

UNIVERSITY OF SOUTHAMPTON

THE IMPACT OF VESALIAN ANATOMY ON RELIGIOUS AND LITERARY  
CULTURE FROM PHILIP MELANCHTHON TO JOHN DONNE

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ABSTRACT

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THE IMPACT OF VESALIAN ANATOMY ON RELIGIOUS AND  
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This thesis examines the changing relationship between anatomy and religiously-based epistemology, in a period when representations of the human body stood poised between the older theological systems of Scholasticism, and the conceptual schemes of a still embryonic scientific mentality. Chapter one considers how public and published anatomy in England gave rise to the new genres of the 'anatomy' and 'analysis', literary forms frequently misunderstood by conventional genre criticism. Chapter two outlines the impact of Vesalianism on the Christian soul, showing how reinvestigation of classical anatomy gradually split apart an existing synthesis of classical and Christian thought. Following chapters focus on the responses of individual writers to the questions raised in this broad survey. Chapter three discusses the religious implications of Melanchthon's anatomically informed De Anima, and Servetus' anatomically grounded heresy. In England, Thomas Nashe's insistently visceral writings offer the most fully developed and revealing example of Elizabethan anatomical rhetoric. Robert Burton's Anatomy, considered alongside contemporary instances of the 'anatomy' and 'analysis' genres, rather than as a monolithic literary conundrum, demonstrates how anatomy exerted influence on more conservative discourses. Chapters four and five examine anatomically inspired imagery in John Donne's nominally secular, and sacred writings, respectively. Donne displays alternate attraction to, and distrust of, the new human interior in rhetorically exploiting its novelty, solidity, and intricacy to 'flesh out' the religious thinking which Vesalianism implicitly subverts. Discussion of Donne's unease about bodily resurrection and body-soul relations develops the issues raised in Chapter Two. Donne's sermons are related to England's wider anatomical culture via their topical glances at the Lenten 'dissective season' of Stuart London.

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This thesis is dedicated to the memory of my father,  
Frank John Sugg (1926-1989).

## EDITORIAL NOTE

In each chapter, further references after initial citation of a work are to the same edition unless otherwise stated, and are given by author or editor name, or by short title.

### List of Abbreviations

The Complete Sermons of John Donne, ed. by George R. Potter and Evelyn M. Simpson, 10 vols (Berkeley and Los Angeles: California University Press, 1953-62); referred to throughout as Sermons, with volume and page number.

John Donne: The Complete English Poems, ed. by A.J. Smith (Harmondsworth: Penguin, 1971; repr. 1975); referred to throughout as Poems.

R.C. Bald, John Donne: A Life (Oxford: Clarendon Press, 1970); referred to throughout as 'Bald'.

Edmund Gosse, The Life and Letters of John Donne, 2 vols (London: William Heinemann, 1899); referred to throughout as 'Gosse' with volume and page number.

Robert Burton, The Anatomy of Melancholy, ed. by Thomas C. Faulkner, Nicolas K. Kiessling, Rhonda L. Blair, 3 vols (Oxford: Clarendon Press, 1994); referred to throughout as Anatomy, with volume and page number.

All references to the Stationers' Register to: A Transcript of the Registers of the Company of Stationers of London 1554-1640, ed. by E. Arber, 5 vols (London: privately printed, 1875-94).

## Chapter One

### The Seen and the Written: Anatomy as a Cultural Phenomenon

#### Introduction

The theoretical framework for this thesis draws on the ideas of Michel Foucault, Ernst Cassirer, and Mikhail Bakhtin concerning the question of cultural or epistemological shift between the late sixteenth and earlier seventeenth centuries. Although no one of these accounts will be taken as definitive, the three together serve, balanced against one another, as a working model through which to approach early modern anatomical and corporeal imagery.

Discussion of the large number of literary 'anatomies' consequent on Vesalian dissection and illustration is used, in section two, to illustrate the wide-ranging and persistent impact of anatomy on both public and creative imaginations. The voguish ubiquity of 'anatomy' as a catchword, and the implied respect for its claims to rigour and thoroughness are displayed by commercial and religious efforts to exploit the reflected glory of the word and associated verbal forms. The pattern of literary anatomy titles within England (or retitlings of existing works) suggests the influence of a revived medical anatomy; of the Lumleian Anatomical Lectures (1584 onwards); and of the work of Helkiah Crooke and William Harvey from 1615. The overview provided in this chapter shows that the active lifetimes of Thomas Nashe (1567-1601), John Donne (1572-1631), and Robert Burton (1576/7-1639/40) coincided with the greatest flourishing of early cultural interest in public anatomy.

The illustrations of Andreas Vesalius and his imitators (and plagiarists) will be referred to throughout the thesis. In this chapter certain material and cultural impetuses behind these remarkable depictions are proposed and discussed. The images are seen as both cause and effect of epistemological changes associated with the human body. Characteristically poised between art and science, they display the transition between a holistically presented body, integrated with 'non-scientific', religious and social elements, and an increasingly clinical, autonomous entity stripped of both incidental human characteristics and religious symbolism, and limited to physiological operations and anatomical composition. They thereby exemplify the 'window of opportunity' spanning the mid-sixteenth and earlier seventeenth-century - a period of epistemological and cultural openness whose effects are visible in philosophy, religion and literature. Much of their power appears to derive precisely from their non-rational, non-discursive character - notwithstanding their accompanying text, these pictures give a forceful immediate impression not easily translated into verbal form. Like the newly-anatomised body itself, they have a mute eloquence at once greater than traditional medical vocabulary, and especially subversive of it, just because their influence operates beneath normal channels of explicit argument. Although *pre-Vesalian* depictions, insofar as they were pictorial, not verbal, were obviously non-rational also, the sophistication of Vesalian graphic techniques produced images at once more powerful, and less marked by the very act of pictorial construction.

The chapter aims to provide a framework through which anatomical innovations can be viewed, setting them in relation to the religious ideas and institutions which they would ultimately contest. The force of anatomical illustration is attested by the phenomenon of the literary

anatomy, while the illustrations themselves are seen as both feeding, and stemming from, the larger cultural transition outlined, in differing ways, by Foucault, Cassirer, and Bakhtin.

## 1. Theoretical and Historical Perspectives: Foucault, Cassirer, Bakhtin, and Timothy Reiss

### a. Foucault

The above writers have all discussed the question of cultural shift just prior to and during Donne's lifetime. Foucault's and Reiss's writings are concerned with knowledge *per se*; Cassirer's with how knowledge relates to the human subject; and Bakhtin's with how language and literature reflect and promote changes in politics and culture. All four approaches overlap to some extent, and all four can be used to understand the relation of anatomy to literature and religion in the sixteenth and seventeenth centuries. I will deal first with Foucault's book, The Order of Things.<sup>1</sup>

In this work Foucault identifies what he terms a 'discontinuity' (Foucault, p.50) between the *epistemé* of the sixteenth-century, and that which succeeded in 'the first half of the seventeenth-century' (Foucault, p.58). The use of the term *epistemé* reflects Foucault's desire to study not history, or history of ideas, but something which he sees as more primary: the basic conditions governing 'knowledge itself' (Foucault, p.54). 'Discontinuities' are those periods in which, 'within the space of a few years' (Foucault, p.50), epistemological conditions have changed 'at that archaic level which makes possible both knowledge itself and the being of what is to be known' (Foucault, p.54).

Foucault characterises 'the end of the sixteenth century, and even... the early seventeenth century' (Foucault, p.17) as epistemologically closed, marked by a predominantly analogical mode of thought which linked all of creation through 'correspondences' and 'resemblance' (Foucault, p.55). A mental habit of discerning similarities between mankind, the natural world, and the larger cosmos, meant that all creation tended to reflect inwards, everywhere signifying the hand of divine artifice. The implicit reverence of such an attitude to both language and phenomena was typified especially by 'commentary'. Foucault sees the large number of particular Commentaries on classical philosophy or Scripture as representative of a more general state of mind: 'questioning [language] as to its secret, commentary halts before the precipice of the original text... it *sacralizes* language' (Foucault, p.81). Rejecting those 'idols imposed by words on the understanding', the new *epistémé*, conversely, favoured criticism, a mode which 'speaking of language in terms of representations and truth, judges it and profanes it' (ibid.).<sup>2</sup> For Foucault, 'The study of grammar in the sixteenth century is based on the same epistemological arrangement as the science of nature or the esoteric disciplines' (Foucault, p.35), so that 'nature and the word can intertwine with one another, forming, for those who can read it, one vast single text' (Foucault, p.34).

At a glance, Foucault's description of Renaissance language is loosely Edenic (names were given by Adam, God's first human creation, and were therefore in some sense 'lodged in the things which they designated' (Foucault, p.36)). It is important to stress, however, that Foucault is not simply attributing a naively magical apprehension of 'words and things' to Donne and his contemporaries. He acknowledges that 'It had long been known - and well before Plato's Cratylus - that signs can be either given by nature

or established by man'. Nevertheless, while the sixteenth century equally 'recognised human languages to be instituted signs', it nonetheless believed that 'the artificial signs owed their power only to their fidelity to natural signs. These latter, even at a remove, were the foundation of all others' (Foucault, pp.61-62). If words were not straightforward magical tools, they yet possessed an epistemological gravity which reflected the pre-eminent status of Christian scripture. This position, somewhere between a representational view of language, and a wholly magical one, corresponds to the implicit epistemological and rhetorical assumptions which are at once manifested, and subtly challenged, in the literature examined in this thesis.

The relevance of Foucault's work to early modern science, and to anatomy in particular, should become apparent in the following chapters. The link can be briefly indicated here. Because 'commentary' implied 'below the existing discourse, another discourse... more fundamental and... "more primal"' (Foucault, p.41), the earlier *epistémé* tended to 'draw... things together' (Foucault, p.55) toward a primary, originating centre - that of the Creator who guaranteed and unified the order of things. By the early-seventeenth century this centralised epistemology was facing opposition. Foucault's recognition that 'sixteenth-century knowledge condemned itself to never knowing anything but the same thing' (Foucault, p.30) echoes Bacon's weariness at 'how many are ever saying and doing what has been said and done before' (Novum Organon, IV, pp.83-4). The 'total system of correspondence' (Foucault, p.55) came increasingly, therefore, to be replaced by a mode of knowledge prepared to actively intervene in the world, rather than cautiously manipulate an order instituted by God. This new *epistémé* was concerned in particular with 'discriminating' (ibid.) - an activity exemplified most vividly, in early-seventeenth

century England, by anatomy. Post-Vesalian dissection may therefore be seen as a precursor, both cause and effect, of the more general 'analytic' mode of knowledge favoured by Bacon, Descartes, and their explicitly taxonomical successors (Foucault, pp.71-76, pp.132-38).

Foucault's opposition between the sixteenth and the later seventeenth centuries has been criticised for its polemicism. Both the book's scholarship, and its flamboyant prose, have excited hostility from traditional historians of the period. Rather than trying to defend Foucault at length here, I will attempt to show, through the details of this thesis, how a revised version of his argument may be applied to cultural changes across Donne's lifetime. Two general points may be stated on Foucault's behalf. One is that his book in fact makes the sixteenth century more credible to us, rather than more incomprehensible. The baffled modern attitude ('Why did they not *look*? Why not *check*?') implies that the Renaissance thinker simply privileged the textual over the actual in Scholastic or Aristotelian fashion. In place of this, Foucault suggests that a solidly theocentric rationality found it unnecessary to distinguish between these two levels. The seemingly chaotic mixture of fable, observation, and hearsay in the work of a naturalist such as Aldrovandi is related to the fact that, '...for Aldrovandi and his contemporaries it was all *legenda* - things to be read. But the reason for this was not that they preferred the authority of men to the precision of an unprejudiced eye, but that nature, in itself, is [sic] an unbroken tissue of words and signs' (Foucault, pp.39-40). As Galileo was to complain, both 'natural philosophy' and 'Scholasticism... look on philosophy as a book, a product of fantasy, like the Iliad or the Orlando Furioso, in which the matter of least concern is whether the things written in it are true'.<sup>3</sup>

Beside revealing this 'positive unconscious of knowledge', the 'rules of formation... never formulated in their own right, but... found in widely differing theories, concepts, and objects of study' (Foucault, x-xi) Foucault also reconstitutes the thinking of the period at the precise level of his own prose. Signification, in the Renaissance, involved a 'uniform layer, in which the seen and the read, the visible and the expressible, were endlessly interwoven', 'an unbroken plain of words and things', and 'a writing that is part of the fabric of the world' (Foucault, p.43, pp.39-40, p.41). These luminous but allegedly 'non-academic' depictions attempt to represent sixteenth-century epistemology holistically, rather than baldly (and anachronistically) asserting that the later, binary division between signifier and signified was unknown to the pre-Cartesian world. Additionally, Foucault's prose is literary in a deliberately post-structuralist sense. By very conspicuously drawing attention to its own materiality and poetic qualities, it rejects pretensions to scientific neutrality or universal truth. In Foucault's opinion our own epistemological view is as contingent, and liable to future assault, as that of the Renaissance. A last specific point to add is that, if a notion of language and epistemology as 'coeval with the institution of God' (Foucault, p.34) can be said to apply to any area of rhetoric and belief, then the medium of the sermon must stand as the most obvious candidate. In my final chapter in particular I will attempt to show how Donne's preaching manifests forms of the attitude outlined in Foucault's book.

## b. Cassirer

Perhaps the most effective argument for Foucault's thesis, however, is the way that it reflects, at certain points, the ostensibly very different ideas of Ernst Cassirer. While it is important to admit that Cassirer's thinking undoubtedly *is*, in some ways, quite distinct from that of Foucault, both appear to agree that a certain epistemological 'distancing' occurred in the early-seventeenth century. In Foucault's sixteenth-century, 'resemblance' *epistémé* there was a relatively close entanglement of the knowing subject and the objects of knowledge. A direct and aggressive relationship to natural phenomena risked implicitly rejecting the divine mediation which ultimately unified humanity with the rest of creation. Equally, Cassirer finds that, for the Italian philosopher Bernardino Telesio (1509-1588), 'All conception, every mediating ratiocination goes back to an original act of *empathy* by which we assure ourselves of the community that binds us with all being' (Cassirer, p.149). Foucault's 'solid and secret bonds of resemblance or affinity' (Foucault, p.58) are evident in "'that bond in the universe which the Greeks call 'sympathy'"', which Cassirer sees as crucial to the cosmology of a figure such as Pico della Mirandola.<sup>4</sup>

Magic, in the sixteenth century, is in one sense only a religious version of later science. The occult forces which allowed Aldrovandi to rely, indiscriminately, on what would later be divided and ranked as '*Observation, Document and Fable*' (Foucault, p.129) made it possible for Paracelsus to insist that, 'Witchcraft, or... such like things... are far absent from me... *I write nothing here, which is supernatural, and which is not wrought and effected by the power of nature and Celestial influences...*'.<sup>5</sup> Equally, in Cassirer's view, Pico della Mirandola sees 'magic' as something which

'supports, like an industrious servant, the operative forces in nature' (Cassirer, p.149). Similarly, in Cassirer's arguably more nuanced version of contrasting modes of thought, the anti-Aristotelian theologian and magus, Tommaso Campanella (1568-1639), though a contemporary of Bacon (1561-1626) and Galileo (1564-1642), stands as a 'rational methodologist of magic' (Cassirer, p.150), developing a flawed empiricism which attempts to unite all natural phenomena around 'a single principle' (Cassirer, p.150). Cassirer's ability to explain how and why such thinkers combined seemingly contradictory tendencies corresponds to Foucault's search for a 'positive unconscious of knowledge' (Foucault, x-xi). It is perhaps unsurprising, then, that there appears so little difference - other than prose style - between Cassirer's belief that 'the theoretical conclusion of the analogy is rooted in the fundamentally common nature of all being' (Cassirer, p.149) and Foucault's statement that, 'The truth of all these marks - whether they are woven into nature itself or whether they exist in lines on parchments and in libraries - is everywhere the same: coeval with the institution of God' (Foucault, p.34).<sup>6</sup>

Cassirer's analysis of the shift away from analogical thought is also similar to that of Foucault: 'The tendency towards immersion in nature's all-embracing unity is now opposed by a contrary tendency towards particularization and specificity' (Cassirer, p.170). The latter trend (situated, earlier and less dramatically than Foucault's 'discontinuity', 'around the turn of the sixteenth century' (Cassirer, p.136)) matches both Foucault's shift toward 'discrimination' (Foucault, p.55), and the general revival of medical anatomy from the 1530s onwards.<sup>7</sup> The dissolution of what Foucault terms 'the solid and secret bonds of resemblance' (Foucault, p.58) between microcosm and macrocosm is implicit in Cassirer's belief that 'the empirical is no

longer to be resolved in the ideal, therewith to be stripped of its specific character'. Increasingly, rather than the empirical merging with the textual, systematic investigation of the former will provide the basis for the latter: 'the ideal can only be genuinely fulfilled in the empirical, where it is tested and justified' (Cassirer, p.172). Galileo provides an especially clear example of the new attitude in natural philosophy, in which either technology, scientific method, or mathematics puts a certain, potentially non-religious, distance between subject and object. Where once the opacity of divine artifice and occult 'significance' that Foucault describes had intervened between the knower and the known, the 'true path of investigation' now consists in bringing 'a definite measure and a fixed rule to the indistinct mass of phenomena by constantly relating experience to mathematics...' (Cassirer, p.155).

In Cassirer's hands, the epistemological rupture outlined by Foucault shows more subtle nuances. Prior to the absolute dominance of the 'taxonomic', analytical *epistémé*, there is, for Cassirer, a temporary coexistence between the older and newer discourses, with 'matter' now 'no longer conceived of as the mere opposite of form, and therefore as "evil" pure and simple'. '[I]nstead matter is that with which all activity of the form must begin and through which the form must realise itself' (Cassirer, p.133). As a gloss on the tendency of Donne, in particular, to employ conspicuously material, often visceral, imagery, this statement could hardly be bettered. It illustrates how Donne and other writers were able, at least temporarily, to exploit a new materiality for religious, conservative ends, in the short interval before scattered analytical, corporealising tendencies hardened into the new 'analytic' *epistémé* proper. Such tendencies, as this chapter's second section will argue, were strongly promoted and popularised by medical anatomy.

Again, the following summary very neatly epitomises both the rise of anatomy in general, and the specific case of Melanchthon's De Anima in particular: 'The basic tendency in the critical renewal of Aristotelian psychology, brought about at the turn of the sixteenth century' consists in 'a turn towards naturalism... an attempt to fit the principle of the "soul" into the general complex of nature, and to explain it purely immanently through nature' (Cassirer, p.136). This statement might be applied directly to the way in which Melanchthon, supposedly writing a mere 'commentary' on Aristotle's De Anima, composes a far more empirically grounded work, and appears increasingly preoccupied with the newly anatomised body.

### c. Bakhtin

Set alongside the arguments of Foucault and Cassirer, Mikhail Bakhtin's discussion of language suggests a similar sense of cultural shift in the earlier-seventeenth century. In this thesis I will be referring to Bakhtin's book Rabelais and his World and to his essays 'Discourse in the Novel' and 'Epic and Novel'.<sup>8</sup>

Central to Bakhtin's work is a distinction between 'monoglossic' and 'heteroglossic' language. The former, which centralises, and is complicit with official, established culture, is typically found in 'high' literary forms such as poetry, and epic poetry in particular. Like the thinking of Foucault's 'resemblance' *epistémé*, monoglossia draws all discourse to one cultural and linguistic centre, suppressing variety, and favouring textual authority over crude empirical realities. It is characterised as 'centripetal', in opposition to the 'centrifugal' language of heteroglossia. A mode of writing which allows free rein to a clash of voices,

literary styles, and genres, and to different strata of society, heteroglossia is exemplified by 'novelistic discourse'. This, in Bakhtin's usage, is not limited solely to the conventional 'rise of the novel' in the eighteenth century. Bakhtin's novel is a work which allows the expression of typically excluded languages, notably those of folk culture, in their unprocessed, living vigour. It involves satire and parody, and an unrepressed physicality. One wave of it is therefore associated with works such as the Satyricon of Petronius, while the most conspicuous sixteenth-century examples are François Rabelais's Pantagruel (1532) and Gargantua (1534).<sup>9</sup> Despite Bakhtin's classical interests, it is only in the revived classicism of the Renaissance that the novel begins to find its fullest expression: 'in ancient times the novel could not really develop all its potential; this potential came to light only in the modern world' (The Dialogic Imagination, p.40).

Changes in language are, for Bakhtin, related to changes in culture. The heteroglossic, three-dimensional, and irreverent language of novels such as Pantagruel and Gargantua, and Don Quixote, subvert the previously dominant, centralising discourse associated with the established Church and with hierarchical institutions in general.<sup>10</sup> To render Bakhtin's distinction more precisely, it is important to appreciate how thoroughly language is, for him, rooted in social and institutional practices. Because of this, pure monoglossia is in fact never possible. Any utterance may be 'exposed... as a contradiction-ridden, tension-filled unity of two embattled tendencies in the life of language' (The Dialogic Imagination, p.272).

The kind of cultural shift explored in this thesis is represented, in terms of the discursive authority of institutional bodies, by the increasing autonomy of the Royal College of Physicians. As this very concrete institution

risers in prominence and power, so the ability of the established Church to centralise and 'flatten' discourse concerning the body, is gradually challenged. In referring to heteroglossic or monoglossic writing, I will therefore be implying the relative discursive power of institutions and practices (notably Renaissance universities, the Royal College of Physicians, the Church and church sermons, and public dissection) in the period from Melanchthon to Burton.

Bakhtin, although in some ways a more traditional scholar than Foucault, touches on similar concerns to those presented in The Order of Things. The 'irreverence' of Foucault's new *epistémé* of 'criticism' (Foucault, p.81) is paralleled by Bakhtin's 'familiar conquest of the world, exemplified in the swab episode' (Rabelais and his World, p.380).<sup>11</sup> Such familiarity more generally 'prepared a new, scientific knowledge of the world' one which 'was not susceptible of free, experimental, and materialistic knowledge as long as it was alienated from man by fear and piousness and penetrated by the hierarchic principle' (Rabelais and his World, pp.380-81). The 'alienation' perceived by Bakhtin can be equated with the 'opacity' Foucault sees as intervening 'between the sign and its content' (Foucault, p.66). My own argument will present the 'free, experimental and materialistic knowledge' as itself a form of distancing which gradually overthrows the older distance of religious fear and piety.

A crucial transitional force in effecting the movement between the religious and scientific systems was the new medical and anatomical practice of Vesalius and his successors, who were indeed 'preparing a new, scientific knowledge' in the 1530s and 1540s. Just as there is a 'stylistic three-dimensionality' (The Dialogic Imagination, p.11) in the novel which is opposed to the relative abstraction of either high poetic style or religiously

directed texts, so the literal three-dimensionality of a human body previously suffocated and flattened beneath textual authorities begins to assert itself in the mid-sixteenth century: 'a new, sober artistic-prose novelistic image and a new critical scientific perception came into being simultaneously' (The Dialogic Imagination, p.39). François Rabelais (c.1494-1553) was of course a medical doctor himself, and published Pantagruel in 1532, just eleven years after Berengario da Carpi's (c.1460-1530) anatomical work, and six years before the Tabulae Sex of Vesalius (1514-1564).<sup>12</sup>

Besides his central literary example of Rabelais, Bakhtin favours the highly novelistic Cervantes in a way very similar to Foucault. The latter insists that 'Don Quixote's adventures form the boundary: they mark the end of the old interplay between resemblance and signs and contain the beginnings of new relations' (Foucault, p.46). Much of the book's comedy, for Foucault, derives from the (failed) 'attempt to transform reality back into a sign... a sign that the signs of language really are in conformity with things themselves' (Foucault, p.47). As the sixteenth meets the seventeenth century, however, 'Flocks, serving girls and inns' no longer 'resemble castles, ladies and armies', but 'remain stubbornly within their own ironic identity' (Foucault, p.47). Bakhtin similarly insists that Don Quixote '...realises in itself, in extraordinary depth and breadth, all the artistic possibilities of heteroglot and internally dialogized novelistic discourse' (The Dialogic Imagination, p.324). For both Bakhtin and Foucault, Cervantes' comedy has serious political and epistemological ramifications.<sup>13</sup>

#### d. Timothy Reiss

While Cassirer's book can be read as an analysis of discontinuity from the perspective of the changing human ego, Bakhtin's work investigates discursive rivalry by analyzing the social and political implications of literary language. Like Cassirer, Bakhtin is far more prepared than Foucault to allow different discourses an uneasy coexistence. A more recent writer who appears to favour this view is Timothy J. Reiss, whose book, The Discourse of Modernism, applies Foucault's ideas of historically shifting discourses to literature, philosophy and science from the Middle Ages to the present.<sup>14</sup> The Foucauldian *epistemés* of sixteenth century 'resemblance' and seventeenth century 'taxonomy', are rendered by Reiss as discourses of 'patterning' and of 'analysis and reference' (Reiss, p.30). Chapter Four of Reiss's book examines Johann Kepler's Somnium (Frankfurt, 1634). Although published just after Donne's death, this tale was begun many years before publication - possibly as early as 1609 (Reiss, p.143). That Kepler's works as a whole are an odd, seemingly contradictory mixture of the scientific and the fantastical has, of course, been a fashionable view for some time.<sup>15</sup> Reiss's attitude to this paradox is that Somnium, in particular, can be seen to straddle two briefly coexisting discourses.

Kepler's book has notes, evidently written some time after the text itself (Reiss, p.143), and designed to explain the central 'dream'. Unlike the dream, these notes are distinguished by their analytic rigour and lack of mysticism: 'They could, if one wished, be reduced to a single logical formulation by the necessary removal of their semantic variables' (Reiss, p.145). Reiss proposes that the notes therefore 'represent the appearance from within a discourse of patterning of the order of what will shortly become the

dominant [analytico-referential] discourse' (Reiss, p.144). The discussion of Kepler provides a neat paradigm for my own discussion of Donne. The ostensibly conservative and religious language of the latter in fact often relies on (and therefore inadvertently promotes) the increasingly empirical and analytic discourse which Donne consciously and explicitly resists.

Reiss's book in some ways complements the Cassiran, as well as the Foucauldian, thesis. In stressing the importance of mathematics for a new scientific outlook Cassirer nonetheless recognises that it is 'the *ideality* of mathematics [which]... thrusts aside the medieval barrier between nature and mind' (Cassirer, p.162, italics mine). Equally Reiss, while acknowledging the seventeenth-century tendency to abstract and conceive (rather than perceive) the world (Reiss, pp.34-36), shows how science and religion are at first mutually reinforcing, rather than straightforwardly antagonistic. Even Bacon, the 'objective' scientist *par excellence*, needs to occlude his own subjective involvement in a supposedly neutral process, and therefore claims to come "in the name of the father" [God], not as the father' (Reiss, p.216). For Bacon it is not simply the case that the delusions of a religiously-grounded knowledge must give way to systematic empiricism. Rather, he feels (or claims to feel) that 'There is a great difference between the Idols of the human mind and the Ideas of the divine. That is to say, between certain empty dogmas, and the true signatures and marks set upon the works of creation as they are found in nature' (Novum Organon, IV, p.51.)

I hope throughout this thesis to give weight and precision to the theoretical framework outlined here, by discussing particular instances of cultural practice and language. I will now examine one of the most conspicuous and

pervasive manifestations of anatomy's epistemological influence.

## 2. Literary Anatomies

### a. Origins and Implications of Anatomically Associated Rhetoric

Between 1556 and 1650, at least 76 literary 'anatomies' were published in English (see appendix). The diverse range of anatomy titles begins with Anthoni de Adamo's English translation of Augustino Mainardo's An Anatomi: that is to say a parting in pieces of the Mass ([Strasbourg], 1556) - the English version notably feeling obliged to explain the novel use of 'Anatomi'. It includes Pierre Du Moulin's The Anatomy of Arminianisme (London, 1620), and James Hart's The Anatomie of Urines (London, 1625), alongside the more enduring specimens: Phillip Stubbes' The Anatomie of Abuses (London, 1583), John Lyly's Euphues: The Anatomie of Wit (London, 1578), Robert Greene's Arbasto, the Anatomie of Fortune (London, 1584), Thomas Nashe's The Anatomie of Absurditie (London, 1589), John Donne's An Anatomy of the World (London, 1611), and Robert Burton's The Anatomy of Melancholy (London, 1621). Between 1595 and 1650 there were published a further 42 works whose titles carried verbal forms of the word 'anatomy', or 'dissect' (see appendix). These verb-based anatomies swell the total to 118. While this figure is the working estimate I will be using for the present chapter, it is worth noting that the addition of continental works (including at least 15 non-medical Latin publications whose titles bear the word 'Anatomia' or 'Dissectio'), and of subsequent editions of English 'anatomies', adds another 52 titles, bringing the grand count

to 170 in the space of 94 years.<sup>16</sup> It is important to consider this larger total as part of the overall picture: French, Dutch, German, Spanish, Italian, and Latin works would be reasonably accessible; while reprintings of existing works not only represent the popularity of the genre or its practitioners, but also provide some indication of how prominent the genre itself would have been in the literary marketplace.

A comprehensive discussion of all forms of anatomically inspired rhetoric lies beyond the scope (and length) of this thesis. Even a brief overview of literary and intellectual coinages related to anatomy suffices, however, to reveal how extensive the influence of post-Vesalian dissection and illustration on literature and thought actually was. Probably the most important case is the rise of the 'Analysis'. Between 1585 and 1648 18 titles carrying this word were published in English, with a further three employing its verbal form between 1615 and 1644 (see appendix).<sup>17</sup> Clearly synonymous with, and in fact almost certainly inextricable from, medical and literary anatomy, analyses are not known to have been published in English before 1585.<sup>18</sup> Although some usages appear to gesture back to the word's Greek origins, by synonymising it with 'resolution' (in the sense of 'unfasten' or 'break up'), early modern analysis was clearly a word and idea born (or re-born) very definitely out of a thing, and its visceral origins were not quickly forgotten. Although the word 'analysis' was used, in the prefatory epistle to Spenser's Shepheardes Calendar, as early as 1579, here it notably appeared in Ancient Greek.<sup>19</sup> While the 1581 edition gives it in English, this appears only to reflect a wholesale switch of Greek words into English; the usage remains essentially a classical and erudite one, and lacks any explicit anatomical connotations.<sup>20</sup> In 1590, however, Thomas Nashe makes play with the term's new associations when he

compares those literary hacks who 'vaunt the pride of contraction' to the starving Scythians who 'tooke in their girdles shorter'. Such writers attract Nashe's derision for being able to 'bound their base humours in the beggerly straights of a hungry Analysis' - the last word here meaning both 'an abridgement' and 'an Anatomie', or anatomised body.<sup>21</sup> Again, when Marlowe, in 1598, has Hero state,

"...henceforth, be all sounds,

Accents, and phrases that show grief's wounds,  
Analys'd in Leander",

his apparent meaning ('epitomised in Leander') seems to glance at anatomy via the association of 'wounds'.<sup>22</sup> Moreover, Nashe's and Marlowe's senses of 'analysis' as meaning 'epitome' or 'abridgement' appear to be necessarily as 'post-anatomical' as literary anatomies themselves. Etymologically, 'analysis' meant to break down or undo, not 'summarise' or 'compress'. This latter meaning of the word evidently depended upon the synonymity of 'anatomy' and 'analysis', and thus ultimately upon the notion of a literary anatomy as *essentially* compressive, providing an outline which was concise but exhaustive.

A little later, William Cowper, author of The Anatomy of a Christian (London, 1611) includes a Burtonian tabular 'Analysis of the first booke' of his Heaven Opened.<sup>23</sup> At times, moreover, literary analyses show much greater awareness of their visceral origins than do many literary anatomies. In 1611 James Forester (b.1559/60) offers a 'particular analyse' (ie., 'analysis') of 'The Marrow and Juice of Two Hundred and Sixtie Scriptures...'.<sup>24</sup> A few years later, in 1615, 'the very marrow of most common-places' was to be found 'aptly diffused through-out the body' of Nicholas

Byfield's analytical exposition of the Epistle to the Colossians.<sup>25</sup> In William Pemble's 1627 Vindiciae gratiae..., 'the maine sinews of Arminius' doctrine are cut asunder' (ibid., title-page). Although all of Pemble's works were published posthumously (Pemble lived 1592?-1623) any editorial intervention in his title may have been motivated by his own undeniably 'analytic' tendencies. His A summe of morall philosophy, succinctly gathered, elegantly composed, and methodically handled (1632) includes not only a bracketed synopsis on its first page, but has smaller-scale versions on almost each one of the text's eighty-two pages. In the civil war period, the minister Richard Ward (1601/2-1684) signals the continuing association of medical anatomy and rhetorical analysis by publishing The Anatomy of Warre (London, 1642), The Character of the warre or the Miseries Thereof Dissected and Laid Open... (London, 1643), and The Analysis, Explication, and Application, of the Sacred and Solemn League (London, 1643).

