

GREEK MEDICINE

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EVERY profession has an exemplar: in English literature alone, Chaucer, Spenser, Shakespeare, Milton; in philosophy, Locke and Hume; in the wider world of religion, the Hebrew prophets, the Lawgiver, the Perfect One; and in medicine, Hippocrates the Father.

For the modern expression of every art and all science we must consult the Greeks. There we shall find the accessible source of beauty, knowledge, wisdom, science, philosophy, and practical ethics. For religion we must go elsewhere, although the form of the dominant religion of the world is cast in a Greek mould. The text of the Gospels upon which we rely was written in that language by Greeks immediately for themselves; and the Epistles, although addressed to a larger audience, were also written in Greek.

These sources were soon defiled; their purity lasted scarce a hundred years. This failure is the world's tragedy. Whilst the Greeks dwelt in the realms of beauty in art and poetry they were supreme. When they abandoned those heights they became sophists in philosophy, imitators in art, quibblers in science. Maurice Hutton on the authority of his tutor affirmed that there is no nonsense one cannot find in Plato. Aristotle is full of assumptions drawn from false premises. Even Socrates became a dialectician in parts, as tiresome to us as to his fellow-men. But Hippocrates remains our spiritual father in medicine. In the scientific sphere his method still prevails: we are yet governed by his ethical precepts.

There is no profession more exposed to the temptation to forget personal honour, intimate humanity, and essential kindness; none in which advantage of human suffering may be so easily taken; and yet there is none in which this tempta-

tion has been so completely withstood. In this medical etiquette, so lightly derided by the public, lies the assurance and safety of the patient. When well observed, it stands between him and exploitation by the selfish, the ignorant, the charlatan. It is not a code for the enrichment and solidarity of a closed profession; rather, it gives to the patient for his alleviation the chief part in the tragedy of suffering.

This foundation was laid in Greek medicine. For twenty-five hundred years it has been embodied in the Hippocratic Oath exacted in old time from every graduate by all universities, and yet by some. In the common Latin form it runs:

Sponsio Academica: In Facultate Medicinæ Universitatis: Ego, A—— B——, Doctoratus in Arte Medica titulo jam donandus, Sancto coram Deo cordium scrutatore, spondeo:— me in omnibus grati animi officiis erga hanc Universitatem ad extremum vitæ halitum persevaturum; tum porro artem medicam caute, caste et probe exercitaturum et quoad in me est, omnia ad ægrotorum corporum salutem conducentia cum fide procuraturum; quæ denique inter medendum, visa vel audita silere conveniat, non sine gravi causa vulgaturum. Ita præsens mihi spondenti adsit Numen.

In translation the Oath reads: I, about to be awarded the degree of Doctor of Medicine, before God the searcher of hearts do swear, that in all good offices of a grateful mind towards this University I shall persevere until the very end of my life; that I will practise the art of medicine with skill, with care and probity; that as far as in me lies I will with fidelity employ every means for the cure of the sick; and finally that of anything which I may hear or see during this ministration I shall remain silent, and will not without grave cause disclose, so may God help me.

This Hippocratic Oath in descent through antiquity assumed various forms according as it was administered in Pagan, Indian, Arabic, or Christian schools; but the spirit

remained unaltered. In the course of time certain elements have dropped out; and many of us may deplore the obsolescence of the Greek obligation: To regard my teacher as the equal of my parents, to make him partner in my livelihood; and when he is in need of money to share mine with him: to consider his offspring equal to my brothers, and teach them the Art without fee or indenture.

Without this obligation of professional confidence, the practice of medicine would be impossible. This secrecy is embedded in the legislation of every country, in none more firmly than in Quebec. Following the old French jurisprudence, the Court of Appeal in 1879 condemned a physician to pay damages to a patient because he had mentioned in a legal claim the nature of the illness from which the man suffered. In 1865 the Superior Court held that professional secrecy could only be violated by a physician when he was being examined as a witness in Court. But in 1907 an amendment was enacted providing that a physician cannot in any circumstances be compelled to disclose what has been revealed to him confidentially in his professional capacity. This provision has been repeated in the Quebec Medical Act now in force. (Revised Statutes, 1925, Cap. 213, Sec. 60). That is the law.

