

# € €€ "With much nausea, loathing, and foetor": William Harvey, dissection, and dispassion in early modern medicine<sup>9</sup>

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## SUMMARY

In early modern England accumulating knowledge of normal and morbid anatomy through dissecting the human body not only led to a better understanding of nature, but also defined the identity of the people who engaged in this activity. This essay analyses the relationship between systematically dismembering the dead and how this pursuit shaped the attitudes and emotions of early modern medical men toward the living. I focus on the most famous anatomist in early modern Britain - the discoverer of the circulation of the blood, William Harvey (1578-1657). (1).

## RESUME

Durant la periode moderne de l'histoire anglaise, l'accumulation de connaissances sur l'anatomie saine et morbide, grace a la dissection du corps humain, a non seulement permis une meilleure comprehension de la nature mais a egalement contribue a definir l'identite de ceux qui s'impliquaient dans cette activite. Cet essai analyse les relations entre le demembrement systematique des morts et la maniere dont cette pratique a faconne, a l'epoque moderne, les attitudes et les sentiments des hommes de medecine a l'egard du vivant. Dans mon etude, je me suis concentre sur l'atomiste le plus celebre de cette epoque, le decouvreur de la circulation du sang, William Harvey (1578-1657).

## WILLIAM HARVEY, ANATOMIST

As a medical student at the University of Padua, Harvey was exposed to methods of dealing with death, nakedness, and the destruction of the human body in the sanitised milieu of the theatre of anatomy and the chaotic wards of local hospitals. He found the dead body to be both a practical, loathsome, experience and yet a source of enormous theoretical fascination and satisfaction. Harvey would go on to carry out and witness many private dissections, including those of his father and sister. In anatomical lectures to the College of Physicians he matter of factly included the 'huge colon in father' and 'large spleen in my sister 51b.' as case material to illustrate certain medical anomalies. (2).

William Harvey (1578-1657) came from a merchant family in London, attended Gonville and Caius College Cambridge as an undergraduate, and received his MD. from the University of Padua in 1602. Harvey then set up practice in London, becoming a primary physician to Saint Bartholomew's Hospital and a Fellow of the College of Physicians. In 1616 he was appointed to the post of Lumleian Lecturer in Anatomy to the College, and most winters for the next 28 years he held a five-day demonstration dissection of a body. Harvey became physician extraordinary to King James I and physician-in-ordinary to Charles I, until the king's untimely decapitation in 1649. In the Lumleian lectures to the College of Physicians Harvey sought to provide his peers with the anatomical education he had personally acquired at Padua. As was becoming increasingly common in European dissections, Harvey both lectured and dissected simultaneously and occasionally identified

dead patients and their diseases. Among the autopsies Harvey referenced were those performed upon the bodies of his father, sister, and cousin's husband, the Earl of Leicester's daughter, Lord Chichester, and the cadavera of the sick-poor at St. Bartholomew's Hospital. With the President of the College of Physicians, John Argent, Harvey examined the meninges of Argent's daughter, and the heart of Argent's relative, Sir Robert Darcy. This tradition of anatomy in the family and naming his corpses probably represented an increasing familiarity with handling bodies and a desire to advertise the use of anatomy to households and individuals. It perhaps even acted to encourage autopsies as an ordinary and desirable part of medicine.

In *Exercitatio anatomica de motu cordis et sanguinis in animalibus* (1628) William Harvey told his readers that he had reached his conclusions about the circulation of the blood, 'by autopsy on the live and the dead, by reason [and] by experiment.' (3). As is well known, Harvey's observations of the circulation of the blood met with a mixed response at best. He reportedly told the diarist and gossip-hound John Aubrey 'that after his booke of the Circulation of the Blood came-out, that he fell mightily in his practize, and that "twas beleevied by the Vulgar that he was crack-brained; and all the physitians were against his opinion...". (4). However, by 1653 Harvey was being lauded in verse by Commonwealth poet Martin Lluelyn, as the wielder of a knife that had made 'living laboratories of the beasts' for, 'there thy Observing Eye first found the Art /Of all the Wheels and Clock-work of the Heart.' In similar vein in 1656, John Collop declared before the College of

Physicians, that Harvey needed 'not a club, but only his dissecting knife to slay the seven-headed hydra of error.' (5).

