### DONNE, DISEASE AND DOCTORS

# MEDICAL ALLUSIONS IN THE WORKS OF THE SEVENTEENTH-CENTURY POET AND DIVINE

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#### 1. DONNE AND THE HUMAN BODY

In his poem 'Whispers of Immortality' Mr. T. S. Eliot places John Donne in the same category as the dramatist John Webster as a man who was 'much possessed by death and saw the skull beneath the skin'. Superficially, the pre-occupation with death of both authors suggests a common depressive disposition. Nevertheless, Donne wears his rue with a difference, and the melancholy he exhibits is as characteristic of the seventeenth century as Webster's is of the Elizabethan age. Webster's melancholy perpetually points the contrast between a violent, vivid and lustful life and the inevitable putrefaction and decay of the body in the tomb. Although equally committed by his temperament to an obsession with the fragility of life and the brutal permanence of death, Donne is concerned generally not with the fate of the body after death, but with the slow process of decay leading to death, and to the moment of death itself. Webster we might expect to encounter in the cemetery or charnelhouse, Donne's spiritual home is the sick-room, the hospital and the place of execution. Consider these lines

... those two red seas, which freely ran,
One from the trunk, another from the head,
His soul be sailed to her eternal bed,
His eyes will twinkle and his tongue will roll,
As though he beckoned, and called back his soul.
He grasps his hands, and he pulls up his feet,
And seems to reach, and to step forth to meet
His soul!

The exactitude of this description of what happens immediately the axe falls at an execution suggests the detachment of a physiologist recording the behaviour of a decerebrate animal. Although everything we know about Donne leads us to believe that he was the last man to get a sadistic satisfaction out of the sufferings of others, yet he was obviously not to be found in the ranks of those who turned their heads aside or shut their eyes when the axe fell.

To Donne death is the last, and in that respect, the worst enemy. His answer to the universal difficulty of reconciling the omnipotence of a loving God with His apparent indifference to our suffering, is to regard death as unnatural.

Death, although gluttonous and indiscriminate is, in the end, as mortal as those it kills. Donne seems to succeed to some extent in exorcising his horror of death by despising it, and sickness, which he describes as death's herald and champion, is to Donne no more inevitable than death itself.

Donne exhibits at times a lack of resignation to the bitter facts of life, combined with both the need and the wish to believe in the goodness of God, which are peculiarly modern in quantity. Both his literary reputation and his personal unhappiness largely derive from his situation poised between two incompatible systems of thought, the superstitious traditionalism of medieval scholasticism into which he was born and the scientific revolution of the seventeenth century which began in his declining years. Because of this pivotal position in relation to science, because of his obsession with disease and doctors, and finally through his detached and analytic approach to the mind and the emotions, he has a particular interest both to the historian of medicine, and to the student of abnormal psychology.

It is rare for men of John Donne's temperament to feel completely well after early childhood. Melancholia and hypochondria are closely associated, and the relations of doctor and hypochondriac have never been imbued with much mutual respect. Donne's doctors were amongst the most distinguished physicians of their time, yet when Donne said 'How much do we lack of having remedies for every disease, when as yet we have no names for them' he was doing no more than stating the dilemma in which all the medical men of his time found themselves. Donne cannot have been the easiest of patients. It is extremely difficult to do much for a man who can write:

There is no health. Physicians say that we, At best, enjoy but a neutrality, And can there be worse sickness than to know That we are never well, nor can be so.

The melancholic and hypochondriac views of life can seldom have been more clearly expressed than in these words.

Although Donne knew enough to realize that his physicians were powerless to diagnose, let alone cure any of his numerous illnesses, he had little doubt that, once he was dead, they would know what had been the matter with him:

When I am dead, and the doctors know not why And my friends' curiosity Will have me cut up to survey each part

he writes, and in his poem, 'The will' mockingly bequeaths his collection of medical books, not to his physicians who were to receive only his illnesses but to the fellow-sufferer for whom the bell was next to toll. Small wonder that his physician's 'visits were brief'. He complained that the physician was no sooner in the room than his knife was in the patient's arm. Blood-letting was the standard treatment for melancholia in Donne's day: that and the purgation, of which he so heartly disapproved. Sometimes the doctors sought safety in numbers

and saw the patient in joint consultation. This arrangement Donne, like many other unfortunates who have long enjoyed bad health, characteristically approved.

Where there is room for consultation [he notes] things are not desperate. They consult; so there is nothing rashly, inconsiderately done; and then they prescribe, they write, so there is nothing covertly, disguisedly, unavowedly done.

