'Flame into Being: Spirits, Soul, and the Physiology of Early Modern Devotion'

What did it feel like to have a soul? For early modern Christians, experience of the soul could at times be surprisingly physical. Christian theology of the sixteenth and seventeenth centuries held that the body and soul were linked together by the spirits. Although there was not a universal agreement on the precise nature of these spirits, it was generally understood that they were composed of the hottest part of the blood, mixed with air. In 1555, Philip Melanchthon had this to say about them:

Galen, writing on the soul of man, says that these spirits either are the soul, or are its immediate instrument. This is certainly true, and their light surpasses that of the sun and all the stars; and, what is still more marvellous, in pious men the divine spirit itself mixes itself with these same spirits, and by its divine light makes them shine more brightly, so that their knowledge of God may be clearer, their ascent to Him more resolute, and their feelings toward Him more ardent.¹

These remarkable words come from the 1555 edition of Melanchthon's Commentary on Aristotle's *De Anima*. Melanchthon had first published a version of this in 1540. He significantly revised it, however, in 1552, in the light of Andreas Vesalius' seminal anatomy textbook, *De Humani Corporis Fabrica* (Basle, 1543). After this, the soul for Melanchthon was filtered through the newly complex wonder of the human body, that great organic masterpiece of the Almighty.

When Melanchthon imagines this special physiological refinement of the pious Christian, then, he is speaking not only from the heart of the Protestant Reformation, but from the beginning of an anatomical revolution that would have substantial influence on Christian bodies and souls in following decades.² In other works, I have examined how the intricacy and dynamism of the post-Vesalian body offered some serious problems for traditional Christian ideas of the soul. Here, by contrast, I want to look at positively embodied versions of the soul. Melanchthon's statement stands as one of the more extreme of these – as D.P. Walker pointed out long ago: Melanchthon's 'conception of the relation of medical spirits to the soul and to the Holy Ghost' was highly unusual, and at times 'leaves it an open question whether or not the human soul is identical with the spirits'.³ But the very fact that Melanchthon here risks materialising the soul only points up how attractive the embodied soul could be for certain Christians. If the dangers were great, so too were the imagined rewards. The mingling of divine and human spirits offered a remarkable kind of sensual piety – the chance not just to be closer to God, but even to believe, at times, that the very breath of God was inside you.

In this essay I want to look at the kind of pious experiences which this distinctive physiology offered to British Protestants of the sixteenth and seventeenth centuries. Naturally enough, for these believers both body and soul were now charged with much of the weight of that structural Church authority that had once belonged to all the complex apparatus of the Catholic faith. I will look first at the dynamic piety of the individual believer's own body and heart; and secondly at attempts to detail the physiology of the crucified Christ. I will first give some further working definitions of the spirits of the Christian body, and then sketch out their relation to the Bible, and to classical cosmology and biology.

Bodily Spirits and their Antecedents

Early modern medicine held there to be three types of spirits in the body. At the lowest stage, there were those of the liver, freshly produced from one's food or drink. These vegetative spirits were refined up into the sensitive spirits of the heart, which were then further refined into the animal spirits of the brain. For much of the early modern period, that last stage of sublimation occurred in the rete mirabile, or 'wonderful net' of veins and arteries at the base of the brain – a kind of distinct organ of the human soul. But this relatively straightforward model was complicated by uncertainty as to just where the soul itself was located. Whilst some held it to be diffused throughout the body, those who preferred one definite location tended to opt for either heart or brain. Partly because the Bible is vastly more interested in the heart than in the brain, many Christians actively preferred the former.

Given how widespread the ascending tripartite model was, we could reasonably imagine that it posed a problem for heart-centred Christians. It would appear, in theory, that their souls did not represent the most thoroughly refined spirits of the body. It may have been for this reason that in 1606 the lawyer Edward Forset presented the soul as moving between heart and brain.⁵ As we will see, however, the heart had other advantages for fervent believers.

Within this broad structure, the spirits themselves were a topic of some debate. In a sermon of 1619 Donne stated: 'the body is not the man, nor the soul is not the man, but the union of these two makes up the man; the spirits in a man which are the thin and active part of the blood, and so are of a kind of middle nature, between soul and body, these spirits are able to do, and they do the office, to unite and apply the faculties of the soul to the organs of the body, and so there is a man'.⁶ Discussing the heart in 1621, Robert Burton noted that its left side 'hath the form of a cone, and is the seat of life: which as a torch doth oil, draws blood unto it, begetting of it spirits and fire.' Accordingly, 'as fire is in a torch, so are spirits in the blood'.⁷ Elsewhere, Burton acknowledged the tangible reality of the spirits by citing the rumour that Vesalius had vivisected condemned criminals in order to watch spirits fleeting from their living bodies.⁸ For those who

were more demandingly empirical and concrete than Burton, the exact nature of spirits could prove elusive. Hence Francis Bacon could state at one point that 'the spirits of animate bodies, are all in some degree ... kindled and inflamed; and have a fine commixture of flame, and an aerial substance'; yet in the same work admit: 'the spirits or pneumaticals, that are in all tangible bodies, are scarce known. Sometimes they take them for vacuum; whereas they are the most active of bodies. Sometimes they take them for air; from which they differ exceedingly, as much as wine from water ... Sometimes they will have them to be natural heat, or a portion of the element of fire; whereas some of them are crude, and cold'. 9

What Bacon and his peers were sure of was that human spirits not only linked body and soul, but were the dynamic agents of almost all physiological processes, from vision and thought through to sensation and sexual generation. As we will see, spirits were central to a distinctive Christian experience, and one which for many survived William Harvey's assertion of the circulation of the blood. 11

Just where, though, did the spirits end and the soul begin? The fineness of that line is already indicated by the relatively orthodox description of the clergyman Thomas Walkington, who in 1607 explained: 'in the elements consists the body, in the body the blood, in the blood the spirits, in the spirits soul'. As we have just seen, Melanchthon at least flirted with a more dangerously blurred composite of spirits and soul. And he was not alone. In around 1580, the French encyclopedist Pierre de La Primaudaye referred to those thinkers who have 'affirmed the soul of man to be no other thing than the vital and animal spirits'. According to their opinion, 'the soul of man is nothing else but natural heat, or else the vital spirit that is in the blood'. La Primaudaye himself was emphatic that the spirits 'are only instruments of the soul, and not the soul it self'. But he does imply that this opinion was relatively widespread. In following pages I will suggest that it was not only widespread amongst materialistic physicians and other dubious

figures, but was very possibly *felt*, during positive spiritual epiphanies, by those who would not explicitly *say* that spirits and soul were liable to blur together.