At least two other widespread literary offshoots of medical anatomy are apparent. Firstly, 49 titles between 1581 and 1650 claim to 'lay open' or 'rip' various subjects and abuses (see appendix).<sup>26</sup> Given that none of these works appears prior to 1581; that to 'rip' or 'lay open' were so frequently used as synonyms for anatomy, both literary and actual; and that there is an overlap between the authors of such works and explicit anatomies, it can be said that these publications are themselves pretending to be 'anatomies' of a kind.<sup>27</sup> The anonymous A fuller answer to the moderatour... [London, 1643] displays the characteristic slippage between rhetorical and actual violence so often found in anatomies, especially of the civil war period, when promising that the moderator's 'argument... is so opened, as that he is laid opened too, and made manifest to be an impostor...'. John Lanseter, more overtly still, offers 'a ripping up, and

laying open' of 'some rotten, putrified, corrupt, stinking matter' in the book of his opponent, Thomas Edwards.<sup>28</sup>

Ultimately the phrases 'open' and 'laid open' (and their variants) may have shed their anatomical origins for many writers. Well into the 1640s certain titles still make the association clear, however; and this association must have conditioned readers' understandings, even in the absence of more precise visceral or medical allusions by writers.

Secondly, the evident attraction to anatomy's 'incisive' powers of division and definition is confirmed by English language uses of the word 'section' or 'sections'. The OED's first instance, from 1559, is unequivocally dissective: Geminus' Anat. 4/1. 'Neyther in man only... but in the Anatomie or Section of any other beast...'. Following this, the dates and contexts where the word appears show that, in much the same way as 'analysis', the Latin root 'sectio' (a cutting, cutting off, or cutting up) had been propelled into a broader vernacular use by association with dis-section; and that literary occurrences of it again represented attempts to exploit the particularising rigour of medical anatomy. Instances cluster around the late 1570s and onwards, once more coeval with the revival of anatomy and the inception of the accompanying literary genre. The OED's second occurrence in the sense of 'The action... of cutting or dividing' is from 1577, and the first occurrence in reference to 'a subdivision of a written or printed work', is from 1576. Not only are there no known literary instances prior to this date, but it is only from 1577 onwards that literary works explicitly advertise themselves as having 'sections', with 36 such titles appearing between 1577 and 1650 (see appendix). Within this total, six authors claim to have 'handled', or be 'handling', their topics. The appropriate edge of materialisation this suggests is compounded by the claim, of a translator of Calvin, to have included 'notes conteyning in

briefe the *substance of the matter handled*'.<sup>29</sup> More definitely anatomical allusions are made by Richard Bernard's A short view... [1641] in which 'abuses' are 'layd open in ten sections'; by William Fulbeck's A parallele... of the civil law... (1601), in which issues are 'opened and discussed'; and especially by the work Moro-mastix (1647), whose author appears very deliberately to associate 'dis-secting' and the literary 'section' in question.<sup>30</sup> Again, it is difficult not to suspect that Thomas Collier's The marrow of Christianity: or A spirituall discoverie of some principles of truth... represented in ten sections... (London, 1647) did not imply, or cause readers to draw, an anatomical link between 'marrow' and 'sections'.

I will look in more detail at precise instances of literary 'sectioning' when discussing Robert Burton's The Anatomy of Melancholy. How did this new practice, and the other literary appropriations of medical dissection, relate to the revival of anatomy in England? A review of statistics (limited to single editions of noun- and verb-based anatomies published in English) runs as follows:

**Table 1. Ten year breakdown of English literary anatomies**

1550	1561	1571	1581	1591
1560	1570	1580	1590	1600
<b>1</b>	<b>0</b>	<b>3</b>	<b>7</b>	<b>7</b>

1601	1611	1621	1631	1641
1610	1620	1630	1640	1650
<b>8</b>	<b>15</b>	<b>14</b>	<b>9</b>	<b>54</b>

In addition to a fairly steady overall increase in titles, this chart suggests certain probable factors operating around

particular periods. Perhaps the most obvious general point is that, in the case of English language publications, it is only after the later 1570s that the 'anatomy' becomes evident as a literary genre. The annual public anatomies instituted in 1540 - when Henry VIII granted the Barber-Surgeons' Company the bodies of four executed felons per year - though significantly coincident with the initial flourishing of continental anatomy, cannot be shown to have had any immediate impact on literature, or on the non-medical public in general. Similarly, the publication of Vesalius' De Humani Corporis Fabrica in 1543 (and again in 1552), and the English piratings of Vesalius by Thomas Geminus (c.1510-1562), issued as Compendiosa Totius Anatomie Delineatio (in Latin in 1545, and in English in 1553) appear to have been slow and indirect influences.<sup>31</sup> To some extent, Geminus' English version of 1553 only serves to confirm the backwardness of English anatomy, as its text is partially derived from the outdated Anatomy of Thomas Vicary (London, 1548).<sup>32</sup> As noted, the earliest known English language instance of a non-medical anatomy was An AnATOMi: that is to say a parting in pieces of the Mass ([Strasbourg], 1556). While this work appeared three years after the English version of Geminus' Compendiosa Totius Anatomie.. (London, 1553), it is, as noted above, not an original native production, but a translation of Annotomia della Messa (1552). Moreover, given its date, and its evidently cautious publication in Strasbourg, the book was probably a reflection of the fierce topicality of the mass, rather than of dissection.

From the 1560s, however, the general conservatism to which British anatomy remained prone during the zenith of Vesalius' work (c.1536-1555) began to decrease. In 1565 John Caius obtained from Elizabeth a grant for the Royal College of Physicians to dissect the bodies of four criminal each year.<sup>33</sup> The Barber-Surgeons' Annals for 1 Feb. 1567/8

proposes substantial improvements to the seating and viewing arrangements in its dissecting hall; and more *avant-garde* medical students were now increasingly spending time in Italy and Leiden.<sup>34</sup> As Mark H. Curtis records, 'of the 120 men who were admitted to fellowship in the Royal College of Physicians in the years from 1559 to 1642, forty-four or 37% of them had received their medical education abroad' (examples including William Gilbert (1540-1603), Helkiah Crooke (1576-1648), the Gresham College Anatomy Lecturer, Thomas Winston (1575-1655), and William Harvey himself (1578-1657)).<sup>35</sup> The dissemination of Vesalian standards by such figures appears, however, to have fully impacted on British medicine only in the 1570s and 80s.

In 1577 the surgeons of St. Bartholomew's hospital published a revised version of Thomas Vicary's 1548 Anatomy. The 1548 edition is now lost, making it impossible to compare the two versions. That the new publication did in fact reflect a serious desire to improve British anatomy is confirmed, however, by the far more substantial and modern anatomy textbook of the following year. John Banister's The Historie of Man, sucked from the sappe of the most approved anathomistes, in this present age (London, 1578) made substantial use of Vesalius' eminent successor, Realduus Columbus (1516-1569). Responsible for the Barber-Surgeons' anatomical demonstrations, and having by 1594 set a unique precedent in combining the roles of surgeon and physician, Banister played a vital part in the promotion of anatomy within England.<sup>36</sup> Banister's desire and ability to increase the study and the prestige of anatomy are attested by the 1581 portrait of him delivering a lecture to the Barber-Surgeons (Roberts and Tomlinson, p.142). It is by no means obvious that Banister himself is *making* the anatomy (this apparently being the responsibility of a less important figure in the picture's immediate foreground), and the

presence of the body is, as with medieval dissections, counterpointed by the prominence of an anatomy textbook. Banister, however, is reading from a new anatomy textbook (that of Columbus), and, more notably, has his own hand on the open body he describes.

The three anatomies published prior to the 1580s can be seen to varying degrees as prompted by the general resurgence of anatomy in the later 1570s.<sup>37</sup> The title of Lyly's Anatomy, coming after 1577, could have been additionally influenced by the Surgeons' revised Anatomy of that year, with intra-textual influence (from the works of Rogers and Woolton) also a possibility.<sup>38</sup> What English medical anatomy lacked until the 1580s was a public anatomy demonstration invested with the greater social prestige and authority of the Royal College of Physicians.<sup>39</sup> This situation was remedied by the establishment of the Lumleian Lectures in anatomy. Conceived in 1581, founded in 1582, and begun in 1584, the Lumleian Lectures clearly played a crucial role in the further cultural promotion of anatomy in England.<sup>40</sup> The status of this new demonstration was very concretely signalled by the building of 'an appropriate room for "the better celebration of this most solemn lecture"', and its founding is mentioned also in Holinshed.<sup>41</sup> How immediately the Lumleian Lectures influenced the vogue of the literary anatomy it is difficult to know. Certainly the Lectures would have constituted a more widely accessible source than Banister's book (at least for Londoners), given that they were free of charge. Moreover, Greene's anatomy was entered on the Stationers' Register on 13 August 1584 (STC 12217). Holinshed states that the Lumleian Lectures were 'to begin to be read in London, in Anno 1584, the sixt daie of Maie' (Holinshed, II, p.1349).<sup>42</sup> Given Greene's known commercial opportunism, it is not unreasonable to infer that his work was written, or at least titled, with a shrewd eye to the activities of the Royal

College of Physicians. Just a few years afterwards, in 1588, Antonie Munday's translation of the romance Palmerin de Oliva claimed to show 'the mirrour of nobilitie, the mappe of honor, [and] anatomie of rare fortunes...'.<sup>43</sup>

There is some evidence that the demonstrations of the physicians, and of the Barber-Surgeons, acted synergistically to promote public awareness of dissection. On 14 July, 1606, the company decreed that 'for the avoydinge of charges... no publique Anothomy shalbe holden in the Comon hall of this mistery for the space of this three yeares now next ensuinge' (Barber-Surgeons, II, p.327). This partial lacuna in early Jacobean dissection corresponds strikingly to the pattern of literary anatomies in the first decade of the century. Two had been published in 1600, 1602, and 1603, followed by one each year in 1605 and 1606. None appeared, however, in 1607 or 1608. While this could be merely coincidence, it is notable that when Dekker refers to anatomy in 1606, he mentions 'the Barber-Surgions' and not the Royal College of Physicians.<sup>44</sup> The new project of the latter, therefore, does not seem to have immediately eclipsed the activities of the former.

Beyond this, the Lumleian Lectures in particular may have been responsible for the 'anatomical' reprint of a devotional work translated from French into English by Robert Filles. First published in 1577 as Godly Prayers and Meditations, this book was reprinted in 1590 under the title The Anatomie of the Soule.<sup>45</sup> Although the 1590 edition is now lost, the text of the book itself appears not to have changed.<sup>46</sup> What had altered, one strongly suspects, was the reading public's sense of the human body, and all that might be associated with it. The impression that it was specifically the Lumleian Lectures which prompted a printer to capitalise on this new sense is strengthened by the fact that, in 1577, the two existing literary anatomies (of

Woolton and Rogers) had not been sufficient to prompt such a title. By asking whether the lost 1590 edition was in fact a *different* book, even presuming an identical text, one encapsulates the overall question of anatomy's cultural and imaginative force. Did its association have the power to alter, in the minds of hearers, viewers and readers, anything with which it came into contact? Clearly writers, printers and preachers all thought so.

The other landmarks of late Tudor and early Stuart anatomy occurred in 1615 and 1616. The first of these was the publication of Helkiah Crooke's anatomical textbook, Microcosmographia (London, 1615). I will be referring to various aspects of Crooke's work throughout the thesis. Here it is sufficient to state that, in terms of what it comprised (rather than of Crooke's personal achievement), it could be said to exceed the impact of Vesalius' De Fabrica (from which it derived, directly and indirectly). At just over a thousand folio pages, it was almost twice as long, and had substantially more illustrations. Reprinted in 1618, with a second edition in 1631, it was unsurpassed by any English anatomical publication during Donne's lifetime. An edition composed only of illustrations and accompanying tables appeared in 1616, credited to the Scottish physician Alexander Read (1580-1641).<sup>47</sup> The likelihood that this shorter work was instigated by the printer, William Jaggard, in order to further recoup the high costs involved in the initial edition, suggests that a strong popular market was anticipated - one which, indeed, must have been stimulated and increased by the availability of so many Vesalian illustrations in two successive years.<sup>48</sup> Interestingly, while Read promotes his epitomised version as a portable alternative which 'may be carried without trouble to the place appointed for dissection', this need not imply that the

abridgement had a purely medical readership (Read, 'To the Courteous Reader'). For Read more directly acknowledges the book to be aimed at 'such as are not able to buy, or have time to peruse the other' (ibid.). Junior medical students may be just those who 'are not able to buy' Crooke's lavish work; but it seems unlikely that they would have been able to avoid *reading* the single most important English medical work of the day by alleging pressure of time. Read's first statement may therefore refer to those members of the *public* who wished to carry a book to dissections, as well as to the physicians whose professional business was involved. Certainly, literate or not, a lay audience is clearly implied in the allegation of Caspar Hofmann, that Harvey's demonstrations were attended by "'jacks-in-office, petty lordlings, money-lenders, barbers and such like ignorant rabble who, standing around open-mouthed, blab that they are seeing miracles!'"'.<sup>49</sup>

Between November 1614 and its actual publication the following year, Crooke's original Microcosmographia was, moreover, the subject of considerable scandal, owing to its explicit discussson "Of the natural parts belonging to generation", and of "...the historie [and birth] of the infant".<sup>50</sup> These indecencies were brought to the attention of the Royal College of Physicians by John King, the Bishop of London. Donne himself had known King since at least 1597; was 'probably indebted' to him for his honorary MA of 1610; dined with him in 1613; and was ordained by him on 23 January 1615.<sup>51</sup> There must then have been a high chance of Donne's having heard of the dispute. With the College upholding King's objections to publication (the President threatened to burn any unaltered copies of Book Four which might be published), the controversy would have drawn maximum attention in medical and ecclesiastical circles, (Crooke

remarkably defying the College, nonetheless, with apparent impunity (O'Malley, 1968, p.8)).

It was in 1615, also, that William Harvey took over the post of Lumleian Lecturer (O'Malley et al, p.7), commencing his duties as dissector between 16-18 April of the following year.<sup>52</sup> Besides Harvey's general eminence (he was by this point thirty-eight years old, and one of the Royal Physicians) the novel spectacle of a comprehensive three-day dissection must have made the event a notable one.<sup>53</sup> It was also in 1615 that Thomas Winston was elected 'Professor of Physic' (which in practice now meant anatomy lecturer) at Gresham College. The College, founded in 1597 by Sir Thomas Gresham, was expressly intended for 'the citizens of London', who could hear daily lectures on divinity, astronomy, music, geometry, civil law, medicine, and rhetoric, "read in Term Time every Day, Sundays only excepted; those before noon, in Latin, and those in the afternoon, the same in English".<sup>54</sup> The college proved so popular that Londoners petitioned (unsuccessfully) to have lectures delivered outwith term-time (Allen, p.134). Winston himself had graduated MD at Padua in 1608, been admitted as a 'licentiate' of the Royal College of Physicians in 1610, and successively risen to the status of 'candidate' in 1613 and 'fellow' in 1615. His appointment certainly demonstrates that Gresham College took this subject seriously by 1615. It indeed seems probable that it was made more prominent by the presence of Winston, whose performances are described by 'F.P.', in the preface to Winston's posthumously published Anatomy Lectures at Gresham Colledge (London, 1659), as superior to 'those [lectures] of Dr. Reads' - this 'Dr. Read' being, almost certainly, the Alexander Read involved with Somatographia Anthropine, and a respected physician in his own right.<sup>55</sup>

In the ten years from 1605 to 1614, seven literary anatomies are known to have been published. In the decade

after the appearance of Crooke's Microcosmographia (1615 to 1624) twenty-two literary anatomies, and four reprints of existing titles were published. Only two of these titles appeared in 1615 itself. Even these, however, need not be entirely excluded from the reach of Crooke's influence; for, as O'Malley notes, 'parts of the work [i.e., Microcosmographia] had been printed and were in circulation as early as November 1614' (O'Malley, 1968, p.7). Contrasting Crooke's work with that of Banister, the most distinguished anatomical publicist in England until 1615, one is immediately struck by the far greater scale and lavishness of the later work. The four illustrations of Banister's work pale into insignificance besides the liberal quantity of plates interspersed through Microcosmographia's thousand odd pages. The burgeoning of literary anatomies from 1615 onward appears, then, to have been closely involved with seeing anatomy, in either graphic or actual forms. While the two most important stimuli were almost certainly Crooke's work, and the Lumleian Lectures, the 'increasing signs of attention to dissection' shown at Oxford and Cambridge 'after 1620' (Webster, p.125) must also be taken into account. From 1624, in accordance with the bequest of the merchant Richard Tomlins, there were two anatomical demonstrations (corporeal and skeletal) each year (ibid.).<sup>56</sup>

The literary anatomy was to remain, from 1615 until Donne's death, one of the most fashionable popular genres of the day. For satirical, religious or political purposes the anatomy increasingly rivalled those other popular catchwords - 'Mirror', or 'Map', for example - previously used to imply accuracy and comprehensiveness in one's subject.<sup>57</sup> As early as 1588, Anthony Munday's translation of the romance Palmerin de Oliva effectively bracketed the three terms in its promise to reveal: 'the mirrour of nobilitie, the mappe of honor, [and] anotamie of rare fortunes...'.<sup>58</sup> In the anonymous, and

still relatively early, A Myrroure for English Soldiers; or, an Anatomy of Accomplished Man at Armes... of 1596, the old and new terms remain poised together, the latter still something of an afterthought. In the same year, however, Walter Raleigh's claim, '...in the said treatise I have anatomized the rest of the sea towns as well of *Nicaragna, Jucata, Nueva Espanna*, and the Ilands...' notably transposes anatomy, as a byword for thoroughness of description, to an area where 'mapped' would have seemed an especially obvious term.<sup>59</sup>

The anonymous The Anathomy of Sinne (London, 1603) again exemplifies the frequent opportunism of publishers in this area. Here 'Anathomy' is implicitly preferred, as a title, over the other rhetorical catchword used for the accompanying tract, 'The Genealogie of Vertue'. A fuller title at the opening of the 'Anathomy' promises that it will 'discover... the whole bodie of Imperfection and pollution' (sig.B1r), while its system of division makes some gesture toward anatomically breaking down its subject, explaining that the 'Capitall heads [of sin] are in number seaven' (sig.B2v), and then further subdividing these vices also: 'Of pride there are nine branches...' (sig.B5r). In 1604, the two pieces are again bound together, but this time as Two Guides to a Good Life, suggesting that the writer's (or publisher's) interest in anatomy was balanced precariously with the ultimate necessity of another new title. The 'anatomy' as synonymous with unrelenting and scrupulous exposure of truth in general is clearly evident in didactic and political writings, notably Roger Gostwyke's The Truth of Tithes Discovered (London, 1618), which, in 1616, in the great early zenith of English anatomy, had preferred to advertise its claims to truth by the title, The Anatomie of Ananias. In 1623, O[liver] A[lmond]'s anti-Protestant work appears as The Uncasing of Heresie, or the Anatomie of Protestancie, neatly

mirrored, the same year, by George Lauder's The Anatomie of the Romane Clergie: or, A Discoverie of the Abuses Thereof.<sup>61</sup>

Ultimately only two features are common to all literary anatomies. One is their necessary evocation (whether precise, or solely via title choice) of public and published medical anatomy.<sup>61</sup> The second is their implicit pretension (with varying degrees of seriousness or flippancy) to the last, most penetrating, complete and exact word on any subject - the determined and unflinching exposure of truth. This is generally evident from a number of passing references. One of the most notable literary anatomists, John Lyly, demonstrates high respect for the dissector's skill when he notes that 'if the butcher should take upon him to cut the Anatomy of a man, because he hath skill in opening an Oxe, he would prove himself a Calfe...'.<sup>62</sup> A little later, probably in the very same year in which the Lumleian Lectures were founded (1582), Sidney describes how, 'in *piercing* phrases late, /Th'anatomy of all my woes I wrate'.<sup>63</sup> In As You Like It, Shakespeare has Oliver comment darkly on his brother, Orlando, '...there is not one so young and so villainous this day living. I speak but brotherly of him, but should I anatomize him to thee as he is, I must blush and weep...' (I, i, 154-158).<sup>64</sup> Here there is a clear division between the sentimental ('brotherly') and the cold-blooded, 'scientific' rigour of impartial 'truth' ('should I anatomize him...').

The rather more obscure Thomas Robinson illuminates the implicit *modus operandi* employed by his fellow anatomists, warning, at the opening of The Anatomy of the English Nunnery at Lisbon in Portugal (London, 1622): '...if the Title of this Booke, being The Anatomy of the English Nunnery at Lisbon, doe make thee expect some Chyrurgicall mysteries, or profound Lecture upon a dissected bodie, let me satisfie thee, and save thee a labour of reading it' (sig.A4r). Confessing that 'the Author hereof is a man of no such Science; being better

skilled in Tackes, Sheats, Braces, Bowlins... then in veines, sinewes, muscles, and arteries', he yet insists that 'what hee promiseth by the Title, hee hath performed in the Treatise, and hath truly anatomized this handmayd of the Whore of Babylon; laying open her principall veines and sinewes in such sort, that hee is bold to challenge the proudest Doctor of her [the nunnery's] acquaintance to traduce his worke...' (sig.A4v).<sup>65</sup> What is especially interesting about this passage is its apparently simultaneous association with, and dissociation from, medical anatomy. In admitting his non-medical usage of dissection, Robinson does not wish, or feel it necessary, to abandon the pronouncedly visceral origins of his title. His distinction implies that he is using anatomy in a non-professional, but not non-visceral, sense.

The anatomist's claims are indeed weighted, here, with a particular rhetorical violence, and there is a sense of the offending topic or adversary as absolutely, finally reduced. This edge of aggression, evident in many other such works, must of course be more than purely figurative in a period when the falsity of 'heretical' belief was often magically eradicated by the emphatically physical torment or destruction of the believer in question.<sup>66</sup> The quotation reinforces the impression, then, that at this stage the rawly corporeal aspects of dissection were frequently at the forefront of many writers' minds; and that in many cases literary anatomists are better classed as 'extra-medical' than as 'non-medical'.

Over and above its extra shade of corporeal invasiveness, however, Robinson's introduction well exemplifies the tacit assumption behind many literary anatomies: the exploitation of medical anatomy in non-medical contexts depends on the public or published spectacle of the latter to underscore its rhetorical method. Certain literary

anatomies indeed appear to have relied on the visual force of 'real' dissection in inverse proportion to the paucity (or absence) of their own precise medical references; what they evoked was considered sufficiently familiar and startling to require no further gloss. In the same year as Robinson's work, when Sir Edward Sackville, at a Virginia Company meeting of 5 February 1622/3, 'said he would not nowe stand to anatomize the carriage of Mr. Wrote seeinge the Lord Cavendish had so fully donn it', the new term (here used to mean 'negatively delineate' or 'expose') indeed appears as a commonplace among the educated London populace.<sup>67</sup>

Although the works published after 1631 are essentially outside the scope of this thesis, the proliferation of anatomies in the 1640s must be mentioned briefly. One factor which may partly account for the sudden rise is the heightened spate of polemical, and pamphlet, publishing *per se* during the Civil War. The huge increase in the genre (from 9 titles between 1631 and 1640, to 54 between 1641 and 1650) does, however, suggest that this period seized with especial fervour on anatomy as a rhetorical mode - one able to lay claim to truth with a persuasiveness and violence suitable to the polemicism of the times. The total count, moreover, for the civil war period proper (1642-1650) reveals for the first time a preponderance of titles employing verb-based over noun-based ones (26 against 18). Although this may simply reflect the increased familiarity of dissection as both medical and rhetorical practice, it seems more probable that the highly active and dynamic nature of the period was responsible for producing a correspondingly proactive and vigorous literary usage. The tendency for literary anatomists at this point to foreground the *process*, rather than the *result*, of anatomy, and the consequent emphasis on corporeal invasiveness and violence may, indeed, be said to constitute a peculiar variety of the 'performative speech act'.<sup>68</sup>

### **b. Literary Anatomy in Fashionable and Professional Contexts**

Two overlapping groups which seem to have been particularly impressed with anatomy (by sight or word of mouth), were the 'University Wits', and the young law students of the Inns of Court. The three most enduring anatomies next to those of Donne and Burton - the productions of Lyly, Greene and Nashe - were all published between 1578 and 1589.<sup>69</sup> In view of the space which this thesis devotes to the writings of John Donne, it should be stressed that the swift resourcefulness of Lyly, Greene and Nashe, besides reinforcing the impression of the genre's fashionable 'market value', tells us something about Donne's relation to the ebullient new genre. It suggests, firstly, that in his vital formative years, from 1584, when he matriculated at Hart Hall, Oxford, to December, 1594, when he left the Inns of Court, he would have been surrounded by the most prominent and skilful examples of a literary mode which had just been furnished with the Lumleian Lectures by way of free advertising.<sup>70</sup> Although Donne was around six years of age on the first appearance of Lyly's anatomy, the work would not have passed the younger man by, Euphues enjoying a flurry of reprints in following decades.<sup>71</sup> For prominence, Philip Stubbes' The Anatomie of Abuses would have temporarily rivalled its more durable peers, at least between 1583 and 1595; there were further editions in 1583, 1584, and 1595, and the 'Second Part' of Stubbes's work also appeared in 1583.<sup>72</sup>

It appears, secondly, that the anatomy, at this stage in particular, was a favourite vehicle of the sharp-witted and fashion-conscious male coterie so crucial to Donne's early years. In this case, the influence of Lyly, Greene and Nashe

would have been less direct. None were Donne's university contemporaries, and the latter pair were of lower social status. Their impact, however, must have been substantial among Donne's university circle.<sup>73</sup> It was perhaps still more so at the Inns of Court. The presence of the lawyer, Simonds D'Ewes, over the best part of three days (27, 28, and 29 March), 'at an anatomy lecture read by Doctor Harvey at the Physicians' College' in 1623 (D'Ewes, I, p.230), matches the claim of Phyllis Allen, that 'Medical studies were pursued without actual instruction at the famous Inns of Court by interested students' (Allen, p.133). Few students could have been as 'interested', in every sense, as Donne, whose stepfather, John Syminges (married to Elizabeth Donne in 1576), was a highly prominent member of the Royal College of Physicians until his death in 1588.<sup>74</sup> Moreover, despite his departure from Lincoln's Inn around 1594 (Bald, p.77), and his failure to reach the bar, Donne remained close friends with his old fellow student, Christopher Brooke, who became a Bencher at Lincoln's Inn in 1614 (see DNB).<sup>75</sup> Donne formally renewed his association with the legal world when public, and published, anatomy, were arguably at their most prominent and novel stage in England - being elected as Divinity Reader on 24 October 1616 (Bald, pp.318-19).

A thematic, as well as a social, link between law and anatomy is also evident at this point. Their general association in poetical or literary usage is already apparent in Donne's poem, 'Love's Exchange'. Donne pursues a quasi-legal exchange between personified 'Love' and the poem's lover and speaker, through to a final surrender, in which the latter, tortured by love, pleads, 'Kill, and dissect me, love', reasoning that, after all, 'Racked carcasses make ill anatomies' (Poems, p.68). There is a possible glance, here, at the link between capital punishment and anatomical specimens. Chiefly, however, Donne's association of law and

anatomy, rather than being intrinsic to the argument of the poem, appears to be a loose, topical one, based on the prominence of the two activities in early modern London. If anatomy is fashionable, law is at once perennial and fashionable - gaining the latter quality from its conspicuous and ambitious young practitioners and apprentices. But law and anatomy share, more importantly, very similar pretensions to the exposure of truth, and the 'last word' in rigour of analysis. An early example is found in the 'Flowers' collection of the errant law student George Gascoigne, where 'The arraignment of a lover' is preceded by 'The Anatomye of a Lover'.<sup>76</sup> George Storde, a barrister of the Middle Temple, not only favoured the title The Anatomie of Mortalitie (London, 1618), but took further advantage of the implied taxonomical exactitude by adding that the publication was 'devided into... 8 heads'. In the published version of Joseph Hall's 1623/4 sermon to a Gray's Inn audience, entitled The Great Impostor: Laid Open in a Sermon..., anatomy seems implicitly more powerful, as a rhetorical claim to truth, than law. Despite the sermon's audience, the 'impostor' (the human heart) is 'openly arraigned' only by way of a later afterthought, further down the title-page.<sup>77</sup> Again, the physician James Hart's The Anatomie of Urines (1625) is in fact a sequel to The Arraignment of Urines (1623).<sup>78</sup>

Both legal and dissective terminology could be used to imply a relentless probing and 'dismemberment', whether of a crime, dispute, or physical body. For such rhetorical purposes, anatomy, however, may be said to improve on law for two reasons. Perhaps most obviously, medical anatomists, rightly or wrongly, must have appeared more disinterested, in their quest for truth and knowledge, than a profession proverbial for its avarice and deceit (see, for example, Rabelais, pp.396-407). Such an image would apply especially in the case of post-Vesalian lectures and text-books, which

(from Banister onwards) expressly disputed ancient medical dogma.<sup>79</sup> The second point in anatomy's favour would be its recourse to definite material evidence - that of the body itself. Both law and dissection ostensibly involve the search for answers. In legal process, however, responses must remain doubtful and often contradictory. It would be simplistic to say that the physical body of the anatomy theatre was, by contrast, plainly answerable, passive and objective. All three qualities would still be compromised by the lingering conservatism which had plagued Vesalius so notably in Bologna in 1540.<sup>80</sup> The body itself might not dispute with Harvey and Winston, but authoritative Galenic texts and their adherents would. Nonetheless, it is probable that such qualities *did* recommend anatomy over law to some extent. If the two disciplines appeared of equal complexity to laypersons, the anatomists could combine the thoroughness of an increasingly detailed human interior with claims to totality that derived from the reassuringly clear delimitations, and homogeneity, of physical bodies.

As already emphasized, the collection of literary anatomies in its entirety tells one firstly about the social phenomenon of the anatomy lecture itself. Such a conclusion is the only way to bring any unity to the heterogeneous collection of writings published under this name between 1556 and 1650. As long as readers of these works did not stop to question the writer's or printer's rhetorical appropriation of the surgeon's art, they had only to listen to Winston or Harvey to be reminded of the astonishing thoroughness which the borrowed terms connoted. During most winters they could view the spectacle 'in the flesh' - an event which must have impressed the memory for some time to come. Certain anatomy titles, do appear, also, however, to tell us something about the epistemology of the Elizabethan and Jacobean world. Two

of these, the works of Thomas Nashe and Robert Burton, will be examined in detail in Chapter Three. I will look now, however, at the messages conveyed by pictorial, as opposed to literary, anatomy.

### 3. Can you Picture This?: Anatomical Illustration in the Sixteenth and Seventeenth Centuries

I will attempt here to identify features which distinguish Vesalius' anatomical renderings, both precisely and generally, from those of his predecessors and followers, and to link these particular traits to changing epistemological conditions in the sixteenth and early-seventeenth centuries. I will then fill in this general outline by more precise comparison of individual depictions from De Humani Corporis Fabrica (Basle, 1543) with prior and later examples. Before doing so I will look briefly at Johann Remmelin's extraordinary anatomical work, Catoptrum Microcosmicum (Ulm, 1619) [Fig. 1].<sup>81</sup>

Dating back, in some form, to at least 1559, the 'flap-anatomy' had been in existence well before Remmelin.<sup>82</sup> Significantly, however, it was a genre which, like the literary anatomy, came *after* Vesalius - suggesting the attempt to produce an experience intermediate between newly prominent public dissections, and standard illustrated textbooks. Remmelin's book (a brief but very tall and broad folio) is one of the most advanced examples of this anatomical hybrid. The earlier instance cited above, found in some editions of Geminus, seems a mere token gesture toward the body interior by comparison with the three plates in Catoptrum Microcosmicum [see Fig. 1 for third of these]. Surrounded by a wealth of dense religious iconography, these latter include a single plate displaying a man, a woman, and



a central torso demonstrating the womb; and two following plates showing male and female figures, respectively. All the figures, and some of the separate body parts around them, have been cut and pasted onto the page so that the reader may make his or her own personal dissection. The anatomy itself is, allegedly, mediocre at best (Roberts and Tomlinson, p.64). What the plates achieve, however, is an impression of depth and complexity arguably unrivalled by any other anatomical textbook of the sixteenth or seventeenth centuries. The figure shown here has sixteen different flaps, some double-sided (for example, the ribs); and at one point an ingenious cut has been made to allow a tube to pass over and under different layers.