In just over twenty years Harvey had been elevated by his peers from 'crack-brained' to the founding father of English anatomy. This was as much due to his invention of a successful method of practising human dissection and animal vivisection that could be easily replicated, as it was to the discovery of the circulation of the blood. In London from the late 1630's, and later at Oxford during the siege from 1642-6, Harvey accumulated admirers who individually and then collectively undertook research projects in anatomy. Physicians such as George Ent, Francis Glisson, Nathaniel Highmore, Thomas Wharton, Walter Charleton, William Petty, and Thomas Willis, investigated anatomy through repeated dissections of felons, vivisection of animals, and postmortems on private patients. They made visible and published the 'new knowledge' of which Harvey had spoken, and linked it to fevers, ferments, and diseases. (6).

William Harvey may well have witnessed a dissection whilst a student at Gonville and Caius College, Cambridge. However, the roots of Harvey's later investigations lay in the education he received in medical Galenism and the humanist tradition of anatomy whilst a medical student at the University of Padua from 1599 to 1602. (7). By the later sixteenth century the idea of anatomy developed by Vesalius had become firmly fixed at Italian universities. The authority of anatomy was established through a carefully managed public spectacle, pedagogical techniques whereby anatomy was promoted as a distinct discipline within the medical tradition, and a detail of description of the body by the lecturer as the authoritative source of knowledge. Harvey's first exposure to the systematic medical dismemberment of the human body probably occurred within the purpose-built theatre of anatomy at the University of Padua. There, Harvey would develop certain mechanisms of mental adjustment and defence during his early clinical training. (8).

The theatre was built in 1593 in the shape of a funnel and, although only 10 by 7.5 metres across, had room for two to three hundred standing spectators. Harvey was the head, or Chancellor, of the English nation of students at Padua, and would presumably have sat in the second or third tier. (9). Conditions during the public anatomies Harvey witnessed would have been overcrowded and dark, while the smell emanating from the cadaver and the crowd must have been oppressive. (10). Yet continental anatomy theatres were meant to be harmonious spaces where the body could be presented

in a pleasant fashion to the audience of future physicians as the foremost example of the wisdom of God. As Johannes Vesling, Professor of anatomy at Padua during the 1640's, stated in the preface to his anatomy book:

'I framed this small [sic] Work, in the manner as we shew it in publick Dissections of the Body of Man: I avoided Controversies, which belong rather to Contemplatists, than the Theatres of Anatomists, which were built to behold, not to dispute in.' (11)

While no firsthand accounts of the public dissections at the University of Padua apparently exist for the later sixteenth century, the seventeenth-century medical student John Finch (1626-82) left behind a fascinating description of such events. (12). Finch was related to William Harvey and his father, Heneage Finch, witnessed Harvey's will. (13). John attended the University of Padua with his friend Thomas Baines. In one of his notebooks Finch copied out a Latin poem written by Baines in 1662 in praise of their Paduan professor of anatomy, Antonio Molinetti. (14). Baines first commented upon 'the many stupendous things we have seen in the bodies which you apply your hand. (15).

'But hear, kind Father, the gentle complainings of thy children....you solve all enigmas and you weave knots. We cease to wonder at man; but a new labour arises: we begin to be amazed at Molinetti alone. While you search the supple pathways of the blood, its nimble course, its slippery passages, behold our own blood seized with ecstasy, halts inert in our veins . . . you do not dissect bodies, Molinetti, but adorn them. You bring them into the Theatre cleansed from all dirt, perfectly in limb, and the obedient muscles are freed at your touch; thus you show yourself not an anatomist, but, what is far greater, a god.' (16).

Baines' gentle satire highlights the largely ceremonial role public anatomies played at early modern Italian universities. Yet he makes a more serious point regarding the presentation of the body itself - sanitized, and seemingly at the command of a somewhat jaded anatomist, the cadaver was presented devoid of its former humanity to the students in the audience. (17). Essentially, Molinetti was teaching the necessity of adopting a mask of emotional equanimity in the face of dismembering a former living body. In this he was more than successful, for in 1659 when Finch was appointed Professor of Anatomy at Pisa due to the influence of the Duke of Tuscany, he was lauded for being the ideal Harveian anatomist — 'keen in mind, a lynx with the knife, clever with a learned tongue, you cut everything, you see everything, and you are silent about nothing.' The sharpness of Finch's mind, knife, and tongue,

represented the emotional honing his head, hands and heart had received as a student of Molinetti's.

However, while these ceremonial dissections enabled Harvey and his peers to isolate their feelings to some extent from the stimuli (cadavers) which threatened to provoke feelings of disgust, when exposed to the more chaotic clinical rounds and post mortems at the Hospital of San Francesco which adjoined the University of Padua, such distance was far less achievable. Interestingly, in comparison to the experiences of seeing dissections in an anatomy theatre, little research has been done on the role of bedside encounters and patient autopsies in affecting the emotional stance of future physicians. (18).