Classical and Christian Spirits

In the west, versions of the bodily spirits can be traced back to Homer. ¹⁴ For economy's sake, I will just touch briefly, here, on Aristotle's ideas of pneuma. For Aristotle, pneuma was a vital force present in the heart of a human embryo, and closely bound up with both heat and blood. More perfect creatures were characterised by greater levels of heat. In the words of Gad Freudenthal: 'this physiologically-grounded construal of the scala naturae implies that the living realm is continuous: plot the scale of being against the vital heat, and you get a continuous curve'. ¹⁵ This notion is echoed in the more general Stoic cosmology of which Aristotle was a part. As S. Sambursky explains, 'difference between soul and organic life [was] merely the result of the variations in the composition of the pneuma', that of nature being moister and colder than the relatively dry, warm pneuma of the soul. ¹⁶

Whilst Stoic cosmology was foundational for New Testament ideas of spirit and soul, it was Aristotle who was explicitly championed as an authority on human life by full-blown Christianity. Given this, it is interesting to find Aristotle stating: 'so far as we can see, the faculty of Soul of every kind has to do with some physical substance which is different from the so-called "elements" and more divine than they are'. Pneuma, he says in *De Motu Animalium*, 'possesses weight as compared with the fiery element, and lightness as compared with the contrary elements'. ¹⁷ In the present context, the most important thing about Aristotle's theory of life is how comfortable it is with a continuum of either pneuma or divinity, rather than the kind of sharply divided dualisms of Plato and many later Christians.

In this respect, the original beliefs of both Ancient Hebrews and the Jews of Christ's day were remarkably similar to Aristotle's continuum of matter and spirit. First: throughout most of the so-called Old Testament, there is nothing resembling the soul of full-blown Christianity. At another level, the ferocious dualism of heaven and hell is also absent: in the bulk of these writings there is only Sheol, a desiccated and static afterlife to which all humans go after death. The kind of body-soul continuity seen in Aristotle sits at the root of the Old Testament: for in Genesis neither man nor woman have souls breathed into them by Yahweh. Rather, He breathes in his own vital force, ruach, upon which the recipient 'becomes a living soul' or nephesh. 'Living soul' here means the whole person, who is an inextricable compound of ruach and the body. Neither one can exist independently. When a person dies, their ruach is impersonally reycled into the being of Yahweh. Moreover, in other contexts ruach is notably dynamic, potent and transferable — a vital force with which Yahweh occasionally 'tops up' figures such as Caleb or Moses in order to empower them for specially demanding tasks. 1

even if much of this emphasis derives from St Paul in particular. Yet at the same time the most common, and arguably the most fundamental spirit force in this context is not psyche, but pneuma. Psyche occurs just 74 times in the New Testament, compared with the 345 uses of the pneuma. Like ruach, the pneuma of the New Testament is dynamic, potent, and transferable. It is the most probable active agent in certain miracles, such as Paul's blinding of Bar-jesus, and the apparently numerous cures which he effects, often by proxy, when sending to the sick 'handkerchiefs or aprons' that have touched his body, and thereby absorbed his pneumatic force. Again, it is a sudden infusion of pneuma which gives to the disciples their special powers at Pentecost. Rather like Moses or Caleb, Christ seems to be imbued with it (by the dove at the river Jordan) to empower him for his magical career; and he gives it up quite definitely and tangibly on the cross: 'Jesus, when he had cried again with a loud voice, yielded up the ghost' (Matt 27.50).

Indeed, in one of the apocyphal accounts of the crucifixion, Christ actually cries out, 'My power, O power, you have forsaken me!'. ²⁴ The sense that this was for some a more accurate description of his integral force is backed up by the incident in which the sick woman touches Christ lightly in a crowd, thereby both gaining a cure, and causing Christ to feel the touch, because 'I perceive that power has gone out of me'. Also translated as 'virtue', the key Greek word here is the tellingly potent and active <u>dunamis</u> – a force whose mobile and concrete qualities ally it with pneuma rather than psyche. ²⁵

Little wonder, then, that where a clear hierarchy of spirit, soul and body is evident in the New Testament, the trio falls in just that order, from highest to lowest. ²⁶ Indeed, the theologian Troels Engberg-Pedersen has further nuanced that hierarchy in an intriguing way, by making some radical claims for Paul's sense of pneuma. He argues, at one level, that when Paul talks about being 'present in spirit' with the Corinthians, he means this literally – that some of his pneuma is actually transferred with his letter (a claim which matches perfectly with the transfer of personal pneuma via 'aprons or handkerchiefs'). Secondly, referring to I Thess 5.23, Engberg-Pedersen sees Paul as 'praying' that 'this bit of pneuma may gradually inform [the Thessalonians'] souls and bodies more and more so that at the parousia of Christ each of them will eventually stand blameless', with the body 'completely transformed into a pneumatic body'. ²⁷ Here we have not only the familiar, sliding and variable continuum of body and soul (or spirit), but also the kind of precedent which Melanchthon may have found especially appealing.

Clearly, many of the above senses of <u>ruach</u>, <u>nephesh</u> and <u>pneuma</u> were ones that later Christianity was keen to suppress (and to this day, theologians remain remarkably silent on the lack of a Hebrew soul, or the blinding of Bar-jesus). Those, like Milton, who were especially rigorous, might feel compelled to admit that the soul died, at least temporarily, with the body.²⁸ Yet it is also clear that certain of the more sensuous uses of spirit could be both recoverable and

appealing for early modern Christians. As we will now see, the Old Testament 'melting' or 'pouring out' of the pious heart or spirit was one influential example.²⁹

Closer to God

From the point of view of systematic theology, what follows may look fragmentary. Indeed, one of the interesting things about this kind of experience is that expressions of it were relatively uncommon. At the same time, much of what mattered about moments of spiritual refinement, intensity or dynamism was very Protestant: special emphasis was placed on the individual's feelings during prayer; on the power of the Holy Ghost; and on the importance of Christ as Saviour.

Writing specifically on prayer some time before his death in 1662, the Bishop and friend of Donne, Brian Duppa, memorably asserted that, 'as soon as the breath of prayer fails, the soul putrifies, and the worm of conscience gnaws upon it'. Elaborating on prayer as an intimate union with God, Duppa reminds us how peculiarly numinous such breath could be. True believers must, he insists, open their breasts 'to receive and emit those beams of divine love, which only can kindle devotion to the height and unite your soul to God by a most intimate union. But alas! you will say, those blessed Spirits that are in such a nearness to God, may well be all fire and love, but you at such a distance cannot find the effects of it; the wood lies upon the altar, but you want fire to kindle it...'. But, Duppa urges, 'the same spirit of God that moved upon the waters till it had produced the world, moves upon thy heart, foments and cherisheth the least spark of the love of God which it finds there, and makes it flame out into a fervent prayer'. 30

For Duppa and for certain of his readers, this kind of spiritual fire did not have to be purely metaphorical, given the intrinsically fiery nature of bodily spirits, and the tendency to value heat as an index of an active soul.³¹ Equally, the initial spark of human piety did not always

have to be that great or strong: once the spirit of God had been joined to it, it was potent enough. And little wonder, given that this was the very same spirit which had 'moved upon the waters' and created the world. The parallel with the Creation reminds us, also, of the peculiar sense of creation and re-creation which an anxious Protestant might be undergoing, day after day, year by year, in their ceaseless struggle for the assurance of grace.³²