Pursuing these downward with increasing wonder, the viewer's appreciation of 'real' anatomy is enhanced not merely by the mimesis of depth, and the crowded assembly of delicate contents, but also by the physical difficulty of handling and replacing the layers (certain flaps are extremely minute, the separate eye of Plate 1 comprising seven, and the skull of Plate 2, ten, layers). Gradually losing count of what one has seen, or 'dissected', one experiences something of the overwhelming, labyrinthine somatic immersion which must have affected the viewers, and indeed practitioners, of public anatomies - the effect indeed being, in Rummelin, in a way stronger because of the artificially rapid speed at which so many stages are undergone.

The reverence for divine artifice which the work must have inspired (and which probably inspired it) is at once attested by the painstaking labour of its construction, and yet simultaneously undermined by a covert sense of the artist (and, to some extent, the viewer), 'playing God' in the acts of 'anatomy' and reassemblage. Although considerably later than De Fabrica, Rummelin's plates are contemporary with the

sermons of Donne which I will be discussing in Chapter Five.<sup>83</sup> Especially when seen and handled, they convey powerfully the wonder and immediacy characterising the zenith of post-Vesalian dissection and illustration.

It seems to be agreed that the illustrations to Vesalius' work, most especially those in De Humani Corporis Fabrica (Basle, 1543) and the Epitome (Basle, 1543) constitute a landmark in the history of anatomical representation. Exactly why this is so remains a daunting question. Arguments for the importance of print must to some degree apply here as elsewhere. As Elizabeth Eisenstein notes, the first flurry of anatomical editions (beginning around 1520) is approximately parallel to the reissue of pocket-sized volumes of Galen, in Paris in 1528.<sup>84</sup> As well as wide availability, the unvarying reproductive qualities of print introduce into anatomical depictions an aesthetically 'mechanised' style, necessarily sharp and clear because of the method of woodcutting, which does not lend itself to the kind of subtleties or blurrings evident in freehand drawings.<sup>85</sup> As Eisenstein stresses, Vesalius' relentless perfectionism in this area meant that 'the second edition of De Fabrica profited from the sharpening of indistinct letters and lines by a Basel woodcarver using a fine knife' (Eisenstein, I, p.53, note 39).<sup>86</sup> Clearly, however, in view of the many printed works not of Vesalian standard (Fries, Berengario da Carpi, Estienne), other factors must have been involved.<sup>87</sup> Further responses might be that Vesalius' plates were more accurate, due to his practical rigour and scrutiny as a dissector; and that far greater care had been taken to do justice to the awesome complexity and intricacy of the inner body. These points are ones which, with qualifications, I will attempt to support. The qualifications are significant ones, however.

One factor which allies Vesalius' publications with those of anatomists from da Carpi onwards is that numerous books in the period were making an important statement simply by having such a large proportion of illustrations to text in their work. This implicit prioritising of the visual is not, of course, an intrinsically more scientific way to proceed. In view, however, of the longstanding tyranny of text over observation, it can be seen in this context as announcing a crucial new attitude to empirical study. Moreover, Alexander Read's Somatographia Anthropine (London, 1616), the abridged version of Crooke's monumental Microcosmographia, compounds such a tendency interestingly. Jesse Lander has recently noted, in a survey of different editions of Foxe's Acts and Monuments, how epitomes tended to imply that they had selected and retained all that was special or essential in the original work.<sup>88</sup> Read's book, vastly diminished by comparison with that of Crooke, effects this compression by retaining only illustrations, losing all text except the tables attaching to the plates.

How does the especial graphic force of Vesalian depiction relate to this apparently general rise of the visual in anatomical publications? It has been stressed by various commentators that there remains a number of inaccuracies in De Fabrica, and that much of the visual difference between earlier textbooks and that of Vesalius is not solely reflective of improved anatomical knowledge. 'So arresting' for Tomlinson and Roberts, 'is the immediate visual impact' of Vesalius' first skeletal figure, that they feel 'reluctant to cavil at certain anatomical shortcomings'.<sup>89</sup> This ambiguous praise neatly captures the peculiar effect of Vesalius' illustrations - and probably applies more emphatically still to sixteenth- and early seventeenth-century viewers, on whom the stylistic innovations of De Fabrica must have worked to maximum effect.

Both Bert S. Hall and Martin Kemp have observed a similar disproportion between the *impression* of scientific accuracy, and the actual verisimilitude of drawings, in other scientific illustrations of the 1540s.<sup>90</sup> This discrepancy appears to be related to a conscious effort to distance Renaissance anatomical representations from medieval ones.<sup>91</sup> Vesalius himself was certainly emphatic that 'Special care should be employed on the impression of the plates' which were 'not to be printed like ordinary textbooks with simple line engravings' and that 'everything depends on the smoothness and solidity of the paper' - the cost of the latter being estimated at as much as forty per cent of overall production expenses.<sup>92</sup>

Vesalius' careful attention to the material media of representation seems linked to Kemp's broader summary: '...in the hands of Vesalius and many of his successors, anatomical illustration lent itself to the "rhetoric of reality"', an artistic trait defined as 'the use of recognisable visual signals of uncompromising naturalism to convince the viewer that the forms are portrayed from life' (Kemp, in Baigrie, p.43). The discrepancy between persuasiveness and accuracy is manifest as early as 1517. In the woodcut made by Wachtlin for Lorenz Fries' Spiegel der Artzney [Fig. 2], surgical activity is signified by the instruments separating the brain hemispheres, and, as Kemp notes, the face is deliberately naturalistic and particularised (Kemp, in Baigrie, p.47).<sup>93</sup> It appears, then, that the impulse to persuade the viewer ('the image is [not] necessarily to be more trusted... but is making implicit and explicit *claims* to be trusted') runs in advance of the anatomical knowledge which, ideally, should guarantee such pretensions (Kemp, in Baigrie, pp.48-49). The broader cultural and epistemological framework, which itself is not necessarily as empirically grounded or objective as the technical changes listed above, therefore seems to play a

Ein cōtrafact Anatomy d'innerē gliedern des  
 mēschē durch dē hochgeleertē physici vñ medicine doctor Wēdelinū hact vō Dia-  
 ctenā zū Straß. declariert in beiwesē viler scharer wūdartz grūntlich durchsuche

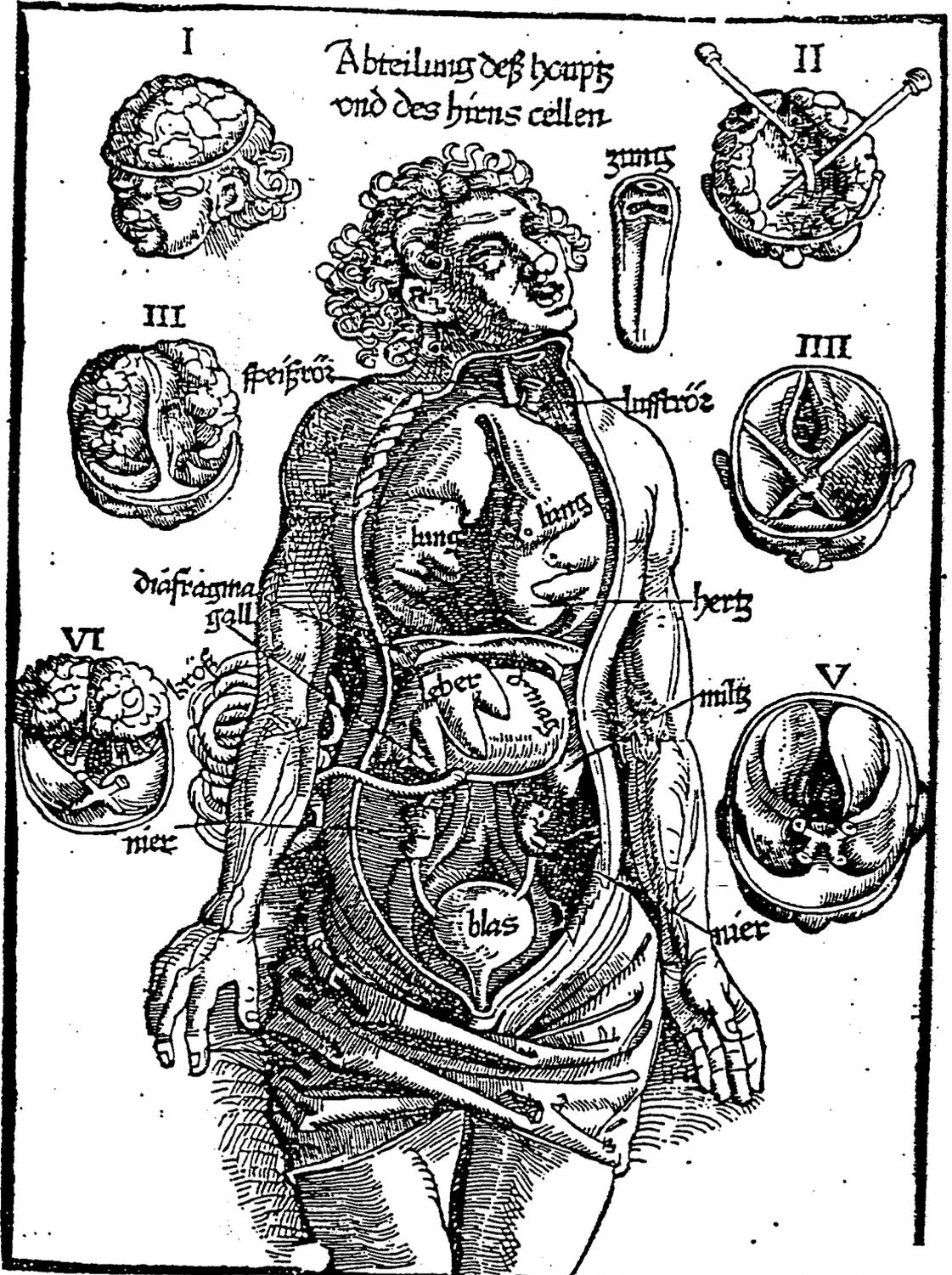


FIGURE 2 LORENZ FRIES, SPIEGEL DER ARTZNY (1518)

substantial role in dictating the nature of graphic representation. While the origins of this newly emergent mentality are highly debatable, it is probable that it is related, in some way, to the variety of smaller, localised shifts already mentioned above. Although definite causal interaction between empirical and more abstract factors is difficult to plot with absolute certainty, what does seem clear is that the *desire to become* scientific may at times be as important as the *means* to do so.

Such a thesis is supported by the new use of linear perspective in anatomical drawing.<sup>94</sup> The plates of Fries, Estienne and Vesalius all enjoy correct perspective. One general result of this is a greater immediacy of impact; the viewer is far less likely to be aware of the frame of the drawing, the fact that it is 'only a picture'. A second consequence, especially crucial for anatomical illustration, is the superior layering effect which perspectival technique can produce by judicious positioning and shading. The importance of an effective illusion of depth can hardly be overstated. It was certainly a priority for Vesalius himself, who entreated Oporinus to 'take care of what I consider most artistic and so pleasing in these pictures, that the thickness of the lines which produce gradation in the shadows is tastefully rendered'.<sup>95</sup> By 1543, however, linear perspective had been successfully manipulated by Italian artists for over a century.<sup>96</sup> Its more effective use in anatomical representations cannot, therefore, have been dependent on purely pragmatic questions of artistic technique.

Certain more abstract, underlying qualities of artistic perspective suggest that it can be aligned with the larger cultural transition variously explicated by Foucault, Cassirer, Bakhtin, and Reiss. Erwin Panofsky, in his seminal work on this subject, Perspective as Symbolic Form, states

that 'Exact perspectival construction is a systematic abstraction from... psychophysiological space'.<sup>97</sup> Perspective, in other words, applies scientific, geometrical rules in order to convincingly mimic reality. This illusionistic technique (notably coeval with Kemp's 'rhetoric of the real') has in it the seeds of a more general and vital scientific truth: necessary as empiricism is, it yet needs to be linked with an ordering filter which itself involves distancing and abstraction - the ability to move away from mere surface features. Perspective, via its 'translation of psychophysiological space into mathematical space' (Panofsky, p.31), epitomises this method of getting closer by moving away.

In covert form, Vesalius' illustrations may be said to anticipate what Bacon and Galileo, in the early seventeenth century, state more explicitly. The former, recognising the need for an organising framework to utilise the potentially chaotic products of empirical research, notes how 'some minds are stronger and apter to mark the differences of things, others to mark their resemblances'. While 'the steady and acute mind can fix its contemplations and dwell and fasten on the subtlest distinctions' the 'lofty and discursive mind recognises and puts together the finest and most general resemblances...'. A balance between the two is required because 'both kinds... easily err in excess, by catching the one at gradations, the other at shadows' ('Novum Organon', IV, p.59). Bacon here exemplifies the balance posited by Cassirer, between empirical scrutiny and conceptual distance. Similarly Galileo uses the metaphor of a solar eclipse to stress how a *too direct* approach to nature may in fact 'blind' the Natural Philosopher.<sup>98</sup>

Like science, this newly abstractive art implicitly challenges the monoglossic, stable, and divinely guaranteed notion of reality. Perspective can, as suggested, furnish a

representation with greater immediacy: 'Perspective creates distance between human beings and things... but then in turn it abolishes this distance by, in a sense, drawing this world of things... into the eye' (Panofsky, p.67). But a certain unease at this distance appears to remain: having *manipulated* lines and shadow to 're-present' viewers with what they imagined to be already 'out there', perspectival construction raises a half-conscious apprehension of the contingency of perceived reality itself. It destabilises the monoglossic stance of a 'restricted world view [aimed at]... trying to preserve one and the same immobile pose' (The Dialogic Imagination, p.385). As Panofsky puts it (citing not Christianity, but its greatest epistemological creditor), 'Plato... condemned [perspective] already in its modest beginnings because it distorted the "true proportions" of things, and replaced reality and the *nomos* (law) with subjective appearance and arbitrariness...'. Not only Plato, but, significantly, 'the Middle Ages' (for Bakhtin, the most extreme instance of monoglossic culture), 'rejected perspective, because it seemed to introduce an individualistic and accidental factor into an extra- or super-subjective world' (Panofsky, p.71). The suspicion arises that perspective is simply 'making up' its own reality. It therefore constitutes a nascent example of a *controlling*, interventionist attitude to a world hitherto apprehended far more reverently - forsaking the emotional immediacy of myth for the faintly alien, but more powerful, detachment of science.

Perspective, then, is as much an *attitude* to the world as it is a technical advance. Vesalian illustration enjoys a distinctive privilege because of its ability to combine the abstract qualities of the scientific attitude with a conspicuously *non-scientific* feature of art: namely, that of perceptual immediacy. By moving from ordinary language to 'the symbols of arithmetic, geometry, algebra', one accepts

'a world of intellectual symbols' and loses 'a world of immediate experience'.<sup>99</sup> Art, on the other hand, is attractive precisely because 'In art we do not conceptualize the world, we perceptualize it' (Cassirer, 1979, p.186). Implausible as it is that even the most primitive art lacks any conceptual element, Cassirer's contrast is valuable in this context for the elements of De Fabrica which it highlights.

As Jonathan Sawday has remarked, 'The period between (roughly) 1540 and 1640 is... the period of the *discovery* of the Vesalian body as opposed to the later *invention* of the Harveian or Cartesian body' (Sawday, p.23). Such a notion corresponds to my own hypothesis, of a cultural, metaphorical, and perceptual 'window of opportunity', opening briefly, from Melanchthon to Burton, between (or across) two different *epistemés*. Relative to the pronounced conceptual bent of the later seventeenth century, the Vesalian stance toward the newly examined body interior is one of wonder - or, in Cassirer's term, 'of contemplation' (Cassirer, 1979, p.186). Explicitly, it claims to contemplate divine artifice. In this sense, Vesalian anatomical drawing has an intriguingly mythic component, arising from its seamless fusion of a perceptual artefact (the new body) with a powerful religious emotion. This mythic side is able to survive, despite Christianity's own strong conceptual aspects, because of the sheer novelty of the Vesalian body, whose overwhelming perceptual immediacy and complexity are sufficient to dominate the theoretical framework of 'Natural Theology'. Following pages will examine particular anatomical depictions, in order to show how shifts in graphic representation illustrate the brevity of the Elizabethan and Jacobean 'window of opportunity'. In doing so I will suggest that the Vesalian body appears broadly to be caught between two different conceptual systems: that of an earlier,

textually-founded epistemology, and a later, taxonomic and proto-scientific one.

The most pronounced forms of these systems are found in the Medieval period and the eighteenth century, respectively. Although the opposition becomes especially evident using such a timespan, traces of it can in fact be seen within Vesalius' lifetime. The depictions I will be using as 'taxonomic', Cartesian instances, although published only in the eighteenth century, were in fact created around 1555 for Vesalius' rival, Bartholomaeus Eustachius (Eustachio, 1520-1574).<sup>100</sup> I will aim here, by identifying traces of the two attitudes in depictions historically closer to Vesalius, to demonstrate that the Vesalian body was not simply a reflection of inescapable and universal epistemic preconditions. It might rather be said that Vesalius' ability to overshadow the very different graphic body of a contemporary such as Eustachio both reveals the synchronic coexistence of supposedly incompatible cultural types, and thereby confirms the *overall* preference of the period for a body of mingled, religious 'wonder' and proto-scientific 'taxonomy', as opposed to an outrightly or pronouncedly Cartesian style of representation.

The three contrasting stages I will be discussing are perhaps most clearly marked in the way that the act of dissection itself is rendered. The difference between the static, hierarchical, textually-based scene of Ketham's Fasciculo de medicina (Venice, 1493) [Fig. 3] and the title-page of Vesalius' De Fabrica (Basle, 1543) [Fig. 4] is glaringly evident.<sup>101</sup> In sole professional command of the opened body (though with a tumultuous press of attention threatening to engulf him from all sides) Vesalius defiantly asserts the rights of the empirically skilled dissector over the theoretically bound stance of his predecessors. This image itself is in fact a projection of what Vesalius desires

FIGURE 3 JOHANNES DE KETHAM,  
FASCICULO DE MEDICINA (1493)





ANDREAE VESALII  
BRUXELLENSIS, INVI-  
ctissimi CAROLI V. Imperatoris  
medici, de Humani corporis  
fabrica Libri septem.

CVM CAESARAE  
Majest. Galliarum Regis, ac Senatus Veneti gratia &  
privilegio, ut in diplomate eorundem continetur.

for the future, rather than a position actually occupied by him in 1543 (Sawday, p.66). Precisely because of its creative iconography, however, the title-page of De Fabrica reveals the new standpoint most unequivocally.

Differences between this attitude, and the anatomy taking place at the opening of G.M. Lancisi's Tabulae anatomicae (Rome, 1714) [Fig. 5] are more subtle.<sup>192</sup> Roberts and Tomlinson, indeed, see the depiction (drawn by the Italian artist, Pier Leone Ghezzi (1674-1755)) as resembling 'a late-medieval anatomy' (Roberts and Tomlinson, p.189). Although this is in many ways untrue (the anatomist himself enjoys central authority, and the previously elevated position of the lecturer is now appropriately usurped by the human form itself, upon its stone plinth) one legitimate reason for such a view is apparent. What unites this image with that of Ketham is the absence of the initial, necessarily unrepeatable thrill of excitement and discovery so unmistakably conveyed in De Fabrica. On first glance, Lancisi's scene does appear to exhibit a remnant of such dynamism in the animated postures of the medical students. In fact, though, the only attentive *spectator* is the least enlivened of these figures, whose intellectual engagement is with one another, rather than with the corpse itself. The relatively brief period of attention enjoyed by the dissected body, then, is bracketed by two different forms of conceptual neglect. Sacrificed, prior to Vesalius, to the dictates of textual and ultimately divine authority, it is appropriately subordinate, in a post-Cartesian era, to the growing assertiveness of the human individual. Excitement about the body has, by 1714, transmuted into excitement about the self.

Just as the tentative and subordinate self of Vesalian anatomy could express its dictum, *Nosce Teipsum*, only within a larger ordering framework, however, so the nascent Ego of the later- seventeenth and eighteenth centuries is often

FIGURE 5      TITLE-PAGE FROM LANCISI,  
TABULAE ANATOMICAE (1714)



*Eques Petrus Leo Gheerius Inu et delin.*

obscured by the increasingly systematised taxonomic mentality of early science. This, as I will try to show via following illustrations, often produces an abstraction and rigidity which is no less opposed to Vesalius' stylistic freshness and wonder than were the preceding schematisations of the late-fifteenth and early-sixteenth centuries.

Looking at the three dissections of the brain shown here [Figs. 2, and 6-7], for example, one might expect, given the respective dates, to observe fairly close similarities between Fries and Vesalius.<sup>103</sup> Both, indeed, have been drawn from actual, specific human subjects.<sup>104</sup> In Vesalius, the carefully delineated eyes, ears and noses invest the deceased subjects with definite facial expressions (a certain sombre resignation being perhaps the best description). These relatively lifelike facial features, and the inclusion of hair on bisected heads (as well as on the central corpse) may be said to align the two sixteenth-century depictions together, in opposition to the spare, functional rendering of Lancisi. In terms of the detail and verisimilitude of the actual brain substance it is, however, hard not to ally Vesalius with Lancisi. The cauliflower appearance of cerebral matter in Fries seems the haziest impressionism set against the breathtaking fineness, texture and depth of the Vesalian brain. Lancisi's representations, albeit inferior in their complexity, seem to differ from their Vesalian predecessors only in degree.

Even this similarity remains, nonetheless, importantly qualified by the subtle but characteristic hint of stylization evident in Lancisi. Obvious enough in Fries, in Lancisi this effect seems to derive from both lack of fine detail, and from a certain flattening of perspective. Because of the absence of heads or faces the figures are shallower, suggesting layering only conceptually. In Lancisi's Fig. IV, for example, one knows that the presence of the choroid

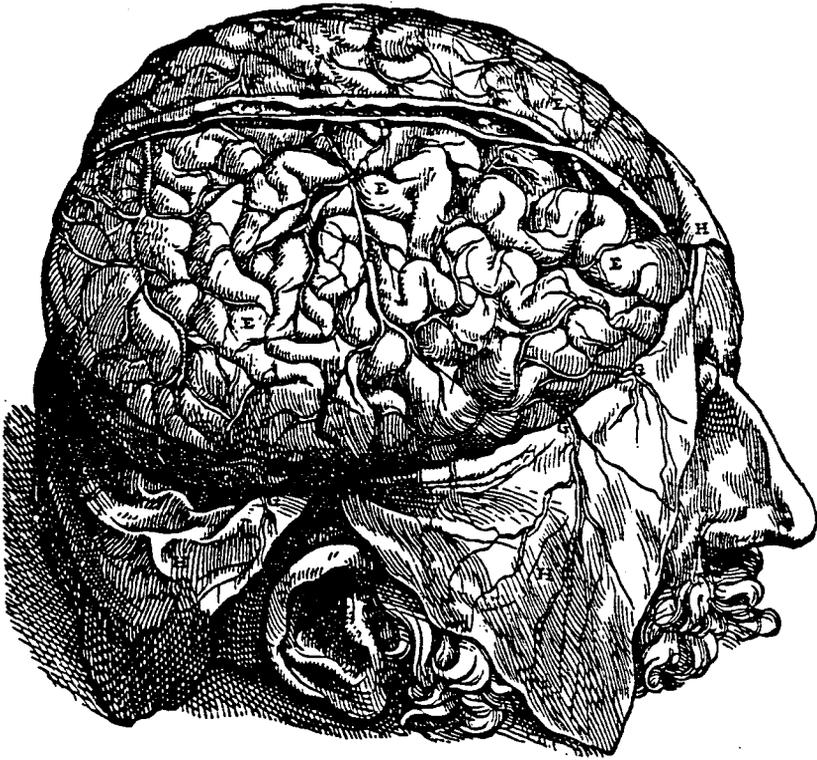
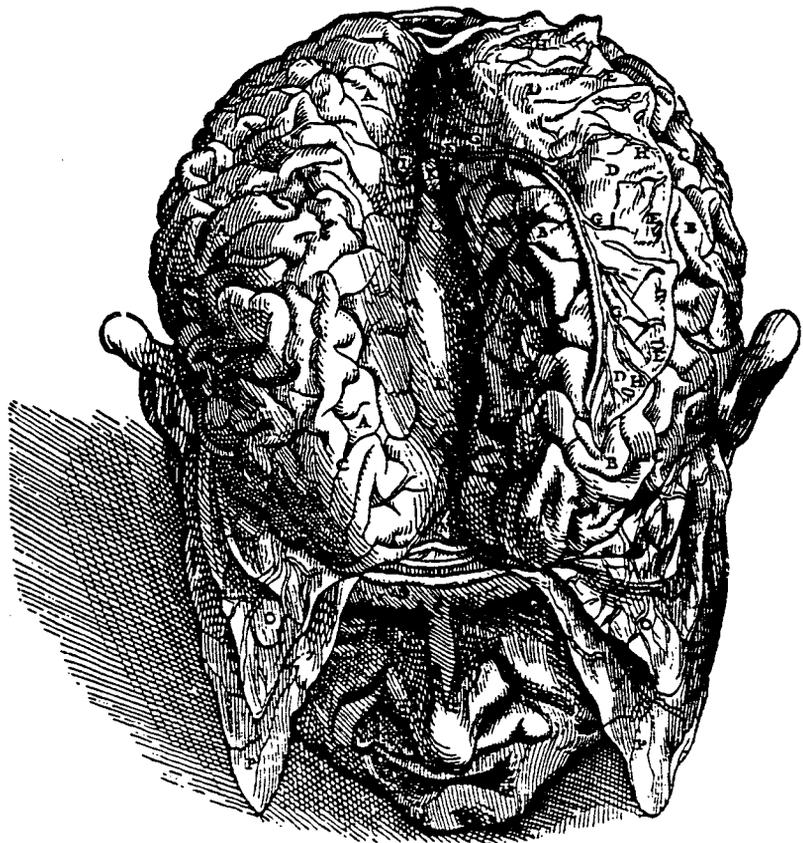
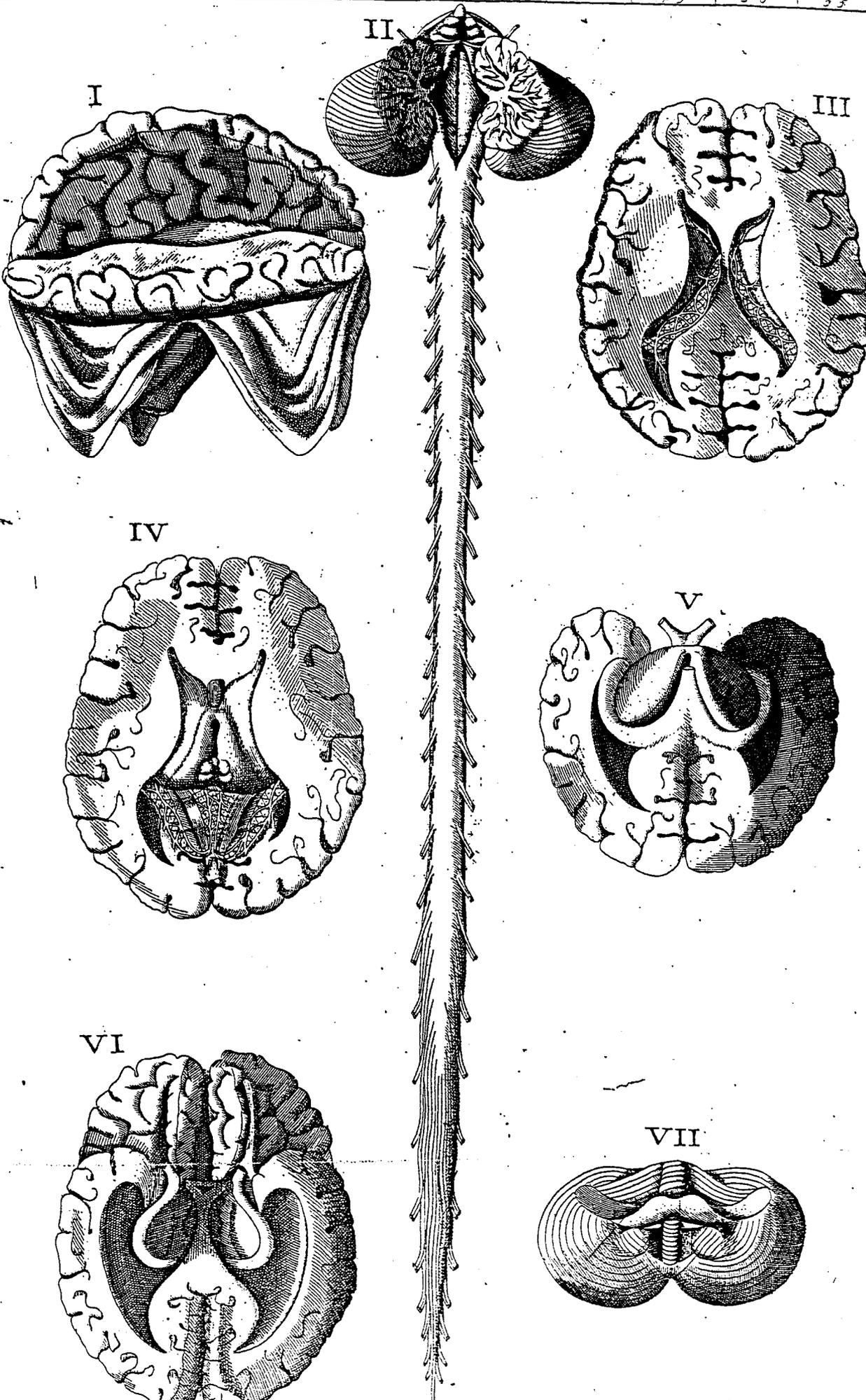


FIGURE 6

BRAIN ANATOMY  
FROM VESALIUS,  
DE FABRICA (1543)

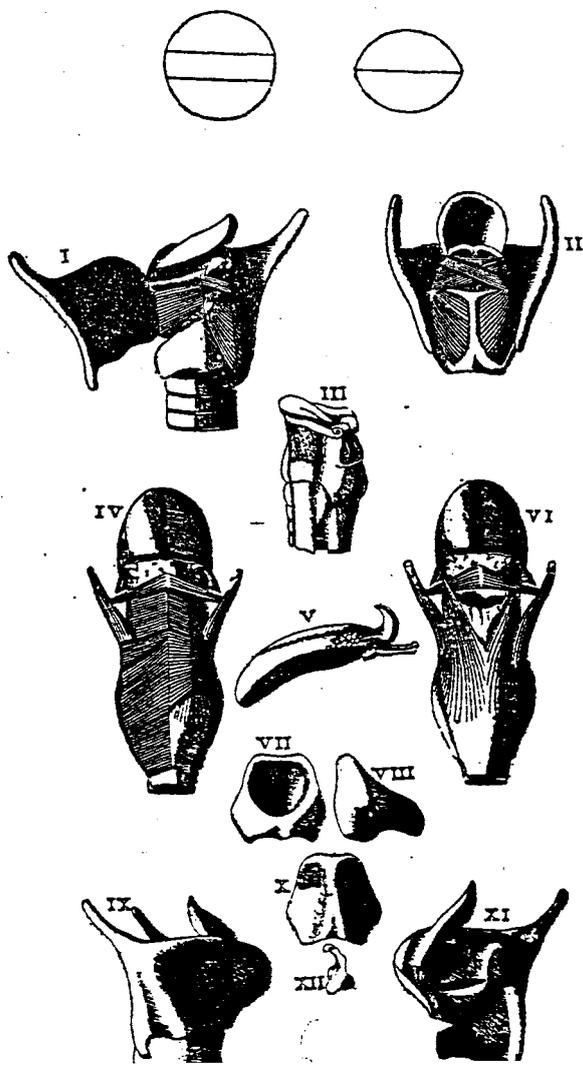
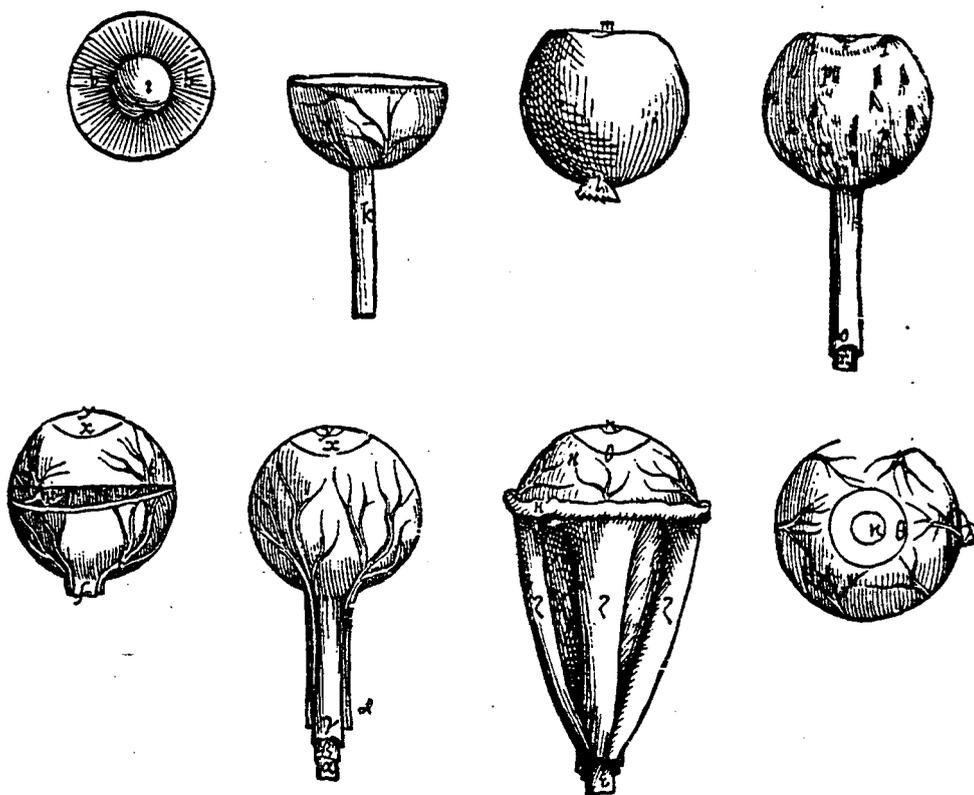




plexuses indicates a three dimensional representation, but does not have the less conscious, immediate impression of perceptual depth given by Vesalius. Similarly, Vesalius' dissection of the eye, and Lancisi's, of the larynx [Fig. 8] may appear superficially to be equally 'taxonomic'.<sup>105</sup> On closer inspection, however, one is inclined to feel that against the fresh, open, vital quality of the former, the cold, densely shaded and schematised images of Lancisi are more like machine parts than human biology.