The question arose again in 1934. An Insurance Company summoned a physician to show that prior to the issue of a policy he had attended the applicant for a grave disease, and this fact the deceased had failed to disclose. The physician refused to testify, and he was upheld by the Court, although the deceased had "expressly renounced all dispositions of law which prevent a doctor from revealing what was learned". The Judge went so far as to declare that even if the doctor were willing to testify, supported by the renunciation of the deceased, he would not permit him to give evidence. But on the 28th of November, 1935, the case came before the Court of

Appeal, when the Hippocratic Oath and consequent legislation was carefully examined. The case was referred back for re-hearing, on the ground that "the interests of justice must take precedence over provisions of the Medical Act". And a decision of the House of Lords, "that the law concedes no privilege to medical men when appearing as witnesses", was cited in support. The problem is not yet solved.

It must be a matter of wonder that the precepts of this old Greek physician should yet be considered in a court of law, that to Aristotle he should have been "the great", to Galen, "the divine", to us, "the Father of Medicine". It is equally a matter of wonder that his coeval companions were in war Themistocles and Alcibiades; in literature Aeschylus, Sophocles, Euripides; and one may surmise the writer of the book of Job; in politics, Pericles; in sculpture, Pheidias. Tides appear in the spirit of man. If we can rely upon the record of history, they come to the spring at intervals of five hundred years. Another such tide is due five hundred years hence.

The causality of the tide that cast up these portents in Medicine and in the other arts of life is a matter of deeper wonder. The Greeks, to call them by the modern name assigned to them by Aristotle, although they were known to themselves as Hellenes and their country as Hellas, were a creative people, which is not saying much. They were an original people; they invented and transformed into their own image all that they borrowed. They were a product of geography. A railway journey of twelve hours from Athens to Salonica along the back-bone of Greece will disclose a series of loculi, cells, or valleys walled in by mountains, and in front always the sea studded with islands. It is a miniature of Europe in climate, vegetation, and scenery. At least, that is what Strabo thought. This scenery was varied yet graceful, bold yet delicate and well ordered; and these qualities appear to have entered into the Greek mind.

Into these fertile valleys came groups from a cognate race. Defended by the mountains, and yet with access to the sea, they remained as isolated communities where they developed individual character, a patriotism to the place, and political independence. This variety of life and livelihood in turn was a stimulus to mental quickness, vigour, and versatility. Internal pressure caused a swarming of these little hives, and they came together in Attica under the further influence of a common language and a corporate religion, based upon the Heaven-father conception which they had brought with them from Asia: his temple in the sky, his shrine on the mountain top. Their gods were not dumb idols, having eyes but seeing not, ears without hearing. This also was the boast of the Hebrews.

At this moment the Greeks were about to emerge into economic prosperity. One may be unable to follow the sequence of Albert Einstein's mathematical symbols and yet understand his words: "Culture is a delicate plant, and is wont to flourish only in a few places at any given time. For it to blossom there is needed a certain degree of prosperity which enables a fraction of the population to work at things not necessary to the maintenance of life; and a moral tradition of respect for cultural values in virtue of which this class is provided with the means of living by those who provide for them the immediate necessities of life." This is a hard saying for believers in democracy; and yet in the Attica of which we are speaking there were four slaves to every free man, and in Corinth nine.

In our own time professors likewise still live handsomely upon the universities endowed under an economic system which many of them affect to deride, as Karl Marx lived upon Engels, and he in turn upon the proletariat of Manchester. The free citizens in Attica never numbered more than twenty thousand; but they were capable of forming an educated

opinion, free, intelligent and sincere, of every work of art. The artist wrought and the dramatist wrote for them with a fresh and living inspiration. They were the critics; without a general criticism there is no art.