Whereas the body was treated as an object of fascination and even veneration in the anatomy theatre, the bodies of hospital patients often caused a sense of loathing and fear. As a medical student following the great Fabricius or some other professor around the crowded wards of San Francesco, watching them first treat, then dissect patients, Harvey would have been exposed to methods of dealing with death, nakedness, and the destruction of the human body. However, his memories of the Paduan hospital, along with his later experiences as the primary physician to St. Bartholomew's Hospital in London, suggest that there were some medical situations in which Harvey could not overcome his disgust. (19).

Whilst discussing differing types of liver abscesses, some 'Hard from tension....like a heape of pus of pale yellow colour....' Harvey commented, 'I observed these things in the hospital (of Saint Bartholemew's) as well as in the hospitals of Italy with much nausea, loathing, and foeter. I have forgotten many things.' (20). No doubt the dissection of the abdominal region presented Harvey with the prime example of the cadaver as an aesthetically repulsive object, '1st. lower venter, nasty yet recompensed by admirable variety....' he wrote in his lecture notes. As the largest cavity in the human body, fluids naturally collected there and nondescript organs such as the soft and slippery intestines would be full of undigested food and faecal matter at times. When opened, this would result in a horrendous stench. Moreover, in the summer heat of Italy, rancid fat must have flowed through the hands of the dissector as he worked in the abdominal region. The physician Thomas Wharton, an admirer of Harvey, performed an autopsy on a judge in the summer of 1673 in Cornwall. 'Despite the smell soe violent and offensive to us all' he opened the body 'being overborne with the curiosity of finding something of the realtyes of the cause' (of plague). (21).

The body had been laid unsalted in an upper room of a pub, and the fat around the omentum flowed through Wharton's fingers during the first incision. Accumulating knowledge of normal and morbid anatomy not only led to a better understanding of nature but also defined the identity of the people who engaged in this activity. To gain self-knowledge through anatomy was to achieve certain social attributes - for physicians and surgeons the value of curiosity was reinforced and confidence gained to intervene in the body of their living patients. Such attributes could be symbolically passed on through gifts of material possessions once worn and handled by a successful anatomist. In his will of 1657, Harvey bequeathed 'to his loving friend Mr. Doctor Scarborough his velvet gown and all his little silver instruments of surgery.' (22). Scarborough replaced Harvey as Lumelian Lecturer in Anatomy and Surgery in the College of Physicians in 1658. The diarist Samuel Pepys attended one of Scarborough's lectures on February 27, 1682-3:

'About eleven o'clock...I walked to the Chyrurgeon's Hall, we being all invited thither and promised to dine there...As the Anatomies were a public show. After dinner, Dr. Scarborough took some of his friends and I went with them, to see the body of a lusty fellow, a seaman, that was hanged for a robbery. I did touch the body with my bare hands; it felt cold, but methought it was a very unpleasant sight..Thence we went into a private room, where I perceive they prepare bodies, and there were the kidneys, ureters, etc., upon which he read to-day, and Dr. Scarborough upon my desire and the company's, did show very clearly the manner of the disease of the stone and the cutting, and all other questions that I could think of.' (23).

Satisfied in his curiosity regarding the operation for the stone which Pepys himself had recently suffered through, he returned to the dinner table. There Pepys and the medical men fell to discussing hanging, pain, and blood circulation. Pepys later wrote in his diary, 'that all the Doctors at table conclude, that there is no pain at all in hanging, for that it do stop the circulation of the blood, and so stops all sense and motion in an instant.' (24). Here we see Pepys juxtaposing the evidence presented by his feelings in seeing the body - 'methought it an unpleasant sight' - and the authoritative statements of the doctors - 'there is no pain in hanging' - to reach a state of uneasy medical detachment.

Pepys' experience at the Surgeons' Hall mirrored that of the young Harvey in the hospital of San Francesco. As Harvey had learnt to suppress his sensual response to the smell and appearance of dying patients and corpses alike, by elevating autopsy and the rule of

reason, so Pepys had to be assured by the medical men gathered around that his reaction to the body was theoretically fallacious and emotionally incorrect. In achieving this state, Pepys temporarily accepted the vision of a community of medical practitioners who used experiential knowledge in certain ways to define both their studies and themselves. They simultaneously praised the objective art of anatomy and marginalised the subjective voice of the patient.