Yet, true to his temperament, Donne found it necessary to his self-respect to maintain a certain reluctance in divulging his medical history, for after a consultation he says

they have seen me and received the evidence; I have cut up mine Anatomy, dissected myself and they are gone to read upon me.

It is not without significance that Donne so frequently resorts to similes involving the dissection of the body to describe his intellectual processes. Anatomical dissection was resumed at the Renaissance after an interval of more than a thousand years. Medieval knowledge of the man within was based entirely on feeble translations of the Arabic followers of Galen. With the resumption of dissection, the making of anatomies was a focus of general interest. As such it is, as might be expected, frequently referred to by the dramatists; Shakespeare, Jonson, Beaumont and Fletcher and Dekker all refer to the study of anatomy, and the system by which dissection was carried out. One of the major events in the propagation of anatomical knowledge in this country was the foundation in 1581 by Lord Lumley and Dr. Caldwell of a lectureship in Anatomy and Surgery at the Royal College of Physicians of London. This foundation provided for an extensive course of public lectures to be given twice a week throughout the year. The whole course lasted for six years and then a new cycle of lectures commenced. The lectures were given from 10 a.m. to 11 a.m. on Wednesdays and Fridays. For the first three-quarters of an hour, the Lumleian lecturer spoke in Latin and then completed his discourse in English. He was then specifically instructed to

Dissect all the body of man for five days together, as well before as after dinner; if the bodies may last so long without annoy.

Because it was impossible at that time to preserve the body for dissection, the lecturer generally concentrated on one part of the body only at a time, and referred only to the most important parts. The Lumleian lectures attracted many of the most influential and learned men of the seventeenth century, including Pepys, and seem altogether to have been regarded, as were Faraday's lectures at the Royal Institution, as fashionable social and intellectual occasions. In his 'Anatomy of the World' Donne says:

... in cutting up a body that's dead, The body will not last out, to have read On every part, and therefore men direct Their speech to parts, that are of most effect.

There do not seem to be any similar references to the exact manner in which dissection was practised by the Lumleian lecturer in the Elizabethan poets and dramatists, and there is obviously a strong possibility that Donne at some time attended a course of these lectures.

In his approach to the action of the heart and the function of the blood Donne apparently remained a traditionalist and follower of Galen to the end of his days. As late as 1626 he said in a sermon, that

We look upon nature but with Aristotle's spectacles, and upon the body of man but with Galen's.

Certainly from first to last in his writings Donne's physiological system is that of Galen and his followers. In this system, one of the vital tenets is the erroneous belief that blood can pass from one ventricle of the heart to the other through holes in the septum. Donne wrote a poem on the second anniversary of the death of a young girl, Elizabeth Drury, in which he made the statement:

Knowst thou how blood which to the heart doth flow, doth from one ventricle to the other go?

This poem was written in 1612. The first sentence taken by itself might argue knowledge of the circulation of the blood. (Knowst thou how blood which to the heart doth flow.)

There are however many similar statements in Shakespeare's plays, perhaps the most famous being the reference in *Julius Caesar* to 'the ruddy drops that visit (the) . . . heart'. The galenical system allowed a to-and-fro motion but not a circulation of the blood, and it is to this that Donne and Shakespeare are referring. Donne continues by stating quite unequivocally that the blood passes from one ventricle to the other; Harvey's concept of the circulation of the blood demands that no such communication exist. It seems therefore that Donne, like Shakespeare, had no prior knowledge of the discovery that has made Harvey's name so deservedly famous.

Donne was appointed Dean of St. Paul's in 1621 and what he describes somewhat plaintively as 'my poor house at St. Paul's' was closely adjacent to the Old College of Physicians at Amen Corner where Harvey lectured. Moreover, from 1621 onwards, Donne frequently preached before the King at Whitehall, and Harvey, when in attendance upon James the First and his successor must frequently have listened to one of Donne's sermons. If indeed Harvey was present when Donne was preaching at Whitehall on 8 April 1621 he would have heard from the Dean of St. Paul's views as to the circulation of the blood very different from those he was himself formulating.

We know the capacity of the stomach of man, how much it can hold [Donne declaimed], we know the receipt of the receptacles of blood, how much blood the body can have. When I look into the larders, and cellars, and vaults, into the vessels of our body for drink, for blood, for urine, they are pottles and gallons; when I look into the furnaces of our spirits, the ventricles of the heart and of the brain, they are not thimbles; for spiritual things of the next world, we have no room.

According to Donne the ventricles of the heart were not measurable, whilst Harvey was to write on the basis of the experiments he had performed:

Let us assume the quantity of blood which the left ventricle of the heart will contain when distended to be, say two ounces, three ounces or one ounce and a half—in the dead body I have found it to contain upwards of two ounces.