These general causes of a renaissance, geography and economics, are not quite convincing. They do not explain the sudden eruption of individual genius in unexpected places. They do not explain Sibelius in Finland, Audrey Brown in Nanaimo, Marjorie Pickthall or Edward Pratt in Toronto, Alphonse Jongers, Tait McKenzie, and Stephen Leacock in Montreal, or George Herbert Clarke in Kingston. It may well be that these persons leap into a new orbit like an element of the atom for some reason that yet eludes us. If there were a few more of these, the world might then begin to speak of the Canadian renaissance. Without Pasteur and Lister, if they had never been born, where would modern medicine be?

This period of Hellenic ascendancy lasted only eighty years, but in it is contained all modern political history for our instruction. For an isolated Greek community the democracy like that of the New England town meeting would do very well. In a larger and more complex world it soon made way for the politician, the demagogue, the oligarchs, the tyrant, and finally for anarchy and Roman domination. They had consciousness; they lacked the conscientiousness of the Hebrews, or the character of the Romans. Those who have the leisure may trace to the origin this and other remembered phrases. They achieved freedom for some individuals, not for the State. They were without a larger patriotism. They were "politically incompetent", as Bertrand Russell says. The physicist has now the ear of the world; and if we go to Einstein for our philosophy, and to Eddington for evangelistic meditation, we may go to Russell for ancient politics. The Greeks, he tells us, had fascism, nationalism, communism, militarism, things he abhors; and they had, besides, bosses, corrupt poli-

ticians, pugnacious vulgarity, and religious persecution. Even Plato recommended a form of religion in which he himself did not believe, and urged that heretics be destroyed. From other and more original sources we learn that they were careless in making allies and false to them when made. They took bribes from the Persians; it was one of their own who betrayed the pass of Thermopylae, and at Salamis Themistocles notified the Persians to attack a part of his fleet before it was ready to desert. Finally, they perished at Syracuse at the hands of their own offspring.

Let us now return to the heights after this descent into the sordid, although in the process we may have discerned a warning against democracy unrestrained, against the casual search for allies who at some future time will demand full payment, against the eternal conflict between conservative and radical. Between the two stood the moderate Pericles who strove to educate the people in politics, in constitutional freedom, in art and manners, to rule worthily the Empire they had won; but he left no successor to complete his design; his was the fate of all dictators, no matter how well meaning. Sophocles erected a lofty ideal combining the old religious tradition with the new ethic, but it went unheeded. Aristides the recalcitrant was banished; Themistocles his opponent in turn met a similar fate; and Socrates was put to death by the old party which could not see that his way of thought alone led safely from the old to the new.

At the best the Greek spirit was precious and personal; it emancipated those who possessed it, and set them apart from the rest of humanity. Civic freedom left the artist free; he was bold enough to represent objects as he saw them. Tradition was exposed to a relentless criticism; even the Logos, which merely meant "the thing said", was set in a new light. The inner truth to nature and faithfulness in revealing it was not confined to artists alone; it pervaded all their

science; it extended to medicine, and a new medicine arose parallel with the new literature and the new art. Men old in years kept alive their sense of beauty by contemplating young, beautiful men and women; they retained their mental alacrity by consorting with those alert and youthful minds. In effect a choice body of gifted women devoted themselves to this æsthetic and intellectual purpose which gave to them the assurance of a career considered useful and honourable even by women who did not possess those gifts. The permanence of youth in old age was the secret of their success and of their failure too. "You Greeks will always be children," one of their own has said: "Ἕλληνες ἀεὶ Παιῖδες.