In the case of Fries, the stylised, diagrammatic tinge may be due to a mixture of inferior artistic technique, early woodcutting, and lingering 'medieval' disregard for material precision. In Lancisi problems of execution seem unlikely. Rather, at least part of the answer must lie with the new form of conceptualising, and institutionalising, associated with science and scientific societies. Notwithstanding the illusionistic techniques of perspective, it can be said that the artist of De Fabrica has attempted to draw *exactly* what he has seen - his image combining a religious and an artistic faithfulness. This implicit reverence for sensual precision (down to hair and facial contours) neatly echoes Cassirer's characterisation of early, pre-mathematical empiricism - an attitude too reverent of 'nature's all-embracing unity' (Cassirer, p.170), and lacking the 'objective standards of value and... principle[s] of selection' (Cassirer, p.151) needed to abstract those features which are of particular interest. Unlike the more ambiguous Vesalian body - floating unstably (if not quite freely) between religion and science - Lancisi's figures have settled into a stable role and framework. This new ordering system produces correspondingly stylised renderings, designed to be didactically *useful* to the human beholder rather than mimetically *respectful* of a divine creator. The less dense imitation of the Lancisan brain (notably the lack of blood vessels) corresponds to this

FIGURE 8 TOP: ANATOMY OF THE EYE,  
 DE FABRICA (1543)  
 BOTTOM: ANATOMY OF THE LARYNX,  
 LANCISI, TABULAE ANATOMICAE (1714)



controlling, post-Cartesian attitude, employing more schematic taxonomy (and, therefore, literally more 'anatomy') to permit better study of separate layers. Such a stance accords also with Lancisi's innovative labelling system, whose measured frame obviates the need for intrusive lettering (see Roberts and Tomlinson, p.190). The stylisation of both the pre- and post-Vesalian images reflects the obtrusion of larger conceptual systems between eye and object.

The three muscular illustrations [Figs. 9-11] reinforce this impression.<sup>106</sup> Perhaps most obvious is the difference between the carefully drawn Italian landscape of Vesalius, the dramatic (and arguably triumphant) 'sunburst' of da Carpi, and the bare rectangle supporting Lancisi's figure. The earlier (Vesalian) impression of a body at least juxtaposed to - if not fully integrated in - a recognisable social context, is opposed by one in which background is considered merely distracting. Lancisi's muscle-figure therefore stands out starkly against a plain white surface. Its starkness arguably derives almost equally, however, from its stylised depiction of the muscles. Representing a very similar state of dissection, the later image has, as with the brain, a schematising tendency in its uniform lines (particularly on either side of the back), and a layering which does not achieve the depth of the Vesalian study. The fluidity of the lines in this latter (again, especially on the lower back), as well as the more compelling illusion of three dimensions, contribute to the vibrancy and dynamism of a freshly perceived body. While all the figures are nominally 'alive', those of Vesalius and da Carpi might be likened to human beings who happen not to have noticed their unusual condition; that of Lancisi, to an *écorché* stood upright and supported by wires.<sup>107</sup> Once again, however, the earlier and

FIGURE 9

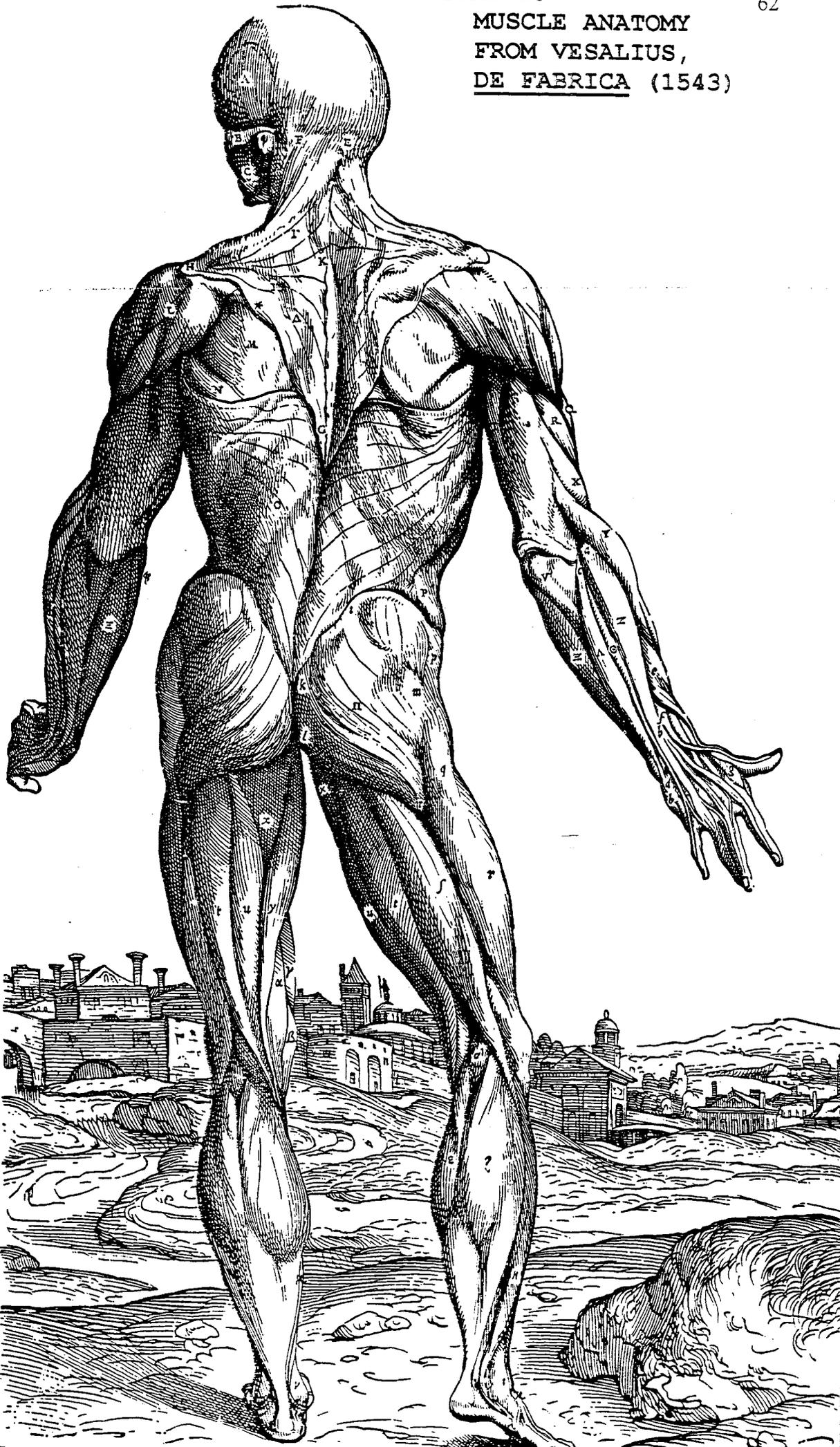
SELF-DISSECTING MUSCLE FIGURE FROM BERENGARIO DA CARPI, COMMENTARIA.. (1521)

DE ANATOMIA

In hac fi-  
 gura hinc dicitur  
 omni musculi  
 obliqui alicui  
 dicitur se ierit  
 cum duobus  
 deficiunt in  
 alia figura po-  
 sita quae de  
 scendit hinc  
 supra illos a  
 scendit: et to-  
 tus mus ex p-  
 ducto muscu-  
 lis descendit  
 bus supra po-  
 sita alia figu-  
 ra cum corda  
 sua superat  
 obliqui muscu-  
 li vni ex istis  
 ascendit ob-  
 liqui facit si-  
 mul figuram x.  
 linc graeco: et  
 istos musculo-  
 rum et pars car-  
 nea est a lateri-  
 bus: Corda ho-  
 eorum sunt in me-  
 dio renitio: sunt  
 et hanc pellu-  
 culam in super-  
 quant musculos  
 longos: alia  
 vero pellu-  
 cula est ista mu-  
 sculos longos:  
 quae adhaeret cor-  
 di latitudine  
 hinc musculorum:  
 et istae cordae  
 et remanent in  
 linc: quae in me-  
 dio vni: et  
 vides.



MUSCLE ANATOMY  
FROM VESALIUS,  
DE FABRICA (1543)



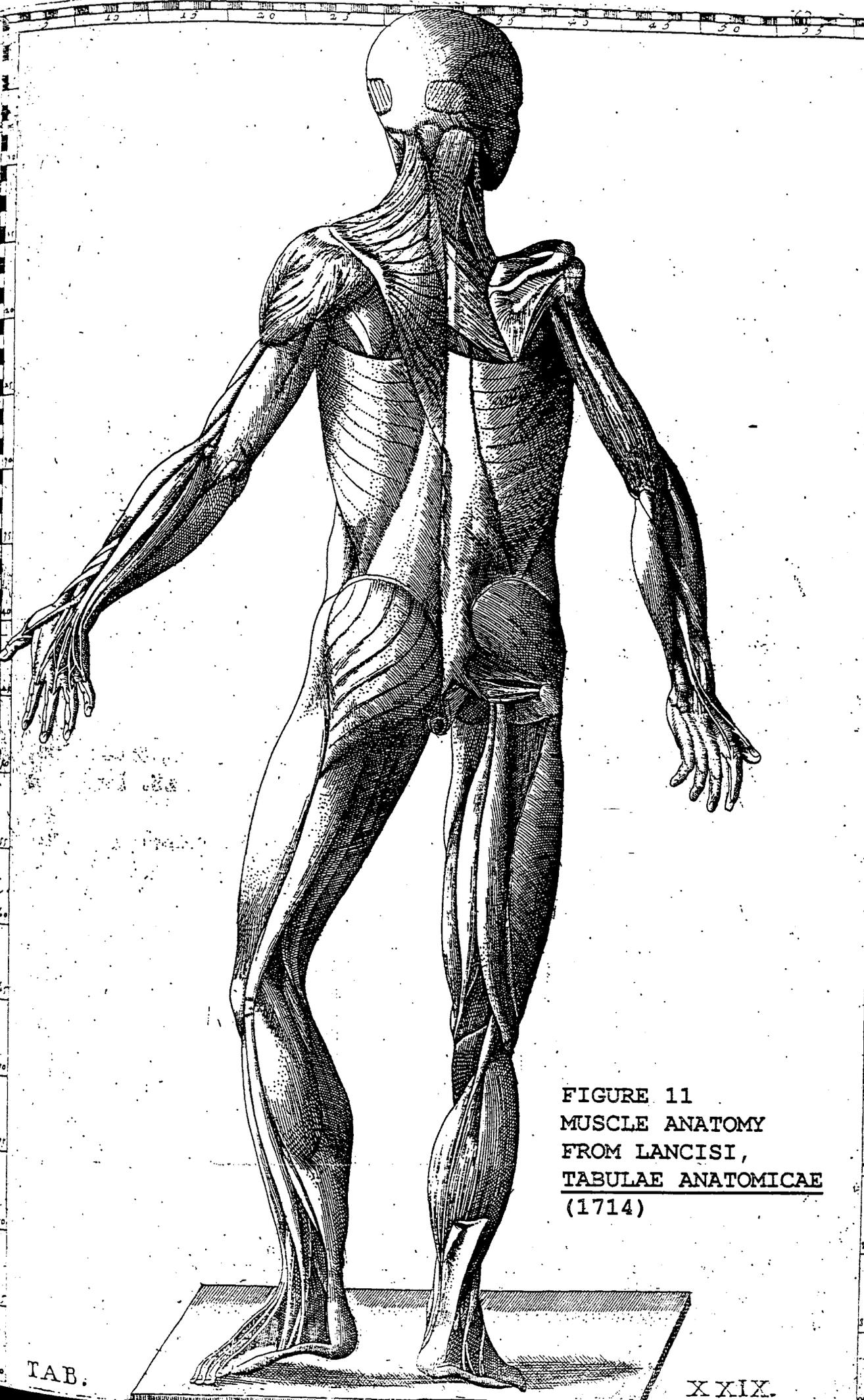


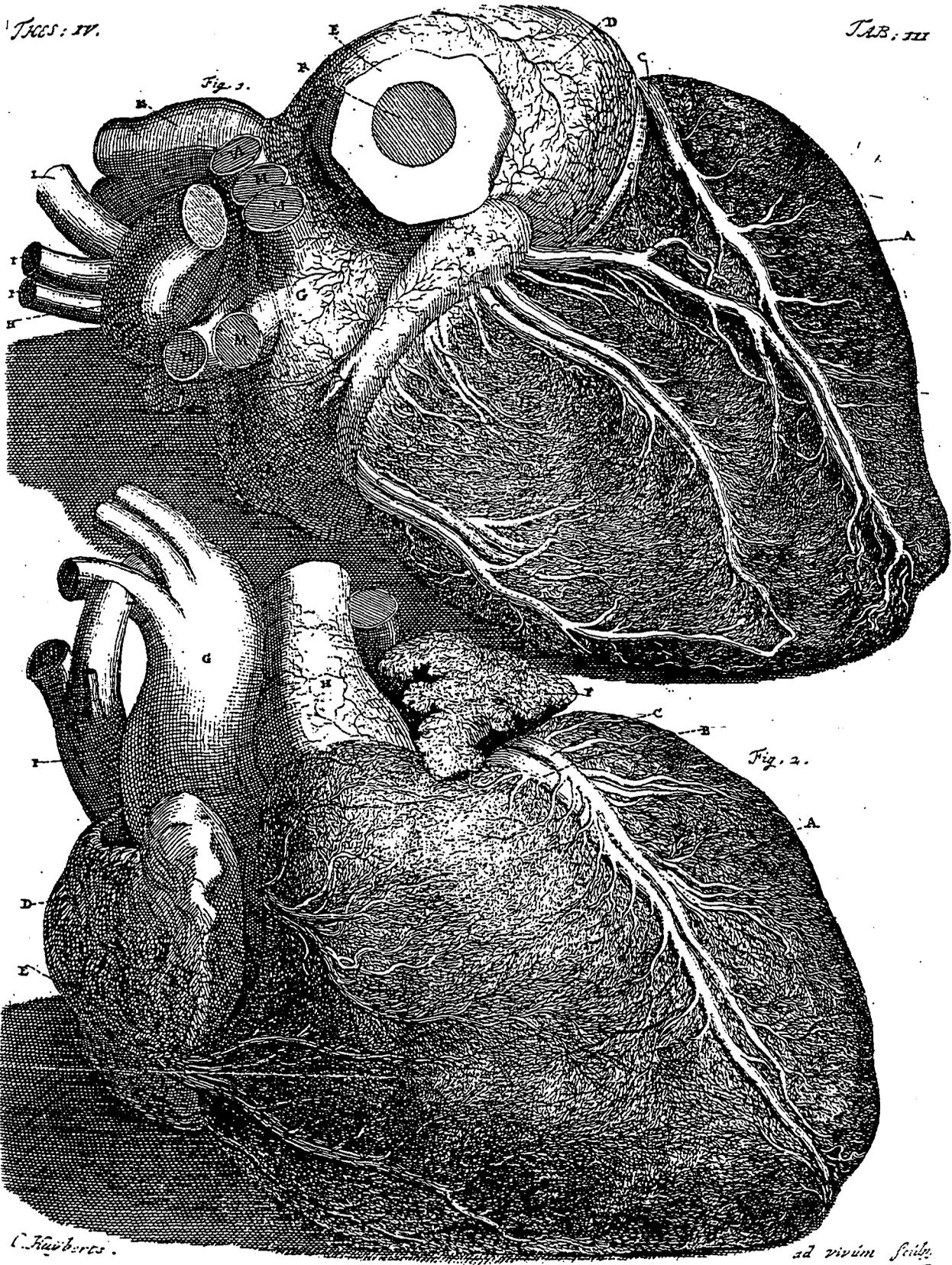
FIGURE 11  
MUSCLE ANATOMY  
FROM LANCISI,  
TABULAE ANATOMICAE  
(1714)

later images are drawn together by the uniformity of their lines (most especially on the da Carpi torso).

I have here aligned the Eustachian illustrations with the eighteenth century, conspicuously post-Cartesian context of their publisher, Lancisi - an identification which seems confirmed by their sustained popularity in the eighteenth century. They were re-engraved by Albinus in 1744, and quite clearly influenced the design of Albinus' own characteristically eighteenth-century work.<sup>108</sup> Given his editorship of Vesalius, it is especially striking that Albinus favoured the illustrations of Eustachio, rather than those of his more noted Flemish rival, as a model. Such historical preferences seem also to accord with the aesthetic evidence of certain depictions. Comparing Eustachio's plates with, for example, Cowper's textbook of 1698 (Roberts and Tomlinson, Pl. 73), or my Fig. 12 - from F. Ruysch's 1704 Thesaurus Anatomicus Quartus - one notes how, in the latter especially, the neatly and vividly sliced cross-sections of veins and aortae echo the similar effect on the arm muscles of Lancisi's Tab. XXVI [Fig. 13].<sup>109</sup>

The fact that these illustrations were originally produced not as woodcuts, but as copper engravings, perhaps explains their 'Cartesian' qualities to some extent. For various reasons (notably accuracy and permanence), the engraving had almost entirely superseded the woodcut in anatomical illustration by the early seventeenth century (see Ivins, p.49). Vesalian plates, while still respected, were themselves reproduced as engravings in the eighteenth century.<sup>110</sup> One might at first be tempted to claim that the qualities of the Eustachian plates, as outlined above, resulted purely from the mechanical shift to engraving. While this argument has some relevance it must nonetheless remain marginal. The method of engraving certainly allowed, and

F. RUYSCHE, ANATOMY OF THE HEART FROM  
THE SAURUS ANATOMICUS QUARTUS... (1704)



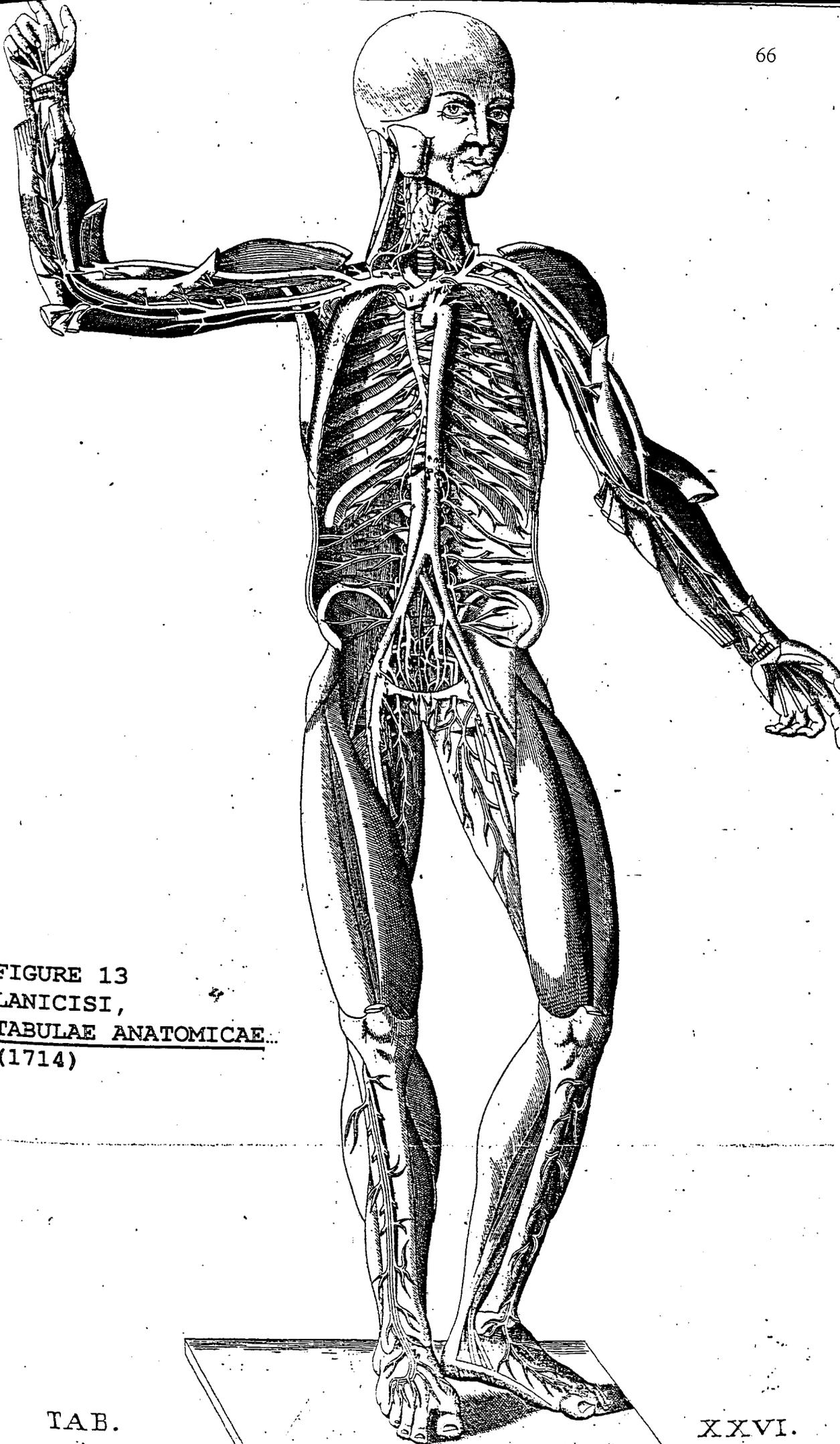


FIGURE 13  
LANICISI,  
TABULAE ANATOMICAÆ...  
(1714)

prompted, changed techniques of illustration; but, as the Vesalian engravings make clear (see Roberts and Tomlinson, pl.29, Pl.33), it did not necessitate the comprehensive differences seen in Eustachio's figures.<sup>111</sup> In the absence of any other evidence, the most reasonable inference must be that Eustachio's (and Musi's) deliberate intentions led to both the *avant-garde* appearance of the Eustachian body, and its *avant-garde* medium of reproduction. Although mere accident remains a possible factor, the most obvious reasons for the initial 'failure' of the Eustachian work appear to be aesthetic and cultural ones. Their alien, 'proto-clinical' appearance meant that these figures were essentially too scientific to appeal to an age still captivated by the perceptual thrill, and attendant wonder, of Vesalian illustration. Like the more textual, and more scientific representations preceding and following them, Vesalian depictions implicitly encoded a definite, albeit unconscious, epistemological preference. Such an explanation accounts for the longstanding hegemony enjoyed by Vesalian illustrations, regardless of the fact that Eustachio's work, in certain respects, was more accurate.<sup>112</sup> The continued subordination of empirical correctness to cultural expectations was something from which Vesalius benefited, rather than suffered, in this case. Indeed, the way that, relative to Eustachio, Vesalius effectively mitigated the novelty of his depictions is arguably similar to Donne's later usage of anatomical and corporeal rhetoric. In both cases, the new body remains at least partially subordinate to the requirements of an older epistemological framework.

A few decades after Vesalius' work, features of Helkiah Crooke's 1615 Microcosmographia serve both to re-emphasise the ultimately taxonomic drive of post-Vesalian illustration, and to indicate the relatively brief lifespan of the 'wondrous', as opposed to the conceptual, human body.

Crooke's textbook presents differences from the Vesalian source material which suggest noticeably Cartesian traits. Where Vesalius' De Fabrica of 1543 had only five muscular limbs detached entirely from their bodies, Crooke's work contains thirty-five such muscle figures. The higher count has been produced by 'dismembering' Vesalius' originals, a habit which also leads to the presentation of isolated muscular torsos, in place of entire, dynamic figures.<sup>113</sup> In many places shading of details has become far more schematic than that of the Vesalian figures (partly due to the passage from Vesalius, *via* Bauhin *et al*, to Crooke).<sup>114</sup> Crooke's versions of Vesalius both increase the perceived complexity of the body, and effect a notably taxonomic transformation of De Fabrica's holistic, 'living', and socially contextualised figures.

Vesalius' work appears, then, to reflect a period of instability and perceptual openness. Clearly more immediate than the anatomical depictions which precede it, the graphic body of De Fabrica is also more immediate than that which follows in the *seventeenth* century. Looking back at Vesalius' instructions concerning the plates, one notes how his use of the words 'pleasing' and 'tastefully' (rather than, say, 'accurate' and 'carefully') reflects the lack of a fully-developed scientific viewpoint and vocabulary.<sup>115</sup> The visual signs identified in Vesalius' plates indicate the persistent element of wonder attaching to a human form suspended between science and 'Natural Theology'. Just as the word 'scientifique', in 1611, is translated into English as connoting at once 'exceeding *skill*' and '*wonderfull* knowledge', so pious wonder and active scientific investigation combine temporarily in the anatomised body.<sup>116</sup>

Reflecting this precarious harmony, Vesalian illustrations stand poised between two different forms of

abstraction. Their perceptual freshness contrasts with both the crudely two-dimensional renderings of the medieval anatomists, and the gradually more conceptualised body of the seventeenth century. In the latter case there appears an appropriately Cartesian tendency to master, control and manipulate the human figure whose previous representations were so compelling precisely because of the power of wonder it exercised over anatomists and artists. Lucien F  bvre recognises that the men of the sixteenth century 'doubtless had keen sight...', but stresses that they 'had not yet set it apart from the other senses. They had not yet tied its information in particular in a necessary link with their need to know'.<sup>117</sup> Similarly, Cassirer perceives in early Renaissance naturalism 'a strictly empirical and sensualistic character... excluding from the picture of nature everything that cannot be supported by the direct testimony of sensory perception' (Cassirer, p.147). In the case of Vesalius, this impression of people newly perceiving, rather than conceiving, the body, appears to be related to the increase in (and increased prominence of) dissection, and to its novelty, as well as to the mechanical and artistic factors posited above.

### **Conclusion**

I have attempted in this chapter to sketch the broad epistemological framework within which early modern anatomy existed as a cultural phenomenon. Both the literary anatomy as a genre, and Vesalian anatomical illustrations (the two most widely influential manifestations of dissective practice beyond the anatomy theatre itself) bear the marks of epistemic transition. Figuring the newer discourse as a disease which consumes the older from within, one can see

both literary and pictorial anatomy as carriers of this virus, ultimately subversive despite their superficial innocence. Although both 'carriers' in this sense, the illustrations of Vesalius and Eustachio differ crucially in that the first at least look culturally 'healthy', while the latter appear more overtly marked by signs of disease. Advancing toward an autonomous human mechanism even as it claims to revere the artistry of divine creation, anatomical illustration suggests an immediacy which is in fact heavily mediated by the new science of perspectival construction. Similarly, the literary anatomy allows the taxonomic elements of dissection, and science in general, a vociferous and unchecked expression by its association with recognised and therefore non-threatening forms of discourse.

The broadest and most far-reaching implications of anatomical representation can be linked to the Foucauldian argument for epistemic shift by Cassirer's comments on the 'new concept of space', in both 'Renaissance philosophy and mathematics...' - one 'stripped of its substantial nature, and.. discovered as a free, ideal complex of lines' (Cassirer, p.182). The view that 'both the theory of art and the theory of exact scientific knowledge run through exactly the same phases of thought' (Cassirer, p.163) parallels the Foucauldian emphasis on unrecognised but dominant epistemological factors within a given period. One can, accordingly, see in Cassirer's analysis of mathematical and geometrical changes a reflection of shifting attitudes to language and the natural world. The opposition between the earlier form of space 'as a *substratum*' and 'space as a function' (Cassirer, p.182) partly echoes Foucault's shift from resemblance to taxonomy. The 'substratum' implicit within sixteenth-century knowledge ('below the language one is reading and deciphering, there runs the sovereignty of an original Text' (Foucault, p.41)) connotes a theory of

language implicitly subservient to the divine. The later-seventeenth century, however, initiates the movement toward a language which is not pre-existing, but created by functional requirements: 'one no longer attempts to uncover the great enigmatic statement that lies hidden beneath [the signs of language]... one asks how it functions... how it *analyses* and composes...' (Foucault, pp.79-80, italics mine). Similarly, Natural Philosophy, as I will be arguing throughout following chapters, gradually becomes less reverential and more manipulative - actively conceiving rather than mutely and wondrously perceiving.

## Chapter Two

### A Brief History of Soul

#### Introduction

Certain broad patterns recur throughout the history of western pneumatology. A major one is that of alternation between materialising and abstracting views of the soul. Related to this is an opposition between the soul as entity, and the soul (or aspects of it) as process. From the time of Vesalius, both these material and dynamic qualities of the soul are crucially affected by their relation to the new standard of human anatomy. I will show how this is linked to aesthetic, as well as to nascent scientific considerations, in the sixteenth and seventeenth centuries. Examination of Cartesian anatomical writings in the lifetimes of Donne (1572-1631) and Burton (1576/7-1639-40), and the years following their deaths, helps to clarify the direction of change which is only dimly apparent in the earlier seventeenth century. By the time of René Descartes (1596-1650) a fundamental shift appears to have taken place - something most clearly visible in the undermining of a body-soul synthesis which had persisted since the time of Augustine.

The figures chosen for discussion are ones who have strongly influenced theories of the soul, either in their own period or in later centuries. While Augustine, a theologian, is set against Galen, a physician, my argument assumes that it is as a theologian that the former is representative of his time. The figures or groups examined prior to the era of Vesalius should provide a fuller understanding of sixteenth-

and seventeenth-century pneumatology, and the impact which anatomical inquiry had on it.

