cambridge Companion to Galen* (Cambridge: Cambridge University Press, 2008); G.E.R. Lloyd, "Theories and Practices of Demonstration in Galen," in M.Frede and G.Striker, eds., *Rationality in Greek Thought* (Oxford: Oxford University Press, 1996).

² We have here in mind the following works: J. Barnes, "Galen on logic and therapy," in R.J. Durling, and F. Kudliien, eds. *Galen's method of healing* (Leiden: 1991); R.J. Hankinson, "Galen and the best of all possible worlds," *Classical Quarterly* 1 (1989), 206-27; R.J. Hankinson, ed., *Method, Medicine and Metaphysics*, *Apeiron Suppl.* Vol.22.1 (1988).

³ V.Nutton, "The chronology of Galen's early career," *Classical Quarterly* 23 (1973); V. Nutton, ed., *Galen, problems and prospects* (London: The Wellcome Institute, 1981); H. von Staden, "Experiment and experience in Hellenistic medicine," *Bulletin of the institute of classical studies* 11(1975), 178-199.

2. Psychological (when he determines the structure of human spirit, distinguishing reason from emotions).

3. Metaphysical and ontological (when he elaborates on the essence of soul (*psyche*))

4. Moral and social (e.g. in the writings where he deals with human virtues and, conversely, human evil).

Unfortunately, in most earlier research into this subject, a question which seems central in fact remained open. Namely, did Galen strive to assemble all these different perspectives into a coherent view of human nature, and if so, how successful was he in it really? Or, if we choose to proceed a step further in posing questions, did Galen consider all these viewpoints confined to their particular fields and domains of application, regarding some to be more significant than others?

It appears typical of Galen, as a medical scientist, to have emphasized the role of physiological factors regarding the question of character and personality, as well as emotions, that is, occupying a materialistic position, according to which the soul is considered subservient to the needs of the body. On the other hand, it seems apparent that Galen develops a philosophical and teleological view of human nature within a cosmological context, which naturally, in accordance with the time he lived in, includes a religious dimension as well. Even if the inner tensions of his theory on human nature cannot quite be resolved, probing and analysing them could, in our opinion, shed a precious light on the nature of his stand, that is, on the fact that he almost consciously cherished different and opposing approaches and possibilities.

The question of the unity (coherence) of Galen's thought includes simultaneously the identification (recognition) of various influences, both medical and philosophical, which impacted upon his work. To explore Galen's understanding of human nature means to take into consideration the plenitude of possible influences. That kind of endeavor is often complicated by the fact that Galen himself is actually our only source about his predecessors: strictly speaking, his prevailing status and impact lead to the disappearance and decrease of the influence of other scientists' works, which were no longer worth preserving. What seems to be of major significance, certainly, is his relation towards Platonism, Aristotelianism and Stoicism, and, as for medicine, the relation to the *Pneumatic school* of medicine, which relied on Stoicism, particularly regarding psychological issues. Within that context, Galen's polemics with Aristotle not only with

his works, but also with his Peripatetic school, as well as with the doctors from the *Pneumatic school* (Athenaeus, Archigenes), has not yet been entirely grasped, thus calling for additional research.

But let us step back from the broader context of the structure, significance, and influence of his scientific opus, to the question that lies in the title of our work, Galen's specific understanding of human nature. Galen's system of physiology and pathology is grounded directly in his conception of nature, which has of course become obsolete in the context of contemporary scientific medicine. In order to understand this concept of nature, first we have to understand the conflict between the two major scientific schools of the time regarding the relation between body and spirit. For a better understanding of the subject of this debate, we will use a quotation from a famous work of Galen's, *On the Natural Faculties*. There he discusses the question of nutrition in quite a straightforward manner:

Diet must in a certain way include a kind of turning of nutritive elements into food. However, some people claim that there is no such a transformation, and that it is obvious. Those are the ones who think that nature is neither like a craftsman, nor sagacious towards animals, and it is the fact that it has no special abilities by which it would change the order of things that in fact attracts some, and simultaneously eliminates others. In medicine and philosophy there are two kinds of schools among those who have dealt with nature...One regards all matter found in nature as prone to genesis as well as decline, making it therefore permanently liable to change. The other school assumes that matter is immutable and divided into tiny parts, separated by empty space...According to the latter, there is no such matter or force which would exclusively belong to nature or spirit, however, both nature and spirit come into being in such a manner that in fact makes this two original bodies...which become acquainted with one another. However, from the standpoint of the former, nature is not secondary in relation to atoms, but primary and older. Therefore, according to their view, nature itself creates bodies of both plants and animals, by using some of its faculties the faculty of attraction, the faculty of assimilation, and the power of secretion for the separation of that which is a foreign body. It shapes everything like a craftsman under whose thumb objects come into being...⁴

⁴ *Claudii Galeni Opera Omnia*, Editionem curavit C.G.Kühn, 20 B (Original Edition, Leipzig: 1821-33), (Hildesheim: Olms, 1964) II, 26. Author's translation. Unless indicated otherwise, the translations of all quotations in the text to follow are likewise author's.

Galen considers Hippocrates the author of the metaphor of nature acting like a craftsman.⁵ This claim, however, should be taken with a pinch of salt, bearing in mind that Galen's Hippocrates is in fact more of an imaginary character with whom all Galen's viewpoints coincide, than a real person. W. D. Smith, for instance, is of the opinion that that, if we base ourselves on Galen, it is very difficult to distinguish fact from fiction regarding Hippocrates.⁶ Moreover, there is no doubt that Galen himself shared the above-mentioned standpoint. He was obviously prone to seeing bodies of living beings as works of art, created by an intelligent nature with a specifically determined purpose. At the same time, the members of Atomistic school were of the opinion that living beings were created by accident. Galen, for instance, claimed that they thought the mouth to have originated from the spirit or breath, which formed an opening at the place where it came out. While criticizing them, however, he wondered why, if it were so, the opening did not form at the top of our head, since it is typical of spirit to strive and reach the highest of peaks? Likewise, what would then be the purpose of teeth in our mouth, properly ordered like singers in a choir, and quite perfectly adjusted to their function? Additionally, if we choose to follow the logic of the Atomists, it is hard to explain why no other bodily opening has teeth. He directs this sort of critique to the Atomists in another work of his, *On the Usefulness of the Parts of the Body*, which, according to him, was written in order to refute the Materialists who did not believe in a nature that acts purposefully like a craftsman. It is in this writing that we can see the intertwining of Galen's attitudes with religion. He claims that a respectable study of the work of the divine Creator himself is more desirable than sacrifice, and in that sense, that what he wrote represents a perfect theology.⁷ Despite his attitude being less religious in some other writings, he never renounced the belief that nature is purposeful. Generally speaking, Galen's scientific work is so extensive and complex that it is impossible to reduce his entire system to a few succinct pages. Interestingly enough, what we are faced with in almost each of his works is

⁵ Ibid., 29.

⁶ W.D., Smith, *The Hippocratic tradition* (Ithaca and London: Cornell University Press, 1979), 9ff.

⁷ *Claudii Galeni Opera Omnia*, Editionem curavit C.G.Kühn, 20 B (Hildesheim: Olms, 1964) IV, 360.

the fact that Galen's attitudes and claims very often depend not on a particular viewpoint, but on a philosopher or a doctor he chooses to admonish at the moment, or, in other words, with whom he is in dispute. Apart from that, a specific attitude of his also directly depends on the phase of scientific development he was in at a given moment, i. e. on the particular mood he was in. Although today it seems very odd and unacceptable, and, according to our current understanding of scientific work and creation, it should not be considered relevant, Galen's attitudes in certain parts of his writings often did depend on his humors (*humori*), that is, on an overall atmosphere within which he was living and working at the time. P. Brain, for example, does not perceive these features of Galen's writings and standpoints as pointing to a fatal inconsistency and incoherence of his system, but seeks reasons for it in the extensiveness and voluminosity of Galen's opus.⁸ According to our stance, this does not have to do solely with the extensiveness of Galen's opus, but it is here that we can in fact clearly see the essential feature of Galen's point of view, that is, his way of dealing with medicine and philosophy. Namely, Galen does not start from purely theoretical scientific issues to which he has only a methodological and technical relation. Likewise, he does not treat problems he deals with coldly and from a distance. Each and every problem is for him very concrete and therefore connected to a specific debate with a contemporary, or with certain schools in the history of medicine. He does not approach a scientific issue in an abstract manner, as though it were something vague and remote, but treats it like his own patients something that is here and now.