We know that Donne, when seriously ill, was attended by two doctors, Simeon Fox and William Clement, who had close connexions with William Harvey. Fox, who later lived and practised from a house which formed part of the College of Physicians at Amen Corner, had actually been present in the Great Hall at Padua when Harvey took his degree in April 1602. Clement was admitted to the Fellowship of the College of Physicians on the same day as Harvey, 5 June 1607. It seems therefore that Donne was in an excellent position to hear of the new theory of the circulation of the blood and yet, although accustomed to using the most erudite and esoteric medical information in metaphor and parable, he never once referred to the circulation in his writings.

Donne is not, however, the only great writer of his time to be curiously silent on the subject of Harvey's discovery. Shakespeare one would not expect to mention the circulation of the blood, for he died exactly a week after Harvey commenced his first course of Lumleian lectures. Francis Bacon is the only contemporary English writer whom Harvey mentions by name and Harvey was Bacon's personal physician for a time. Yet Bacon never refers to the doctrine of the circulation. Perhaps the reason for the silence upon Harvey's discovery is revealed by John Aubrey who overheard Harvey remark that, after his book on the circulation of the blood came out:

He fell mightily in his practice, for it was believed by the vulgar that he was crack-brained, and all the physicians were against him.

In the dedication of his great book Harvey compares the heart to that King to whose service he was so loyally to devote his life. In giving this primacy to the heart as opposed to the brain, he was following the Galenical tradition his work was to undermine, and unconsciously echoing the words in Donne's 'Devotions', 'The heart is the king and the brain is his council'.

The gout, the stone, the plague, syphilis and lupus were horrors of Donne's day which have either left us entirely, or at least lost most of their power. Consumption, cancer and mental disease remain. On all these subjects Donne has something to say, sometimes something foolish or superstitious, sometimes something merely taken straight out of some medieval encyclopaedia of medical knowledge, but very frequently something remarkably to the point showing powers of observation as well as mere book learning. A few illustrations at random will have to suffice.

Like a bunch of ragged carrots stand The swollen fingers of thy gouty hand.

Although this is a clear and accurate description of the appearance of the gouty extremity it demands no special medical knowledge. If, however, we consider another passage,

Knowst thou but how the stone doth enter in The bladder's care, and never break the skin?

This passage shows that Donne had some knowledge of surgical pathology and must have given some thought to the remarkable fact that a hard stone can lie inside the soft smooth lining of the bladder without breaking through the wall. 'In a fit of the stone', said Donne, 'the patient wonders how any man should call the gout a pain', an observation which is almost worthy of being one of the aphorisms of Hippocrates.

On the causes of the plague, however, Donne was hopelessly at sea. He attributes it to damps and vapours from the earth which meet and produce 'putrid defluxities' which condense to form the plague. In view of the ominous role played by the rat-flea in the Plague of 1665, it is ironical to find Donne dismissing the flea as a creature which 'though he kill none, does all the harm he can'.

Throughout his life Donne was subject to repeated attacks of a low and intermittent fever which, since one of his recorded serious illnesses is known to have been the quinsy, were most probably attacks of infective tonsillitis. During his many illnesses, he had become accustomed to examining his urine, testing his pulse, and estimating with the pessimistic bias of his melancholy nature the eventual outcome. In his last mortal illness when he felt death to be near at hand, he had himself attired in the shroud he was to wear in the grave and sent for the sculptor, Nicholas Stone, to execute a likeness. Ten days later he met, with fortitude and resignation, that last enemy which had been the constant companion of his thoughts on every day of his adult life.

#### 2. THE BRAIN, THE MIND AND THE SOUL

The writings of John Donne repeatedly disclose that his concept of the structure and function of the brain was the traditional Galenical one which, passing from Rome through Alexandria to the Arabian physicians, returned to Europe at the beginning of the Renaissance to dominate medical thought. On this theory all human activities depend on *Pneuma* which was the term used to describe a vital essence belonging to the world spirit, invisible except when it escaped from the body of a sacrificed animal as steam. It is tempting for us to equate pneuma with oxygen, but it had qualities which were not material and 'energy' would perhaps serve as a very rough approximation for what pneuma meant in the ancient and medieval world. According to Galenic tradition an external pneuma was drawn from the general world spirit in respiration and met the blood in the heart. Here it met another sort of pneuma, the natural spirit, which derived from the food and travelled through the liver to the heart. The two spirits combined and travelled up to the brain, where they were elaborated, in blood vessels at the base of the brain, into the animal spirit, or pneuma psychicon, which was the substance responsible for the production of all human activity. This substance passed through three cavities of the brain where it was further refined, and then was transmitted down the nerves just as sunshine passes through water, to produce muscular activity and therefore movement of the

body. During this process of elaboration in the brain, some waste or unwanted matter was naturally produced. The liquid part of this detritus passed through the base of the skull as the *pituita* or phlegm, and was evacuated through the mouth or nose. The gaseous part passed upwards through the spaces between the skull bones, the cranial sutures, to escape into the atmosphere; this is the gaseous element to which Donne refers in his poem 'The Cross' when he says:

As the brain through bony walls doth vent By sutures, which a cross form present.