Comparing Duppa's claims to those of Thomas Morton of Berwick (in 1597) we are further reminded just how distinctively sensual and dynamic the Protestant heart could feel in this period. Broadly foreshadowing Duppa's sense of the putrefying soul, Morton first explains how prayer, 'preserveth the soul in sound and perfect health, even as bodily exercise doth the body'. For, just as men, 'feeling their bodies any way heavy, distempered and out of course ... fly to this remedy of exercise', so, 'whensoever we feel our selves prone to sin, and untoward and sluggish in the service of God, if we give our selves to this exercise of prayer, and stretch out the joints of our souls before God, we shall no doubt feel a great change in our souls, and that now they are light and able to lift up themselves to heaven'. Morton goes on to argue that, quite apart from 'the extraordinary work of God in pouring his spirit and grace into their hearts, who ask it by hearty prayer ... the very action of prayer doth, although not merit, yet both confirm and increase grace'. 33

The kind of exercise Morton has in mind was probably rather less strenuous than the average triathlon. (Interestingly, the generally light exercise which most people took at this time may mean that, for some preachers, delivery of a long sermon, during fast-time on a cold day, agitated their heart to a relatively high degree. But he does imply that its effects are physiologically perceptible; his parallel rests on the belief that they lighten the heaviness of a distempered body. Equally, 'the very action of prayer' seems to produce a real sense of increased grace, and one which is at least partly attested by the fact that the believer *feels* different after having prayed. So

What is less obvious to us now is what the heart may have felt like even before one began praying. For its whole physiology depended not on the pumping blood, but on the spirits. Witness a populist guide to general knowledge, translated in 1599:

the air and the most subtle spirits have chosen the heart for their seat. They being then so pure and subtle do seek means to stretch and enlarge them selves, so far as they may, and to fill that which they find to be void, which causeth the heart to move and pant. It may be said also that the heart being made as it were in a triangle form, although not perfectly, do open and shut in the less part, and therefore it continually moveth.³⁶

In general terms, this outline reminds us why the heart has, across history, so often trumped the brain as the site of powerful emotions. The heart moves. More precisely, it can much more easily be felt to move than can the brain. In particular terms, that literal, distinctively spiritual motion of early modern physiology must be connected to both Morton's sense of 'exercise', and to the way he subtly expands the soul and heart, by articulating them into bodies ('and stretch out the joints of our souls before God'). If the spiritual agitations of the believer alone made the heart dilate and pant, then what kind of physiological turmoil might ensue once the very spirits of God had fired themselves into this dark chamber of pious activity?

Perhaps still more dynamically sensual is the experience of prayer as described by the Church of Scotland minister and educator, Robert Rollock, some time before his death in 1599. In his commentary on the Psalms of David, Rollock points up the distinctive sense of Protestant 'conscience', at a time when the word combined the now more abstract super-ego, with varying degrees of sensually apprehended 'consciousness' - the sheer feeling of being alive as a distinct individual. Worldly and sinful men, Rollock warns, 'see well enough with their mind, and do understand, but they feel nothing in their heart'. Therefore, 'God is earnestly to be prayed unto ...

so he would grant unto us, that we may feel entirely in our heart, and that there may be with the knowledge of the mind a conscience, and a feeling of the heart'. Later, Rollock tells his readers that prayers

bring that to pass, that God draweth near unto us, and they are the increase of mercy and grace, for it is not possible, that those sighs which are not so much ours, as the holy Spirit's in our heart, and the cries of that same Spirit in our mouth can pass away in vain. For God knoweth what the meaning of his Spirit is, and blessed are those that hunger and thirst for righteousness, for they shall be satisfied. And we find that in experience in our selves, that we no sooner sigh unto God, but our souls are watered over with a certain unspeakable joy: so that we truly feel that thing, to wit, that the presence of God, through the Spirit of heaviness and inutterable sighes, causeth the presence of God through the

Rollock starts, here, with an apprehension of the presence of God. But he then seems to quickly move from the claim that prayers cause God to 'draw near unto us' to the implication that the breath of the Holy Spirit is actually in his own heart and mouth. The phrase 'not *so much* ours' ostensibly qualifies this claim. Yet Rollock further asserts that these divine sighs and cries cannot 'pass away in vain'. They leave a trace. They cause a definite transformation, at a precise moment, and he <u>feels this</u> as he prays: 'we find that <u>in experience</u> in our selves ... we no sooner sigh unto God, but our souls are watered over with a certain unspeakable joy'. In these last few words we are privileged to peer briefly into a very dark and distant space, poised above the chasm of religious experience, some four centuries past. Finally, that experience is unspeakable, as ineffable as the silent deliquescence of thought into feeling, feeling into blood, blood into vapour. Spun down into the chemical whirlpool of the enraptured soul, Rollock clutches at that one apt

little phrase, offering the roughest guide to his sensations: 'our souls are watered over...'. In the intensity of this moment, the frustratingly elusive vapour of the Holy Ghost condenses into liquid and showers down on the parched spirit of the lonely believer. Whatever the uncertain mixture of hope, fantasy, and reality in Rollock's evocation, he does indeed seem to have convinced himself of this spiritual alchemy, shifting in a few words from that faintly tentative 'not so much' to the passionate depiction of something 'truly felt' in his own experience.

Throughout his writings Rollock returned to the mysterious potency of such ineffable moments of grace. And tellingly, one of his key sources for the value of these spiritual raptures was chapter 8 of Paul's letter to the Romans. Reflecting on this he evokes moments when 'the Spirit of the Lord intercedeth for us with sighs and sobs unspeakeable', insisting that such bursts of 'unspeakable joy ... witnesseth, that the Lord giveth his presence: for there is a sure ground, there is no true joy, but in the presence of God'. The sheer number of times that Rollock celebrates these unspeakable epiphanies already suggests that, for him, powerful though silent feelings have very special value. As we will see below, there were also other, very concrete reasons why Rollock celebrated certain parts of embodied Christian identity.

A few years later, in 1627, a peculiarly memorable evocation of sudden grace sprang from the pen of the Puritan minister Robert Bolton. 40 Bolton cites 'the remarkable work of the spirit' upon the heart of the Protestant martyr, Robert Glover, explaining how, after days of desolation prior to his burning,

upon the first sight and representation of the stake ... in the very nick and needful time ... the blessed Spirit did suddenly shine into his dark and desolate soul, with the glorious beams of his own immediate comfort, and so sensibly filled it with such overflowing rivers of spiritual joys, that no doubt they mightily abated and quencht the rageful fury of those Popish flames, wherein he sweetly fell asleep.⁴¹

Bolton seems to have believed that sudden and peculiar feelings or thoughts could come from either God or Satan - but to have inclined to the view that they were always likely to be supernatural. At the same time, Bolton also had a strong sense that the actual, personal bodily chemistry of a pious believer could protect them against psychological trauma. If am persuaded, he asserts in a work of 1631, that 'the very same measure of melancholic matter' which would prompt 'ghastly fears' and even madness in 'the hearts of worldlings', could 'in a sanctified man ... be so mollified and moderated by spiritual delight, and sovereignty of grace' that he is easily 'preserved from the sting and venom of them' and from the 'desperate extremities ... and distractions, which keep the other in a kind of hell upon earth'. Bolton's last words seem not only to adumbrate Milton's notion, of the mind as its own place, but to insist, too, that the sanctified body is its own place, able by a kind of pious alchemy to make gold from lead, or manna from poison. His seeming conviction is neatly underlined by those opening words, 'the very same measure of melancholic matter', as if he imagines Satan decanting carefully calibrated test-tubes of fluid, in order to experiment upon the resilience (or otherwise) of the potential sinner.