In December of 1651 John Finch wrote from Paris to his sister Anne Conway: 'I was on Saturday with Sir Kenelm Digby where I had some philosophical discourse: and he heard of your marriage, but wondered with me at your story of Dr Harvey. I must confess I have scarce faith enough to believe he would cutt himself but rather believe he voided the stone you speak of than cut out; for I doe not see it was possible for him in two days to be able to goe abroad otherwise.' (25).

What does this tell us of the personality of William Harvey? Finch's disbelief in the story of Harvey operating on himself for bladder stone seems predicated on the notion that Harvey would not have been walking around a mere two days after the operation, rather than the fact that he would not have 'cutt himself to begin with. Such stories regarding the bizarre nature of those who dissected for a living were beginning to circulate in early modern Europe.

As Katherine Park observes, beginning in the 1530's a haze of unsavoury stories on the topic of vivisection gradually collected around the names of famous anatomists. (26). Intriguingly, Park also noted a willingness on the part of anatomical authors to boast of their illicit behaviours in procuring cadavers and so fan the rumours of vivisection. It was Vesalius who marks the real turning point:

'One of the most surprising aspects of his great treatise *On the Fabric of the Human Body*, (1543) compared to the works of his predecessors, is his lack of respect for persons and his candid pride in the acts of daring and deception required to obtain what he considered an adequate supply of cadavera. He and his students forged keys rifled tombs and gibbets and stole in and out of ossuaries in a series of night time escapades that he recounts with evident relish and amusement.' (27).

Similarly, the young Felix Platter gleefully recounts his role in 'every secret autopsy of corpses' while a medical student at Montpellier in 1554. He refers to the repulsion 'I had felt at first when I came to put my own hand to the scalpel', but admits this quickly passed. (28).

Soon Platter could aid in the grave robbing and dissection of a 'student we had known.' However, as with Harvey, the smell of rotting cadaver lingered long in Platter's memory: 'the lungs were decomposed and stank horribly, despite the vinegar that we sprinkled on them.' (29).

A hundred years after Vesalius, the Danish Royal anatomist Thomas Bartholin gloomily recounted the horrors of a career of dissecting:

'Neither in our age nor any former one will you readily find an eminent anatomist who has placed domestic ease before the rigors of travel, although it must be warned that the goal sought will not always be a happy one. Zerbi barborous in diction but not in knowledge, was wickedly slain in Thrace...Vesalius was compelled to go to Jerusalem not for expiation of a crime but... because he sought the cause of a disease in a cadaver of which the heart was still beating. Carpi was driven into exile by the Bolognese not because he dissected live men...but because he seemed to have done so by reason of his numerous dissections.... Hence almost everywhere anatomists have been victims of misfortune, and if some have been able to avoid these snares that have been debilitated by the stench of cadavera so that few can hope to reach a venerable age...Finally if spared, they complete the journey and grow old at home with Galen, with no reward except wearied and bloody hands, and those empty.' (30).

Here was the anatomist as hero and martyr with his 'wearied and bloody hands,' scorned by his fellow countrymen and destined to live out his life in poverty. Notable in Bartholin's description of the anatomist is the stress on the *manual* nature of the work and the foul conditions under which they laboured. Moreover, Bartholin draws attention to the misunderstanding those who dissected were subject to, and so echoes Harvey's words that other physicians perceived him as 'crack-brain'd' when he first published *De motu cordis*. New to the seventeenth century was the celebration of competent and incompetent anatomists in verse, as previously seen in Baines' poem to Molinetti at Padua. The focus of much of the doggerel was the masculine bravery - or lack thereof - of certain dissectors. In Cambridge Dr. Thomas Clayton (1575-1647) arranged for his eldest son, Thomas (1612-93) to succeed him as the Tomlins Reader in Anatomy, although he was clearly unsuited for these posts, 'being posses'd with a timorous and effeminate Humour, [he] could never endure the sight of a mangled or bloody Body.' (31). Clayton was subjected to scurrilous student songs:

Well noble Knight our Anatomiste  
 Take my advice. Bee pleas'd to desist  
 from reading. And mistake no parte  
 No not a liver for the hart  
 As last you did. Trade not in blood  
 Be advised by your friends, o good  
 Sr Thomas. (32).