Nevertheless, let us go back to Galen's understanding of human nature. As opposed to, for instance, the Christian God, nature, as understood by Galen, is not omnipotent. It is enough for the Christian God just to order something, and it will happen at once. He creates immediately. Nature, on the other hand, needs to act according to the common laws of cause and consequence, and in doing so, has to use only the available materials. For example, it cannot create a living bird or a cow out of paper or rock.⁹ To create living things, it must use specific elements that already possess a certain kind of corporeality, since it is not capable of creating

⁸ P. Brain, *Galen on Bloodletting* (Cambridge: Cambridge University Press, 2009), 3.

⁹ *Claudii Galeni Opera Omnia*, Editionem curavit C.G.Kühn, 20 B (Hildesheim: Olms, 1964) III, 906.

something out of nothing. For that reason, although “intelligent,” it is also intelligible, fathomable, thus rendering science itself possible.

Within such a context of understanding nature, Galen distinguishes the crucial medical terms, health and illness. This means that both of these concepts are understood “naturally.” Illness is a kind of unnatural bodily condition which impairs a certain function, or completely disables it. On the other hand, health is a condition where an organism is in accordance with nature, which is hence the cause of the bodily functions working properly.¹⁰ Therefore, nature is purposeful and driven to the maintenance of well-being of living creatures. It does everything in its power, for instance, to restore an organism which fell into an unnatural condition, i.e. illness, to the condition of rapport with it. This pertains to a famous concept “*vis medicatrix naturae*” (the healing power of nature), one of the greatest spokesmen for which is Galen himself. Out of it springs the purpose of the doctor’s position as well. Namely, his role is to cooperate with nature. When a patient suffers from a certain illness, nature struggles to overcome pathogenic agents, and if it succeeds in it by itself, no doctor is needed whatsoever.¹¹ However, should it not manage to win the struggle unaided, he is obliged to make haste and enable it to achieve what it would otherwise do on its own, if it could. Accordingly, the doctor must preserve that which is in accordance with nature, and eliminate that which is not. Galen deeply believes that the same perspective was also held by Hippocrates.

The difference between Galen and the Materialists thus pertains to the way they understand the question of causality in biology. The essential cause for Galen is what we commonly call the final or purposeful cause a purpose or an aim due to which a specific thing happens. Conversely, the Materialists renounce the final cause as an implausible one, inasmuch as they do not perceive nature as purposeful. In relation to this, Galen gives us an example of the final cause referring to a man who goes to the market. If somebody asked him why he went, he would definitely reply at once that it is because he has two legs which enable his body to move on the ground. It is indisputably one of the causes of

¹⁰ Claudii Galeni Opera Omnia, Editionem curavit C.G.Kühn, 20 B (Hildesheim: Olms, 1964) VI, 837.

¹¹ Claudii Galeni Opera Omnia, Editionem curavit C.G.Kühn, 20 B (Hildesheim: Olms, 1964) VII, 194-196.

his actions, the so-called instrumental cause, but a more important one, which includes the concept of purposefulness, is in fact the final cause. In this case it is the intention of the man to buy something in the market, or possibly to meet with his friends.¹² Galen ascribes the final cause to nature itself, due to it being, according to his view, an intelligent and purposeful agent. It does everything with a particular purpose, and hence arranges everything in the best possible way. Similarly to Aristotle, Galen also claims that nature does absolutely nothing in vain.

