

Language, Literature and the Humanistic Tradition: Necessities in the Education of the Physician

John H. Siegel, M.D.
Deputy Director, Maryland Institute for
the Emergency Medical Services Systems
(MIEMSS)
Director of the MIEMSS Clinical Center
and Professor of Surgery
University of Maryland

Medicine is an art and a science. And, it is ultimately the most humanistic of all of the disciplines, for it seeks to heal the body and the mind of man. The humble roots of medicine are grounded in the classic literature of antiquity and the lofty branches are high in the brilliant atmosphere of science. But, as with many tall trees, when the nourishing source of life is far from the germinating buds, the fruit can be mishapen and unpleasant to taste.

We realize how far we have come away from our roots when we read or know of physicians whose greed for personal gratification or glory has led them to sacrifice the humanism on which their profession is based. We celebrate in our hearts those doctors who show by their conduct that they truly understand the first aphorism of Hippocrates that, "Life is short, and the art long; the occasion fleeting; experience fallacious, and judgment difficult. The physician must not only be prepared to do what is right himself, but also to make the patient, the attendants and the externals cooperate" (from "Writings of Hippocrates," in Ralph H. Major, Classic Descriptions of Disease, With Biographical Sketches of the Authors. Baltimore, MD: C. C. Thomas, 1939, P. 3).

For Hippocrates, observation of the sick person and synthesis of observations into a pattern of the disease process becomes the key to understanding the nature of the affliction besetting the patient. This knowledge also has its pragmatic usefulness to the physician. Since by cultivating the ability to prognosticate, the physician will be esteemed to be

good, "for he will be better able to treat those aright who can be saved, from having anticipated everything; and by seeing and announcing beforehand those who will live and those who will die, he will thus escape censure" (p. 4).

Observation and description of events with a sense of their relationship over time underlie the physician's narration of a clinical history. However, to communicate these patterns to others one must develop the skills of language and learn how to concatenate mere words into metaphors which organize our consciousness of the world around us. Hippocrates described the countenance of the patient in whom death is impending as one having, "a sharp nose, hollow eyes, collapsed temples; the ears cold, contracted, and their lobes turned out; the skin around the forehead being rough, distended, and parched; the color of the whole face being, green, black, livid, or lead colored" (p. 5). This is known the world over as the "Hippocratic facies," and this term in itself has become a universal metaphor for the appearance of the patient in whom certain death is at hand.

I emphasize the value of observation and description of complex life processes, and the ability to use language to extract the essence of this experience in order to communicate it to others as an analog of experience, to make a point. To function well, the physician must act as a parallel processor, a pattern recognition device who tempers observation and action with the qualities of compassion and empathy to fulfil the dual role of scientist and humanist. Unfortunately,

the present approach to the education of the future physician and scientist is failing to develop these qualities essential to communication and humanism. Current premedical and medical teaching deliver education in a format which is too rigorously scientific, in a linear rather than integrative way, and in a way which de-emphasizes the interaction with human experience. As a result, we all too often read physician's notes which are dry, uninformative catalogues of events with the flesh, blood, and emotion wrung out of them. More disturbingly, we hear a patient referred to in a dehumanizing fashion as an anatomic abnormality, "the fractured femur in bed two", or as the living manifestation of a biochemical process gone wrong, "the little glycogen storage disease in the nursery."

While there are many reasons for the humanistic educational failures that we produce as graduates of our colleges and universities, part of the problem may lie in our failure to find ways to compensate for the early-childhood acquisition of a disproportionate amount of information from the two dimensional medium of television rather than the four dimensional medium of life. TV minimizes two-way communication and more important, it is not structured to emphasize the conscious creation of an awareness of the events seen, nor does it impart a realistic sense of time or process. The viewer-student is not forced to create a metaphoric description of what has been seen. As a result, he develops a poor structure of conscious awareness, which may lead to an acting out rather than to an internalization of the process experienced. For

example, we often see in children a mimicking of the perceived acts of violence seen on the screen, rather than an understanding of the pain and suffering incurred by the victims of such violence.

I believe that there is a great deal of evidence to support Julian Jayne's contention, in his book on the bicameral mind, (The Origins of Consciousness in the Breakdown of the Bicameral Mind NY: Houghton Mifflin Co., 1976) that metaphor and analog are the means by which we create a structure to our consciousness that enables us to view the present and the future with a sense of self. Without a sense of self involvement, it is not possible to develop those qualities of empathy and compassion which are the hallmarks of the good doctor, and without a comfortable use of language as a means of structuring our feelings it is not possible to communicate them to others. It is often said that the physician treats the disease, but the doctor treats the patient. We train lots of physicians, but educate few doctors.