Galen himself merely described three cavities in the brain, indicating that their function was to secure a triple refinement or purification of the pneuma. The medieval ideas as to the physiology of the brain differed from strict Galenical tradition inasmuch as specific mental functions were attributed to each of the three ventricles. To the ventricle which lies foremost was attributed the powers of imagination or fantasy, to the middle ventricle the powers of cogitation or thought, and the posterior cavity was concerned with memory. The earliest protagonists of this theory that we know of flourished in the sixth to tenth centuries A.D., but how and why mental functions were ascribed to the cavities in this way is an unsolved mystery. On a similar basis medieval psychologists explained the co-ordination of the body by means of the nerves or sinews. Donne frequently refers to this co-ordinating function as when he says:

If the sinewy thread my brain lets fall Through every part, can tie those parts and make me one of all.

Much importance was attached to a balance between the functions of the three cavities of the brain. When Banquo refers to memory as 'the warder of the brain', he does so because, on this contemporary psychological system, action could only be held up in the cavities of the brain, once pneuma passed to the nerves, action was inevitable. When a man got drunk, the last ventricle, that of memory, was knocked out of action, and he was no longer in control of himself. It is to the importance of an adequate balance between the cavities of the brain responsible for imagination, memory and thought that Donne is referring in his poem 'The Dream', when he writes:

When you are gone and Reason gone with you Then Fantasy is Queen and Soul and all.

A single function could be abolished by the action of external agents, as when Donne talks of 'Corruption in our brains, or in our hearts, poisoning the Fantasy whence our actions spring', a statement which also illustrates his belief that action originates in the front of the brain and receives its final modifications in the ventricle of memory behind.

The cavities of the brain contain a fluid which is now termed the cerebrospinal fluid. To the medieval physicians this fluid represented the *pneuma* passing from the front to the back of the brain. If there was plenty of fluid in and around the brain, it was wet, and this was a desirable state, for the *pneuma* 

was then flowing freely and the brain was very active. Shakespeare frequently refers to dry brains; Jaques, for example, in As you like it says the Fool's brain is as dry as 'the remainder of biscuit after a voyage'. When the brain is dry, imagination runs riot, or as Spenser puts it, '(the) drier brain is tossed with troubled sights and fancies weak'. Donne shows that he too believed the wet brain superior to the dry in his curse in the poem 'The Bracelet':

May the next thing thou stoops't to reach, contain Poison, whose nimble feet rot thy moist brain.

The most remarkable feature which the study of Donne's writings reveals to the medical historian is the extraordinarily modern quality of his concept of the body-mind relationship. In order to understand the full significance of this, it is important to understand both the medieval mould into which his thoughts about the brain and the mind were cast and the internal conflict between his deep religious faith and the constitutional melancholy of his temperament.

The feelings of a man suffering from the disease now known as endogenous depression have seldom been better expressed than in this extract from a sermon preached by Donne before the King at Whitehall in 1625:

What had I for heaven? Adam sinned and I suffer; I forfeited before I had any possession or could claim any interest; I had a punishment before I had a being, and God was displeased with me before I was I.

One of the main complaints of the victim of melancholia, that most terrible of all diseases, is of a feeling that the whole of the Universe including the self lacks all significance. This is often accompanied by the related feeling that one is, in Mr. Colin Wilson's sense of the word, an Outsider. Donne expresses this pathetic sense of abandonment perfectly:

Oh, I shall soon despair, when I do see That thou lovest mankind well, yet wilt not choose me.

One of the disadvantages of a melancholy temperament is that its owner will always tend to prefer a pessimistic philosophy of life to an optimistic one; a natural choice since it enables the feelings to equate with the reasoning powers. If Donne had lived three centuries later he might have adopted Housman's attitude of defiance to the Creator, 'Whatever Brute or Braggart made the world' and paid, with Housman, the penalty by feeling 'a stranger and afraid, in a world I never made'. Donne's religious convictions, like his physiology, are those of his time. Never in the depths of his depression does he doubt the existence and essential goodness of God. According to Donne, God's purpose is inscrutable, and all that man can do is to submit himself to His will with the promise of blessings hereafter.