## 1. The Pre-Christian Soul: Early Greeks to Galen

### a. Early References to *Pneuma*

Early European pneumatology is characterised by a theory of body-soul unity which typically shows a far greater physiological component than later, Christian adaptations. To the Ancient Greeks this agent of unity was *pneuma*, deriving from a 'breath' or 'wind' with which the body was literally 'in-spired', and which left it at death.<sup>1</sup> Some of the earliest references to it are found in the *Iliad*. The precise nature and role of *pneuma*, as understood by the Greeks, is difficult to apprehend in a post-Christian world. Translated below as 'spirit' or 'spirits', it can at times appear as merely figurative as modern references to a 'spirited' person. The Danaans, for example, when watching Hector rallying his men 'were seized with fear, and the spirits of all men sank down to their feet'; while elsewhere Hector's encouragement to the Trojans 'aroused the strength and spirit of every man'.<sup>2</sup>

The second phrase, which recurs often, is not conspicuously concrete. The first, however, has a definite physical aspect which is highlighted by comparison with the battlefield description of how, in the stabbing of Hyperenor: '...the bronze let forth the bowels, as it clove through, and his soul sped hastening through the stricken wound...' (*Iliad*, II, p.105, italics mine).<sup>3</sup> The clear material integration of *pneuma* (here a vapourised spirit passing through a ruptured body) is evident in a way which obliges us to subtly alter our understanding of other usages of it. So 'sank' and 'feet'

in the above become far more actual than figurative. Again, the seemingly metaphorical, '...he smote him with a thrust of his bronze-shod spear, and loosed his limbs. So his *spirit left him...*' (*Iliad*, I, p.187, italics mine), is necessarily coloured by the more precise depiction of spirit leaving the wound (II, p.105).

### b. Plato

The danger of confounding Greek *pneuma* with later Christian adaptations of it is something that can be illustrated further by looking briefly at the formulations of Plato and Aristotle.<sup>4</sup> Plato is not known for his interest in the precise corporeal aspects of pneumatology. Nonetheless, he talks of the soul in terms comparatively detailed, material and physiological:

The starting point for all [bodily substances] was the formation of the marrow, for the bonds of life, so long as the soul is bound up with the body, were made fast in it as the roots of the mortal creature... From [the marrow] as if from anchors, [the Creator] put forth bonds to fasten all the soul...<sup>5</sup>

Notwithstanding *Timaeus*'s tripartite division of soul between liver, heart, and brain, and its confinement of the 'divine' soul within the head (69a-71a), the relatively detailed account of the human mechanism which it gives shows a body far more readily integrated into mainstream pneumatology than it was to become under Christianity. After the marginalisation of the body in the medieval period, the relatively unstrained co-existence of body and soul which Plato presents is more effortfully reasserted in a new context: that of the concrete

examination of the human body. Plato's choice of 'marrow' as the seat of both the mortal and the immortal parts of the soul is also significant in terms of the dynamic, physiological aspects of the Greek soul, given the way that it permits a continuity of body and soul, and an interaction at once localised and definite, yet ramifying, too, throughout the entire human organism (Timaeus, 73b-d).<sup>6</sup>

Moreover, Plato does not appear to be very nervous about allowing to the soul a degree of mutability consequent on the processes of the body. A great deal of flux occurs in the human interior as described by him - bone and flesh, for example, crumbling into the bloodstream (Timaeus, 84a-b). Even the primary material of the marrow is not immune to physical accident: 'the most desperate case of all is when the substance of the marrow becomes diseased by some deficiency or excess'. This excess 'produces the most serious and deadly disorders, since the whole substance of the body is forced to flow in a backward course' (Timaeus, 84c, 4-5). Although this appears to refer to the marrow of the bones, rather than the brain, it suggests a potential for blurring of physical and spiritual disorders which medieval Christian adaptations of Greek thought typically avoid.

Just as the more concrete references to 'spirits' in the Iliad inform understanding of apparently figurative instances, physically precise statements such as this one crucially alter the sense of apparently general descriptions of the soul. For example, the claim that: '...disorders of the soul are caused by the bodily condition... among the gravest [of which] we must rank excessive pleasures and pains' (Timaeus, 86b, 8-9) might, if viewed in isolation, appear virtually identical with Christian notions of a desirable temperance in one's physical habits. The similarity which does exist between the two views (that the soul will be adversely affected by 'excessive pleasures and pains') must

be set against the ultimately different Greek apprehension, which stresses a dynamic, concrete interaction between the physical and spiritual far more than the abstract ethics of Scholasticism. While Scholasticism certainly recognises the influence of the body on the soul, it explicitly distances itself from the physical details of this relationship.

### c. Aristotle

It is by no means easy to simply oppose Aristotle's pneumatology to that of Plato. It has been recognised, indeed, that there is no definite agreement as to the views of Aristotle himself.<sup>7</sup> It is important to pursue this ambivalence to its developments in later centuries. Looking, first, at De Motu Animalium, one finds empirical and physiological leanings which can be linked to Galen (though not to the later, conservative 'Galenists') and to the revived anatomy of the Vesalian and post-Vesalian decades. Explaining that 'all animals have connate *pneuma* and derive their strength from this', Aristotle goes on to claim that 'the functions of movement are pushing and pulling, so the tool of movement has to be capable of expanding and contracting'.<sup>8</sup> This, he asserts, 'is just the nature of the *pneuma*. For it contracts and expands without constraint... Whatever is going to impart motion without undergoing alteration must be of this kind' (703a, 22). This appears to require (and to feel comfortable about supplying) a detailed and physically grounded pneumatology. What is said about the necessity of 'expanding and contracting' is similar to the use of 'spirits' to explain motor action between brain and body, during the Renaissance.

Aristotle adds, in the same section of De Motu Animalium, that 'this *pneuma* appears to stand to the soul-

centre or original in a relation to that analogous between the point in a joint which moves[, ] being moved and the unmoved'. Because 'this centre is for some animals in the heart, in the rest in a part analogous with the heart, we further see the reason for the connate *pneuma* being situate where it is actually found..'; namely that 'it is [here] well disposed to excite movement and to exert power... (De Motu Animalium, 703a, 10-15). While references to the heart after Aristotle's time may be said to have become progressively more figurative than anatomical, it is worth considering that here it is a physical locus as precise and material as the mesh of cephalic veins known to the Middle Ages and the Renaissance as the *rete mirabile*. The fact that the Aristotle of De Motu Animalium is satisfied with 'a part analogous with the heart' demonstrates his adherence to comparative anatomy, and his respect for actual bodily structure (as opposed to abstract theories about the body). Moreover, the *pneuma* is argued to be centred 'in the heart' because this accords best with physiological requirements ('it is well disposed..' etc.).

It is hard to ignore the significance, however, of these passages being found here, and not in De Anima, whose slant is very different. In this latter work there appears the influential notion of the soul as the 'form' of the body. Aristotle first complains that most 'theories of the soul' involve 'the following absurdity: they all join the soul to a body, without adding any specification of the reason of their union, or of the bodily conditions required for it'.<sup>9</sup> What is required, however, is not a fuller physiological elaboration of such theories. This approach, to the Aristotle of De Anima, is apparently a blind alley. His analogy - 'as the pupil plus the power of sight constitutes the eye, so the soul plus the body constitutes the animal' - suggests that one simply cannot talk of a living body without implying a

soul (De Anima, 413a). The soul is the form of the body. To put it more precisely:

If, then, we have to give a general formula applicable to all kinds of soul, we must describe it as the first grade of actuality of a natural organised body. That is why we can wholly dismiss as unnecessary the question whether the soul and the body are one: it is as meaningless as to ask whether the wax and the shape given it by the stamp are one..

(De Anima, 412a).

From a modern perspective, the ingenious analogy of wax and stamp might appear only to sidestep the question. It is consistent, however, with the assertion that the soul is 'the first grade of actuality of a natural organised body'; without soul there is only formless and undefined matter. The notion of 'defined bodies' necessarily having soul also provides a reasonable criterion for the otherwise indiscriminate allocation of soul to animals, insects and plants. To be 'animated' thus means: to have natural, well delineated physical boundaries. It implies growth, also, as something common to humans, animals, and plants. The refusal, even as late as the seventeenth century, to absolutely discount the possibility of stones having souls suggests, however, that growth is not so essential a feature of soul as is physical definition.<sup>10</sup>

Despite the potentially ambiguous quality of Aristotle's earlier objection to theories which fail to deal with the 'bodily conditions' of body/soul union, on the whole De Anima appears concerned to refute notions of the soul which involve it too precisely with, or subordinate it to, corporeal qualities. Thus, '...it is an impossibility that movement should even be an attribute of it'; and while, '...in old age

the activity of mind... declines', this is 'only through the decay of some other inward part... when this vehicle decays, memory and love cease; they were activities not of mind, but of the composite which has perished; mind is, no doubt, something more divine and impassible' (De Anima, 406a, 408b). The slightly vague 'something more' (cf. 'in some other way', (407a, 1.9)) and the parenthetical 'no doubt' suggest an *inclination* to rarify the soul in spite of insufficiently certain or full evidence.<sup>11</sup> For all his relative empiricism (as contrasted, especially, with Thomistic developments), Aristotle yet appears ready, ultimately, to let the abstract and the immaterial hold sway. This ambiguity can be characterised as an acceptance of the physical, but not of the *dynamic*. Hence, the implication of 'the "Orphic" poems... that the soul comes in from the whole when breathing takes place, being borne in upon the winds', is rejected because 'this cannot take place in the case of plants, nor indeed in the case of certain classes of animal' (De Anima, 410b). Although the ostensibly careful regard for comparative anatomy and structure is here the nominal reason for Aristotle's opposition, the tendency to exclude the mutable and the concrete is notably consistent with De Anima's general preference for abstraction.

The notion of a tripartite soul, evidently derived from Plato and Aristotle, has important consequences for later Christian theories of body-soul interaction. A probable explanation of the surprisingly physical apprehension of soul in Plato and Aristotle is that, by the 'lower' souls, at least, something very different from the immaterial, abstract Christian soul was actually meant. By the time of the Renaissance, however, this distinction was not always recognised. The result was that, especially in the case of bodily spirits, there occurred descriptions of the soul which indeed appeared strikingly corporeal. The difference between

the physical integration of De Motu Animalium and the increasing abstraction of De Anima provides an important symbolic example of the later schism between matter and spirit. Without positing a direct derivation, it can be said that the medieval, Thomistic notion of body-soul relations looks back to De Anima, while those of the Stoics, and of the early-modern period, are indebted to both De Anima and De Motu Animalium.

#### d. The Stoics

Stoic 'pneuma' has some affinity with the soul as an 'act' which unites and defines the body. Hence, in Alexander of Aphrodisias' statement that, "There is no part of the soul which has no share in the body which contains the soul", we find an echo of Aristotle's conclusions on the uniform diffusion of soul.<sup>12</sup> In the description of S. Sambursky, 'the cosmos is filled with an all-pervading substratum called *pneuma*, a term often used synonymously with *air*' (Sambursky, p.1). While its all-pervasiveness at first suggests that it is merely air, we are told that, additionally, 'A basic function of the *pneuma* is the generation of the *cohesion of matter* and generally of the contact between all parts of the cosmos' (ibid., italics mine).<sup>13</sup> *Pneuma* is arguably no more easy to define, then, than is Aristotle's notion of 'soul'. Its similarity to air, and the breathing of air, points notably to Genesis 2.7: 'And the Lord God formed man of the dust of the ground, and breathed into his nostrils the breath of life; and man became a living soul'. Just as the words 'spiration' and 'spirit' are appropriately cognate, so the Hindu 'atman' (the self or thinking principle) derives from an Indo-European word meaning 'to breathe'.<sup>14</sup> For the Stoics, *pneuma* (whose

similarity to air must be at least partly misleading) seems to lie somewhere between Aristotle's more abstract notions of soul, and a prosaic modern understanding of physiology (it now being universally accepted that oxygen is essential to human and animal life.) *Pneuma*, relatively concrete and dynamic as it appears beside the theories of De Anima, is part of a kind of holistic physiology of body and soul. The elusive character of *pneuma* and the state of the whole organism consequent on it is clarified indirectly by the Stoic belief that '...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.<sup>15</sup> *Pneuma*, therefore, is by no means equivalent to the Christian soul, but is capable of transforming into something very like it, at some point along a continuum, rather as consciousness is now held by some scientists to be consequent on a sufficiently large number of brain cells.<sup>16</sup>

Having stressed that '...the Stoics completed the transformation of the [Aristotelian] geometrical concept into a physical one' Sambursky adds: 'The most striking proof of this is the specifically physical property ascribed by the Stoics to the *pneuma*...: tension (*tonos*)', emphasizing that '*Pneuma* possesses this tensional power as its most specific property' (Sambursky, p.5). While it yet remains hard to prove that *pneuma* (which we do not believe to exist) is more physical than Aristotle's 'act' of the soul, the Stoics' 'tension' does give the impression of a real, relatively physical apprehension. It implies a substance which, essentially, preserved the world from a kind of entropic collapse. If this does not entirely remove the potentially 'everywhere and nowhere' quality which *pneuma*, in its all-pervading diffusion, could appear to have, it certainly charges it with a physical urgency which differs from the

abstract, static pneumatology of the Scholastics. As Sambursky emphasises, the Stoics conceived '...of hexis [the 'synthesis of pneumata permeating the body'] not as a static phenomenon but as a dynamic process prevailing within a continuous medium and "of a corporeal nature"'.<sup>17</sup>

As suggested here, *pneuma* also incorporates a key feature which appears to remain constant up to the time of Donne's usage of 'spirits': it is capable of flowing through other substances and bodies. Set beside the fact that 'The specific Stoic attitude... attributes corporeality to everything capable of acting and being acted upon, including even the soul...', the penetrative capacity of *pneuma* again suggests a *continuum* of body and soul (Sambursky, p.21). During the Renaissance it appears to have been precisely this continuity which lay behind certain unorthodox, problematic, or outrightly heretical representations of body-soul unity.

The sense of partial similarity between Stoic and Renaissance attitudes is reinforced explicitly by Sambursky when, discussing the tendency for classical writers to conflate or confuse Aristotle's concept of 'aether' (as part of the composition of the celestial spheres themselves) with Stoic *pneuma* (as a universal cohesive principle), he recognises that: 'During the Middle Ages, when Aristotle reigned supreme, aether again became the element confined to the celestial spheres'. From the beginning of the seventeenth century, however, 'the term was generally used to express the universal substance imbued with all the properties attributed to it by the Stoics, as is well known from the writings of Descartes, Boyle, Newton and others' (Sambursky, pp.34-35). Making 'aether' effectively immune to empirical investigation is something which corresponds appropriately to the medieval tendency to hypostatise the theories of Aristotle and Galen. Here as elsewhere the Renaissance, and its later stages

especially, can be seen to re-physicalise something essentially frozen into abstraction for many centuries.

#### e. Galen

Like the Stoics, Claudius Galen (131-c.200AD) also sets the soul in a relatively physiological context. Following the tripartite arrangement of spirit through Natural, Vital, and Animal, Galen had the *pneuma* circulate through the body in the same way as blood. On reaching the brain, in its vital form, it then became 'charged with the *pneuma* of the soul, the Animal Spirit, and was carried forth by the nerves, believed to be hollow during life, to endow the body with sensation and motion'.<sup>18</sup>

Despite this seemingly Aristotelian hierarchy of souls, Galen's attitude towards Aristotle's three classes of soul is in fact refreshingly commonsensical: 'Since feeling and voluntary motion are peculiar to animals, whilst growth and nutrition are common to plants as well, we may look on the former as effects of the *soul* and the latter as effects of the nature'. It follows that 'if there be anyone who allows a share in soul to plants as well, and separates the two kinds of soul, naming the kind in question *vegetative*, and the other *sensory*, this person is not saying anything else, although his language is somewhat unusual'.<sup>19</sup> These almost Baconian remarks indicate how the Renaissance was able to recover its own version of Galen while breaking with the hypostatized Galenism of medieval physiology and pneumatology. In the sixteenth century the anatomical physician Joannes Argenterius (1513-1572) was to deny the existence of animal spirits themselves; while Descartes later expressed a slightly different, but related, objection to the traditional 'three souls' of Aristotle.<sup>20</sup>

According to Lynn Thorndike Galen indeed was so respectful of the rules of the material world as to qualify his 'admiration at nature's providence in keeping the eyebrows and eyelashes of the same length and not letting them grow long like the beard or hair', by insisting that this was 'because a harder cartilaginous flesh is provided for them to grow in'; for 'the mere will of God would not keep hairs from growing in soft flesh'.<sup>21</sup> In this clear assertion of the rights of anatomy over theology we see something which is utterly forbidden by Scholasticism.

The disembodied soul of Aristotelianism is, then, relatively alien to Galen. His references to the soul usually occur alongside discussions of *pneuma*, and the latter in particular is integrated into a medical context. Galen argues, for example, that if the *pneuma* 'is too cold, it has not the same facility of moving everywhere (yet the psychic *pneuma* must move readily through all the members)', whereas 'if it is too hot it is able to move readily enough but first burns and consumes the body, and finally also perishes and is consumed itself'.<sup>22</sup> Here *pneuma* is at least functionally similar, notwithstanding its flamelike quality, to blood.

Galen's rigour does admittedly have its limits. The illusory *rete mirabile*, the network of fine veins in the head, and supposed intermediary between soul and body, is perhaps the most conspicuous illustration. In the oxen and sheep which Galen was accustomed to dissect this was an impressive fabric. He found it also, though less spectacularly, in the Barbary ape. In human bodies, which he is not known to have dissected, it appears in the most reduced form of all. Related to this pneumatological *chimaera* was the fact that, although Galen 'by binding up a section of the femoral artery... proved that the arteries contain blood and not air or *spiritus* as had been generally supposed' he did not 'perform any experiments with the pulmonary veins,

and so the notion persisted that these conveyed "spirit" and not blood from the lungs to the heart' (Thorndike, I, p.147). As will shortly be evident from the attitudes of Vesalius and his successors to the *rete mirabile*, these two related errors were to have important and enduring consequences for following centuries.

In Galen and the Stoics, then, and to an extent in the pre-Christian Greeks generally, one finds examples of a physicalising, and to some degree experimental, attitude to the soul. Given that a quite contrary view prevails in the Christian tradition which dominates Western thought between Augustine and the Renaissance, it is important to see how the revived experimentalism of Vesalius (and those after him) has earlier foundations.

Origins of the views about to be examined, from Augustine to Aquinas, can, however, also be detected in the Greeks. In the case of Aristotle particularly, one can see how a tendency to idealise the soul develops into the more uncompromising Aristotelianism of the Middle Ages. Even Galen too, however, has some leaning toward a physiology which (at least compared to that of the Stoics) is relatively static. This is most notable in his frequent recourse to the theory of humours. Although the humours can be part of a dynamic process, they may also be seen only as isolated substances, lacking integration with complex physiology. While in Galen this potential stasis is modified by the physical, at least partially experimental, context in which it appears, the later devaluing of the empirical associated with Galenism alters the emphasis significantly.

## 2. The Christian Soul

### a. Augustine

In the writings of Augustine (354-430), the abstracting and non-experimental temperament of the Schoolmen can be seen in nascent form. By no means the most blameworthy among those Bacon is later to single out for censure as the 'spiders' of philosophy, Augustine is nevertheless far closer to them in spirit than he is to Galen.<sup>23</sup> As the very title of The City of God suggests, a central part of Augustine's philosophy is his attempt to deflect inquiry from the physical to the immaterial. Hence he prefers the 'Platonists' to the preSocratics and the Stoics ('Let Thales depart with his water, Anaximenes with his air, the Stoics with their fire, Epicurus with his atoms'), asserting that 'those who understood [Plato] far better than others, do think that in God is the cause of natures, the light of reason, and the rule of life'.<sup>24</sup> There is apparent here the beginnings of an epistemology which implicitly privileges the divine and textual over the earthly and actual. It refuses, as it were, to meet empirical arguments on their own grounds, rather carving out a wholly new sphere of wisdom for itself. From this lofty height matters of physical detail may be dismissed as trifling and secondary, if they are considered at all.

Such occasional glimpses of naturalistic detail as The City of God does provide are fundamentally subordinate to theological strictures; a notable example being the demonstration of 'Nature's testimonies, that bodies may remain undiminished in the fire'. While God 'gave the fire that wonderful power to make all things that it burns black, itself being so bright...' his power is further demonstrated by the fact that fire 'will burn stones until they be white' (City of God, II, p.322). The momentary particularity of this

is undermined by its being used to show that God can overrule the supposedly habitual course of nature (and thus, by extension, that he may detain the unworthy in perpetual combustion). In this sense it contrasts notably with Galen's attitude to divine intervention: 'the mere will of God would not keep hairs from growing in soft flesh' (Thorndike, I, p.151).

Monumental and absolute as it now appears, Augustine's achievement was in his lifetime a very fierce and dynamic struggle for religious and philosophical domination. This must be expected to colour his attitude toward mediation between human and divine. 'Spirits', in the sense of Socratic or Platonic daemons mediating between heaven and earth, are much discussed, and with hostility and derision. Augustine inveighs against the Platonist Apuleius (c.125-180AD) and his like - 'For these men thought it unfit to join the angels with men: but held the spirits fit means for both sides...' (City of God, I, p.245). In distancing Christianity from Paganism Augustine causes the old spirits to be tainted with a new association of evil, and denies their superiority to men.<sup>25</sup> While the word 'spirits' here of course has little in common with its Galenic, medical sense, Augustine's attitude toward mediation between the earthly and divine is significant, nonetheless. His wish to discredit and demean these intermediate spirits may be seen to parallel the attitude of early and medieval Christianity to the link between body and soul. In both cases, Christian theologians reject the physical continuity found in the Stoics (and to some extent in the Greeks generally), preferring to abstract the relation between human and divine.

Augustine does show that he adheres to some version of the more Galenic, 'physical', relationship of body and soul (as opposed to the conceptual, Aristotelian 'form'): "...the soul administers the body by light... and by air, which are

most akin to a spirit".<sup>26</sup> There is a sense even here, though, that the idea is becoming increasingly doctrinal and formalised; it no longer has much - if any - physiological force or detail to it (an impression which is reinforced by the physically vague term 'administers' or 'governs').<sup>27</sup> The fact that both 'light' and 'air' are referred to (while Aquinas, commenting on this, is further to gloss 'light' as 'fire') again suggests a tendency toward abstraction.<sup>28</sup> Augustine himself acknowledges that there is latitude in the translation of the Greek πνοή, which 'we do sometimes call breath, sometime spirit, sometimes inspiration, and aspiration, and sometimes soul: but πνεῦμα, [pneuma] never but spirit...' (City of God, II, p.23). This last point also, on which he is so certain, betrays his position. For, as Benjamin Lee Gordon points out, by rendering 'pneuma' as the equivalent of the Latin 'spiritus', Galen's Latin, Arabic and Hebrew translators were effectively registering, if not causing, a fundamental shift from the original (Greek) idea: 'Galen intended to convey by the term pneuma the entrance into the body of a material substance from the air that had to be renewed constantly through respiration' rather than 'a fixed entity blown into the body at the time of birth or conception'. Hence, 'the *spiritus animalis* of the Middle Ages developed into a mystical power, a disembodied supernatural entity that controls all the phenomena of life'.<sup>29</sup> We catch, here, a glimpse of the nebulous transition by which a physiological process is gradually hypostatized and separated off into something sacred and absolutely 'other'. It is, of course, a transition consistent with the Augustinian tendency to degrade and marginalise the earthly and bodily.

Even Augustine's observation that '...in Isaiah... God saith "I have made all breath" meaning doubtless, every soul' can be re-read significantly in this light.<sup>30</sup> Whereas 'all breath' is consistent with Galenic *pneuma*, 'every soul'

(italics mine) seems to be prompted by a Christian preference for individual souls. Augustine's reinterpretation chimes well, also, with his detestation of the world-soul propounded by Varro (City of God, I, pp.200-201.) Despite Augustine's antipathy to the world-soul, the Old Testament provenance of the above quotation means that 'all breath' probably does have more in common with Greek *pneuma* than with post-Christian conceptions of soul and spirit.

### **b. Aquinas**

By the time of Aquinas (1225-1274), Augustine's pioneering work in Christianising the soul has developed into an uncompromising Aristotelianism. Aquinas does show some respect for concrete detail when he notes how 'Augustine speaks... of the soul as it moves the body; whence he uses the word *administration*', recognising that the soul 'moves the grosser parts of the body by the more subtle parts' and that 'the first instrument of the motive power is a kind of spirit, as the Philosopher says' (Summa Theologica, IV, p.50, Qu. 7, Art. 7, Reply Obj.1). This is untypical, however. It seems likely that Aquinas feels obliged to mention it partly because Augustine does so, and it is notable that in admitting it he refers to the authority of Aristotle (the canonical and unchallenged status of the latter significantly underlined by Aquinas' characterisation of him as, effectively, *the*, rather than *a*, philosopher.)<sup>31</sup>

More characteristic are statements which have the soul 'united to the body immediately', refusing to 'admit any medium as uniting the soul to the body, whether it be the phantasms, as Averroes maintained, or its [the body's] powers... or the corporeal spirit'.<sup>32</sup> In keeping with this, 'The theologian considers the nature of man in relation to

the soul, but not in relation to the body, except insofar as the body has relation to the soul' (Summa Theologica, IV, p.3, Qu.75). This relation is itself clarified: '...the soul, which is the first principle of life, is not a body, but the act of a body...' (Summa Theologica, IV, p.5, Qu.75, Art.1, Obj.3). As noted previously, in the case of Aristotle's 'wax' analogy (above, 2.1c, p.78) the physical question is in a sense sidestepped. The Thomistic soul, pervasive and non-localised, is unlike those of the Stoics or of Galen: '...the whole soul is in the whole body and in each part thereof' (Summa Contra Gentiles, II, p.180).

Aquinas then represents the farthest remove from the physiologically integrated and localised pneumatology of Galen and the Stoics. Perhaps because of his great remoteness from the more vital struggle against paganism which motivated Augustine, his view appears drier and more thoroughly conceptualised. This distinction, suggesting as it does the greater possibility of reconciling Augustine, rather than his successor, with the revived physiological soul of the Renaissance, is important given Donne's attachment to the earlier figure.<sup>33</sup>

In periods when theories of the soul are more abstract, such as those of Augustine and Aquinas, the word 'spirits' comes close (for present purposes) to losing all of its original physical connotations. While the physiological aspect is never quite vanquished, its continuing survival is at times very much obscured by the prevailing ideas surrounding it. In the words of G. Verbéke:

Si l'on compare le point de départ et le point d'arrivée de l'évolution de la doctrine du pneuma, on constate une différence tellement profonde qu'il serait plus exact de parler d'une révolution totale dans la signification de

ce terme, puisque de pneumatologie de Zenon de Citium, qui se rattache immédiatement aux conceptions médicales de son temps, n'a fort peu de traits communs avec la spiritualisme néoplatonicien de saint Augustin. En tout cas la signification fondamentale du terme est nettement différente: alors qu'il désigne, d'une part, l'âme matérielle, en tant que telle, il est employé d'autre part, pour signifier formellement l'essence immatérielle de Dieu et de l'âme humaine.<sup>34</sup>

### **3. Body/Soul Problems: the Impact of Vesalian Anatomy on Traditional Conceptions of the Human Soul**

This section examines certain of the problems which arose when the authoritative textual notions of body-soul integration derived from classical and medieval writers were subjected - initially by Vesalius - to new standards of empirical verification. The chief focus for such tension, in the work of both Vesalius and those anatomists influenced by him, is the chimaerical '*rete mirabile*': the impressive venous mesh found by Galen in the heads of certain animals, and subsequently attributed to humans as an 'organ' responsible for processing the vital spirits of the heart into the animal spirits of the brain and the immortal soul. Although a very much reduced version of the *rete* was just perceptible in humans in the relevant area of the skull, it seems almost certain that the size, and therefore the aesthetic impact of the animal structure, had been integral to its previously accepted role as body-soul intermediary. Like alchemical apparatus, it needed to *look* sufficiently remarkable, to be deemed capable of its remarkable task.

### a. Vesalius

The work of Andreas Vesalius (1514-1564) and its influence after his death produce a significant shift of emphasis in attitudes to the relations between body and soul. Vesalius' most famous book, De Humani Corporis Fabrica (Basle, 1543) is generally recognised as a major landmark in the history of medicine, anatomy, and early science as a whole. His ultimate achievements, however, were gained in the face of predictable resistance. I will try to sketch here the cultural circumstances within which Vesalian anatomy arose, in order to emphasize both what Vesalius worked against, and how he himself shifted his position over a very few years. I will explore this transition chiefly by focussing on the fate of the Galenic *rete mirabile* just prior to, and after, De Fabrica. As noted, the structure found in the heads of Barbary apes and ungulates by Galen had, for centuries prior to Vesalius, been accepted as an integral juncture between pneumatology and physiology. Processing and refining the vital spirits of the heart into the more rarefied animal spirits of the brain and soul, the *rete* was as much a religious and psychological necessity, as a medical one. In this section I will be considering the tension between the existing religious requirements of the sixteenth and seventeenth centuries (the need for a material locus for spiritual processes) and the increasing drive toward exact empirical investigation (which, as noted, found only a very reduced venous formation in human heads at the site described by Galen).

As demonstrated in the previous chapter, there is a growing recognition, in the late fifteenth and early sixteenth centuries, that words must be subordinated to the investigation, and careful illustration, of a body now seen as too complex for crude verbal generalisations. Leonardo da

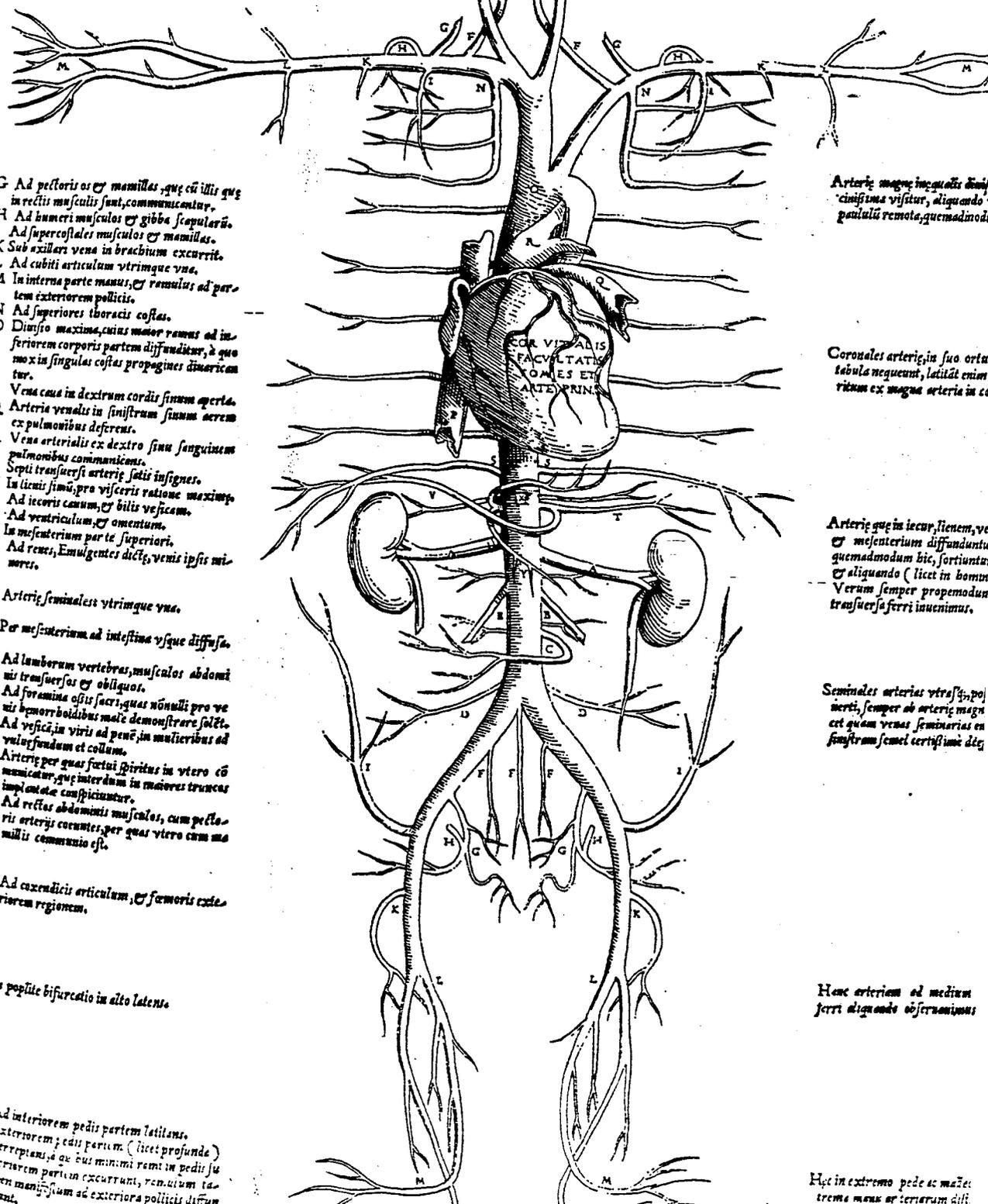
Vinci's (1452-1519) faintly indignant query, beside a drawing of the heart, 'How in words can you describe this... without filling a whole book?' (quoted in Roberts and Tomlinson, p.101) points to a fundamental aesthetic shift of which Vesalius' illustrations are a part.<sup>35</sup> While this transformation can usefully be contrasted with the tendencies of Scholasticism outlined above, it did not happen suddenly and entirely. The ultimately contradictory blend of classical and Christian pneumatologies inherited by the sixteenth century produced correspondingly ambiguous and unstable conceptions of body and soul for at least a century after De Fabrica. The peculiar problems which Vesalian anatomy raised for Christian orthodoxy are seen with especial clarity in Vesalius' own rapidly changing attitudes to the *rete mirabile*.