The doctor like the writer needs to develop skills in metaphor generation and in the use of language for communication, which accurately describe events and processes in a humanistic manner. Below are two passages presented as examples of the similarity in approach to compassionate description fitting the needs of the doctor and the writer; each passage fits the needs of its author. The first is by Aretaeus, the Cappadocian, a physician of the second century A.D., describing acute suppurative tonsillitis. The second, written by Giovanni Boccaccio, is from

the introduction to the Decameron describing the epidemic of bubonic plague in Florence which occurred in 1348.

Aretaeus by his metaphor of fire or carbuncle, meaning a live coal, conveys the sense of a soul in the torments of a Hell in life, brought to surcease only by death itself, but his description of the disease process is also an accurate and complete narrative of the clinical course.

The manner of death is most piteous; pain sharp and hot as from carbuncle; respiration bad, for their breath smells strongly of putrefaction, as they constantly inhale the same again into their chest; they are in so loathsome a state that they cannot endure the smell of themselves; countenance pale or livid; fever acute, thirst is if from fire, and yet they do not desire drink for fear of the pains it would occasion; for they become sick if it compress the tonsils, or if it return by the nostrils; and if they lie down they rise up again as not being able to endure the recumbent position, and if they rise up, they are forced in their distress to lie down again; they mostly walk about erect, for in their inability to obtain relief they flee from rest, as if wishing to dispel one pain by another. Inspiration large, as desiring cold air for the purpose of refrigeration, but expiration small, for the ulceration, as if produced by burning, is inflamed by the heat of the respiration. Hoarseness, loss of speech supervene; and these symptoms hurry on from bad to worse, until suddenly falling to the ground they expire (The Extant Work of Aretaeus, the Cappadocian. Ed. and Trans. Francis Adams. London: Sydenham Society, 1856, p. 253).

Boccaccio also conveys the inevitability of a horrible spreading death but adds the artist's license of attributing causation to the divine wrath of a just God.

I say, then, that the years (of the era) of the fruitful incarnation of the Son of God had attained to the number of one thousand three hundred and forty-eight,

when into the notable city of Florence, fair over every other of Italy, there came the death dealing pestilence, which, through the operation of the heavenly bodies or of our own iniquitous dealings, being sent down upon mankind for our correction by the just wrath of God, had some years before appeared in the parts of the East and after having bereft these later of an innumerable number of inhabitants, extending without cease from one place to another, and now unhappily spread toward the West. And there against no wisdom availing nor human foresight (whereby the city was purged of many impurities by officers deputed to that end and it was forbidden unto any sick person to enter therein and many were the counsels given for the preservation of health) not yet humble supplications, not once but many times both in ordered processions and on otherwise made unto to God by devout persons—about the coming in of the Spring of the aforesaid year, it began in horrible and miraculous wise to show forth its dolorous effects, yet not as it had done in the East, where, if any bled at the nose, it was a manifest sign of inevitable death! Nay, but in men and women alike there appeared at the beginning of the malady, certain swellings, either on the groin or under the armpits, whereof some waxed of the bigness of a common apple, others like unto an egg, some more and some less, and these the vulgar named plague-boils. From these two parts the aforesaid death-bearing plague-boils proceeded, in brief space, to appear and come indifferently in every part of the body; wherefrom, after awhile, the fashion of the contagion began to change into black or livid blotches, which showed themselves in many (first on the arms and on the thighs) and after spread to every other part of the person, in some large and sparse and in others small and thick-sown, and like as the plague-boils had been first (and yet were) a very certain token of coming death, even so were these for every one to whom they came.

To the cure of these maladies nor counsel of physicians nor virtue of any medicine appeared to avail or profit aught.

Because the writer needs to have a broader view of disease than does the physician,

Boccaccio provides the sense of the historical tragedy occasioned by the outbreak of plague.

Alas, how many great palaces, how many goodly houses, how many noble mansions once full of families, or lords and of ladies, abode empty even to the meanest servant. How many memorable families, how many ample heritages, how many famous fortunes were seen to remain without lawful heir. How many valiant men, how many fair ladies, how many sprightly youths, whom, not others only but Galen, Hippocrates or Esculapius themselves, would have judged most hale, breakfasted in the morning with their kindfolk, comrades and friends and that same night supped with their ancestors in the other world.

In contrast, the physician is constrained by experience and training to choose a metaphoric structure to his descriptive language that develops a structure of consciousness allowing for further investigation from the same group of observations. This language structure also projects the imperative for therapeutic action; if and when the real, not the theologic, cause of the malady becomes known. Consider, for instance the description again by Aretaeus the Cappadocian, of the disease we now know as diabetes mellitus.