Because Donne found life appalling yet did not doubt that its purpose was a good one, he was able to depart far from the medieval world of superstition in which mental disease was attributed to supernatural influences, to the actions of witches and warlocks, unfortunate conjunctions of the stars, or that of the

possession of the mind by evil spirits. Donne believed that mental health depended on bodily health. This was of course a much more satisfactory theory from his personal point of view than any current during his life-time. 'Mens sana in corpore sano' is a fair approximation to his belief.

In a fair body I do seldom suspect a disproportioned mind [he wrote] and as seldom hope for a good in a deformed.

He did not believe that the body actually made the mind, rather it was responsible for deciding whether the mind had a good or a bad bias. Donne did not distinguish very clearly between the mind and the soul stating that 'if the body oppress itself with melancholy, the soul is sad too'. It is important however to notice the difference, the soul is 'sad' but the mind may be 'bad' under similar circumstances.

If today the ideal of a healthy mind in a healthy body differs significantly from Donne's ideal, it is in the increasing emphasis which is now laid on mental health as an essential to the well-being of the body. Donne revealed a precocious insight into modern psychology when, in a paroxysm of despair of being cured, he wrote:

Nothing works, for there lies at his patient's heart a damp that hinders the concurrence of all his faculties, to the intention of the Physician, or the virtue of the Physic.

Donne was also aware of the way in which disordered emotional states can produce changes which simulate mental or bodily disease. How modern is the tone of this sentence!

As the wind in the body will counterfeit any disease and seem the stone, and seem the gout, so fear will counterfeit any disease of the mind.

The old doctor in Francis Brett Young's novel Dr. Bradley Remembers neatly combined these two statements in his advice to his young successor to remember that

Half the patients who get you up in the middle of the night and think they are dying are suffering from wind.

In his endless self-examinations or Anatomies, Donne frequently discloses his awareness of his melancholy and its endogenous nature. 'I do nothing upon myself,' he says, 'and yet am mine own executioner.' The one discovery about himself that he did not make was the simple one that his melancholy disposition and pessimistic attitude determined the entire structure of his picture of the Universe. Like Tennyson whom he so closely resembles, melancholy clouded his view of life from early manhood onwards. Again like Tennyson, Donne lived at a time of crisis in the history of belief. He was more fortunate than Tennyson in that the existence of the Creator was not in debate in the sixteenth and seventeenth centuries, so that he was able to approach the great intellectual problems of his age with a confidence in his ultimate destiny which was immune to the influence of his melancholy temperament.

Like Shakespeare and Sir Thomas Browne, Donne constantly gives the impression of a man living between two worlds. On the one hand there is the world of superstition, and the pedantic handing down of tradition for its own sake, to which we have seen Donne adhered as far as the physiology of the brain was concerned. On the other is the age of Reason which lay in the not so distant future, an age of whose approach Donne shows himself at times uneasily aware:

Fire and air, water and earth are not the elements of man. Inward decay and external violence, bodily pain and sorrow of heart may be rather styled his elements.

One can see a symbol of the conflict present in the mind of all great Elizabethans, a conflict which raged in the mind of Donne, in a scrap of dialogue between Glendower and Hotspur in *Henry IV*, Part I.

I can call spirits from the vasty deep [claims Glendower]. Why so can I or so can any man [Hotspur rejoins], But will they come when you do call for them?

Donne himself summed up most prophetically the salient features of the intellectual world which lay just beyond the horizon in his lifetime, in a sermon which he preached in St. Paul's Cathedral in 1621, just after his appointment as Dean:

Divers men may walk by the seaside, and the same beam of the sun giving light to them all. One gathereth by the benefit of that light pebbles, or speckled shells for curious vanity, and another gathers precious pearl or medicinal amber, by the same light. So the common light of Reason illumines us all.

In November 1660, after a lecture at Gresham College, some members of the audience stayed behind to discuss a scheme for the foundation of a permanent institution to promote research in physics and mathematics. When this society was eventually formed its members included John Dryden the poet, Robert Boyle, the father of modern chemistry, Pepys the diarist, John Locke, the founder of experimental psychology, and the man who had lectured that day at Gresham College, the architect Christopher Wren. On the day that Donne died, Robert Boyle was a boy of four in Ireland. Later in that year, 1631, Dryden and Wren were born. The next two years witnessed the birth of both Pepys and Locke. The light of the sun of reason was to illumine them all, and they in their turn were to illumine that Royal Society which was destined to be the vehicle by means of which the common light of reason shone into the last remaining recesses of the medieval mind.