The name of Hippocrates stands with the other great ones, although a licensing body to-day would not grant him a license to practise; his preliminary education was so deplorable that he would not be admitted to the first year in any medical school; it is doubtful if he could qualify as a freshman in a faculty of Arts; he could not pass the examination in Greek, as he wrote only with capital letters; the small letters were not developed until thirteen hundred years after his death; he would be confused by the accents upon words, which were only placed to assist men who were forgetting how the language was spoken. For a similar reason Isaiah could not pass in Hebrew; he would not understand the modern points that indicate the vowels.

Hippocrates knew nothing of anatomy. The Greeks did not dissect; they venerated the human body too highly to submit it to that desecration. The practice began in Alexandria under the influence of the Egyptian priesthood to which the dead body had become familiar in the process of embalming. Like the modern "morticians", they made much of their art, and pretended to use rare spices whilst in reality the preventive was common salt; the embalmer was known as the salter, and his mortuary as the salting-place. It was the

practice of the Greeks once a year to remove the bones of soldiers from the place where they fell and bury them with appropriate pomp in the Acropolis. That was the occasion for the great funeral oration of Pericles, which yet yields material for every funereal orator. A similar practice prevailed in the Crusades; the bones of the fallen were brought home for burial. For sanitary reasons the Bulla, *De Sepultura*, was issued, forbidding the dismembering of the dead for transport; and this in time gave rise to the calumny that the Church had put a ban upon dissection.

Hippocrates knew something of the bony structure of the body by observing those remains; but between arteries, veins, and nerves he could not distinguish; nor did he know anything of their function. To him muscles were merely flesh. But he based his practice upon the existence of a spiritual restoring essence, the *φύσις*, which the Romans described as *Vis medicatrix naturæ*, and we as the healing power of nature. Sixteen hundred years later the English Sydenham rediscovered the principle, and relaid the foundation of modern medicine.

It would lead us too far backward into the abyss of time if we were even to indicate the kind of medicine that prevailed in the world anterior to those Hellenes. It was much the same kind that prevailed in mediæval Europe after Hellenic medicine was forgotten and before the rediscovery at the Renaissance. Medicine had birth with the first appearance of pain, and even animals have their own remedies. In many respects their medicine was better than ours until we abandoned a reliance upon Galen. Their advantage was that they could not read. The Canadian Indians had a better medicine than that which the French colonists brought. Jacques Cartier's company was saved by the Indian knowledge of vitamins, although they did not call their "tree of life" by that name.

It will not do to say that this Hellenic resurgence of science was due to the discovery and substitution of the de-

ductive for the inductive method of reasoning. The antithesis of the two modes is a fiction of the logicians in the attempt to simplify the mental process. Deduction involves induction. The first ape that ever fell from a tree deduced the existence of gravitational attraction; he induced that he should be more careful in future. The deductive process of demonstrating specific fact or truth from general principles or truths, contrasted with the inductive process of inferring general conclusions from particular cases, without the certainty that all similar cases have been observed, was carefully examined by David Hume. He set out with the attempt to prove the superiority of induction over deduction, and ended in a quite contrary position. His combination of acumen and intellect would not permit him to occupy the middle position acquired by the ancient but sensible ape.

These Greeks had intuitions as mathematicians and other poets have. Hippocrates was satisfied that a sick man survived if he were left alone and nature assisted instead of being thwarted. Heraditus surmised that everything flowed *πάντα ῥεῖ*. Every old man who shaves himself with a long knife has observed that the edge is sharpened by being rubbed upon a piece of leather; the steel flows. Modern scientists have "proved" all this, following with laborious steps, as they might follow an exaltation of larks or a gaggle of wild-geese. Even the value of placental hormones, about which so much is being made, has been tested and proved by every parturient animal. Dr. Collip was wise enough to learn from that humble source.