For all the drama and the bodily concreteness of these lines, Bolton insists that an experience such as Glover's cannot 'be reputed an extraordinary revelation, or enthusiasm'. This sense of doctrinal moderation is evidently sincere, rather than merely cautious or pragmatic, for he goes on to insist plainly that 'I heartily abominate all Anabaptistical fooleries and frenzies'. 44

To some extent, Bolton's analysis of sudden thoughts is one which we ourselves can understand. A thought, a feeling, a terror or delight, seems to spring into the body from nowhere. How could this be accounted for? Take the following instance, written around 1698 by the minister Robert South. Comparing Christ to a star, South first talks of how 'stars are thought to operate powerfully even then, when they do not appear; and are felt by their effects when they are

not seen by their light'. And, 'in like manner, Christ often strikes the soul, and darts a secret beam into the heart without alarming either the eye or ear of the person wrought upon'. And this, South explains, drawing on St Peter's second Epistle, 'is called both properly and elegantly by St. Peter ... The day-star's arising in our hearts'. This passage evokes not just 'the secret silent workings of His spirit', but carefully links these to the minutiae of the human interior organism. The light of Christ, South insists, 'is operative as well as beautiful, and by working upon the spirits, affects the heart as well as pleases the eye'. He working the secret silent workings affects the heart as well as pleases the eye'.

Here we encounter something essentially as old as myth: a sudden intense shift of consciousness so forcible that it must surely be nothing less than the visitation of God (or a god). The conviction is immortalised in the word often used (sometimes abusively) to describe the more emotive and fervent Protestants of the later seventeenth century and after. These people were 'enthusiasts' or 'enthusiastic Christians'. And the word 'enthusiasm', from the Greek, en-theos, means, quite literally, 'filled with God'. Seen from this angle, the sudden rapture of spirit which South evokes becomes all the more intriguing. For he himself, as a High Church Royalist, was all too ready to fling the term 'enthusiast' like mud at his religio-political opponents – including, a few months after his death, Oliver Cromwell. Yet in a literal sense, South and other High Anglicans must on occasion have been 'enthusiasts' themselves, especially if they felt themselves to have been so suddenly invaded by the Holy Ghost, at one precise moment.

It must, of course, be admitted that South's actual language is here by no means as concrete, sensual or fervent as that of Rollock. But it is worth reminding ourselves of what light could mean for other sensually pious Protestants of the early modern era. For Melanchthon, after all, had insisted that the light of the bodily spirits, even <u>before</u> they were mixed with those of God, 'surpasses that of the sun and all the stars'. Pausing a moment before this seemingly idle piece of rhetoric, we are dazzled by yet one more extraordinary flash of light, shot out of the pounding heart of a long-buried Christian, like the gleam of a distant star whose body has expired

long since across the universe. For Melanchthon probably meant this quite literally. That inner light of the heart, both innately divine, and potentially receptive to a sudden further spiritual influx from God, was actually brighter than the sun and all the stars. No one could deny this claim. He for that light was trapped within the writer's heart. There could hardly be a more apt image of secret Protestant piety than this: silent, invisible, and yet densely potent, Melanchthon folds into his own chest all the stellar energies of the universe, compressing them into a kind of pious black hole, whose interior only the Almighty himself can perceive. This is not, of course, to clumsily and wholly equate Melanchthon with South. Yet South himself, a few lines before he reached that dart of holy light, had openly stated that Christ, surpassing the stars, and the created world that would burn at the Last Judgement, was 'a light, durable and immortal, and such an one as shall outlive the sun, and shine and burn when heaven and earth and the whole world shall be reduced to cinders'. He

Closer to Christ

Having discarded all the numerous Saints of the Catholic faith, Protestantism naturally threw extra weight onto that remaining figure who was able to mediate, in a specially human way, between God the Father and humanity. Part of this mediatory quality was, of course, Christ's human status. Whilst this had been emphasised long before the early modern period, it was after the time of Vesalius that Christians became especially fond of filtering Christ's greatest crises through the newly-precise medical works of the day. Three areas were especially well-suited to this tendency. First, the outbreak of Christ's bloody sweat in the garden; second, the flow of blood and water from his body when, hung on the cross, he was pierced by the spear of the Roman centurion, Longinus; and third, a less easily localised point at which the all but literal fire of his love flamed through his crucified body before his death.

The apostle Luke leaves us the sole brief hint at one of the most human moments of Christ's final hours:

And he was withdrawn from them about a stone's cast, and kneeled down, and prayed, saying, Father, if thou be willing, remove this cup from me: nevertheless, not my will, but thine, be done. And there appeared an angel unto him from heaven, strengthening him.

And being in an agony he prayed more earnestly: and his sweat was as it were great drops of blood falling down to the ground (Luke 22.41-44)⁵⁰

Seen in context, this bloody sweat looks poignantly real. Christ prays to be spared the crucifixion; he then takes the angel as a sign that he must be crucified; and accordingly prays 'more earnestly' for release, the stress of his fear causing blood to seep through his pores as he does so. That is: both the psychology and the physiology of this moment are recognisably human. For modern physiological science has indeed shown that, in cases of unusually extreme stress, a person can sweat blood without having been wounded in any way. The capillaries of the sweat glands burst, producing a condition known as "hemohidrosis" or "hematidrosis", in which sweat acquires a pinkish tone. ⁵¹

Although unaware of these modern physiological mechanics, early modern Christians were at times keen to emphasise that bloody sweats were a real and persistent phenomenon, long after Christ. In 1635 the Dean of Peterborough, Thomas Jackson, used the biblical episode to reinforce a point about Christ's unfailing obedience: 'even in this agony when his mortal spirits did faint and languish, the spirit of obedience was much stronger in him, than the pulse of pain and sorrow. It did not intermit or abate when his pains and anguish did increase. Being in agony (saith S. Luke) he prayed more earnestly ...'. Jackson went on, after this, to carefully nuance the stages of Christ's agony: 'most probable it is from Luke's relation ... that he sweat blood both in

the first and second fit, and that in all the three he delivered his supplications ... kneeling, or falling upon the ground'. 52 Most notable, however, are the few lines just above, in which Jackson argues that, whilst 'in colder countries bloody sweats be as rare in men's bodies, as showers of blood in the air: yet as a good philosopher hath long ago observed, to sweat blood is not unusual to Italians'. Admitting that even there, such trauma usually afflicts only those with certain diseases, Jackson then adds:

the most remarkable instance which I have read of bloody sweat in a man not oppressed with any disease, is of a Captain, an Italian (if I mistake not) who being surprised by the subtlety of his enemy, whom he had trusted too far upon a trist of parley, and [was] thereby inforced either to yield up the fort which he had stoutly maintained, or otherwise to be presently hanged: the consideration of this perplexity wherewith through his own folly he had entangled himself, did make such deep impression into his generous spirits, that it squeezed blood out of his veins.