William Petty (1623-1687) the son of a Romsey Kent clothier and graduate in medicine of Leyden University, deputized for the squeamish Thomas Clayton. As one of the early admirers of Harvey's accomplishments, Petty had already undertaken anatomical research in Paris and London during the late 1640's. As with Harvey there soon arose a mythology surrounding Petty as an anatomist of some bravado. According to John Aubrey, 'Anatomy was then but little understood by the university, and I remember he [Petty] kept a body that he brought by water from Reding a good while to read upon some way soused or pickled.' (33).

Elegies were composed reflecting the character of those who anatomised. In 1677, Nathaniel Williams published an elegy for another of Harvey's followers, Thomas Willis, including this verse. Its portrayal of the wonders anatomists reveal, and the final anatomy their own bodies make, echoes the mixture of unease and fascination for dissection seen in medical students of the period:

Thou knew the wonderous art,  
 And order of each part....  
 In the whole lump, how every sense,  
 Contributes to the health's defense.  
 The severall, Channels which convey,  
 The vitall current every way,  
 Trackst wise Nature every where,  
 In every region, every sphere,  
 Fathomest the mistery  
 Of deepe Anatomy.  
 The unactive carcasse thou hadst preyed upon,  
 And stript it to a sceleton,  
 But now alas! the art is gone,  
 And now on thee,  
 The crawling Worms experience their Anatomy. (34).

The references contained in Willis' elegy to the relentless and predatory nature of anatomists and the ultimate futility of such detailed knowledge of the corruptible body were not lost on the critics of dissection-crazed physicians. Perhaps reflective of the fact that the Royalist Harvey's programme of sustained anatomising was taking hold, wholesale attacks on the

art of anatomy were launched during the Interregnum as part of the campaigns to reform medicine. In *Mataeotechnia medicinae praxeos: the Vanity of the Craft of Physick*, (1651) the self-avowed 'Chymiatrophilos,' Noah Biggs attacked the cruelty and uselessness of Anatomy:

To what ends tends the Anatomy of these two thousand years, with those tedious lectures, if the sanation of diseases, be not more happier at this day, then of old? What meanes that tearing and Cadaverous dissection of bodies, with that curious inspection and inquisition into the capillary veines, if we may not learn by the Errors of the Ancients, and if we may not make an emendation of those things that are past.' (35).

For Biggs anatomy was the inhuman art:

'For there is nothing more hard, more inhumane and full of Cruelty, among all humane Arts, through so many ages undertaken and usurp'd then that art, which by a concentrick subscription doth make new experiments by the deaths of men where the Earth covers the vices, the errors & frauds of its professors....' (36).

Similarly the London physician Gideon Harvey (no relation to William) in a savage satire of the monopoly of the College of Physicians in 1683 entitled 'The Conclave of Physicians, *Detecting their Intrigues, Frauds, and Plots, Against their Patients*', compared anatomy to the practice of cannibalism. Gideon Harvey referred to the College as 'The Conclave of Physicians to the Venetians,' managing thereby in one fell swoop to attack English physicians in particular, and Roman Catholicism in general:

'Their immolations are celebrated chiefly in the Winter upon Dogs and Cats by the younger fry, and sometimes upon humane bodies performed by the Hangman, their subservient Officer, which being conveyed to their Chauncel, the Cardinals in their turn fall hewing and slaying these Carcasses like Cannibals, to the intent all Spectators (to whom at such Festivals free egress and regress is granted) may behold them sitting in their Pontiscalibus, and making a pretended narrower search into the parts of mans body, insinuating thereby to these gazers their incomparable Skill and Learning, not without a plain Innuendo, that they should send for them in time of Sickness.' (37).

Gideon Harvey bitterly concluded that the illusion of anatomical research was created to attract customers and create public displays on 'safe' bodies - dead and therefore incurable, rather than living and sick - thus demonstrating the new attractions of dissecting physicians. (38).

Ultimately, in *The Art of Curing Diseases by Expectation*, 1669', Gideon Harvey blatantly attacked the father of anatomy himself, claiming that William Harvey's

anatomical proficiency did not guarantee his therapeutic skills. Gideon listed a number of cases where William Harvey had misdiagnosed patients' ailments and erred greatly in prescribing:

'One Mr. Farwell, Barrister of the Temple, was Patient and Complainant of a painful disease in his belly....Dr. Harvey ingrossed to himself the speaking part (a noisy 'Consult' of doctors were present) by reason of his extraordinary claim to Anatomy...after a long contrectation of all the abdomen, did very magisterially and positively assert all his symptoms to arise from an Aneurism of an artery, and therefore incurable, as being too remote to come at, wherein all, except Dr. Bates, very readily concur'd, though it was a most absurd offer in opinion, as I ever yet heard.' (39).