In 1538, in Tabulae Sex - produced to illustrate the work of his conservative tutor, Johann Guinther - Vesalius dutifully reproduced what was expected of him (literally so - he himself being the artist for the first three plates) [Fig. 1].<sup>36</sup> In De Fabrica of 1543, he was far less quiescent, and included Galenic drawings of the *rete* accompanied by sceptical notes [Fig. 2]. Beside Vesalius' figure 17 we find the remark, 'In this figure I represent the plexus falsely, but in accord with Galen's descriptions in the De Usu Partium'.<sup>37</sup> Even here there is, notably, a curious balance between the defiant text, and the complaisant figure. Given what is known about the power of the 'wonderful net' to defeat the rigours of empirical verification, one cannot help suspect something more than Vesalius' alleged purpose: 'I have here set them [the arteries below the *dura mater*] out lest any think I do not know the difference between those animals and man' (Singer, 1952, p.116 [see my Fig. 2, Vesalius' Fig. 17]). Certainly Vesalius was quite prepared to state in De Fabrica that he had found 'over three hundred

**ARTERIA MAGNA, A OPTH, הנכונ, HAORTI EX NISTRO CORDIS SANV ORIENS, ET VITALEM SPIRITVM TOTI CORPORI DEFERENS, RALEMQUE CALOREM PER CONTRACTIONEM ET RELAXATIONEM TEMPERANS.**

- A Plexus choriformis in cerebri anterioribus ventriculis ex arterijs et venis constitutum.
- B Plexus reticularis ad cerebri basim, Rete mirabile, in quo vitalis spiritus ad animam preparatur.
- C Post aures, et ad tempora, et faciem arterijs.
- D Ad linguam, laryngem et fauces.
- E Arterij quorundam id est soporarij, Apoplectici, Subiecti, et per hanc hauriuntur.
- F Ad transversos vertebrarum cervicis processus ad cerebrum usque excurrentes.

Sinistram carotidem, aliquando brachium fertur, sed utam videtur pectoris, ab ea que in dextram carotidem reperimus.



- G Ad pectoris et mamillas, que cum illis que in rectis musculis sunt, communicantur.
- H Ad humeri musculos et gibba scapularum.
- I Ad supercostales musculos et mamillas.
- K Sub axillari vena in brachium excurrit.
- L Ad cubiti articulum utrinque vna.
- M In interna parte manus, et ramulus ad partem exteriorem pollicis.
- N Ad superiores thoracis costas.
- O Diviso maxima, cuius motor ramus ad inferiorem corporis partem diffunditur, a quo mox in singulas costas propinques dirigitur.
- P Vena cava in dextrum cordis sinum aperta.
- Q Arteria venalis in sinistram sinum aere ex pulmonibus deferens.
- R Vena arterialis ex dextro sinu sanguinem pulmonibus communicans.
- S Septi transversi arterie satis insignes.
- T In litui sinu, pro visceris ratione maxime.
- V Ad icteri canum, et bilis vesicam.
- X Ad ventriculum, et omentum.
- Y In mesenterium par te superiori.
- A Ad rens, Emulgentes dicti, venis ipsis minores.

Arterie magne in quibus divisio, cunctis visitur, aliquando paululu remota, quemadmodum

Coronales arterie, in suo ortu tabula nequeant, latitudo enim ritum ex magne arterie in cor

Arterie que in iecur, sienem, ve. et mesenterium diffunduntur quemadmodum hic, sortiuntur et aliquando licet in homin veram semper propemodum transversa ferri invenimus.

Seminales arterie utraque, potuerit, semper ab arterie magne cet quam venas feminarias in femuram semel certissime deteg

Hanc arteriam ad medium ferri aliquando observamus

Hic in extremo pede ac male tremis manus ar terrarum disti

- B Arterie feminales utrinque vna.
- C Per mesenterium ad intestina usque diffusa.
- D Ad lumborum vertebra, musculos abdomini transversos et obliquos.
- F Ad foramina ossis sacri, quas nonnulli pro venis hemorrhoidibus male demonstrare solent.
- G Ad vesica, in viris ad penem, in mulieribus ad vulvum fundum et collum.
- H Arterie per quas foetus spiritus in utero committitur, que interdum in maiores truncas implantate conspicuntur.
- I Ad rectos abdominis musculos, cum pectoris arterijs coarctatis, per quas utero cum matris communitio est.
- K Ad coxendicis articulum, et femoris exteriorem regionem.
- L In poplite bifurcatio in alto latens.
- M Ad anteriorem pedis partem latitans.
- N Exteriorem pedis partem (licet profunda) perreptans, a qua sui minimi rami in pedis superiorem partem excurrunt, venulium tamen manuum usque ad exteriora pollicis diffundunt.

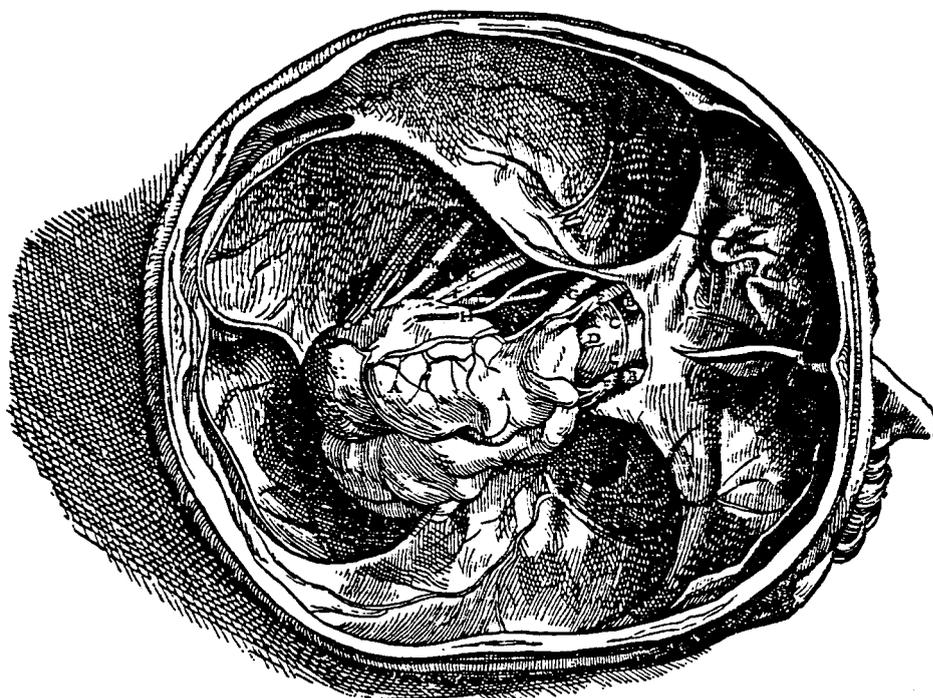
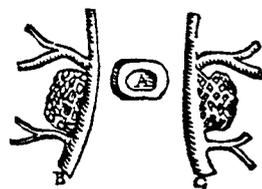
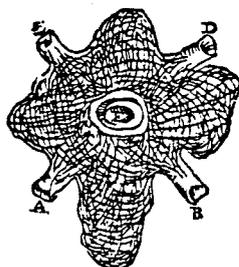
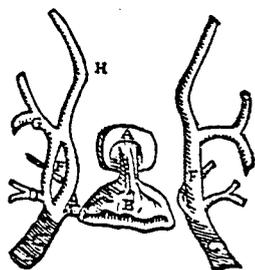


FIGURE 2  
 GALENIC RETE MIRABILE  
 FROM VESALIUS,  
DE FABRICA (1543)



errors in Galen...'.<sup>38</sup> Despite this seeming independence, however, the graphic inclusion of the *rete* suggests that Vesalius' rebellion against Galen was, especially on such delicate issues, far more of an ambivalent and tortuous process, than a clean and straightforward break. Moreover, as will be seen shortly, Vesalius himself, whatever his opinion, was ultimately unable to control either the reception, or the various adaptations, of his own work.

Barely three years earlier, we find still more paradoxical negotiations between the old and the new. This midway point, between Tabulae Sex and De Fabrica, is documented compellingly via the eyewitness account, in 1540, of Vesalius' first public anatomy.<sup>39</sup> Owing to the differences of human and animal brain anatomy noted above, Vesalius was in the habit of curiously 'emphasizing' the human *rete* by dissecting it alongside the more formidable animal version: 'before he cut and demonstrated the three ventricles of the brain... [he] showed them to us on the head of a sheep which he had brought so that *we should better see them in man*' (Eriksson, p.219, 15<sup>th</sup> dem., italics mine). Given the associations surrounding the *rete mirabile*, it is wise to be suspicious of this method of emphasis. One could conceivably use larger animal features to make clear smaller human ones, in a neutral, 'magnifying glass' fashion. Yet while this might apply in the case of the ventricles, in that of the *rete*, the immense weight of expectation and religious awe pre-existing any actual dissection were all too likely to confound and distort the human structure illegitimately with the animal. It may be that the viewers were able to forget that there was a 'magnifying glass' involved.

Various features of the dissections themselves contribute to, or support, this probability. The demonstrations occurred in January, in order that the bodies might be preserved naturally by cold, and certain dissections

were therefore performed after dark, and by candlelight.<sup>40</sup> Viewing conditions on the tiered but crowded benches were less than clinical. A clear edge of hysteria, moreover, seems to have been produced by one region of the body in particular. Immediately before Vesalius had '...showed us the network of winding arteries around the *rete mirabile*', he became, Heseler relates, 'very confused, upset and bewildered owing to the noise and disorder that the students then made... [and] hurried on this dissection to get through it anyhow' (Eriksson, p.221, 15<sup>th</sup> dem., evening).<sup>41</sup> Warned by this, Vesalius, at the close of his twenty-fourth demonstration, expects that the lecturer, Curtius, may discourse the next day 'perhaps on the brain', but is 'not sure, if I will once again do the anatomy of the brain, for I am afraid you will make so much disturbance, as you did previously' (Eriksson, p.287, 24<sup>th</sup> dem.) There seem, then, to be especially sacred associations surrounding the head and brain; such that, plausibly, Vesalius' 'rhetorical' gesture would have far greater persuasiveness than we might initially expect.

Happily for posterity, he appears to have overcome his nervousness. The following morning, in a theatre perhaps more subdued after his admonishment - 'we shall once again see the anatomy of the brain, more clearly, however, if you do not disturb us' (Eriksson, p.287, 25<sup>th</sup> dem.) - Vesalius has 'prepared the head of one of the two bodies, and similarly also the head of a sheep' (ibid.). There is then a reference to 'the net-like plexus of arteries which ascend *from* the *rete mirabile*, and in which the *spiritus animales* are produced, and sent to the cavities of the brain' (Eriksson, p.289, 25<sup>th</sup> dem., first italic mine). Given that this plexus is clearly *not* the *rete mirabile*, and is evidently above it, the best identification seems to be the 'circle of Willis', a more prominent formation increasingly focused on as a substitute for, or accompaniment to, the *rete*.<sup>42</sup> The

statement is revealing because it implies a general belief, even at this stage, in a *diffusion* of the processing of spirits, across successive areas of the brain. When, 'At last he showed us the *rete mirabile*' the site was apparently human (not animal), as immediately prior to this Vesalius had demonstrated, among other nerves, a pair running down 'to the chest' (Eriksson, p.289, 25<sup>th</sup> dem.). Somewhere, then, in the human brain, Heseler now sees the *rete*, 'situated higher up in the middle of the cranium near where the arteries ascend, and forming the plexus in which the *spiritus animales* are produced out of the *spiritus vitales* transferred there' (ibid.). It is not explicitly stated that the ovine *rete* is displayed also. That it in fact was is made probable both by the earlier description, 'he removed half of the brain at each side, first in the head of a sheep, then in the human brain', (Eriksson, p.289, 25<sup>th</sup> dem.) and by Vesalius' later confession:

I myself cannot wonder enough at my own stupidity and too great trust in the writings of Galen and other anatomists; yes I, who so much laboured in my love for Galen that I never undertook to dissect a human head in public without that of a lamb or ox at hand, so as to supply what I could in no way find in that of man, and to impress it on the spectators, lest I be charged with failure to find that plexus so universally familiar by name. For the soporal arteries quite fail to produce such a "plexus reticularis" [*rete mirabile*] as that which Galen recounts!<sup>43</sup>

Besides clarifying the procedure adopted with the lamb's head, this appears to display, by contrast with the demonstrations of 1540, an open hostility on Vesalius' part. As noted above, however, the exorcism of the Galenic spectre

was not complete, even at this point; in the light of its continuing graphic portrayal, comments such as the above only serve to emphasize how peculiar the epistemological situation of the 1530s and 40s really was. What to us seems initially no more than a rather crude conjuring trick is illustrative of precariously balanced epistemic forces. The empiricism of De Motu Animalium and the abstraction of De Anima (to use a convenient shorthand) are no longer able to fully harmonise, nor yet to define themselves in binary opposition. If the notion of an epistemological 'window of opportunity' captures much of the religious and poetical imagery around and after Vesalius' work, the hypothesis is illustrated nowhere more vividly than in this act of Vesalius himself. He has implicitly made redundant the *rete mirabile* by choosing 'the net-like plexus of arteries which ascend from the rete mirabile' (Eriksson, p.289, 25<sup>th</sup> dem., italic mine) for the production of the *spiritus animales*. The 'demonstration' of the net does therefore appear superfluous. It is difficult to assert unequivocally, however, that Vesalius is entirely insincere and merely 'pleasing the crowd' by this gesture. The above statement itself, where he talks of his 'stupidity' can be glossed most satisfactorily by the inference that even Vesalius, at this stage, remained partially in thrall to Galen. The *rete* was a product of both the actual body, and a heavily-filtered perception of that body.

The seeming elasticity of belief found in Vesalius' methods and statements is paralleled with surprising neatness by Renaissance ideas of rhetorical figuration. Hyperbole, for example, as explained by John Hoskins, is used 'that rather you may conceive the unspeakableness, than the untruth' of what is related; or, as Heseler puts it, 'so that we should better see...' (Eriksson, p.219, 15<sup>th</sup> dem.).<sup>44</sup> Because the reassurance of an ultimate and ingenious creator stands behind both poetical figures, and the body as situated within

Natural Philosophy, the two enjoy a relatively dense epistemological status. If Vesalius' 'science' seems at this point a little poetical, it is important to appreciate that poetry itself is relatively scientific: it *reveals* truths about the world, rather than inventing them.<sup>45</sup> Cassirer's belief that, 'The theoretical conclusion of the analogy is rooted in the fundamentally common nature of all being' seems here applicable to Vesalius' actions, as well as to figures such as Pico della Mirandola and Telesio. Moreover, Hoskins' definition seems to imply 'gradations of proof' (or belief) now lost to us, and not comprehensible by the plain criterion of falsifiability. This again fits the precise terms of Vesalius' 'confession': he talks not of 'cowardice' - which would suggest a conscious attempt to deceive his spectators - but of 'stupidity', which suggests that he himself cannot *rationaly* explain his past actions, and did not 'know his own mind'.

There is, however, *some* physical substance behind the associative tricks. Heseler claims to behold '*...a reddish, fine, netlike web of arteries lying above the bones, which I afterwards touched with my own hands, as I did with the whole head*' (Eriksson, pp.289-291, 25<sup>th</sup> dem., italics mine). Both Heseler's act of touching, and the very wish to do so, vividly illustrate the difference between the medieval *rete*, and medieval body - and, by implication, that between medieval and Renaissance souls. To clarify the situation as far as possible, before proceeding with the successive history of the wonderful net: the structure that does exist in the human head, and that even the iconoclastic Vesalius still grudgingly recognises in 1543 ('*almost non-existent in the human body*' (Singer, 1952, p.57, italics mine)) has been identified as the cavernous sinus [Fig. 3].<sup>46</sup> Although this measures only one by two centimetres (and collapses after death) it is a plausible match for both Heseler's 'web of

FIGURE 3 THE CAVERNOUS SINUS: PHANTOM  
RETE MIRABILE OF THE RENAISSANCE

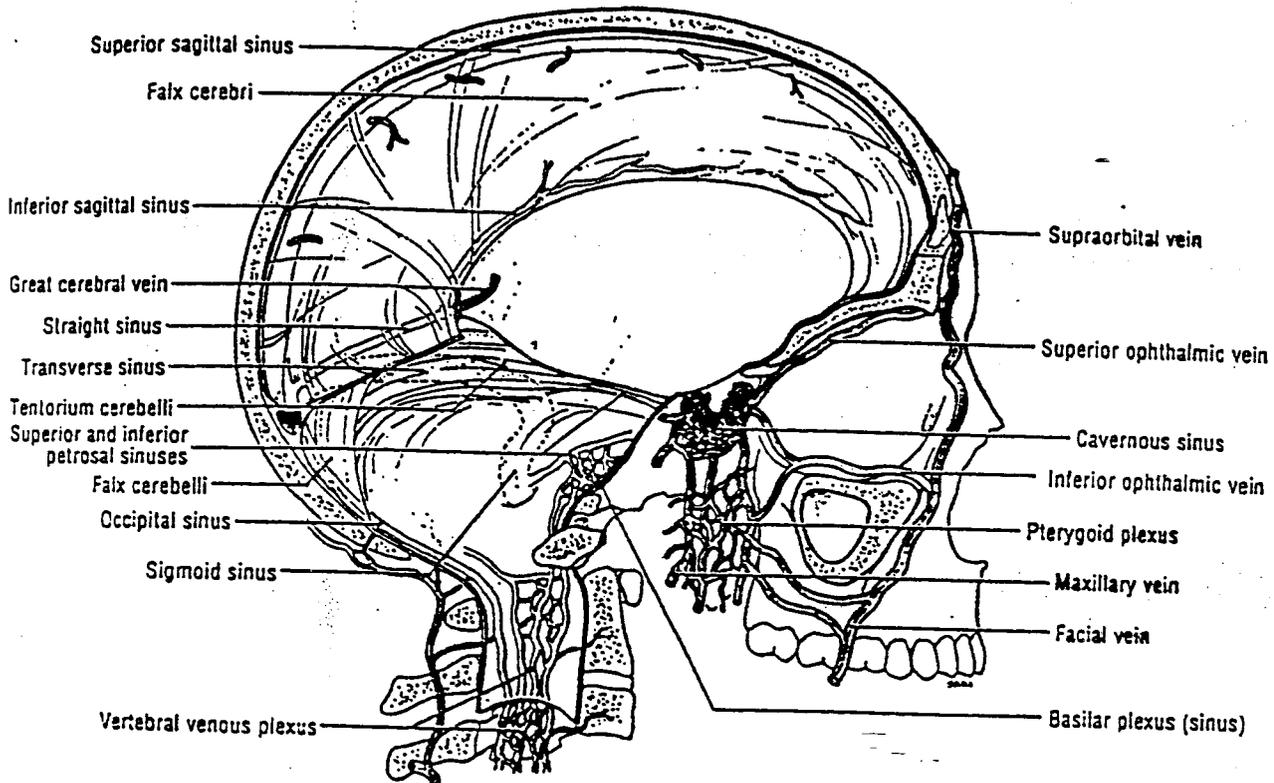


Figure 7-30. The facial vein and venous sinuses of the dura mater. The cavernous sinuses are situated on each side of the sphenoid bone.

Note that the cavernous sinus communicates with the veins of the face via the ophthalmic veins and the pterygoid plexus.

arteries lying above the bones', and for Harvey's later situation of the rete as rising from 'the sides of the sphenoid bone'.<sup>47</sup> The new standards and public nature of Vesalian anatomy did not, then, simply dispel a longstanding myth previously sustained by a disregard for empirical verification. Rather, for a certain oddly privileged period, this myth was vivified and thrown into a three dimensional relief by the new anatomy and its textbooks. It was indeed to enjoy a surprisingly long, if controversial, lifespan.

#### b. The Post-Vesalian Rete Mirabile

Some years before Vesalius, as early as 1489, Leonardo da Vinci had made an anatomically grounded argument for the localisation of the human soul within the brain.<sup>48</sup> Da Vinci's eclectic investigations, however, must be seen as a very embryonic form of the far more high-profile stage which anatomy had reached by the 1540s. At this point in the history of the rete, sceptics are by no means in the majority. Prior to Vesalius, only Berengario da Carpi has ventured (in 1522) to doubt its existence (Illustrations, p.198). In Thomas Geminus' pirated edition of De Fabrica both Vesalius' figure and caveat are reproduced.<sup>49</sup> The same scepticism persists in the English translations of the work in 1553 and 1559, the rete being 'sette forth [only so] ... that no man should thinke us to be ignorant, what difference is betweene those foresayde beasts and man...'.<sup>50</sup> Nonetheless, as the following account will show, this can by no means be taken as the last word on the English reception of the 'wonderful net'. Caspar Bauhin (1560-1624), an influential figure in the lifetimes of Donne and Burton, particularly for English medicine, states quite unequivocally that he has 'beene able to make demonstration of it in all the mens heads

we have hitherto cut up', although significantly he concedes that 'in Calves and Oxen... it is greater and more conspicuous'.<sup>51</sup> After Vesalius, Realdo Colombo (1516-1569) replaces it with the more impressive choroid plexuses of the third ventricle. Yet even the controversial Johannes Argenterius (1513-1572), noted for denying the existence of both *rete* and animal spirits, adds to his initial '...this does not exist in human beings' the scrupulous '...or is certainly not as evident as in animals'.<sup>52</sup>

In John Banister's The Historie of Man... (London, 1578) it is explained that, 'Of these ii arteries [branching from carotids, after entry of skull] the true distribution, no man hath knowne before *Collumbus*, nor did *Vesalius* invent it...'. It is, therefore, 'no mervaile, if so much be devided the description of auncient Anathomistes, as touching *Rete mirabile*: since rather from these Arteries, of which... [Vesalius] was ignorant, then from the *Arterie Carotides*, the mervailous net is effourmed...'.<sup>53</sup> Banister, who as noted was highly instrumental in bridging the longstanding divide between surgeons and physicians, shows here the not uncommon ability of anatomists to find a suitably positioned, and suitable-looking, replacement for the original 'net' of Galen.<sup>54</sup> Andreas Laurentius - rivalling Bauhin for his influence on English anatomy - is in partial agreement. He takes the inadequate size of the *rete*, however ('it is so small in man, that it is almost impossible to see it'), as a pretext to expand the process of spiritual distillation across miraculous network, the succeeding veins (again, evidently the 'circle of Willis') and the choroid plexuses: '...animal spirit [is] prepared in the net, and perfected in the ventricles'.<sup>55</sup> William Harvey simply states, 'The *rete mirabile* is declared by Galen [to be] the factory of animal spirit; a mixture of the carotid artery with veins; they surround the pituitary gland everywhere. From the sides of

the sphenoid bone like a net... Bauhin, contrary to [the opinion of] Vesalius [writes that] it is a capital organ in men...' (O'Malley, pp.228-229). This peculiarly unassertive recapitulation of existing opinions suggests that Harvey finds it safer, in such a vexed area, to suspend final judgement. Even had he been as sceptical, at this stage, as he seems later to have become about the role of 'spirit' within the body, the legend of the rete would by no means be concluded.

In Cotgrave's French-English dictionary, in 1611, the entry under 'Rets, a net' tells of the 'Rets admirable', a 'certaine narrow skin in the head (made of a part of th'arterie carotide) which disposes itself into the forme of a net, neere to the hole, or passage of the third paire of sinewes [sic]'. The contrast between this relatively careful and detailed description, and the subsequent admission, 'This net is hardly found in mans head', stands as a faint echo of the verbally qualified drawing in Vesalius' De Fabrica.<sup>56</sup> The fact that the longer initial statement indeed appears to refer to the human, and not animal, brain, suggests that the final caveat is in fact a fairly recent addition to a longstanding definition.

In 1615 Helkiah Crooke published his comprehensive anatomy textbook, Microcosmographia. In accordance with the opportunism attributed to him, Crooke appears to have been interested in maximising sales of his book.<sup>57</sup> Having incurred the displeasure of the Royal College of Physicians by referring to the niceties of female anatomy in English rather than Latin (O'Malley, 1968, p.8), he went on to collaborate with the Scottish physician Alexander Read (1580-1641) in producing a more accessible volume in 1616, containing only illustrations and descriptive tables. As already suggested in Chapter 1.2a, this work was possibly aimed at students requiring something portable during

dissections. One may reasonably suspect, however, that it also represented an attempt to capture a relatively popular (non-literate and non-professional) audience. Although Harvey is now rightly remembered, and Crooke rightly forgotten, it appears to have been the attractive and prestigious volumes of the latter which most influenced general perceptions of the anatomised body in early seventeenth-century England.<sup>58</sup>

Even within Crooke's own work, moreover, there are peculiar ambiguities. On the one hand, we find the typical post-Vesalian complaint that the *rete mirabile* '...is so small in man that a good eye can scarcely discern it', being '...but a very shadow of that in brute beasts' (Microcosmographia, p.529, p.866). On the other, we find him noting how, 'this Net compasseth the glandule... and is not like a simple Net, but as if you should lay many fishers Nets one above another' and is 'admirable' because 'the replications of one are tyed to the replications of another so that you cannot separate the Nets asunder', these being 'all of them so wrought into one another as if it were a body of net meshed together not into breadth only but into thicnesse also'.<sup>59</sup> The contradiction may have resulted from the use of two principal authorities (Laurentius and Bauhin respectively) noted for their divergence on this matter. The aforementioned opportunism again seems evident in Crooke's having not only borrowed, but in his borrowing so carelessly.<sup>60</sup>

Another example of this carelessness is evident in Crooke and Read's 1616 abridgement of the Microcosmographia, now titled Somatographia anthropine. Here the drawing of the *rete* is included, without Vesalius' original caveat (the book having only explanatory tables by way of text), and with the addition of letters ('D,D') which draw especial attention to it [see Fig. 4].<sup>61</sup> Vesalius' original drawing in De Fabrica now resurfaces - perhaps not inappropriately - to haunt

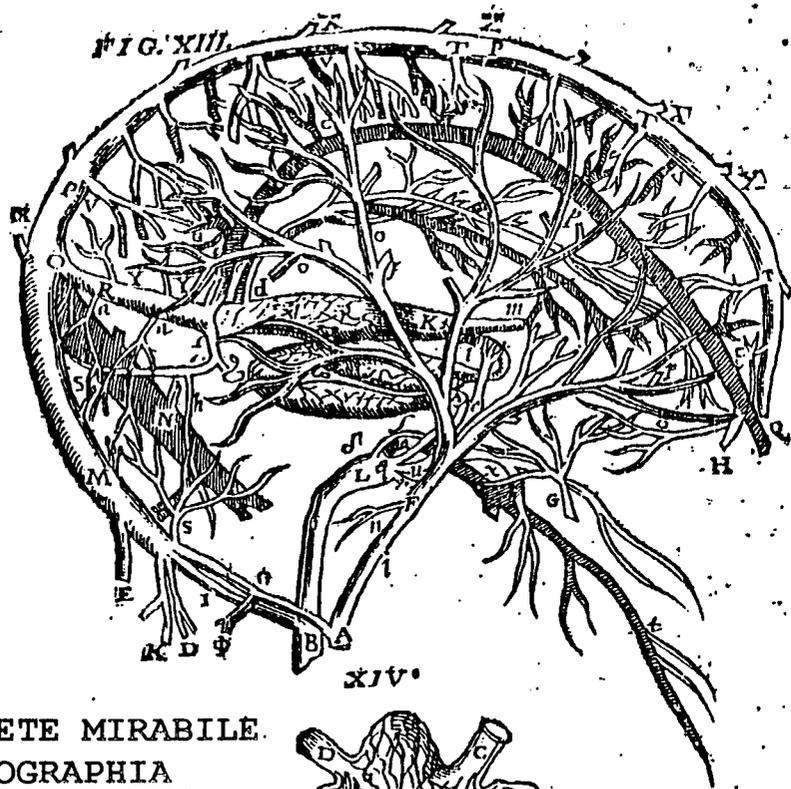
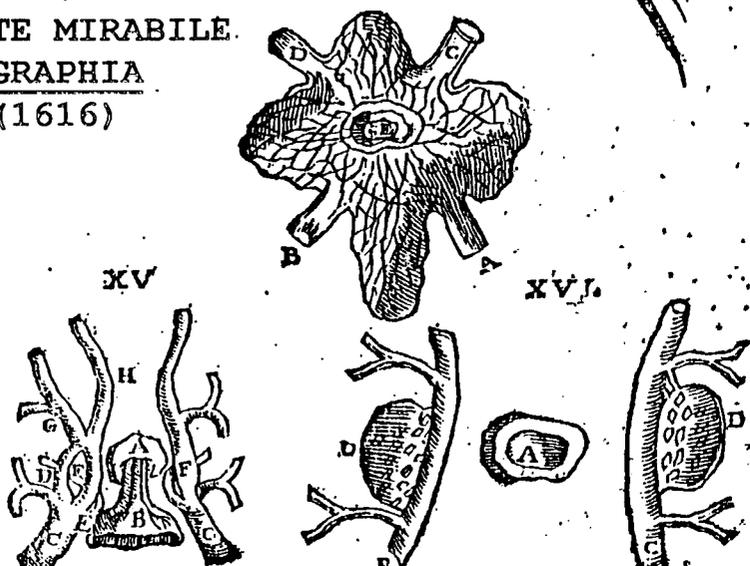


FIGURE 4 RETE MIRABILE  
FROM SOMATOGRAPHIA  
ANTHROPINE (1616)



- . . . A notable vessell into the  
 which the fourth sinus doth  
 determine.  
 . . . K. The upper. The by-partition  
 of this vessell in the Braine.  
 . . . *lm.* Two branches of this by-  
 partition.  
 . . . *n.* A surcle reaching to the or-  
 gan of hearing.  
 . . . *ooo.* The distribution of the 3.  
 veine and artery.  
 . . . *ppp.* Surcles proceeding from  
 the branches marked with *o*  
 deriued into the *pia mater*.  
 . . . *q.* The diuision of the third Ar-  
 tery, where it entereth into  
 the Scull.  
 . . . *r.* A branch reaching to the hol-  
 lownesse of the nostrils.  
 . . . *s.* The end of this in the extre-  
 mity of the vessell.  
 . . . *uu.* Two Branches entring into  
 the scull.  
 . . . *x.* A branch deriued vnto the  
 eye, from the coition or  
 meeting of the branches *uu.*  
 . . . *y.* A branch attaining vnto the  
*Pia Mater*.  
 . . . *A.* A branch attaining to the  
 right ventricle.  
 . . . *n.* The complication of vessels  
 called *Plexus Choroides*, for-  
 med on either side of the  
 branch marked with *A.*  
 . . . *Figure 14.*  
 . . . *A B.* Arteries climbing into the  
 scull, and making this won-  
 derfull net.  
 . . . *C D.* Branches into which the  
 surcles of that net are ioyned.  
 . . . *E.* The pituitary Glandule or  
 kernell of Flegme.  
 . . . *Figure 15.*  
 . . . *A.* The Glandule receiuing the  
 bason.  
 . . . *B.* The bason it selfe, or if you  
 will, the Tunnell called *Pe-  
 luis infundibulum*.  
 . . . *CC.* The Sleepy arteries.  
 . . . *D.* A branch of the artery go-  
 ing to the side of the *dura  
 Meninx*.  
 . . . *E.* Another branch of the same  
 artery, going vnto the nose  
 thrils.  
 . . . *FF.* An artery in one side diui-  
 ded into two branches, but  
 in the other side meeting to-  
 gether againe.  
 . . . *G.* A partition of the Arterie,  
 creeping through the *Dura  
 Meninx*.  
 . . . *H.* Another branch which  
 getteth out of the scull, and  
 reacheth to the eyes.  
 . . . *Figure 16.*  
 . . . *A.* The pituitarie Glandule.  
 . . . *B, C* The Sleepy arteries going  
 into the scull.  
 . . . *DD.* The wonderfull net.  
 . . . *H 2*

seventeenth-century anatomy. If the Vesalian text and plate, taken together, tilted at least marginally toward discrediting the *rete*, Crooke's depiction without text nudges the balance back toward reasserting a straightforward Galenic version of the structure.<sup>62</sup>

Besides enjoying a continued and uncritical place in Thomas Vicary's Anatomie, and in the Gresham College lectures of Thomas Winston, the *rete* was actively championed (rather than just passively perpetuated) in Stuart England by Robert Fludd (1574-1637).<sup>63</sup> Officially a medical doctor, Fludd was a member of the Royal College of Physicians, and close friend and supporter of William Harvey. In his esoteric Triple Anatomy of 1623, he includes a drawing of the *rete*, devoid of any of the *caveats* of Vesalius or Crooke, and blandly explaining its function in processing vital spirit, and its position relative to the carotids.<sup>64</sup> Both the faintly defiant, self-consciously esoteric act of having the *rete* deliberately redrawn (by De Bry), and the flagrant disregard for the conclusions being reached increasingly by actual anatomists, suggest that the fabled structure was now acquiring a definite new status. Temporarily the concern of the dissecting table, it appears, in Fludd's usage of it, to have become almost as hypostatized and abstract as it had been during the dominance of Scholasticism. While Fludd, for all his esotericism, seems at just this time to have been actively anatomising, there are other signs suggesting that the anatomical 'window of opportunity', if not quite closed, can be seen to narrow and darken here.<sup>65</sup>

This impression is reinforced by the shifting opinion of Harvey, who in later life taxed various medical authorities (most notably Vesalius' contemporary, Jean Fernel) with hypothesizing a spirit "of celestial origin and nature, namely a body most simple, most subtle, most fine, most mobile, most swift, most lucid; aethereal and participating

in the quintessence"', proceeding to complain that '...nowhere have they demonstrated that there is such a spirit... or that it performs greater works than blood alone could do'. On the other hand, 'We indeed, *who in our investigations use sense as our guide*, have not been able to find any such spirit anywhere'.<sup>66</sup> Moreover, elsewhere in De Generatione Animalium Harvey insists that, 'it is blood in which the vegetative and sensitive activities first shine forth' and in which 'heat, the primary and immediate instrument of the soul, is born'. Blood, not spirit, 'is the *common bond of body and soul; and [that] by which, as a vehicle, the soul influences all parts of the body*' (Walker, p.131, italics mine). As Walker notes, 'spirits' can be substituted for 'blood' here without any other alteration to the passage (ibid.). Thus Harvey retains older notions, but inserts them into an uncompromisingly definite and known physical element. In this he echoes Vesalius' use of the 'circle of Willis' and other veins for the sacred tasks of the increasingly marginalised *rete mirabile*. The 1653 translation of De Generatione, having similarly stressed that '...there is no need at all to enquire after any kinde of *spirit* distinct from the *Blood* itself..' adds more generally: '...what we commonly derive from the starres, is bred and borne at home, and within us'.<sup>67</sup> The attack on notions of micro- and macrocosm is surprisingly explicit, and neatly formulates the nascent shift toward a self-contained, 'Occam's razor' understanding of the human mechanism.