In marginal notes Jackson gives the 'good philosopher' as Curaeus, and the captain as one 'Dragonera'.⁵³ And he then proceeds to assert that Christ's own fears were justly greater than those of this besieged Italian soldier.

Whilst Jackson had good theological reasons for so vividly humanising Christ the Son in this context, it is also interesting to note that he took trouble to keep abreast of relatively modern anatomical writings. For Jackson had read - and may have owned - the influential textbook *De Re Anatomica*, work of Realdo Colombo, the successor to Vesalius' Chair of Anatomy in Padua.⁵⁴

In a sermon preached in or before 1614, and titled *The Agony of Christ*, the Jacobean Royal Chaplain and Dean of Windsor, Anthony Maxey, engages in considerable detail with the

physiology of both the sweat and the crucifixion. Beginning with the garden, he paints a brisk and dramatic picture of Christ's growing terror:

It is ... the instinct of nature, when the murtherer approacheth, and the traitor is ready, the party appointed to be slain trembleth, and begins to bleed. Our blessed Saviour, perceiving Judas to be at hand, and instantly coming; the noise of the multitude, with lanterns, and weapons, rebounding from the valley ... the time fearful, in the murk and dead of night; the place comfortless ... all these together did so belabour him, surround and overwhelm him, that he fell into a dreadful agony; his thoughts were troubled, his spirits affrighted, his heart trembled, his joints shook, his pores opened, and all in a sweat, he fell grovelling and prayed, he passed to and fro, he panted and prayed, he sweat and prayed again: so earnestly did he pray and sweat, that in the flame of this passionate fervour ... thorough and thorough his garments [his blood] trickled to the ground. 55

In these lines both the overt reference to spirits, and the 'flame of ... passionate fervour' indicate the typically spiritualised blood of early-modern medicine. And, while this scene is itself vivid, the sense that Maxey is keen to get himself and his audience closer to Christ as a real person is powerfully compounded when he drives home the paradoxical wonder of this grovelling condition:

what a mournful and strange sight was this? The glorious Lord of heaven and earth, who was desired for four thousand years together; who might have kept himself in his heavenly pavilion ... that he, should be brought to this pass...! ... wounded at the heart with sorrow, troubled in mind, melted in soul, afflicted in body, passing to and fro affrighted,

grovelling on the earth with his face, crying out with piteous moans, disfigured, deformed, and all in a gore with bloody sweat (*Five Sermons*, 110).

Here Maxey's aim is to get closer to Christ in order to emphasise both the strange wonder of this God as man, and the consequent gratitude modern Christians should feel for such a radical and yet voluntary transformation. Whilst the outward writhings of visible human fear allow Maxey one way to achieve this, he is also able to move inward, to Christ's agitated spirits, through the evidence of the bloody sweat which breaks the normally sealed bounds of the skin. He indeed emphasises this temporarily porous frontier again a few pages later, when demanding, rhetorically: 'Why did he grovel and cry out? Why did his pores sweat, and all his spirits melt?' (*Five Sermons*, 115-16).

Writing, around 1653, of the blood and water issuing from Christ's side when pierced by Longinus' spear, the mortalist and seeker John Brayne states: 'the naturalists say, the water that came out of Christ's side was that [which] was contained in the pericardian'. ⁵⁶ Brayne's own comment on such claims is itself tantalisingly brief: 'what relation this had to the soul, or the soul to it, I dare not determine'. ⁵⁷ But there is very good reason to suspect, either that Brayne would have liked to believe that this water was the vapourised spirit of Christ's soul, or that he certainly wanted to know just what it was, and what it meant. For Brayne had highly distinctive and rigorous views on the key soul-words of both Old and New Testament, as well as on the relationship of these words to the human body. The above lines appear in *The Unknown Being of the Spirit, Soul, and Body, Anatomized* – a work which meticulously analyses biblical uses of 'spirit, soul, and body', and which shows that Brayne's mortalism, like that of Milton, was in part influenced by his painstaking scholarship in Hebrew and Greek. Although Brayne's analyses are constrained to some degree by his taking the bible as literal truth, his sense of the ineffability of spirit is indeed more accurate than the misleading biblical translations which he so fiercely

criticises. And his hierarchy of <u>pneuma</u>, <u>psyche</u> and <u>soma</u> is also faithful to the New Testament, as well as to Paul in particular: 'as the soul is to the body, so the spirit is to the soul; the soul is in the blood as its seat, and the spirit in the mind as its seat, being the sublimest part of the soul, informing and leading the soul and body'. ⁵⁸

Perhaps not surprisingly, Rollock is still more carefully anatomical about the piercing of Christ's side:

John says, that one of the soldiers, with a spear, pierced his side, and forthwith came there out blood and water. No doubt this effusion of the blood and water in a part was natural and ordinary: for, they who have skill in the things which concern the body of man, and know the anatomy, they know that the heart of man is a receptacle of blood, and in the heart is the cleanest and finest blood: the vital blood is fined in the heart of man, and the blood there is finer than in the rest of the body: ye hear commonly that the heart blood is the finest blood, and most precious: ye know likewise that there is a fleece, which compasseth and goes about the heart, which is called [Greek: pericardian]: and in it there is some liquor and water wherewith the heat in the heart is cooled and refreshed. Then to come to the purpose: the Lord being pierced thorough the side and in thorough the heart, it was no wonder, that that blood in the heart: and that water in the fleece should have gushed out, especially seeing that He had but newly given up the ghost, and He was yet warm: so that this blood and this water could not be yet much altered, by reason of the shortness of time (Lectures, 226).

As regards those who 'know the anatomy', Rollock here is a little modest. Although he was not an anatomist himself, he was remarkable, as master and regent of the newly founded Edinburgh University, for his 'pioneering class in human anatomy' – something which (notes James Kirk) 'was plainly a distinctive element in the humanist-inspired curriculum'. ⁵⁹

During the new College's anatomy lectures, Rollock must have watched with especial keenness as the intricately packaged interior of God's masterpiece was unveiled before the students' eyes. This impression matches the way that he carefully correlates the flow of blood and water with the ordinary natural state of a recently dead body: Christ, he emphasises, 'had but newly given up the ghost, and He was yet warm: so that this blood and this water could not be yet much altered, by reason of the shortness of time'.