Purposeful nature in bodies acts with the aid of certain faculties or powers (*dinamis*) that it possesses in itself. The primary activities of nature are: birth, growth, and nutrition.¹³ Birth pertains to organism formation out of embryo. With the aid of semen, the menstrual blood of the mother, withheld in the body during pregnancy, is transformed into a placenta and organs of a new organism. Thus we can say that nature is cleverer than a craftsman, because the sculptor Phidias, for instance, cannot transform wax into gold or iron. Semen, likewise, has a certain feature which enables it to draw blood to itself, and yet another faculty by which the blood is either shaped or dissolved.¹⁴ The faculty of growth works in those parts of the organism which have come into being, increasing their volume and shape. The faculty of nutrition turns food and drink that the body takes into parts of the organism, aided by blood as a mediator, whose primary function is in fact to deliver the food to specific body parts. Blood is transformed into body tissue, more or less straightforwardly, depending on the similarity of the latter to the former. Turning blood into flesh is, compared to some other transformations, relatively simple. However, turning blood into bones is, incidentally, a much more complicated and longer process. Food also differs in how suitable it is for transforming into a useful kind of blood, blood that would reach its goal, the feeding of the organism. Flesh, for instance, can almost completely be turned into useful blood, with the exception of a tiny leftover (*perittoma*), which is inadequate for transformation. There is such food that man is incapable of transforming into anything else. Galen, for example, considers

¹² Claudii Galeni Opera Omnia, Editionem curavit C.G.Kühn, 20 B (Hildesheim: Olms, 1964) III, 464.

¹³ Claudii Galeni Opera Omnia, Editionem curavit C.G.Kühn, 20 B (Hildesheim: Olms, 1964) II, 10-11.

¹⁴ Ibid., 82-86.

that, in the case of humans, it is grass. It is transformed into useless sediment, whereas vegetables, for example radishes, have a small useful component, but leave behind a huge sediment. To release itself from such a sediment, nature uses the faculty of disposing of the surplus of it. It hence takes what it needs from the food through the faculty of attraction and disposes of the rest. Since it does not act solely as a craftsman, but as someone who makes sure that the organism is provided with everything it requires as well, it takes only what is suitable.¹⁵

In this review of Galen's understanding of nature, the following ought to be emphasized as well. Namely, according to the results he obtained, nature rules the body from three centers, or, borrowing the term Plato coined, "three parts of the soul": liver, heart, and brain, which act through veins, arteries, and the nervous system. Referring to Hippocrates, Galen considers him right in the claim that the center of all faculties is in the brain, i.e. soul, as it is commonly known that Plato used to say as well. P. de Lecy offers a thorough report on this view, as well as on other opposing theories from the antiquity, for instance, Aristotelian, according to which the center of human organism is in fact in the heart.¹⁶ The question of where the center of all our faculties resides was one of the major apples of discord in ancient medicine. What can clearly be seen, based on Lecy's analysis, is that the sticking points of various theories in medicine in fact followed the already established discords in philosophy, especially in relation to Plato's theory of ideas and Aristotle's study of *ousia*.

The faculty of nutrition, also referred to as an appetitive one by Galen, takes its origin from the liver, where veins also originate from, and where blood is created out of the material coming from the intestines. What should be emphasized here is only that in Galen's perspective of how the organism works there was no room for circulation. Namely, as he sees it, blood flow in both veins and arteries occurs from the center outwards slowly, in the veins with the aim of feeding the body, being replaced in the center after it has been "spent" in the periphery.¹⁷ This faculty is also in charge of the sense of enjoyment. However,

¹⁵ Ibid., 46.

¹⁶ P. de Lecy, *On the doctrines of Hippocrates and Plato* (München: Akademie Verlag, 1980), 65ff.