Diabetes is a wonderful affection, not very frequent among men, being a melting down of the flesh and limbs into urine. Its cause is of a cold and humid nature, as in dropsy. The course is the common one, namely, the kidneys and bladder; for the patients never stop making water, but the flow is incessant, as if from the opening of aqueducts. The nature of the disease, then, is chronic, and it takes a long period to form; but the patient is short-lived, if the constitution of the disease be completely established; for the melting is rapid, the death speedy. Moreover, life is disgusting and painful; thirst unquenchable; excessive drinking, which, however, is disproportionate to the large quantity of urine, for more urine is

passed; and one cannot stop them either from drinking or making water. Or if for a time they abstain from drinking, their mouth becomes parched and their body dry; the viscera seem as if scorched up; they are affected with nausea, restlessness, and a burning thirst; and at no distant term they expire. Thirst, as if scorched up with fire. But by what method could they be restrained from making water? Or how can shame become more potent than pain? And even if they were to restrain themselves for a short time, they become swelled in the loins, scrotum, and hips, and when they give vent, they discharge the collected urine, and the swellings subside, for the overflow passes to the bladder (The Extant, p. 338).

Written in the second century after Christ, this is indeed a remarkably accurate portrayal of this disease, made even more impressive in the preciseness of its organizing metaphor that diabetes is "...a melting down of the flesh and the limbs into urine." Its accuracy is especially impressive since seventeen hundred years later we have just come to understand that the biochemistry of this disease is a pathophysiologic conversion of muscle protein and body fat stores into excess production of glucose, which cannot be metabolized in the absence of the hormone insulin. The glucose produced by this gluconeogenic process is therefore excreted by the kidney, osmotically carrying with it large quantities of body water as urine. Indeed, it was the discovery in the 18th century by Willis (courageous fellow) that the large quantity of urine described by Aretaeus, "as if from the opening of aqueducts," was sweet "as if imbued with sugar or honey," that opened the modern era of biochemical investigation of disease.

The fascination that both writers and physicians have for each other's thought processes and powers of observation have produced some interesting and some powerful literary works, and I believe that it is more than random chance that so many modern writers have first trained as physicians--A. Conan Doyle, A. J. Cronin, Somerset Maugham, and Chekhov, to name

but a few. What is often forgotten, however, is that the early premedical education of all of these men was in the classic tradition, where language and metaphor structured their consciousness along humanistic lines.

It is also no accident that the most famous detective of fiction, Sherlock Holmes, was modeled after the leading physical diagnostician and surgeon of his day, Mr. Joseph Bell, a teacher of A. Conan Doyle, Holmes' creator. Bell was that sort of man who uniquely combined the scientific and humanistic traditions. He saw individual men and women in the context of their social subcultures, adapting to, or suffering from their disease processes. Nowhere are the physician's powers of observation and deductive logic better synthesized with realistic descriptive writing and a sense of the classic educational tradition than in the Holmes' stories, as shown in this brief excerpt from "The Red-headed League."

The portly client puffed out his chest with an appearance of some little pride and pulled a dirty and wrinkled newspaper from the inside pocket of his greatcoat. As he glanced down the advertisement column, with his head thrust forward and the paper flattened out upon his knee, I took a good look at the man and endeavoured, after the fashion of my companion, to read the indications which might be presented by his dress or appearance.

I did not gain very much, however, by my inspection. Our visitor bore every mark of being an average commonplace British tradesman, obese, pompous, and slow. He wore rather baggy gray shepherd's check trousers, a not over-clean black frock-coat, unbuttoned in the front, and a drab waistcoat with a heavy brassy Albert chain, and a square pierced bit of metal dangling down as an ornament. A frayed top-hat and a faded brown overcoat with a wrinkled velvet collar lay upon a chair beside him. Altogether, look as I would, there was nothing remarkable about the man save his blazing red head, and

the expression of extreme chagrin and discontent upon his features.

Sherlock Holmes' quick eye took in my occupation, and he shook his head with a smile as he noticed my questioning glances. "Beyond the obvious facts that he has at some time done manual labour, that he takes snuff, that he is a Freemason, that he has been in China, and that he has done a considerable amount of writing lately, I can deduce nothing else."

Mr. Jabez Wilson started up in his chair, with his forefinger upon the paper, but his eyes upon my companion.

"How, in the name of good-fortune, did you know all that, Mr. Holmes?" he asked. "How did you know, for example, that I did manual labour? It's as true as gospel, for I began as a ship's carpenter."

"Your hands, my dear sir. Your right hand is quite a size larger than your left. You have worked with it, and the muscles are more developed."

"Well, the snuff, then, and the Freemasonry?"

"I won't insult your intelligence by telling you how I read that, especially as, rather against the strict rules of your order, you use an arc-and-compass breastpin."

"Ah, of course, I forgot that. But the writing?"

"What else can be indicated by that right cuff so very shiny for five inches, and the left one with the smooth patch near the elbow where you rest it upon the desk?"

"Well, but China?"