Having emphasised how natural the blood and water was, Rollock also goes on to explain their extraordinary meaning. For 'this blood and this water meaned more than this: they testified of the force of that death: they testified not of a death only, but of a powerful death', catalysing both salvation and regeneration. We are prompted to wonder, then, if Rollock's precise reference to heart-blood as 'the cleanest and finest blood ... finer than in the rest of the body', and undoubtedly 'the most precious' is also related to the power and value of what Christ's sacrifice achieved. We might even go so far as to suspect that, for Rollock, Longinus (as part of God's plan) completed the sacrifice of the crucifixion by releasing a specially valuable last reserve of holy blood - something which might otherwise have been untapped and unused.

This impression is confirmed by another remarkable moment in Rollock's engagement with the crucifixion. Having stressed that it was, 'no children's play to have the soul dislodged', he goes on to ask:

Is this for nothing? No, for suppose the Lord Jesus had been crucified, taunted and scorned, and suffered all the ignominy that ever could have been, and yet had been taken down quick, and the nails loosed, and gotten His wounds healed, thou hadst not been

saved, thy salvation had not been wrought: our sins had never been forgiven us, for without shedding of blood, and death, there had been no remission of sins...⁶⁰

This is a highly unusual and effective twist of rhetoric. For Rollock here temporarily *undoes* the crucifixion. Deftly wrenching the imaginations of his readers or listeners, he takes perhaps the most heavily iconic and abstracted event of Christian history, and artfully prises it loose from the fabric of history and necessity. In that brief space of dislocation, his audience finds itself sharply jolted back to a moment of history that might *not* have happened, and which therefore becomes the more compellingly real, and the more passionately appreciated. Clearly, then, for Rollock, the achievement of the cross was a very real and dynamic one. While most theologians saw it as a causative (not a merely symbolic) act of redemption, Rollock pinpoints exact physiological causation.

Brayne, meanwhile, focuses that kind of emphasis perhaps more concretely, when he urges his fellow Christians to understand, of Christ's death, that: 'the pouring of his soul out to death, was in the soul a suffering in a special manner'. And Jackson (in the same work in which he explicated the bloody sweat) is still more exactly medical about the final moments of the Passion: 'after his natural strength was spent, and his bodily spirits diffused with his blood; he lastly offers up his immortal spirit, his very soul unto his Father. Father into thy hands I commend my spirit: and having said thus he gave up the ghost, Luke 23.46'. So, Jackson concludes, 'the spirit of obedience did not expire with bodily spirits, it did accompany his soul into Paradise'. 62

If Jackson had been more rigorous about the Greek renderings of the crucifixion, he might here have had Christ bleed out not just bodily spirits for humanity, but his most fundamental <u>pneuma</u>. This would, arguably, have been consistent with His still having some remaining spirit to breathe out ('into thy hands...') after that exhaustion, given that Greek <u>pneuma</u> (like Hebrew <u>ruach</u>) was a quantity rather than an entity. Instead, Jackson renders Luke's 'spirit' into 'soul' –

having already chosen an apostle whose version of 'giving up the ghost' allowed Christ far more control than did the renderings of Matthew or Mark.⁶³

Whilst Jackson carefully divides bodily spirits from the 'immortal spirit', Maxey is determined to celebrate the most dynamically potent and concrete aspects of Christ's sacrificial end. With some thoroughness, he first gives an overview of the still competing opinions as to the exact seat of the soul. Is it in the head or heart? Is it rather diffused throughout the body and the blood? Without seeking to decide on one final position, Maxey instead asserts that by any of these criteria, Christ has undoubtedly spilled out his soul for humankind:

Now whether it be in the head, or in the heart, whether in all the body or in the blood, out of all doubt this sacrifice was throughly slain, most truly did he lay down his life for our redemption. For if the seat of life were in the brain or head, when he was crowned with thorns, the veins of his head did spring with blood: If in the heart, his heart was pierced thorough and gushed blood: If in the parts of the body, with wounds and stripes, all and every part of his body was tortured and stained with blood. (*Five Sermons*, 117)

Then, glancing back momentarily to the bloody sweat of Gethsemane, Maxey adds that 'if life consists in the blood it self, in this agony, the power of his spirits (like a still of roses) sweateth and trickleth blood. Prima sudorum origo è praecordiis est, sweating proceedeth from the heart strings; it was not ... a moist and watery dew, but ... rather a current of blood: or as Saint Chrysostome saith ... a bloody shower' (*Five Sermons*, 117-18). While this citation of Chrystostome is quite orthodox, it is perhaps telling that in his margin Maxey thrusts together a quotation from Bede on the bloody sweat, with a reference to the sixteenth-century French physician, Jean Fernel. As Walker has emphasised, Fernel's views of the body-soul relation were highly *un*orthodox. Hence we find Maxey attempting to piously humanise Christ through

the medical views of an author whose ideas about the soul may ultimately have helped to undermine one of the most basic entities of Christian theology. ⁶⁶

Yet for many of Maxey's audience, circa 1614, his efforts may well have provoked the jolt of sensuous empathy at which the passages seem to aim. If they did not, Maxey himself can hardly be accused of having understated his case:

so that we may see, in the distress of this agony, and his passion following, by sudden dilatation of the heart, the vital spirits and the blood being too far carried from their fountain, the life of his brain, the life of his heart, the life of his body, the life of his blood, and the blood of his life; all was drawn out and exhausted. His body was like a bottle dried in the smoke; for as this agony began with water and blood, so his passion did end with blood and water; last of all water, to show there was no more blood remaining.

Following this extra burst of somatic drama, Maxey goes on to create an extraordinary moment of powerfully embodied feeling: 'thus was his love like fire in his breast, till it flamed in his blood. That the spirit of blood (which of all things is observed most cordial to the heart) might comfort our heart: from so many springs as he hath members, did he drink salvation unto us in a full cup of his own blood' (*Five Sermons*, 118).

But what is most remarkable is the way that Maxey effectively imposes the Galenic model of progressively refined spirits onto Christ's ultimate moments of sacrifice. 'Thus was his love like fire in his breast, till it flamed in his blood'. These few words present a startling medical rewriting of the Passion. Maxey seems to imply that it is the physical experience of crucifixion, combined with the physical effects of intense love, which sparks a kind of metaphysical combustion, thereby causing Christ's soul to flame into his blood, and making this blood a valid medium for a cosmic act of redemption. By directly opposing Jackson's claim as to the distinctness of blood and

soul, Maxey has the advantage of evoking a peerlessly dramatic crucifixion. In this version Christ's act of mercy is at the furthest possible remove from any kind of purely conceptual gesture. Rather, at the most intense limits of physiological extremity, he is able to catalyse a state where emotion and biochemistry fuse into a special state of unity. The crucifixion now becomes not just theologically, but biologically necessary. Not only that, but Maxey even implies that this process of spiritual agitation and refinement had begun with that bloody sweat in the garden: 'the power of his spirits (like a still of roses) ...'. Here we have not just a kind of alchemical sense of Christ's body as some overwrought still, but a hint at that original status of that pneuma was indeed seen by many around Christ as a vehicle not of ethics, but of practical healing power.