¹⁷ Claudii Galeni Opera Omnia, Editionem curavit C.G.Kühn, 20 B (Hildesheim: Olms, 1964) X, 635.

much nobler a power is distributed through arteries from its source in the heart. It is a spiritual or vital faculty, whose function is to equip the soul with a *tonus* (*humor*), to be unswerving in carrying out the orders coming from reason, and what is more, in the moments of wrath, to provide a “boiling” within the heart in its left chamber, to be more specific. Moreover, this faculty distributes the heat and growth to body parts, and provides arteries with pulsation. The condition of this faculty can be observed by measuring the pulse, which clearly indicates the current strength of this faculty. Thus the noblest of faculties is in fact a logical one, with its center in the brain, transferring through the nerves an element known as the psychic pneuma, formed in the chambers of the brain. It brings sensory and voluntary movements to all the body parts and simultaneously brings forth imagination, memory, knowledge, and contemplation.¹⁸ According to Plato’s view, disagreed with by Hippocrates, this was the only immortal part of the soul. Galen, though full of respect for Plato, was uncertain about the immortality of any part of the soul, thus regarding it more as an issue for theoretical philosophy than for medicine.¹⁹

Nature creates everything out of the four elements (earth, water, air, and fire), connected to four Aristotle’s qualities (hot, cold, wet, and dry). Fire is hot and dry, air hot and wet, water cold and wet, whereas earth is cold and dry. In celestial phenomena there is a fifth element, ether. It is more divine than the materials found in the sublunary sphere, where all living beings reside. However, it also dwells in certain amount in the innate heat produced by the heart, as well as in semen, which has the power of creating life in the same manner as the sun creates the heat. These four qualities are of utmost importance for Galen’s understanding of nature. Namely, they are united in the bodies of all animals whose bloodstream consists of four body fluids, which can therefore be taken as the key elements of living beings. Those are: yellow bile (hot and dry), blood (hot and wet), phlegm (cold and wet), and black bile (cold and dry). The first three are true components of the body, whilst black bile is a fictitious substance devised in order to make all the body fluids complete. As it is commonly known, Galen borrowed this system of four body fluids from Hippocratic school, and developed it further. Despite the impact this

¹⁸ Claudii Galeni Opera Omnia, Editionem curavit C.G.Kühn, 20 B (Hildesheim: Olms, 1964) V, 600.

¹⁹ Ibid., 791-794.

school had on the subsequent development of medicine, it is one of the most problematic, most contradictory parts of his scientific system.

Based on everything aforementioned, we can say that the first essential principle of Galen's teaching is the one of the purposeful nature acting like a craftsman, creating and regulating the work of living beings. The second one is the principle of balance. Four qualities and four body fluids, though tightly linked, have in fact quite distinctive features. Yellow bile and blood contain warmth/heat, whereas phlegm and black bile are cold. On the other hand, blood and phlegm are wet, while yellow and black bile are dry. The idea of balance seems to derive from Alcmaeon of Croton, who claimed that health is in fact characterized by an equal balance of its opposite, whereas illness is marked with the predominance (*monarchia*) of one of these elements. This balance of body fluids affects both body and spirit equally. However, the well-known theory of the four temperament types, or four humors (sanguine, choleric, phlegmatic, and melancholic), derived from four types of body fluids, did not originate from Galen's teaching, but appeared later. On the foundations of these insights about four body fluids and the principle of balance, a whole system of treatment, perceived by Galen as a Hippocratic one, came into being, according to which opposites in fact have a mutual function as the key medicaments for treatment. If, for instance, a patient is hot and feverish, he is treated by coldness. Conversely, if too dry, he must be treated with moistening, etc. In that respect, Galen sees health as a harmonious balance among the four qualities, i.e. four body fluids within the organism.