"The fish that you have tattooed immediately above your right wrist could only have been done in China. I have made a small study of tattoo marks and have even contributed to the literature

of the subject. That trick of staining the fishes' scales of a delicate pink is quite peculiar to China. When, in addition, I see a Chinese coin hanging from your watch-chain, the matter becomes even more simple."

Mr. Jabez Wilson laughed heavily. "Well, I never!" said he. "I thought at first that you had done something clever, but I see that there was nothing in it, after all."

"I began to think, Watson," said Holmes, "that I make a mistake in explaining. "Omne ignotum pro magnifico," you know, and my poor little reputation, such as it is, will suffer shipwreck if I am so candid.

Finally, and most importantly, a sensitive appreciation of humanistic tradition makes it possible to develop a consciousness that permits the physician to feel and to give voice to his own feelings of frustration, anguish, and loss, as a means of learning to empathize with his patients and their families in times of need. Familiarity with the metaphors and images of great literature can sensitize the consciousness to respond anamnesticly and can show that such conduct is not only permissible but virtuous and laudatory. Such a use is well illustrated in the following passage from The Plague, by Camus, in which the doctor, Rieux, distraughtly attends and then mourns the death of his friend, Tarrou.

At noon the fever reached its climax. A visceral cough racked the sick man's body and he now was spitting blood. The ganglia had ceased swelling, but they were still there, like lumps of iron embedded in the joints. Rieux decided that lancing them was impracticable. Now and then, in the intervals between bouts of fever and coughing fits, Tarrou still gazed at his friends. But soon his eyes opened less and less often and the glow that shone out from the ravaged face in the brief moments of recognition grew steadily fainter. The storm, lashing his body into convulsive movement, lit it up with ever rarer flashes, and in the heart

of the tempest he was slowly drifting, derelict. Now Rieux had before him only a masklike face, inert, from which the smile had gone forever. This human form, his friend's, lacerated by the spear-thrusts of the plague, consumed by searing, superhuman fires, buffeted by all the raging winds of heaven, was foundering under his eyes in the dark flood of the pestilence, and he could do nothing to avert the wreck. He could only stand, unavailing, on the shore, empty-handed and sick at heart, unnamed and helpless yet again under the onset of calamity. And thus, when the end came, the tears that blinded Rieux's eyes were tears of impotence; and he did not see Tarrou roll over, face to the wall, and die with a short, hollow groan as if somewhere within him an essential chord had snapped.

The next night was not one of struggle but of silence. In the tranquil death-chamber, beside the dead body now in everyday clothing—here, too, Rieux felt it brooding, that elemental peace which, when he was sitting many nights before on the terrace high above the plague, had followed the brief foray at the gates. Then, already, it had brought to his mind the silence brooding over the beds in which he had let men die. There as here it was the same solemn pause, the lull that follows battle; it was the silence of defeat. But the silence now enveloping his dead friend, so dense, so much akin to the nocturnal silence of the streets and of the town set free at last, made Rieux cruelly aware that this defeat was final, the last disastrous battle that ends a war and makes peace itself an ill beyond all remedy. The doctor could not tell if Tarrou had found peace, now that all was over, but for himself he had a feeling that no peace was possible to him henceforth, any more than there can be an armistice for a mother bereaved of her son or for a man who buries his friend.

The point in this brief essay, is not that some doctors make good writers, nor is it that good narrative writing is a common feature of a good story and of a

classic description of disease. Rather, it is to emphasize that the physician serves his patients and his art best when he functions in the humanist tradition. Training in the skills of observation and description, and in the use of metaphor as a means of structuring a common consciousness are important features of pre-medical and medical education.

Most important, it is through the development of a humanistic consciousness that we can imbue best a sense of the patient as a person (like the doctor believes himself to be) whose psychological and emotional needs must be attended to along with his disease process. The seamless web of persona and physiologica is not derived from the scientific tradition, although modern medical science has reluctantly come around to that view, but is rather a product of our culture and our literary heritage and is embedded in our metaphors of life, growth, reproduction, and death.

To know, to understand, and to teach the lessons of the past are the joint responsibility of both the medical and humanistic faculties of our colleges and

universities. But, in a time when values are in question and there are conflicting winds of opinion, the leaves fall far from the tree. There is need for the re-establishment of the humanistic tradition of western civilization as the core program in primary, secondary and university education. For this program, an emphasis on the relationship between our language and all of our cultural roots would seem to offer a way to create anew the important aspects of a common consciousness on which our American society is based. The true reconciliation between science and humanism can occur only in the mind of each man or woman who is a scientist or physician, not in some ill-defined aspect of the non-conscious society around him or her. The use of language and metaphor to structure and shape that consciousness is too important a task to leave to the teachers of English alone. It must be developed as a clinical tool common to all disciplines, to be handled with the same care and under the same kind of peer review as we believe necessary for those who utilize the scalpel to cure or who administer any dangerous therapeutic medicine.