Gideon Harvey concluded that Harvey's practical mismanagement of cases stemmed from hubris based upon his anatomical pretensions. (40).

'No doubt but Dr. Harvey in Anatomy, and happiness of theoretic discoveries might justly pretend the precedency of all his contemporaries; and others before and since have also arrived to a great proficiency in cat and dog-cutting, also calf-head and sheeps-pluck dissecting; yet few of 'em when concerne in practice, were gifted with sagacity to know diseases when offered to their view, much less capable of curing them; in which curative particular the thinking Physician has the advantage, though the prating Physician by his pretended Anatomy ingrosses the opinion of mankind.' (41).

For Biggs and Gideon Harvey, anatomy was a 'prating art' much like quackery where practitioners dazzled the public with sleight of hand and empty rhetoric. Yet there was also a more serious accusation concerning the fundamental inhumanity of any physician who has learnt to 'do no harm' to his patients through long training in dissection and vivisection.

Contemporary reflections of Harvey's relations with patients are few and infrequent, however, but to a large extent they appear to back up his critics' complaints. In November of 1635 the Barber-Surgeons' Company called one of their members before the Court of Assistants, a William Kellett, for failing to present a case to them that resulted in the death of a 'maide.' Kellett appears to have accused Harvey of causing the woman's death by failing to diagnose a skull fracture and treating her for vomiting, 'by reason of the foulness of the Stomacke, and to that purpose prescribed physick by Briscoe the apothecarye.' (42). Even the diarist John Aubrey who knew Harvey firsthand and thought of himself as one of his friends confirmed that:

'All his profession would allow him to be an excellent anatomist but I never heard any that admired his therapeutique way. I knew several practitioners in this towne that would not have given 3.d [threepence] for one of his bills [prescriptions] and that a man could hardly tell by one of his bills what he did aime at.' (43).

The fame of Harvey's work led prominent physicians and surgeons to champion a more anatomical approach to understanding and treating the body. Concurrently, Harvey's reputation led to more cosmopolitan and Continental practices coming into vogue whereby autopsy and dissection were increasingly accepted by the wealthy and powerful. His stress on relying on the eyes rather than texts to reveal the truth (autopsia) was also crucial in constructing the image of the dissecting-medical man who was, 'keen in mind, a lynx with the knife, clever with a learned tongue, you cut everything, you see everything, and you are silent about nothing.'

Anatomical knowledge which raised a physician above his non-anatomically minded peers, while seeing and then constantly performing dissections and postmortems, allowed Harvey and his admirers to continually rehearse a certain emotionless response to suffering in living bodies. Yet these rehearsals were not often successful, for Harvey or his disciples. The activities of Harvey, his peers and followers did not escape the notice of the public and a particular stereotype emerged of a stoic, but flamboyant and deeply troubling, anatomist-physician. Critics of dissection-crazed medical men compared anatomy to the practice of cannibalism and suggested that those who frequently cut on the dead lost, or perhaps never even learned, a humane bedside manner toward the living.

As physicians sought to become more refined in the later seventeenth century and distance themselves from the blood and gore of dissections, vivisections and post-mortems, William Harvey's legacy was eagerly embraced by the surgeons. It would include a set of attitudinal norms towards both bodies and patients — an idealised mixture of objectivity, practical insensibility, and pathological hunger, best described as medical dispassion.

#### References.

1. This essay is based on a paper presented at the 19th Congress of the British Society for the History of Medicine, Birmingham, England, September 6-9, 2001.
2. William Harvey, *Lectures on the Whole of Anatomy: An Annotated Translation of Praelectiones Anatomiae Universalis*, CD O'Malley, F.N.L Poynter and K.F. Russell, UC Press, 1961, p.75. Keele