However, it is here, at the key point of Galen's teaching where he defines health itself, that we come across one of the major problems of his system. Two types of bile and phlegm are pathological body fluids in the sense that Galen had a difficulty deciding what their purpose is, besides maintaining balance within the organism. Yellow bile, for example, is pathologically hot and dry, and if there is too much of it in the body, it will cause high temperature. If health consists of a perfect mixture (*crasis*) of four qualities as well as the same amount of body fluids, while illness means the imbalance (*dyscrasia*) of four qualities and body fluids, then each one of body fluids is a potential cause of imbalance. Taken independently, they could be a source of imbalance, i.e. illness. However, it is here that we encounter a problem. Galen claims so for two types of bile and phlegm, but he is unable to admit that blood can

also be a cause of imbalance. Namely, he compares four body fluids with four seasons of the year. Blood, in that metaphor, corresponds to spring a season characterized by growth and development of the body. According to his view, as opposed to other seasons, spring is in itself harmonious, and balanced. It is neither too hot nor too cold, neither too wet nor too dry. It is, therefore, moderate in every respect.²⁰ Analogously, Galen ascribes the same qualities to blood. The entire nutrition of the organism is directly dependent on blood. If the malfunctioning of an organ leads to a production of blood which is in itself imbalanced and therefore a potential cause of imbalance, it finally results in illness. Hence the problem Galen's scientific system confronts is the following: how can it be that such a well-balanced body fluid can form a harmonious scheme together with three fluids which are a potential source of imbalance? To this Galen does not offer an answer.

Notwithstanding the fact that Galen gives almost equal attention to all the qualities as equally important opposites, heat seems somehow the most significant one for him. According to his view, there are two kinds of heat: a common heat that leads to things burning, and the innate heat of living beings themselves, which enables things to grow and hence is a cause of birth. The latter kind is in Galen's writings frequently identified with nature. The moment that this kind of heat leaves the body is the moment that the living being ceases to be alive. Inasmuch as this kind of heat is transferred to all body parts via arterial circulation, it is, likewise, often identified with blood. As its very name suggests, the innate heat does not come from outside, but reaches the embryo from the semen, which contains the heat in itself. The breathing function is directly linked to the intensity of innate heat, whose center is in the left antechamber of the heart. Breath comes directly from the oxygen mixed with the arterial blood in the left heart chamber, and via it, gets distributed further. The innate heat is the most conspicuous upon the birth itself, and since its source is in the blood, children have more blood than adults, in a manner of speaking. With growing up and getting old, the amount of blood and the heat are decreased, so that especially the limbs of very old people are usually colder. The most thorough account of place and significance of Galen's understanding of the innate heat, and its connection with the

²⁰ Claudii Galeni Opera Omnia, Editionem curavit C.G.Kühn, 20 B (Hildesheim: Olms, 1964) I, 524-534.

heart, can be found in Furley and Wilkie.²¹ Even though it may seem nowadays that these kinds of analyses of Galen's meticulous considerations about the specific human organs and their functions do not make much sense, inasmuch as the aforementioned insights have been overcome by modern and contemporary discoveries in medicine, they in fact help us grasp Galen's understanding of the human organism in its entirety, and finally, his complete understanding of human nature.

Excessive heat in the body commonly causes high temperature, which may come in several types. In Galen's view, all types of high temperature are pathological imbalances of heat. For instance, he would not have agreed with the modern idea that high temperature is a kind of adaptation, i.e. a sign of body's struggle against the illness. It comes to high temperature when the heat increases to such an extent that it disturbs certain functions of the organism and debilitates a normal functioning of the body. There are several reasons why the body heats up and becomes hotter. Galen distinguishes several types of temperature. Short-term temperature appears due to a momentary overheating of the body. The doctor's task is simply to reduce the temperature and eliminate the cause of overheating. Temperature due to an inflammatory process is more complex and hence it might be necessary to eliminate the cause of the inflammation itself. Bloodletting is one of the recommendations that Galen offers in this case. A major role in decreasing the temperature is also played by body's release of excess materials, i.e. its discharge, which was considered unusually important in the ancient medicine.