For around a hundred and fifty years after Melanchthon's Commentary of 1552, spirits were things of power. In this sense, early modern Protestants had more in common with the ordinary recipients of healing in the New Testament (whether at the hands of Christ, or Paul) than those of later eras. Pneuma was a highly active and effective spiritual agent, rather than something ethereal or otherworldly – something beyond or opposed to matter. In this respect, it is interesting to close with a few words from Donne on the raw power of the Holy Ghost.

For much of his life, Donne engaged in detail with questions about the status of the Americas and their un-Christianised inhabitants. And at one point he employed <u>pneuma</u> in this context in a quite striking way. He first argues that, when a 'natural man' (ie, a native American) discerns sin in himself, this is actually due to the working of the Holy Ghost. He bases this claim on Acts 19.1-3, in which Paul baptises certain disciples at Ephesus: 'when he asked them "Whether they had received the Holy Ghost", they said, "That they had not so much as heard that there was a Holy Ghost". So, Donne concludes, 'certainly, infinite numbers of men, in those unconverted nations have the Holy Ghost working in them, though they have never so much as heard that there is a Holy Ghost'. Here the physiology of bodily spirits – underpinning once

again the positive invasions of God's spirit – has a peculiarly universal value, wholly transcending language or ideas. Twisting the medical side of this process a little further, it is as if such spiritual infusion and mingling has the wholly impersonal status of an injected drug – one which will operate in a homogeneous and standardised way, whatever the recipient may think or know about it. For Donne and his peers, faced with untold numbers of unconverted American heathens who had never seen books, who spoke innumerable different languages, and who, when offered a Bible, might well rub it over their body to absorb its vaunted benefits, spirits here offered a very special kind of power indeed.⁶⁸

Unless otherwise stated, all primary works listed here were published in London.

D.P. Walker, 'Medical Spirits in Philosophy and Theology from Ficino to Newton', in *Music, Spirit and Language in the Renaissance*, ed. Penelope Gouk (London: Variorum Reprints, 1985), Study X, 290, citing *De Anima Liber Unus* (Lugduni, 1555), 111.

² For more on Melanchthon's interest in Vesalian anatomy, see: *Philip Melanchthon's Observations on the Human Body: A poem written in Latin by Melanchthon on the flyleaf of the first edition of Vesalius' 'De Humani Corporis Fabrica'*, 1543, trans. Dorothy M. Schullian (1945) (Los Angeles: Ward Ritchie Press, 1949); Sachiko Kusukawa, *The Transformation of Natural Philosophy: The Case of Philip Melanchthon* (Cambridge: Cambridge University Press, 1995). For Melanchthon's influence on natural philosophy in Scandinavia, see: Morten Fink-Jensen, 'Medicine, Natural Philosophy and the Influence of Melanchthon in Reformation Denmark and Norway', *Bulletin of the History of Medicine* 80.3 (2006): 439-464.

³ Walker, 'Medical Spirits', 290.

⁴ For more on the <u>rete mirabile</u>, see Sugg, *Murder After Death: Literature and Anatomy in Early Modern England* (Ithaca: Cornell University Press, 2007), 130-33; Sugg, *The Smoke of the Soul: Medicine, Physiology and Religion in Early Modern England* (Basingstoke: Palgrave, 2013), 72-75, 281-91.

⁵ A Comparative Discourse of the Bodies Natural and Politic (1606), 24.

⁶ *The Complete Sermons of John Donne*, ed. George R. Potter and Evelyn M. Simpson, 10 vols (Berkeley and Los Angeles: California University Press, 1953-62), II, 261-62.

⁷ The Anatomy of Melancholy (1621), 28.

⁸ *The Anatomy of Melancholy*, ed. Thomas C. Faulkner, Nicolas K. Kiessling, Rhonda L. Blair, 3 vols (Oxford: Clarendon Press, 1994), I, 142.

⁹ Sylva Sylvarum (1627), 153, 31.

¹⁰ For further details, see: Sugg, *Smoke of the Soul*, 20-42.

¹¹ For more on the nature and functions of spirits in early modern bodies, see: Wietse de Boer, 'Spirits of Love: Castiglione and Neo-Platonic Discourses of Vision'; Justin E.H. Smith, 'Spirits

as Intermediary in Post-Cartesian Natural Philosophy', in: *Spirits Unseen: The Representation of Subtle Bodies in Early Modern European Culture*, ed. Christine Göttler and Wolfgang Neuber (Ledien: Brill, 2008): 121-140, 269-292.

- ¹³ The Second Part of the French Academy, trans. T. Bowes (1594), 578, 563, 566. This work was first published in France in 1580.
- ¹⁴ See: Sugg, *The Secret History of the Soul: Physiology, Religion and Spirit Forces from Homer to St Paul* (Cambridge Scholars, 2013), 14-31; Caroline P. Caswell, *A Study of* Thumos *in Early Greek Epic* (Leiden: Brill, 1990).
- ¹⁵ Aristotle's Theory of Material Substance: Heat and Pneuma, Form and Soul (Oxford: Clarendon Press, 1995), 66.
- S. Sambursky, *The Physical World of the Greeks*, trans. Merton Dagut (London: Routledge and Kegan Paul, 1956), 134.
- ¹⁷ Movement of Animals, trans. A.L. Peck (London: Heinemann, 1961), 703a.

Cf., also, the moment in *De Generatione Animalium* when Aristotle says that <u>pneuma</u> 'is analogous to the element which belongs to the stars' - namely, ether. Freudenthal rightly stresses that Aristotle is indeed making an analogy, here, not claiming that <u>pneuma</u> is <u>equivalent</u> to the ether. Yet even as an analogy, the statement is highly significant (see: *GA*, 736b, cited in: Freudenthal, *Aristotle's Theory of Material Substance*, 107).

¹² The Optic Glass of Humours (1607), 58v.

¹⁸ Sugg, Secret History, 38-43.

¹⁹ Sugg, Secret History, 43-58.

²⁰ See: W.E. Staples, 'The "Soul" in the Old Testament', *The American Journal of Semitic Languages and Literatures* 44.3 (1928): 145-76, 147; H. Wheeler Robinson, 'Hebrew Psychology', in *The People and the Book: Essays on the Old Testament*, ed. A.S. Peake (Oxford: Clarendon Press, 1925), 353-382, 366.

²¹ See Sugg, Secret History, 42.

These counts include 'soul' (55) and 'souls' (19); 'spirit' (287), 'spirits' (32), 'spiritual' (23), and spiritually (3).

²³ Acts 13.6-11; Acts 19.11-12. For other, probably similar, apostolic cures, see Acts: 5.15, 6.8.

²⁴ 'Gospel of Peter', 5.15-6.21, *The Apocryphal New Testament: A Collection of Apocryphal Christian Literature in an English Translation*, ed. J. K. Elliott (Oxford: Oxford University Press, 1993), 155.