3. William Harvey, *Lectures on the Whole of Anatomy: An Annotated Translation of Praelectiones Anatomiae Universalis*, CD. O'Malley, F.N.L. Poynter and K.F. Russell, UC Press, 1961, pp.76. & 99.
4. John Aubrey, *Brief Lives*, edited by Andrew Clark, 2 vols., Oxford: Clarendon Press, 1898, Vol. I, p.300.
5. Robert Frank, *English Scientific Virtuosi in the 16th and 17th Centuries*, Los Angeles: William Andrews Clark Library, 1979, p. 100.
6. George Ent defended the circulation of the blood in *Apologia pro circulatione sanguinis (1641)*. Francis Glisson wrote a clinical treatise on rickets *De rachitide (1650)* and the liver *Anatomia hepatis (1654)*. Nathaniel Highmore's *Corporis humani disquisitio anatomica (1651)* supported Harvey's anatomical method, while Thomas Wharton's *Adenographia (1656)* detailed new discoveries on the glands. Walter Charleton's *Oeconomia animalis (1659)* discussed physiology. Thomas Willis in *Diatribae duae (1659)* applied anatomy to fevers and ferments.
7. See Peter Murray Jones/Thomas Lorkyn's Dissections' **1564/5** and **1566/57**', in *Transactions of the Cambridge Biographical Society*, Vol 9, pp 209-229. Jones concludes : It is clear that in the 1560s at least dissection did take place, and was attended by men who went on to become leaders of the medical profession, (p 226).
8. On Harvey's time at Padua see G.Berti-Bock, L.Premuda, F.Vial, R.Rulliere, 'Le sejour de William HARVEY a Padoue.' In *Histoire des Sciences Med/cales*, Vol 14, pp 317-324, and Gwyneth Whitteridge, *William Harvey and the Circulation of the Blood*, London, Macdonald, 1971.
9. Arturo Castiglioni, 'The Origin and Development of the Anatomical Theatre to the End of the Renaissance,' in *Ciba Symposia*, Vol 3, May 1941, pp 826-844. Also see Th. H. Lunsingh Scheurleer, 'Un Amphitheatre D'Anatomie Moralisee,' in *Leiden University in the Seventeenth Century: an Exchange of Learning*, Th. H. Lunsingh Scheurleer and G.H.M. Posthumus Meyjes (eds), Leiden University Press, 1975, pp 217-277. The theatre at Leiden was much larger, better lit, and airier than at Padua.
10. See Jerome Bylebyl/'The School of Padua. Humanistic Medicine in the Sixteenth Century,' in Charles Webster (ed), *Health, Medicine and Morality in the Sixteenth Century*, Cambridge: Cambridge University Press, 1987, pp 361-3, for more details on Padua. Also see Giovanna Ferrari, 'Public Anatomy Lessons and the Carnival in Bologna', in *Past and Present*, I 17, Nov. 1987, pp 50-106, and Jan Rupp, 'Matters of Life and Death: the social and cultural conditions of the rise of anatomical theatres, with special reference to seventeenth century Holland,' *History of Science*, Vol 28, 1990, pp 264-287 and idem, 'Michael Foucault, Body Politics and the Rise and Expansion of Modern Anatomy,' *Journal of Historical Sociology*, Vol 5, March 1992, pp 31-59.
11. Johannes Veslingus, *The Anatomy of the Body of the Man, wherein is exactly describes every part therof, in the same manner as it is commonly shewed in Publick Anatomies*, London, 1653. Vesling's work was translated from the Latin by Nicholas Culpeper.
12. However, see R.Eriksson (ed.), *Andreas Vesalius' First public anatomy at Bologna 1540. An eyewitness report by Baldasar Heseler, together with his notes on Matthaeus Curtius' Lectures on Anatomia Mundini*, Uppsala: University Press, 1959.
13. Heneage Finch became Lord Chancellor and Earl of Nottingham.
14. The Venetian Molinetti succeeded Vesling in 1649 as Professor of Anatomy at Padua.
15. Archibald Malloch, *Finch and Baines: A Seventeenth Century Friendship*, Cambridge: Cambridge University Press, 1917, p. 15. Malloch provided both the Latin and the translation. '*Stupenda vidimus!...Molinetta sic decet queis admoves manum...!* p. 14.
16. *ibid*, '*Sed filiorum sentias clemens Pater/Dulces querelas quae vagientes proferunt/Enigmaes omnes solvis, et nectis nodos/Desinimus admirari hominem, at novus labor/Incipimus unum obstupescere Molinettum/Qui flexuosus sanguinis dum tramites/Agilemque cursum permeatus lubricos/Scrutaris, en sanguis correptus extasi/Stat piger in venis, nescitque progredi/Quis cum stupore viderat motum suum...Dissectiones laudent queis placent tuas/Parcius oportet istas: nam me iudice/Non dissecas Molinette sed adomas corpora/Et sordibus remotis, in crus integrum/Producis in Theatrum et sequaces musculi/Solvuntur ad tactum; sic non Te Anatomicum/Praestas sed id quod abunde magis est, Deum'* p 15.
17. *ibid*, p 27. Baines was chosen Professor of Music at Gresham College as successor to William Petty in 1661. In the same year Finch and Baines were made Fellows Extraordinary of the Royal College of Physicians and in 1662 Finch became one of the doctors of Catherine of Braganza. Malloch surmised that many of these honours were due to Finch's relation to Harvey.
18. See Andrea Carlino, *La Fabbrica Del Corpo: Libri e dissezione nel Rinascimento*, Torino: Giulio Einaudi editore, 1994.
19. Bylebyl confirms that there were daily hospital rounds with formal discussion of major cases in the late sixteenth century at the hospital of San Francesco, p 364. Unfortunately, I have been unable to locate further accounts of clinical experiences in hospitals of this period.
20. C.D O'Malley, F.N.L.Poynter, and K.F. Russel, *op. cit.* p 106.