Even though Galen's system of pathology may seem too complex, it is basically very simple. All medical illnesses arise due to imbalance of this or that kind. All that a doctor has to do in that case is re-establish the disturbed balance of four body fluids within the organism. His task is not an easy one inasmuch as all patients differ in the natural state they are in. Some are naturally cold, whereas others are hot, etc. Thus, throughout the treatment of a patient, it is of utmost importance to take into consideration the natural state he is in, that is, his personal humor. In that respect, each patient must be approached individually, regarding both his natural humor and physical condition, and his lifestyle in the present, as well as in the past. As opposed to, for instance, the Methodist

²¹ D.J. Furley, and J.S. Wilkie, *Galen on Respiration and the Arteries* (Princeton: Princeton University Press 1984), 10.

school which held that during the treatment of every person we must adhere to one and the same principle applicable to all, Galen's approach to treatment was an individualist one.

However, we want to emphasize some concrete issues of Galen's scientific system here as well. First and foremost, namely, this is not a story of a coherent system in the understanding of human nature, health, and illness. As we have seen, there are many contradictions in Galen's teachings, which have remained unresolved. Many of his contemplations and attitudes have become obsolete nowadays, and, viewed from the contemporary stage of the development in medicine and science, they look naïve. However, what is particularly worth emphasizing in Galen's teaching is his tendency to regard human nature as very indented, complex, and altogether concrete, in the context of health maintenance and treatment of illness, as opposed to viewing it through the prism of some "great" philosophical theory, as, for instance, was done by Plato or Aristotle. Dealing with the issues of health and illness, Galen has before him a flesh-and-blood person who is to be examined, observed, analyzed, and then, based on all those insights, he makes his own conclusions about the nature of health and illness, i.e. about the essence of human nature. In accordance with some contemporary trends in philosophy and ethics, in deliberation of human nature and the problems of health and illness, he takes into consideration the elements from man's environment as well (air, water, earth, etc.), which makes him quite contemporary. It is a complex approach to the issue of human health and illness such as this one that enables Galen to look upon human nature itself in a more acute and comprehensive manner. In this way he establishes a base for better understanding of the link existing between research into human health and illness, and the very nature of mankind, that is, the essence of what humanity really is. In that respect, it seems Galen is really becoming quite contemporary. His approach to the study of these issues fits very well into what H. T. Engelhardt and F. Jotterand emphasize in their preface to the Pellegrino's famous book, *The Philosophy of Medicine Reborn*. Namely, basing their explanation of a new approach to the issues in philosophy of medicine on Pellegrino's clues, they in fact argue that a "new-born philosophy of medicine" today must necessarily be developed on the basis of a different approach to the relation between eminently medical problems, and a thorough questioning of the essence of humanity, or, in Galen's words, the essence of human na-

ture.²² In other words, Galen's insight into the significance of understanding of human nature prior to further dealing with concrete issues in medical practice is in accordance with the contemporary streams in the development of the philosophy of medicine.

What we found particularly significant in Galen's view on human nature is a lack of the "big ideas" and strong theoretical approach, which burdened for instance Plato and the members of Methodists school. Galen realized the whole complexity and relativity of human health and first of all he comprehended its dependence on many agents: four qualities and four fluids, air, water, earth, etc. That's why the treatment of the patient has to be individual. Theory cannot cure. It is only the physician who cures on the basis of some theoretical ideas, but firstly on the basis of his experience. However, the physician does not cure the illness, but the living man who is ill. Given the noted relativity and complexity of human health, it is easier now to understand why it was so difficult for Galen to talk about immortality concerning human nature. If somebody is so dependent on so many agents and if her/his health is always on the edge between balance and imbalance, it is difficult to advocate the perception of human nature as something solid and steady. Supported by the physician here and there, nature is continuously balancing between balance and imbalance, which means, between health and illness. Since the physician always cures the particular living human, medicine has to have "human face." This is the most important lesson we should today learn from Galen, and we could not learn it from Plato or members of Methodist school. Galen's idea that throughout the treatment of a patient, it is of utmost importance to take into consideration his personal humor, physical condition, and his lifestyle in the present and in the past, has to be today a main marker for the further development of medicine.

²² E.D. Pellegrino, *The Philosophy of Medicine Reborn* (Notre Dame: Notre Dame Press, 2008), 4ff.