The *rete* must, then, ultimately be understood not as a *chimaerical* physical structure, but as a phenomenon which was essentially a composite of various elements: mythical reputation, empirical context, and aesthetic appearance. It may be said to represent, particularly in its earlier phase, the tyranny of concept over percept. For almost a hundred years after the Vesalian version of 1538, there is a more or

less well-matched battle between these two forces. The lingering conceptual side of the rete is responsible for Vesalius' 'stupidity'; possibly for Harvey's curiously indefinite statements; and for both the contradictions in Crooke's text, and the still more misleading slip of 1616, which all but reincarnates the net. The inadequate percept explains the attitude of the later Vesalius, and of Argenterius and Laurentius. The stance of the later Harvey does not necessitate the abandonment of the rete (which could now simply process blood and not 'spirits'.) That Harvey's erosion of spirits probably does reflect a more final stage of decay, at around this time, of the wonderful net also, should appear from the writings of one of his contemporaries. René Descartes can in many ways be seen as the most important single force in eliminating the *rete mirabile*, and ultimately, realigning the status of the human soul itself.

### **3. The Enclosed Soul: Descartes, Mechanism and the pineal gland.**

The material used in this section ranges from writings composed in the 1630s to Descartes' later work and correspondence around the mid-seventeenth century. I want briefly to examine Descartes' ideas in this area because of the very clear turning point they represent. The radical nature of his thought, and the beginnings of a new synthesis between philosophy and empirical investigation clarify the anatomical and pneumatological trends occurring in late Elizabethan and early Stuart England. Vesalius - and to some extent Harvey also - appear as empiricists by temperament, but ones still working in a largely unsympathetic general

framework. Descartes, however, sets out a coherent and comprehensive philosophical system in accordance with - and often directly determined by - the newly anatomised body, and with a natural world increasingly approached on uncompromisingly experimental terms. This section will focus on the substitution of the pineal gland for the *rete mirabile* as a physiological mediator between body and soul. It will attempt to demonstrate, also, how Descartes' attitude here is involved with body-soul dualism, and how dualism itself is an essentially Vesalian (or post-Vesalian) phenomenon.

A considerable amount of evidence in Descartes' letters and philosophical writings shows that anatomical investigations fundamentally affected his conception of the soul, and its relation to the body. He tells Mersenne, in a letter of 1630: 'My work [on my treatise]... is going very slowly, because I take much more pleasure in acquiring knowledge than in putting into writing the little that I know'; adding that he is 'now studying chemistry and anatomy simultaneously; every day I learn something that I cannot find in any book'.<sup>68</sup> This conspicuously anatomical stance is most clearly focussed in Descartes' discussions of the pineal gland. He believes it to be 'the principal seat of the soul, and the place in which all our thoughts are formed'. The reason for this is that 'I cannot find any part of the brain, except this, which is not double'. As we have two eyes, and ears, but only one impression 'it must... be the case that the impressions... unite with each other in some part of the body before being considered by the soul'. The pineal gland 'is situated in the most suitable place for this purpose, in the middle of all the concavities; and it is supported and surrounded by the little branches of the carotid arteries which bring the spirits into the brain' (Kenny, pp.69-70, To Meyssonier, 29 January 1640).<sup>69</sup>

The chief point to emphasize here is that Descartes' views on the body and soul have to a large extent been formed as a result of looking at, and into, the body - something which, as will be seen, he has done himself. The pineal gland is chosen for reasons of anatomical (and what in Descartes might more precisely be termed mechanical) suitability. While continuity with the *rete mirabile* is certainly preserved to a degree by the involvement of the carotid arteries (still concerned, in this scheme, with the processing of spirits), it is striking that, after so many decades of heated controversy over the anatomical *chimaera* generated by Galen, Descartes effectively appears to start from scratch, asking simply: 'what should it need to do?', and 'what can be found?'. The mention of the gland's being 'in the most suitable place' *could* be taken as the kind of comment expectable from orthodox Christian natural philosophers, paying homage to God's careful design. But - especially in the light of Descartes' overall mechanism - the reference might equally be seen to imply only the immediate, functional requirements of a self-contained machine.<sup>70</sup> Descartes' principle of anatomical suitability does, indeed, significantly match Aristotle's choice of the heart as the place most 'well-disposed to excite movement' (De Motu Animalium, p.52).

Anatomy has, as it were, 'set the tone' of the discussion, something Descartes implicitly assumes elsewhere: 'Everyone already has some knowledge of the different parts of the human body...' for 'we have all at some time or other seen various animals cut open, and been able to look at the shape and arrangement of their insides...' (Cottingham *et al*, I, p.315).<sup>71</sup> Elaborating on this in a letter to Mersenne on 20 February 1639, Descartes states: '...I have taken into consideration not only what Vesalius and the others write about anatomy, but also many details unmentioned by them that



I have observed myself while dissecting various animals'. Having 'spent much time on dissection during the last eleven years', he presumes to doubt 'whether there is any doctor who has made such detailed observations as I' (Kenny, pp.63-4).

Clearly Descartes' context must be seen as not merely 'post-Vesalian', in the sense of the new standards represented by De Humani Corporis Fabrica and the various piratings, but as fulfilling the hopes of Vesalius, and his more enlightened successors, for *ongoing* observation and discovery. Crucial to the understanding of 'body-soul problems' at this stage, then, is a recognition of the way new detail continues to be incorporated in an ever more complex model of the human mechanism. Elsewhere Descartes plainly and unflinchingly cites, to prove various points, his own experiences of animal vivisection.<sup>72</sup>

In his arguments as to why the pineal gland in particular was well-suited to be the organ of body-soul mediation, a faint echo of the *rete mirabile* can be made out, allowing for appropriate variations. 'It is not surprising either that the carotids send many branches' to the pineal, as 'that is necessary to... separate the coarser parts of the blood from the more rarefied parts', these latter alone being permitted to 'travel through the straightest branches of the carotids to reach the interior of the brain, where the *conarium* is located' (Kenny, p.86).<sup>73</sup> Something of the once more crucial, and far more *convoluted* processing achieved by the carotid arteries, and by the *rete* itself, is evident. There is nothing, however, of the kind of wondrous intertwining and entanglement which previously was so impressive as to dazzle the eye and mind into - precisely - admiration, and which appeared requisite for so sacred a task (see Crooke, Microcosmographia, p.470). Any possible doubt as to Descartes' relatively prosaic apprehension dissolves under the explicit assertion: 'There is no need to suppose that

this separation takes place in any but a purely *mechanical* manner' (Kenny, p.86, *italic mine*). Significantly, Descartes equates this bodily process with the very concrete empirical example of 'reeds and foam... floating on a stream which splits into two branches', in which case 'the reeds and foam will be seen to go into the branch in which the water flows in a less straight line. The present case is similar' (Kenny, p.86). Here the reeds and foam must be the 'coarser' parts of blood, given the earlier belief that the 'more rarefied' alone pass into 'the straightest branches of the carotids'. The relatively simple bipartite division represents a loss of the older tortuousness, and dense aesthetic texture, of the rete. It should be stressed however that this is not *only* a consequence of empirical investigation, but also appears to reflect an unstated aesthetic, or psychological, preference of Descartes' period. Most obviously, it parallels the (to us) overly neat and simplified diagrammatic representation of bodily processes peculiar to mechanistic thinking (typified especially in the use of 'pipes' for nerves and suchlike).<sup>74</sup> It is a preference which matches, also, the increasingly schematised character of anatomical illustration (Descartes' own included) in the mid and later-seventeenth century.<sup>75</sup>

A larger outcome of mechanism, and one of the most compelling arguments for the radical changes wrought by early seventeenth-century anatomy, is the notion of the *bête machine* so famously associated with Descartes. As regards animals the idea is unmistakably clear:

...The number and the orderly arrangement of the nerves, veins, bones and other parts of an animal do not show that nature is insufficient to form them, provided you suppose that in everything nature acts in exact accord with the laws of mechanics, and that these laws have been imposed on it by God.<sup>76</sup>

While the theory would not be explicitly applied to humans at this stage, certain features of the Cartesian body-soul relationship do point implicitly to a threateningly autonomous '*homme machine*'.<sup>77</sup> A crucial element of this sense of threat is the impression that the body has been spiritually 'hollowed out' at the same time that it has been physiologically enriched and complicated. The two processes are, of course, interlinked. On one hand, the loss of the *rete mirabile* shows how dissection has undermined the soul directly, by resituating discussions of body-soul mediation in the dangerously contingent and experimental context of anatomy and physiology. On the other, the increasingly 'automatic' physiology of Descartes and others subverts it indirectly by removing certain of its traditional functions.

Seen in the light of this, the pineal gland appears as a *rete mirabile* for Descartes' times. Rather than just a product of careful anatomical inspection, it is also a covert response to those who would accuse Descartes of 'unsouling' the body. Significantly, he says of it, '...it is certain that *the soul must be joined to some part of the body*, and there is no other part which is not at least as subject to alteration as this gland'.<sup>78</sup> It is hard not to view the italicised phrase here as symptomatic of a world in which the body - even in such sensitive areas - implicitly 'calls the shots'. Half-whimsically, the words might be paraphrased as 'we have to find somewhere to put it' - the soul is being not so much located, as *reinserted* into a body which has

temporarily been robbed of it.<sup>79</sup> This comes across with especial clarity if we consider the opposite theory of the Scholastics, with their doctrine of the soul 'everywhere and nowhere' in the human organism (above, 2.2b, p.90). The sense of Descartes essentially *inventing* the soul, rather than discovering or commenting on it, aptly mirrors the growing tendency of seventeenth-century Natural Philosophy to *conceive*, rather than *perceive*, the human body. The Foucauldian distinction between the passive, reverent stance of commentary, and the active intervention of criticism appears especially pertinent here (Foucault, pp.81-82).

By Descartes' later lifetime, then, it is appropriate to speak of a 'post-anatomical', rather than simply 'Vesalian' context for the soul. The way in which Descartes conducts body-soul discussions and investigations and the conclusions he reaches suggest that, in contrast to the more fluid and ambiguous relationship prevailing in the lifetimes of Vesalius, Nashe, and Donne, advantage has by now shifted decisively in favour of the body. The precise choice of the pineal gland therefore appears as philosophically and theologically crucial, consistent with the potentially dangerous predominance and autonomy of the Cartesian body. Unlike the relatively diffuse structure of the *rete mirabile*, the new substitute is conveniently sealed off - a mechanical junction or node, rather than the complex site of a process apprehensible in actual space (that is, a mesh of veins that *looks* sufficient to admit of qualitative change). So the pineal gland becomes the necessary answer to those who see Descartes as having 'demystified' the body. Mystery has, as it were, been run to ground in this closed den, and cannot be *empirically* probed further (though inferences may be drawn from its site and supposed functions).

The dualism famously attributed to Descartes, and ultimately to attract the label of the 'ghost in the machine'

is clearly visible in the new relationship of body and soul. Such dualism appears as the necessary philosophical accompaniment to an anatomical viewpoint so thoroughly integrated as is Descartes'. The body finally receives 'equal representation' with the soul, arguably even to the extent of having 'overgrown' the latter. Like a younger brother who, after a spurt of growth, can now win fights, the body indeed causes the soul, the newly threatened senior, to be kept to a separate room for his own protection. At a wider level, this interpretation can be applied, *mutatis mutandis*, to the rigorous scepticism of the 'Discourse on the Method', which (to us) appears to shut God out of the realm of argument so successfully that he has to be effectively reintroduced, via the back door of faith.<sup>80</sup>

### Conclusion

The aim of this chapter has been to identify key markers in the epistemological 'window of opportunity' (c.1540-c.1650) opened up by post-Vesalian anatomy. The focus on Greek, Augustinian and Thomistic attitudes to body-soul interrelation illustrates the degree to which Renaissance notions of the soul are complicated by their mingled, dual allegiance to both pagan and Christian pneumatology. An equally important, additional complication is provided by the new standards (and aesthetic representations) of human anatomy initiated around the earlier-sixteenth century.

Like the shifts in anatomical depictions discussed in Chapter 1.3, the controversies surrounding the *rete mirabile* and bodily spirits generally, support the notion of this window of opportunity: a period of instability which produced unprecedented graphic, poetical, and literary images of the

body, and heresies as startling as that of Michael Servetus. Even a very few years after Donne's death, such imagery appears to be losing the force of the concrete and the novel which it (and most notably the *rete* itself) had gained via temporary association with the newly perceived and represented human body. Examination of Cartesian anatomy therefore serves to define the relative brevity of the period argued for. The pneumatology of the Renaissance, marked by instability, curiosity and aesthetic freshness, contrasts strikingly with the abstract soul of orthodox medieval Christianity. With the increasing pervasiveness of anatomy in the lifetime of Descartes, there appears to be an awareness that the interrelation of soul and body will not simply conform to previous notions. Because a stable relationship of body and soul cannot be maintained in accordance with these received ideas, a second, appropriately modified form of abstraction occurs, represented most notably by Cartesian dualism. Christianity's recurring fear of a too intimate, anatomically specific body-soul union is shown, in this context, to be amply justified. Although Descartes' pineal gland is ostensibly favoured as an explanatory mechanism for precise and complex anatomical reasons, it forms, ultimately, a compact, irreducible unit, not susceptible of further investigation, as the more diffused *rete mirabile* and its earlier substitutes might have been.

The larger pattern which emerges is of a kind of cumulative oscillation - a pendulum swinging back to its starting point after having gathered various accretions in the intervening period. Similarly the Renaissance may be seen to parallel the pneumatology of the Stoics, and of Galen, but to have added more advanced medical science, and Christian theology, to the earlier theories. From the time of Vesalius onwards, the ultimate incompatibility of these elements becomes increasingly clear. The reassertion of empiricism

effectively reduces the older synthesis of abstracting and concrete tendencies to its constituent elements. Robert Fludd's occultism, for all its alleged anatomical grounding, is essentially a form of Platonism deprived of its material anchorage. Harvey's increasing impatience with superfluous theories of spirit, on the other hand, aligns him with the pre-Christian Galen, and the Aristotle of De Motu Animalium, where physiological and functional considerations are given priority.

## Chapter Three

### The Anatomical Imagination: Dissective Representation and Metaphor from Philip Melanchthon to Robert Burton

#### Introduction

This chapter explores the psychological and cultural impact of the Vesalian body. *Via* its appearance in public anatomies, and in increasingly sophisticated anatomy text-books, the Vesalian body influenced notions of spirituality, of selfhood and of sin, and of 'analysis' as a logical and polemical tool. The following sections develop my discussion, in Chapter 1, of the new literary genre of the 'anatomy', and attempt to identify how specific or general usages of the Vesalian body impacted on religious, literary, and scholarly fields from the 1530s to the 1651 edition of Robert Burton's Anatomy of Melancholy.<sup>1</sup> My opening section, therefore, will focus closely on the distinct, but ultimately related, influence of Vesalian anatomy on the writings of Philip Melanchthon (1497-1560) and Michael Servetus (?1511-1553) in the years immediately following De Fabrica (1543). These two writers illustrate how rapidly the Vesalian body altered traditional notions of body-soul relationship, and of Natural Philosophy in general. They demonstrate, too, the ability of the Vesalian body to command fascination across a spectrum of belief from a nominally Protestant orthodoxy to outright heresy.

I will then examine the writings of Thomas Nashe. A crude division might be made between the sacred writings of Servetus and Melanchthon, and the profane labours of Nashe. If Servetus was pious, however, he was hardly orthodox, and in this he seems to prefigure the problems which new anatomy

offered to traditional religion - problems which are inscribed more irreverently in Nashe's dazzling and opportunistic writings. Nashe himself, superficially a very irreligious and commercial writer, nonetheless vividly exemplifies many of the epistemological tensions which increasingly threaten to subvert orthodox Christian doctrine.

Robert Burton, finally, is seen to use the *avant-garde* cultural and literary motif of anatomy in a double-sided fashion. In his paradoxical combination of anatomy's taxonomic rigour with a conspicuously textual form of 'resemblance' discourse, he characterises the epistemological instability and ambivalence of this period, showing how anatomy is able to exert a strong influence on relatively conservative thinkers. The link between anatomy, Burton's encyclopaedism, and new arrangements and perceptions of knowledge is one which, though most famously demonstrated by The Anatomy of Melancholy, is by no means Burton's exclusive possession. The analytic aspects of Burton's Anatomy are viewed here as part of a general tendency to exploit the taxonomic rigour of medical dissection for purposes of formal organisation.

## **1. Religious Faith in the Era of Vesalius:**

### **Two Contemporary Responses**

#### **a. Michael Servetus**

After Michael Servetus was burned, along with his books, in Geneva by Calvin in 1553, only a handful of copies of his heretical work, Christianismi Restitutio ([Vienne], 1553), survived.<sup>2</sup> It is not therefore with Servetus' influence but with his writings as a religious phenomenon that I will be concerned here. The contemporary impact of his ideas is of

course strongly evidenced by the very thoroughness with which they were smothered. I want to focus especially on the Vesalian qualities of Servetus' writings. The extract from Christianismi Restitutio which I will examine is that in which Servetus outlines his peculiar blend of pneumatology and physiology - giving, incidentally, a famed early account of pulmonary circulation as he does so. These pages provide the most pronounced evidence of Servetus' anatomical knowledge, while also making clear the distinctiveness of his heretical Christianity. I will argue that Servetus' heresy is better understood as a Renaissance form of Stoic cosmology than as a merely deviant Christian faith; and attempt to show how this neo-Stoicism relates to Vesalian anatomy.

Of all the thinkers examined (for reasons other than the purely anatomical) in this thesis, Servetus is rivalled only by Descartes for his knowledge of anatomy. Sometime pupil of both Jean Fernel (1497-1558) and of Vesalius' teacher, Guinther of Andernach, Servetus is praised by the latter in 1539: 'After him [Vesalius] is Miguel Villanovanus, who was my friendly assistant in dissections - a person who is an honour in any field of erudition - and does not have an equal in the knowledge of Galen'.<sup>3</sup> Having practised medicine successfully for twelve years near Lyons, Servetus was, when captured in Geneva, apparently *en route* to Naples, where he intended to continue in the medical profession.<sup>4</sup> While I will not be focussing exclusively on Servetus' description of the pulmonary circulation, it is important to stress that he appears to have noted this significant and neglected point of physiology largely through his skill in anatomy and empirical observation. Although understanding of circulation was integral to his pneumatological beliefs, he would not, without the kind of training mentioned, have observed so carefully.

Servetus' anatomical knowledge must be understood, moreover, as essentially Vesalian. The bulk of Vesalius' work had been completed by 1550, and piratings of his illustrations were already widespread, having appeared even in England in 1545.<sup>5</sup> While anatomical evidence from certain of Servetus' writings, such as On the Errors of the Trinity (1539) is prior to De Fabrica (1543), it nonetheless postdates the Tabulae Sex of 1538. Even the Dialogues on the Trinity of 1532 must naturally have been influenced by Servetus' own anatomical training and by already existing publications.<sup>6</sup> Servetus' emphatically Vesalian pneumatology is epitomised when he explains how, 'So that you, the reader, may have the whole doctrine of the divine spirit and the spirit, I shall add here the divine philosophy which you will easily understand if you have been trained in anatomy' (Servetus, p.202).<sup>7</sup> His own training, his strong tendency to look (and perhaps to precisely visualise as he wrote), are all evident throughout the extract. His references to the 'very ingenious arrangement' (Servetus, p.204) of the pulmonary circulation, to 'the notable size of the pulmonary artery' (Servetus, p.205), to the fact that 'in the left ventricle of the heart there is no place large enough' for blood (Servetus, p.205); to 'these plexuses... internally girdling the ventricles of the brain' and 'vessels' which 'in a very remarkable way are woven together very finely' (Servetus, p.206), are all sufficient to reveal his status as an anatomist in the absence of any other biographical information.

Ultimately, though, Servetus' anatomical precision must be understood in the light of the unrelenting fusion of theology and physiology which characterises his faith. The two threads are, for him, essentially inextricable. We see this interdependency in, for example, his assertion that the 'soft mass of the brain is not properly the seat of the

rational soul, since it is cold and lacking in sensation' (Servetus, p.208). The location of faculties according to suitable heat or cold, dryness or moisture, was longstanding. Only now, however, do we sense empirical backing behind such choices - Servetus' 'soft mass' suddenly making pneumatology not only visual but arguably *tactile* also. Equally, we have the identification of the vital spirit - 'reddish-yellow... a kind of clear vapor from very pure blood' (p.204). The 'vital spirit', and its arguably liminal status between body and soul was familiar enough to the sixteenth century for the potential paradox surrounding matter-spirit contact to have grown faint. One could look very long, however, among the innumerable descriptions of it without finding this sudden flicker of colour - something which may have startled readers accustomed to a relatively abstract pneumatology.

More serious consequences of Servetus' Vesalian rigour are evident in his untroubled and habitual conflation of biblical and anatomical evidence. Although it is 'taught by God himself' that the divine spirit is in the blood (Servetus, p.204) Servetus usually relies on observation more than authority.<sup>8</sup> 'The formation of man from the uterus', for example 'teaches that the vital spirit is communicated from the heart to the liver' because 'an artery joined to a vein is transmitted through the umbilicus of the foetus' (Servetus, p.203). In a way very similar to Descartes, but far more remarkable, given the eighty odd years dividing them, Servetus treats the body with easy familiarity, as the obvious point of reference for grounding theological truths. The presence of the soul, however, is in danger of being edged out by arteries, veins, and internal organs. The precarious coexistence of the two areas is most evident when Servetus explains how, 'The divine spirit was truly drawn into the mouth and nostrils, but the inspiration extended to the heart' (Servetus, p.203). The careful alignment of

Scripture (the breath went into the nostrils [Genesis 2.7]) with physiological fact (the heart is the first living part of a foetus) subtly betrays a new respect for the rules of human biology revealed by anatomy.

Servetus' rapid shifts between biblical orthodoxy and contemporary medical research are visible again in his famed account of pulmonary circulation. This is given in order to clarify his belief that the divine spirit is 'in the blood' (Servetus, p.204). The communication of blood from left to right of the heart 'is made not through the middle wall of the heart... but rather 'by a very ingenious arrangement the subtle blood is urged forward by a long course through the lungs' (Servetus, p.204). As Servetus proceeds through some 80 further lines of painstaking anatomical description, one begins to see why his continual intermingling of Scripture and anatomy is by no means straightforward 'Natural Theology'. Firstly, and perhaps most obviously, there is his failure to indicate the priority of the *written* book of God, over the Almighty's *physical* 'book of Nature'. A second key point is that he has violated a tacit understanding of Natural Theology: to not go beyond a certain level of detail and complexity in expounding divine artifice. If at times such artifice was only more extolled by further detail, extra caution was particularly necessary when discussing the relationship between bodily (and thus medically categorised) spirit, and the spiritual breath of God himself. These two points relate crucially, the second becoming more threatening because of Servetus' failure to establish a hierarchy of Scriptural over empirical evidence. Without this hierarchy, the increase of detail may detach itself from the traditional discourse of divine artifice and mutate into autonomous, rawly physical complexity.

Thirdly, there is a definite shift of power apprehensible in Servetus' explanation. He goes quite

literally where most theologians cannot follow him (making it quite clear from his 'very ingenious arrangement' that he has *looked* carefully); and where, indeed, almost no anatomists have ventured either. It is not hard to conceive the unconscious anxiety such boldness might have prompted. There is a clear danger here of anatomy leading theology, rather than *vice versa*, and of theologians correspondingly having to defer to anatomists. If orthodox Christian pneumatology is implicitly threatened by Servetus, however, he himself is clearly able to reconcile the apparently discordant elements of his belief.

To understand how this reconciliation is possible it is necessary to examine how he combines biblical evidence with a conspicuously non-Christian philosophy: namely, that of the Stoics. The Renaissance's chief secondary source for Stoic ideas, the writings of Alexander of Aphrodisaeus, circulated in three translations in the sixteenth century.<sup>9</sup> The most well-known of these, by Angelus Caninus (Venice, 1546), had run into a third edition by 1555 (see Aphrodisaeus, p.92). As early as 1540, Servetus' contemporary, Melanchthon, was aware that, 'The Stoics said that the souls leaving the body, since they are of a fiery nature, last a long time and fly about for some centuries in the air...'.<sup>10</sup>

- Typical Stoic features of dynamism, materialism and pantheism are prevalent in Servetus' pneumatology.<sup>11</sup> To take the first quality: 'The dispensation of our life is given and *is sustained* through grace from his breath, as Job says, chap. 10 and 32 following' (Servetus, p.202, italics mine); while 'mind, soul and spirit' are described as 'requiring constant fanning' (Servetus, p.208). This urgent sense of God's continuous and active presence ('making everything and sustaining the essences of everything') is linked closely with the characteristically Stoic blending of pneumatology and physiology.<sup>12</sup> Servetus, like the Stoics, integrates the

human soul with the process of respiration, thereby 'spiritualising' both breath and breathing: 'From the air God introduces the divine spirit, introducing the air with the spirit itself and the spark of the very deity which fills the air' (Servetus, p.202). For Servetus the 'saying of Orpheus is true, that the divine spirit is carried by the winds and enters through full inspiration, as Aristotle cites in the books, *De Anima*' (Servetus, p.202). For the Stoics, the 'very deity' filling the air was a logical result of their essentially biological cosmos. Their universe 'like a living being, was born, lived an allotted span of life, and died', and 'like a living body [it] was animated by vital heat or vital breath that passed through its entire extent'. Again, 'as with an animate body, all its parts were interconnected'.<sup>13</sup>

Both pantheism and a continuum of matter and spirit necessarily follow from this cosmology. Both are indeed key elements in Servetus' cosmos, as a twentieth-century commentator makes clear. Noting how 'Servetus brings in his knowledge of the circulation of the blood to exemplify the contact of God-Spirit's omniform being with our most hidden physiological motions', A. Gordon Kinder stresses that Servetus 'does not shrink from the logical corollary of this, that the world is a mode of the godhead, even though this brings with it the possibility that he will be open to the accusation of pantheism' (Kinder, p.14). Clearly Servetus leans far closer to the dynamic pantheism of Stoic respiration theory and cosmology than to its comparatively static Christian descendants.

Servetus to a large extent shared his fondness for cosmic spirit with his sometime tutor, Jean Fernel, who took the idea very seriously.<sup>14</sup> Such antecedence suggests that Servetus' unorthodoxy was so shockingly prominent partly because it had shifted a few degrees too far, rather than

being unique in kind. No doubt his temperament played a crucial role also. Perhaps the most important factor, however, as Walker himself notes with regard to Fernel's adoption of 'astral body' theories, is the shift from 'a religious or philosophical' context, to a medical one (Walker, 1958, p.123). Just as divine spirit is essentially continuous with human respiration, so the divine father and son are *biologically* as well as spiritually linked. For Servetus, 'Jesus Christ was the literal son of God', while God was "called the Father of Jesus Christ with just as good right as earthly fathers are called the fathers of their own sons"<sup>15</sup>. According to Jerome Friedman, Servetus is so unrepentant in his integration of bodily fluid and divine essence as to effectively assert that 'While Jesus may have appeared an ordinary man, the semen of his production was divine, creating a direct *biological* linkage with the father...' (Friedman, p.65). Filtering the biological cosmos of the Stoics, and its absolute interconnectedness, through New Testament theology, Servetus' ideas represent a conflation of Stoic biologism and orthodox trinitarianism rather than a bizarre species of Christian heresy.<sup>16</sup>

Servetus' hybrid cosmology implicitly collapses the Christian trinity in favour of an essentially Stoic continuum of matter and spirit. Refracting his Stoicism through the nuances of the Vesalian body, Servetus, as already noted, insists that 'the divine spirit is in the blood, and the divine spirit is itself the blood, or the sanguineous spirit' (p.204). Although this is supported by the notionally orthodox authorities of 'Genesis 9, Leviticus 7 and Deuteronomy 12', Servetus here is clearly replicating his heretically material Trinity on a microcosmic scale. To put the matter beyond doubt, he elsewhere stresses that the three 'bodily spirits' are 'not three but once again of the single spirit' (p.203). The identification (or 'confusion') of

divine with sanguineous spirit would be controversial enough; and the identification with blood more shocking still. In Stoic terms, however, the immediate communication of a divine spirit into that of the human body is unproblematic and logical. Zeno, for example, 'had no hesitation in making the bodily *pneuma* identical with the soul' (Lapidge, p.168). For the Stoics, 'spiritual inspiration' is bound up with immediate physical survival. Christianity had sought to refine this explicit continuum into a more carefully graded hierarchy of spirit and matter. Nonetheless, Servetus' unearthing of the Greek original is, as Michael Lapidge suggests, by no means as wayward as it seemed to Calvin: '*pneuma*... commended itself to a long posterity, and numbered among its descendants the Holy Ghost itself' (Lapidge, p.176). Servetus' 'heretical' pantheism and continuism may be seen, then, as restoring a suppressed element from Christian prehistory.

The continuum of divine and human which Servetus favours is, moreover, not only greater than that normally allowed by orthodox Christianity, but necessarily more pronounced than that of the Stoics also. In the striking and newly sophisticated interior of the rediscovered human body, Servetus is able to anchor and intricately define a belief system which, for all its material leanings, has until this point remained ultimately non-empirical.<sup>17</sup> Traced down through the most minute convolutions of the arteries, the relatively abstract Stoic inspiration of spirit is as different, after Vesalius and Servetus, as the startlingly modern plates of De Fabrica are from late-fifteenth century medical depictions. In both cases a spare outline is filled with a dense amount of compelling and at times overwhelming physical detail. Servetus' opponents were faced, therefore, with a thorough-going pantheism which had harnessed the Proto-scientific forces of Vesalian dissection to

particularise and solidify its claims. A materialising heresy, in 1553, and in the hands of one of Guinther's pupils, was in a crucial sense very much more material than it could have been in (say) 1503.