²⁵ See: Matthew 9. 19-22; Mark 6.24-34; Luke 8.42-48. For discussion, see also: Sugg, *Secret History*, 158-63.

For more on Bolton's relationship to other ministers concerned with conscience, and with Burton's *Anatomy*, see: Mary Ann Lund, 'Robert Burton the Spiritual Physician: Religion and Medicine in the Anatomy of Melancholy', *RES* (2006): 665-683.

²⁶ See I Cor 15.44-7.

²⁷ Cosmology and Self in the Apostle Paul: The Material Spirit (Oxford: Oxford University Press, 2010), 102-3.

²⁸ On Milton's mortalism, see Sugg, *Smoke of the Soul*, 221-23.

²⁹ See, for example: 1. Sam. 1.15; Psalms: 42.4, 62.8, 107.26, 119.28; Joshua: 5.1, 7.5, 14.8.

³⁰ Holy Rules and Helps to Devotion Both in Prayer and Practice (1683), 19-20.

³¹ For more on this topic, see: Sugg, *Smoke of the Soul*, 164-84, 194-98.

³² Cf: Thomas Watson, *A Pastor's Love* (1662), 16-17, sermon 17 Aug 1662. Watson's sense of anatomical culture is reflected in a sermon of 27 December 1649: *God's Anatomy upon Man's Heart* (1649).

³³ Two Treatises Concerning Regeneration (1597), 57-59.

³⁴ See: Sugg, *Smoke of the Soul*, 324-25.

³⁵ It is worth noting that Morton cites Melanchthon on several occasions; see, for example: *A Catholic Appeal for Protestants* (1609), 244, 574, 578; *The Opinions of Certain Reverend and Learned Divines*... (1643), 4, 7.

³⁶ Delectable Demands, trans. William Painter (1566), 29v.

³⁷ An Exposition upon Some Select Psalms of David (1600), 273-74, 469.

³⁸ *Certain Sermons* (1616), 248.

³⁹ See, also: *Five and Twenty Lectures* (1619), 60-61; *An Exposition...* (1600), 73.

⁴⁰ As Stephen Wright emphasises, Bolton was by no means Puritan in his early career. It is also worth noting that Bolton was lecturer in natural philosophy at Oxford, c.1602 (see Wright, 'Robert Bolton', Oxford DNB).

⁴¹ Some General Directions for a Comfortable Walking with God (1626), 327-328.

⁴² On the suddenness of temptation, see: Bolton, *Instructions* (1631), 283-84. Cf also: William Perkins, *The First Part of the Cases of Conscience* (1604), 150. For a slightly different view, see: Samuel Clarke, *Medulla Theologiae* (1659), 344.

⁴³ Instructions for a Right Comforting Afflicted Consciences (1631), 198.

⁴⁴ *Some General Directions*, 327-28. For more on the relative ordinariness of such experiences among the pious, see: *Some General Directions*, 326.

- ⁴⁷ See: *Interest Deposed* (1660), 14; *Twelve Sermons* (1694), 146, 565. On Cromwell as the 'Father of enthusiasts' see: *Interest Deposed*, a1r.
- ⁴⁸ A relatively scientific critic might, of course, insisted that the presence of heat within light would have fried the heart to a crisp.
- ⁴⁹ *Twelve Sermons* (1698), 356.
- ⁵⁰ In strict theological terms, of course, all the moments of Christ's life were *equally* human. But certain Christians must, if unconsciously, have recognised some of his experiences as more 'human' than others.
- ⁵¹ Cf. Paul L. Maier, *In the Fullness of Time: A Historian Looks at Christmas, Easter, and the Early Church* (Kregel Publications, 1997), 131.
- ⁵² The Humiliation of the Son of God by his becoming the Son of Man (1635), 146.
- 53 *Humiliation*, 129. 'Long ago' shows that Jackson must be referring to Joachim Curaeus (1532-1573) rather than Marin Curaeus (1594-1669). The former studied and practised medicine in Padua and Bologna, 1557-8 (see: Charles H. Lohr, 'Renaissance Latin Aristotle Commentaries: Authors C', *Renaissance Quarterly* 28.4 (1975): 689-741, 740).

⁴⁵ 2 Peter 1.19.

⁴⁶ *Twelve Sermons* (1698), 356-57, italics mine.

⁵⁴ See Sugg, *Murder after Death*, 167.

⁵⁵ Five Sermons (1614), 109-110.

⁵⁶ Strictly, the water released by the spear appears to have been the 'thin film of fluid between the visceral and parietal layers', just beneath the fibrous envelope of the pericardium itself (Anne M.R. Agur and Ming J. Lee, *Grant's Atlas of Anatomy* (Philadelphia: Lippincott Williams & Wilkins, 1999), 59). As this source notes, the fluid is now thought to allow 'the heart to move within the sac' (ibid).

⁵⁷ The Unknown Being of the Spirit, Soul, and Body, Anatomized (1654), 31.

⁵⁸ *Unknown Being*, 5. Brayne also insists on the great differences between the spirits of individual men (57-8); and at one point glances at the importance of 'spiritual communications' via the Holy Ghost: 'the spirit of Christ, as joined to the spirit of God, and sent out of God into the hearts of his Elect, by far exceeds the angels ... in the power and way he hath of communicating himself to men' (61).

⁵⁹ James Kirk, 'Robert Rollock', Oxford DNB.

⁶⁰ Lectures upon the History of the Passion (1616), 223.

- ⁶³ Matthew 27.50: 'Jesus, when he had cried again with a loud voice, yielded up the ghost'; Mark 16.37: 'And Jesus cried a with a loud voice, and gave up the ghost'.
- ⁶⁴ Five Sermons, 118: citing Jean Fernel, *Physiologia* (Paris, 1567), book 4, chap 10. As John Henry and John M. Forrester note, chaptering is anomalous after chapter 9 of book 4; Maxey is probably referring to 'Distinctions between native heat and spirit' (chapter 9a in: 'The "Physiologia" of Jean Fernel (1567)', ed. and trans. John M. Forrester and John Henry, in *Transactions of the American Physiological Society* 93.1 (2003): 1-636, 295-98).
- ⁶⁵ 'The Astral Body in Renaissance Medicine', in *Journal of the Warburg and Courtauld Institutes* 21 (1958): 119-134, 119, 130.
- ⁶⁶ Cf. also *Certain Sermons* (1619), 401, where Maxey imagines God, creating Eve from Adam's rib, as a kind of 'anatomist'. For other examples of preachers linking the crucifixion to anatomy, see also: Thomas Ailesbury, *The Passion Sermon ... 7 April 1626* (1626), 25; and Donne, *Sermons*, VIII, 146, Christmas 1627.

⁶¹ Unknown Being, 14.

⁶² *Humiliation*, 146-47.

⁶⁷ Sermons, VII, 222.

⁶⁸ On this unorthodox use of the Bible, see: Thomas Hariot, *A Brief and True Report of the New Found Land of Virginia* (1590), 27.