In a review of Henry Osborn Taylor's *Greek Biology and Medicine*, that old friend St. Loe Strachey wrote in the *Spectator*: There is no place in which the Greeks, magnanimous, original, and humane, can better be understood than in the works of Hippocrates. He laid the foundation for the study and for the practice of the healing art; more amazing

still, in an art so inextricably mixed with the passions, errors, and sufferings of mankind, he placed the ideal physician for all time above the temptation to exploit the sick; the sealed pattern of the medical man designed by him is the ideal yet universally acknowledged; he established for all time, that he who would heal the sick must first seek the cause of disease; and that the art must increase by the observation of the needs and diseases of men, not by the acceptance of rigid hypotheses and pedantic assumptions.

Hippocrates was born on the island of Kos in the year 460; he died at Larissa in Thessaly at the age of ninety. Soranus, five hundred years later, is his biographer; he is mentioned by Plato and by Aristophanes. He travelled much and for a time practised in Attica. It was in his native island, Kos, he established his school. He had behind him a tradition; his family came from Epidaurus the centre of the worship of Aesculapius, and he himself was seventeenth in descent from that god of healing. Few persons now visit Kos; it is too isolated, but remains of his temple still exist, and they have been thoroughly explored. Even at that early time there was a rival school on the adjacent promontory of Knidos. The distinction lay in this: the Koans dealt with disease; the Knidians were specialists and dealt with diseases. They had no laboratories; the bedside was their clinic.

The Hippocratic writings consist of eighty-seven treatises, some genuine, some merely notes by students, others essays by disciples, many spurious. They have been subjected to the keenest criticism, and only thirteen are now accepted as genuine; in the remainder the work of nineteen different authors is detected. The collection was made after a hundred years in Alexandria by the Ptolomies, and parts were translated into Arabic, Syriac, and Hebrew. The earliest Greek edition was published by Aldus at Venice in 1526, and the best by Littré in 1861 at Paris. Although the compilation was uncritically

done, the essence of it remains to this day as the highest conception of the medical calling and of medical thought. Of these the *Prognosis* is the best known. It gives a clear description of conditions observed in acute diseases, describing the countenance, the position in bed, movements of the hands, sweats, sleep, and other events, all of which are contrasted with those observed in health. It was of ill omen that there should be "a sharp nose, hollow eyes, collapsed temples; the ears cold, contracted and the lobes turned out, the skin about the forehead rough, distended, parched; the aspect of the whole face green, black, livid, or lead-coloured". This *facies Hippocratica* was observed upon the dying Falstaff; "his nose was as sharp as a pen".

Both the student and the physician are addressed in appropriate terms: Whoever is to acquire a competent knowledge of medicine ought to be possessed of the following advantages: a natural disposition; instruction; a favourable position for the study; early tuition; love of labour; leisure. First of all, a natural talent is required, for when nature opposes everything else is vain; but when nature leads the way to what is most excellent, instruction in the art takes place, which the student must try to appropriate to himself by reflection, becoming an early pupil in a place well adapted for instruction. He must also bring to the task a love of labour and perseverance, so that the instruction taking root may bring forth proper and abundant fruits.

And the physician: Touching his state of mind, he must know how to be silent at the right time, and lead a well ordered life; for this adds much to his good repute. Let his disposition be that of a man of honour, and let him behave to all honourable men in a friendly and easy spirit. Let him wear an expression of sympathy and not show vexation. He who, on the other hand, laughs readily and is at all times merry becomes a burden; but the physician who is also a philosopher approaches the divine.

This high ethical view of the medical profession is the incentive to the most laborious study, to the most accurate observation, the most conscientious treatment. The good of the patient is the final goal of thought and action; "for where love of mankind is, there also is love of the Art". Hippocrates stands at the confines of two epochs, rooted in the remotest part yet providing direction for the future, a shining example of philanthropy and professional rectitude, a seeker after truth with full knowledge that the perfect truth is not yet attainable.

In a word, what Hippocrates the creator of Greek medicine, did, and by doing so is the inspiration of all medicine, was this: He freed it from the domination of caste and superstition; he conceived of it as an art based upon accurate observation; as an integral part of man and nature; he lifted it out of the hands of the unworthy; he inspired it with a lofty moral idea.