21. Letter 31, letterbook of Thomas Wharton, *Royal College of Physicians*, MS 640.
22. Burton Chance, 'Charles Scarborough, an English Educator and Physician to Three Kings,' *Bulletin of the History of Medicine*, Vol 12, 1942, pp 274-296. Quotation from p 274.
23. *ibid*, p 282. Unfortunately, Pepys did not record attendance at any other anatomies.
24. *idem*.
25. Conway Letters: *The Correspondence of Anne, Viscountess Conway, Henry More, and their friends, 1642-1684*, Marjorie Hope Nicolson (ed) Yale University Press 1930, p 60. Nicolson noted that this story appeared nowhere else.
26. Catherine Park, 'The Criminal and Sainly Body: Autopsy and Dissection in Renaissance Italy', in *Renaissance Quarterly*: 47 (1994) pp 1-33. There is a large and growing literature on death and dying, and on cruelty towards criminals and the poor, etc, in this period. However, my focus is on doctors' attitudes towards their patients rather than these larger themes in English culture.
27. *ibid*, p 17.
28. 'Beloved Son Felix': *The Journal of Felix Platter a medical student at Montpellier in the Sixteenth Century*, translated and introduced by Sean Jennett', London: Frederick Muller Limited, 1961, p 89.
29. *ibid*, p 90.
30. Thomas Bartholin, *On the Burning of His Library and on Medical Travel*, translated by C.D. O'Malley, Lawrence: The University of Kansas Libraries, 1961, p 52.
31. Kenneth Dewhurst, *Willis' Oxford Lectures*, Oxford Sandford Publications, 1980, p 402. Clayton was a devout Royalist, the Master of Pembroke College and had succeeded his father-in-law to the post of Regius Professor. The quotation regarding Clayton's son comes from Anthony Wood, *Athene Oxonienses*, 2nd ed, 1721, Vol 2, p 807.
32. Dewhurst, p 403.
33. *ibid*, p 404. In 1651 Petty left Oxford to serve as Physician-in-Chief to Cromwell's army in Ireland.
34. Aubrey, p 176.
35. Noah Biggs, *Mataeotechnia medicinae: The vanity of the craft of physick: or, A new dispensary....* London, 1651, p 9. Biggs' identity has never been established; however, see Harold J. Cook, *The Decline of the Old Medical Regime in Stuart London*, Cornell University Press, 1986, p 122. Cook explains that Biggs' work 'was addressed to the Parliament, which, Biggs said, had been directed by Cromwell to undertake the reform of all the professions.'
36. Biggs, p 14.
37. Gideon Harvey, *The Conclave of Physicians, Detecting their Intrigues, Frauds, and Plots, Against the Patients....* London, 1683, The Introduction, p 8. Gideon Harvey (c 1640-1700) was born in Holland and probably obtained his MD in France. In 1675 he became physician-in-ordinary to King Charles II. In 1683 Harvey was satirised in a 30-page work, *Gideon's Fleece', or the Steur de Frisk, an heroic Poem. 'Written on the cursory perusal of a late Book call'd The Conclave of Physicians by Friend to the Muses.*
38. For more on Gideon Harvey and other critics of William Harvey's discovery of the circulation of the blood, see Robert G. Frank, Jr, 'The Image of Harvey in Commonwealth and Restoration England,' in *William Harvey and His Age: The Professional and Social Context of the Discovery of the Circulation*, Jerome Bylebyl (ed), Baltimore: The Johns Hopkins Press, 1979 pp 103-143, especially pp 132-3.
39. Harvey, *The Conclave*, p 17.
40. *ibid*, p 180.
41. *Memorials of Harvey*, J. A. Aveling (ed), London J & A Churchill 1875, p 17. The quotation is taken from Gideon Harvey, *The Art of Curing Diseases by Expectation*, Chapter XXII.
42. Aveling, p 16.
43. *idem*.