Before attempting to identify what unites Servetus' diverse authorities, I would emphasize the surprisingly heteroglossic nature of his citations. His writing demonstrates a textual opportunism which at times threatens to make biblical authority just one among a host of different voices. Just as he blurs traditional priorities between written authority and empirical phenomena, so he takes little or no care to distinguish between biblical and other writings. In the space of two quite brief pages he cites Genesis, Job, Isaiah, Psalm 103, Acts, Ezekiel, Orpheus, Aristotle's De Anima, Ezekiel, and Alexander of Aphrodisaeus (in that order). Throughout he indirectly alludes to Stoic beliefs. While Aristotle, at first glance, might seem comfortably orthodox, Servetus in fact only lifts 'Orpheus' from De Anima, and neglects to include Aristotle's subsequent objection to the quoted remarks.<sup>18</sup> Servetus' opportunistic use of sources arguably extends, indeed, to the supreme written authority of Christianity itself. Unlike conventional theologians, who would quote widely, but with great care to indicate hierarchical ranking, and to assimilate and subdue what they used to Biblical orthodoxy, Servetus permits a free clashing of discourses similar, say, to the stylistic polyphony found in Nashe's The Unfortunate Traveller.<sup>19</sup>

As stated, Servetus' location of 'the divine spirit... in the blood' (Servetus, p.204), is supported by the orthodox authority of Genesis 9, Leviticus 7 and Deuteronomy 12. In the same breath, however, he refers to 'the sanguineous spirit... the walls of the heart... the body of the brain... [and] of the liver' (ibid.), thereby recontextualising one relatively abstract somatic passage within a conspicuously

medical and empirical context. Such a context was at this point not, of course, so clearly opposed to theological discourse as it would later be. Yet it was, through Vesalius' innovations, already becoming so - something which is vividly apparent in Servetus' subsequent lines, where he gives his account of pulmonary circulation. While no doubt wholly pious in Servetus' mind, this densely physiological explanation, with its numerous references to veins, arteries, ventricles, membranes and lungs, threatens to entirely overwhelm its initial religious motivation. The general defamiliarising of biblical words or phrases recalls the semantic playfulness and dislocation of Servetus' contemporary, François Rabelais (1494-1553).<sup>20</sup>

There appear to be three chief factors unifying Servetus' ostensibly disparate source materials. The sheer force of his own personality and of his religious fervour comprise one element. This, however, is relatively self-contained, and does not lend itself to much further explication. A second point which does is Servetus' repeated stress on the necessity of Hebrew for full understanding of Old Testament pneumatology. In the Impartial History he is said to stress (citing the apocryphal Ecclesiasticus) that 'the Hebrew tongue, when translated into any other language, is defective, and the spirit of it is almost lost...' (Hodges, p.40). His careful respect for nuances of language is further reinforced by his awareness that, 'the Hebrew language is very full of hyperboles, and other very great mysteries are contained therein' (p.43).<sup>21</sup> Quite precise and important consequences follow from Servetus' etymological rigour. He can rightly 'call the air spirit because in the sacred language there is no special name for air' (Servetus, p.203). The lack of distinction between a divine sustenance and straightforward air (a feature common to both Hebrew and pre-Christian Greek) directly 'indicates that the divine breath

is in the air which the spirit of the Lord fills' (Servetus, p.203). Again, it seems probable that this rigour, like Servetus' accurate anatomical knowledge, would have threatened orthodox Christians. Non-Hebraists would be undermined entirely, and Hebraists would be challenged persuasively on their own terms, on a point of no small concern. It is difficult to avoid the conclusion that this implicit challenge was a key factor in the antagonism which Servetus excited.

The final, and perhaps the most obvious unifying factor behind Servetus' diverse authorities is the body itself. It may be seen, in Servetus' writings, as appropriately bisected in a figurative, as well as a literal, sense, riven between two ultimately divergent modes of knowledge. On the one hand, the potentially overwhelming materiality of the Vesalian body can be made acceptable by the peculiarly spiritualised matter of the Stoics.<sup>22</sup> On the other, it may be argued that it is precisely a subconscious dissatisfaction with Christianity's empirical vagueness which prompts Servetus to cleave to Stoicism. In this he finds a system which lends itself far more readily than Christianity to the imposition (one might say insertion) of Vesalian elements (see Walker, 1958, p.125). The relatively materialistic slant of Stoic thinking is attractive because of its ability to act as a kind of religious or philosophical glue, binding an incipient scientific mentality to traditional Christian Neoplatonism.

The diverse fragments temporarily unified by this adhesive will remain intact, however, only in Servetus' own hands. Although theoretically no more than a manifestation of divine artifice, the increasingly too intricate and ingenious body constitutes a vehicle through which hypostatized, assimilated, or marginal elements of Aristotle (rather than medieval Aristotelianism) and the Stoics may re-enter Renaissance theology. Rather than an artful piece of smooth,

monolithic sculpture, theological syntheses from the pagan world become, here, a dangerous and autonomous Frankenstein's monster. The creature's heterogenous origins show all too clearly at its clumsy seams, exposed by a force which at once galvanises it and threatens to dismember (to literally 'anatomise' or analyse) it into its constituent parts. This force is the dynamic confidence and empiricism of Vesalian anatomy itself. Its dynamism both echoes and compounds that of Stoic cosmology, interleaving the general materialism of the Stoics with a network of fine corporeal detail. The use of Vesalian anatomy revives and reinforces the suppressed materialism of Christian pneumatology; so that the buried, undesirable features of Christianity's Greek sources threaten to break out of the Christian frame and exist upon their own terms, no longer wholly subordinate to 'an abstract, systematic context'.<sup>23</sup> Servetus' ability to reveal the elements of *bricolage* behind the ostensibly immaculate surface of Christian theology is all too well-attested by the murderous rage correspondingly aroused in Calvin.

Servetus' literalism appears to underlie both his anatomical and etymological thoroughness. Common in either case is a respect for exact detail, whether of pulmonary circulation or subtleties of pneumatology. Common also is a humanistic spirit, freeing original and unpalatable truths from the impure accretions of both medieval anti-empiricism, and obfuscatory biblical commentary.<sup>24</sup> Unsurprisingly, given the extremity of his temperament, Servetus tends to exceed the relatively modest project of 'recovery' in both cases. After giving the account of pulmonary circulation he (rightly) claims discovery of 'a truth which was unknown to Galen' (p.205). His emphasis on Hebrew, moreover, implies an emphatically immediate link between biblical text and divine authority. Among sixteenth- and seventeenth-century religious writers, Servetus is notable for the directness of phrases

such as: 'God himself testifies', and 'God himself teaches'; while the location of divine spirit is 'taught by God himself in Gen. 9...' (Servetus, p.202, p.204). In matters medical and scriptural Servetus' zeal for the purest, most unfiltered version of the divine word is plainly evident. The body 'speaks' to him in a way not much less literal than God's speech as heard in the original Hebrew.

Servetus' writings may, then, be seen as one of the most extreme cultural phenomena arising from the 'window of opportunity' which is coeval with Vesalian anatomy. Servetus' attitude to the body is importantly *preparatory* to science, in that it allows the material world to be studied at all, if only undercover of religious and psychological priorities. This intermediate position fits well with Servetus' sensualistic and pantheistic leanings in religion. While his anatomical study has a rigour and precision equal to that of Descartes or Harvey, Servetus filters these labours not through taxonomical thinking, but through analogy. The most important and scrupulous anatomical passage in Christianismi Restitutio, on pulmonary circulation, stems from Servetus' passionate desire to provide a physiological basis for his pantheistic pneumatology. The importance of *discovery*, as opposed to the successive, Cartesian *invention* is strongly apparent, therefore, in Servetus' notions of the body.<sup>25</sup>

'Discovery' is sensual, overwhelmed by immediate appearances, and with a religious reverence (a literal 'binding back') evident in the analogical status of a body tightly integrated with pervasive 'world-spirit'. That the very same historical period sees the rise of the empirically grounded, highly perceptual, yet still partially reverent and *pre-scientific*, Vesalian body is, clearly, no coincidence. Both are coeval with an unstable, wayward empiricism not yet restrained by the conceptual frameworks of the later-seventeenth century.

## b. Melanchthon and Vesalian Natural Philosophy

Philip Melanchthon (1497-1560), unlike his contemporary Michael Servetus, is important for the lasting and widespread influence of his ideas and writings. After Melanchthon's death his theological work, Loci Communes (1521), was vitally important in the development of Protestantism, and went through many successive editions.<sup>26</sup> John Donne was later to speak highly of Melanchthon on more than one occasion, referring to him as 'a man of more learning and temperance than perchance have met in any one in our perverse and froward times' and as one 'who assisted the Reformation of Religion, with as much learning, and modesty, as any...'.<sup>27</sup> The reference to 'temperance' suggests that Donne may have been attracted to Melanchthon because of his relatively tolerant stance as a Reformer.

The anatomical interests of Melanchthon which I will be examining were only part of a vigorous cluster of activities pursued by the 'Wittenberg Circle' in the sphere of Natural Theology. Melanchthon and his friends and colleagues were engaged in astronomical studies, and Melanchthon's close friend, Leonhard Fuchs (1501-1566), enjoys high distinction in the history of botany for his 'Herbal' of 1542, De Stirpium Historia.<sup>28</sup> There are a number of reasons, however, for viewing Melanchthon's anatomical studies as pre-eminent. A dissection of the human head is known to have been performed at Wittenberg in 1526, a surprisingly early stage in the general revival of anatomical studies.<sup>29</sup> The fact that Baldasar Heseler, the onlooker responsible for the account of Vesalius' dissection was himself a theology student of Luther's before he went to Bologna, suggests that theological study might lead a Wittenberg scholar along relatively empirical paths.<sup>30</sup> Sachiko Kusukawa's study of the Wittenberg

library (of which Melanchthon is said to have been fond) reveals a high quantity of past and present anatomical texts, including Hippocrates, Galen, Dryander, and Guinther.<sup>31</sup> Melanchthon himself, with Camerarius, edited Fuchs' translation of Hippocrates and may also have had medical works in his personal library.<sup>32</sup> Certainly he came to own a copy of Vesalius' De Fabrica, and indeed, on 25 January 1552 wrote in it his own poem, 'On the human body'.<sup>33</sup> Moreover, he was by no means content with existing anatomical works, and by 1551 Fuchs, evidently at Melanchthon's suggestion, had produced his own De Humani Corporis Fabrica Epitomes pars prima (Lyons).<sup>34</sup> Clearly indebted to Vesalius, who is glowingly cited, this unillustrated but detailed account of bones and muscles was supplemented in 1555 (that is, *after* the second, 1552 edition of De Fabrica) by a 'pars altera' adding a further four books.<sup>35</sup>

All this comes to fruition most clearly in the two editions of Melanchthon's 'commentary' on Aristotle's De Anima (1540 and 1552). Designed to accompany the substantial educational revisions of Luther and Melanchthon at Wittenberg, the first half of Melanchthon's Commentarius de Anima (Wittenberg, 1540) is filled with subheadings such as 'De Ventriculo' (sig.28r), 'Omentum' (sig.31r) and 'Pia Mater' (sig.62r), and looks remarkably like an unillustrated anatomical textbook.<sup>36</sup> In the second edition, De Anima Liber Unus (Wittenberg, 1552), the respective proportions devoted to somatic and philosophical matters are, again, about equal; but the book itself has grown substantially, and has incorporated revisions from De Fabrica (perhaps indirectly, too, from Fuchs' work of 1551) - most notably on the question of the *rete mirabile*.<sup>37</sup> Clearly Vesalius' work has answered an insistent desire of Melanchthon's for a more complex and rigorous treatment of the human body; something evident not

only from his own copy of De Fabrica, but from his stated dissatisfaction with pre-Vesalian anatomists.<sup>38</sup>

Melanchthon's Natural Philosophy, then, must be seen as a deliberately Vesalian Natural Philosophy. While Kusukawa implicitly recognises this, his explicit emphasis is on the persistently *Lutheran* character of Melanchthon's Natural Philosophy (see Kusukawa, p.4). This stance, legitimate within its own limits, appears to reflect Kusukawa's ultimately reductive position, encapsulated by his desire to understand 'what Natural Philosophy meant to Melanchthon' (Kusukawa, p.2). Aside from the arguable difficulty of ever knowing this at all, there is the more interesting probability that Melanchthon himself did not fully, consciously realise what Natural Philosophy 'meant to him'. It is overwhelmingly apparent that the interests of the Wittenberg circle in this area were part of a general, albeit nascent, epistemological shift away from Scholastic Aristotelianism. That Melanchthon and Luther were emphatically part of (and indeed partly responsible for) this change is demonstrated at least as much by the reasons for the origins of Melanchthon's De Anima, as by the work itself.<sup>39</sup>

Reflecting the violent anti-Aristotelianism of Melanchthon, and of Luther in particular, Melanchthon's commentary appears to have been a pedagogical compromise, in response to a prolonged but only partially successful battle with the conservative university authorities over Scholastic aspects of the curriculum (Kusukawa, pp.26-27). The covert preference for empiricism over mere 'verbal juggling', betrayed by Luther's assertion that '...any potter has more knowledge than is written in these books [Physica, Metaphysica, De Anima and Ethica]', is reinforced by Luther's further comment on Aristotle's Physica - 'The whole book is a debate about nothing' - and Melanchthon's admission: 'the

commentaries on Aristotelian natural philosophy are so chilling that nothing could be read with greater discomfort'.<sup>40</sup> Aristotelian terms such as "matter", "form", and "privation", are to Melanchthon no more than 'verbal monstrosities' (Kusukawa, p.43). While undoubtedly mingled with the kind of transitional elements found in Servetus and Vesalius, there is in the Wittenberg circle a clear parallel with the rigorous anti-Scholasticism of Francis Bacon's scientific manifesto.<sup>41</sup> Notably, too, Melanchthon's original tag of 'commentary' (significantly dropped from 1552 onwards) appears to be merely a concession to more conservative parties, given his interesting statement, in 1534: "'here we have begun to write [not 'comment on'] a natural philosophy'".<sup>42</sup> This remark, undermining the subterfuge of a merely subservient and secondary work, conforms with the opinion that Melanchthon's De Anima was, in fact, a new synthesis.

The general picture of innovations given above is particularised strikingly by Melanchthon's sensualistic leanings. The study of nature is not merely a duty or piety, but the "'most pleasant joy'"; one should "'blaze with desire of knowing that most beautiful teaching of celestial motions'", and be "'inflamed with the desire for that perfect wisdom [of divine artifice]'".<sup>43</sup> This fervent embracing of natural philosophy reflects the rehabilitation of empirical science initiated by Lutheran theology. For Luther and Melanchthon it is not only admissible, but necessary to possess detailed understanding of the human interior, in order to adequately appreciate 'the Providence of God in this world'.<sup>44</sup> The non-rational illustration of divine artifice provided by the anatomised body conveniently opposes that traditional, Scholastic emphasis on a rational knowledge of God with which Melanchthon and Luther wish to break (Kusukawa, p.26).

Beneath this superficial Protestant orthodoxy, however, particular undercurrents in Melanchthon's religious attitude are evident. He appears to possess a more mystical, emotional temperament than Luther. He is, for example, notably impressed with the inspirational fervour of the 'Zwickau Prophets' of 1521; and far from denying their supposedly 'direct colloquies with God' (as Luther presently does), admits, "I cannot easily explain how I am affected by them...", it being "apparent... that there are certain spirits in them"<sup>45</sup> Elsewhere he notes that '...many ghosts walk everywhere...', some of which he has 'seen myself', while 'many trustworthy men [have]... affirmed that they had... even spoken with them at length' (Keen, p.288). Melanchthon's version of the 'Providence of God in this world' is coloured by a conspicuous emotional zeal. He apprehends divine presence with an affective directness not entirely unlike the fervour of the Zwickau Prophets themselves.

The potential for unorthodoxy which these traits suggest is most fully evident in Melanchthon's distinctive attitude to the 'medical spirits' of Renaissance theology. As D.P. Walker rightly states, Melanchthon's 'conception of the relation of medical spirits to the soul and to the Holy Ghost' is highly unusual, and at times 'leaves it an open question whether or not the human soul is identical with the spirits' (Walker, 1985, p.290). The passage to which Walker refers appears early in Melanchthon's revised *De Anima*, and derives from Galen, who 'says... that either these spirits are the soul, or they are the immediate instrument of the soul'; to which Melanchthon ambiguously responds: 'This is certainly true'.<sup>46</sup> Still more dangerously, he then proceeds to assert that, 'in pious men the divine spirit itself is mixed with these very spirits, and makes them shine more brightly with divine light' (Walker, 1985, p.290). As Walker stresses, this curious equivalence is not 'mere analogy' (Walker, 1985,

p.290). It is, indeed, arguably a 'Melanchthonian' version of Servetian heresy. The chief difference between this statement, and Servetus' insistence that 'the divine spirit is in the blood' (Servetus, p.204) is that Melanchthon goes into less physiological detail, and does not, like Servetus, effectively reinterpret Scripture.

Overtly antagonistic as Melanchthon was to Servetus' ideas (on publication of Servetus' On the Errors of the Trinity in 1539, he 'besought [the members of the Senate of Venice] to use their utmost Indeavours, that the impious Errors of that Man might be avoided, rejected and abhorred') there are convincing reasons for believing that his discussion of bodily spirits may lean surprisingly close to them.<sup>47</sup> His subsequent prayer that 'the Son of God may... pour the divine spirit into our spirits' not only echoes his earlier 'mixture', but betrays a potentially physiological colouring, given the association of medical spirits with blood (Walker, 1985, p.290). Supporting this unconscious corporealising of religious feeling is the phrase 'pious men', which suggests that Melanchthon is attempting to provide a (not entirely orthodox) physiological grounding for the deterministic Lutheran theory of salvation. Melanchthon risks implying that, in the especially pious, religious feeling will catalyse changes in body chemistry. Even Kusakawa, who only briefly acknowledges Walker's citation, tellingly sees in it Melanchthon's desire to find 'in the human body... the power of the presence of God' (Kusakawa, p.120). The human body is attractive precisely because its newly perceived complexity, vigour and solidity afford a new kind of sensuous and concrete grounding for religious emotion. Such complexity, indeed, may be especially alluring for its ability to rival the *rational* complexity of the Scholastic theology which it seeks to replace.

Perhaps the most startling example of Melanchthon's corporeal and sensual imagery is that concerning bodily resurrection: "There is a secret cause why the Son of God Himself put on human nature. Him in all eternity you shall look upon with your eyes, you shall hear Him with your ears discoursing on divine wisdom; with *your embrace* shall you greet Him".<sup>48</sup> If this might be passed over as a variation on the language of the Song of Songs, it becomes potentially unorthodox when paralleled with a contemporary statement: "you will with these your bodily organs see, touch, taste, smell and hear God".<sup>49</sup> Given that this latter is from Servetus' Christianismi Restitutio, and given Melanchthon's known hostility to Servetianism, it seems clear that at this period the undercurrent of corporeality sparked by anatomy was sufficiently powerful to infect religious thinkers in spite of their avowed positions.

The Vesalian body provides the seductive and ambiguous focus for such traits. Attractive for the very subtilising and intricacy of devotional feeling and expression which its own intricacy permits, the human interior of Vesalian depictions at times leads Melanchthon into a kind of sensuous corporeal rapture, providing a rare example of just that 'sensuous particularity' so often absent from sixteenth-century devotional or theological writing:

The organs are the nerves, muscles and tendons, in that order. The first one judges perceptions and it is by that organ that limbs are moved, as a thirsty deer imagines the memory of a river... When this awareness is formed, at once the brain vibrates and activates the nerves and the nerves carry the spirit to the muscles. The muscles when vibrated are moved by the nature of their flesh and by certain fibres, and they expand and contract. With

this expansion or contraction is drawn the tendon which when drawn moves the outer limbs. The chord or tendon is therefore an immediate organ of the voluntary movements of the joints. But the mediate organ is the muscle. And the muscle is vibrated by the spirit that is moved in the nerves. The nerves are impelled by the brain, which expands or contracts them. The brain however is moved by perception. And there are no further causes to be sought. In this way we know that the nature of animate things is ordered by the plan of their master, and we may rightly use this faculty of voluntary movement.<sup>50</sup>

One needs to cite this at such length precisely because the extent of somatic preoccupation is just what betrays, in Melanchthon, a dimension beyond purely innocent 'Natural Philosophy'. However powerful the epistemological perspective of the established Natural Philosophers may be, their use of the body cannot escape certain compromising tensions. Notwithstanding Melanchthon's instinctive allusion to Psalm 42, the dominant feature of these lines is not only movement (as might be expected under the heading, 'Of Locomotive Ability'), but autonomous movement.<sup>51</sup> For all Melanchthon's careful distinction between a motion initiated 'by imagination' in beasts, and 'by reason' in man (Keen, p.253), the potential for Cartesian automatism remains evident. The tell-tale phrase, 'And there are no further causes to be sought' is echoed in Melanchthon's poem 'On the human body'. The opening lines -

Think not that atoms, rushing in a senseless, hurried  
flight  
Produced without a guiding will this world of novel  
form..

- strongly suggest a half-conscious anxiety at the potentially autonomous nature of a body just revealed ('this world of *novel form*') as astonishingly complex (Schullian, 11.1-2). Such complexity can, of course, be harnessed to Natural Theology beneficially. Yet the poem's two references to 'sightless' or 'senseless' atoms (*ibid.*, 1.9) clearly betray a keen awareness of the resurgent Democritean physics of the period, and again look forward to the self-contained mechanical organisms of Descartes.<sup>52</sup>

Such particular glimpses of later-seventeenth century somatics point to a more general and strengthening complex of new epistemological traits associated with the body - ones which will ultimately tear it, with Cartesian dualism, all but literally in two. These are able to operate parasitically through Melanchthon and Luther's Natural Philosophy, doing so with greater insidiousness just because Lutheranism has relegitimised the body so wholeheartedly. Moreover, because this body is, crucially, a non-rational demonstration of divine providence (allowed, as it were, to 'speak for itself'), what it says becomes all the more perilously subjective. Dead men do tell tales, and ones understood very distinctively by figures such as Servetus.

The writings of Melanchthon and Servetus show how two distinct but contemporary religious thinkers were affected by the immediate aftermath of Vesalian dissection and representation. Comprising a transitional stage in the new relation to the body, their work is at once strongly religious and analogical, and yet, because of the relative

epistemological security of the period, reveals subversive features of this body about which a later age is more guarded. The Vesalian body plays a crucial role in promoting unorthodox religious beliefs and imagery. Certain of Servetus' ideas (notably on the trinity) are straightforwardly heretical. Other striking aspects of his cosmology, however, such as his re-filtering of biblical passages through a contemporary medical context, arguably have a logical fairness which suggests much of their impact to be dependent on the aggravating factor of the newly perceived, and newly complex, human interior. Similarly, Melanchthon's curious blurring of human and divine spirit conspicuously suffers from the growing prominence of the physical over the spiritual.

If neither Servetus' heresy, nor Melanchthon's sensualistic leanings in religion, are caused by their contemporaneity with Vesalius, both are certainly influenced substantially by the more immediate physicality and detail of the body which the activities of the anatomists produce. The writings of both exemplify the 'rehabilitation' of matter identified by Cassirer (Cassirer, p.172). The body, as apprehended by these figures, faces in two directions. While Natural Philosophy's emphasis on God, as its Creator, draws it back toward the authority of Scripture, Vesalian anatomy increasingly articulates the body in a way which allies it with the taxonomical stance of early scientific thought. Poised between the totalising epistemological schemes of the Scholastics on the one hand, and of a figure such as Descartes on the other, the anatomised body bridges the distance between this world and the next in a way at once acceptable to orthodox Protestant Christianity, yet sympathetic to proto-scientific enquiry.

## 2. Anatomy in Elizabethan and Jacobean Literature

### a. Dramatic Uses of Anatomy

This section examines in more detail the first flourish of English rhetorical dissection, as broadly sketched out in Chapter 1.2 - a vernacular literary usage which at once promotes and presumes a widespread popular familiarity with public dissection. The bulk of the discussion focusses on the writings of Thomas Nashe. It is necessary to emphasize, however, that Nashe is not alone in his attentiveness to the dissectors' art. In Dekker, in Webster, in Shakespeare, and in Jonson we find instructive instances of anatomy's power over the literary imagination. In 1606, Thomas Dekker's Newes from Hell features an emaciated old man, whose leanness is emphasized by the fact that, '...the Barber Surgions had begde the body of a man at a Sessions to make an Anatomie, and that Anatomie [ie, 'skeleton'] this wretched creature begged of them, to make him a body'.<sup>53</sup>

Six years later, in The Duchess of Malfi, Bosola, satirising female cosmetics, tells an old woman of 'a lady in France, that having had the smallpox, flayed the skin off her face, to make it more level'. The only result of this rudimentary facelift, however, was that 'whereas before she look'd like a nutmeg grater, after she resembled an abortive hedgehog'.<sup>54</sup> Given classical tales such as the flaying of Marsyas, this does not have to be dependent on post-Vesalian anatomy. It seems unlikely, however, that in 1612 Webster would not have been conscious of the especial force his tale and accompanying simile must have. Again, while the 'abortive hedgehog' may hark back to Shakespeare's depiction of Richard III as an 'elvish-mark'd, abortive rooting hog' (Richard III, I, iii, 227), Webster's characteristically raw physicality is

no less integral to the image. 'Abortive' in Shakespeare's usage must refer generally to Richard's deformity; in that of Webster it appears to imply not merely 'misshapen', but also the approximate similarity of colour and texture between a flayed body, and a premature or miscarried child. Moreover, although the vision of an 'abortive hedgehog' is by no means the most extravagant of Webster's descriptive feats, the explicit association of flaying and dissection elsewhere in the play (V, ii, 75-79) does suggest the likelihood of a correspondingly potent *visual* impact on Webster himself.<sup>55</sup>

In Romeo and Juliet, there is clearly an ironic edge to Romeo's despairing question:

O tell me, friar, tell me,  
 In what vile part of this anatomy  
 Doth my name lodge?

(III, iii, 105-7).<sup>56</sup>

At the same time, however, the pathetic force of Romeo's query obviously derives from the unjust sense that his obstructive name is as integral and irremoveable as his own liver or lungs. Anatomy here allows a new twist to the essence of human identity. The following stage direction, in which Romeo 'offers to stab himself', as if to slay the offensive name trapped beneath his skin, is aptly symbolic of a more widespread ascendancy of the empirical and actual over textual authority.

The merging of psychic and somatic interiority, and the unstable relationship between words and things which Romeo's gesture implies, are expressed with still greater force in Act III of King Lear. The increasingly enraged and distraught father proposes, 'Then let them anatomize Regan; see what breeds about her heart' (III, vi, 74). This might be taken in its most purely figurative sense as meaning 'interrogate',

and such a legal sense is clearly involved. The king's subsequent question, however, 'Is there any cause in nature that makes these hard hearts?' (ibid.), prompts an instinctive revision of the initial reading. Lear's query, like Romeo's, of course has a poignantly ironical charge, as he seems to the onlooker to confuse the figurative attributes of the human heart with the physical ones scrutinised by physicians and surgeons. Yet, just as the contemporary prominence of public anatomy gives an appropriate edge of violence to 'let them anatomize...', so it is medical anatomy as an institution which lies at the heart of Lear's paradoxical question. Put simply, the dilemma is this: any part of the human body previously invested with more than merely physical significance - notably the heart and brain (and, for the Renaissance, the soul) - is now both vivified and problematised by its visible intrusion into the material world. Figuratively and literally, it shifts from two into three dimensions. If the heart and viscera *had* occasionally been visible in the more spectacular public executions, they had not, as they now were, been located within the new discipline of empirical medicine.

While Lear's attempt to reduce callousness to somatic disorder would have been most actively supported some years later by Cartesian mechanism, there are already interesting and authoritative medical echoes within Shakespeare's own lifetime. Perhaps as little as a decade after the play's first recorded performance, William Harvey was explaining his belief that 'A hard heart [indicates blunt] sensibility, and a softer one, keen sensibility'.<sup>57</sup> Similarly, in the anonymous tract The Anathomy of Sinne (London, 1603), the author, warning against 'Reproch', notes how 'hath God in the creation of the tongue... made it tender and soft, to signifie our worddes should be of like temper... [and] hath tyed it with many threades and stringes, to restraine or bridle it'

(sig.G2r). The reference to the 'threades and stringes', in particular, implies a precision of anatomical observation very different from the relatively vague parallelisms of orthodox analogical thought. Such conflations of the moral and physiological thus epitomise the transitional phase accompanying post-Vesalian dissection: body and personality, body and mind, and body and soul are all notoriously prone to blur together, so long as the newly-forceful body stands poised in tension against older forms of knowledge.<sup>58</sup>

In Jonson's Volpone (1605) the protagonist, during his mountebank speech in Act II, lists among his medicinal ingredients 'some human fat, for the conglutination, which we buy of the anatomists'.<sup>59</sup> The play's Venetian setting may imply that the Lumleian Lectures had not yet sufficed to remove anatomy from its stereotypical, and relatively exotic Italian surroundings. Nonetheless, a more substantial rhetorical exploitation of the dissector's craft later on in the Act makes it clear that, whether by word of mouth or 'in the flesh', public dissection had forcibly impressed Jonson's imagination. The jealous husband Corvino forbids his beautiful wife, Celia, to 'look toward the window', with the threat,

Nay, stay, hear this - let me not prosper, whore,  
But I will make thee an anatomy,  
Dissect thee mine own self, and read a lecture  
Upon thee to the city, and in public  
(II, v, 69-72).

Later, when it is, paradoxically, his wife's stubborn chastity that incites his rage, Corvino has other physical torments allegedly in store for her:

[I will]... rip up  
 Thy mouth unto thine ears, and slit thy nose,  
 Like a raw rochet!  
 ...Death, I will buy some slave  
 Whom I will kill, and bind thee to him, alive;  
 And at my window hang you forth, devising  
 Some monstrous crime, which I, in capital letters,  
 Will eat into thy flesh with aquafortis,  
 And burning cor'sives, on this stubborn breast  
 (III, vii, 97-105).

For present purposes, what is of interest is the implied equivalence of the two fates described. Both scenarios are emphatically public, and, in the latter case especially, involve shame and display. That this highly ostensive shaming applies to the proposed 'anatomy' is suggested by the intention to 'read a lecture on thee'; the speech would, presumably, be far more moralistic than informative.

More subtly, there is an impression that the indelible etching of the 'monstrous crime' into the flesh stands as a conscious parallel to the 'analytic' writing of the anatomist. To find a contemporary horror which will equal the ancient and exotic practises of the Roman empire ('as the tyrant Romane Emperours used to tye condemned living caytives face to face to dead corses') Jonson looks to the 'inscriptive' markings of the dissector's knife.<sup>60</sup> Just as the literary anatomy promises the most rigorous and authoritative analysis and epitome of any topic, so all the grotesque and detailed horrors of Jonson's 'slave' passage can be neatly conveyed by the single word 'anatomy'. The practices of dissection provide a significantly updated version of the Foucauldian punishment inscribed on the bodies of regicides and traitors.<sup>61</sup> For Corvino's warning, indeed, does more than simply convey the furthest imaginable extremes

in physical terror. In Volpone, one may see a glimmer of the 'clinical' and 'scientific' in the opposition between the two different punishments. The rage and uncontained violence of ripping the mouth and slitting the nose are compressed and frozen in the promised 'anatomy', the latter being somehow more terrible because of its calculation, precision, and the utility involved ('read a lecture'.) Notwithstanding the important religious dimension connected with 'Natural Philosophy', there is here a nascent sense of the 'dehumanised' body, now increasingly to be viewed in coldly functional terms as an ingenious mechanism.<sup>62</sup> It is in the almost obsessively visceral writings of Nashe that such glimpses into the future of the newly perceived body are most vividly presented.

#### **b. Thomas Nashe the Anatomist**

Nashe's The Anatomie of Absurditie (London, 1589) constitutes, ironically enough, perhaps the least medical or visceral of his writings. The only anatomical reference is in fact internal to the literary genre itself, a satirical glance at Nashe's predecessor Phillip Stubbes, who pretended 'to anatomize abuses and stubbe up sin by the rootes' (The Anatomie of Absurditie, I, pp.19-20). Nashe certainly does aim at the thoroughness to which the title 'anatomy' usually pretends. His explicit method of exhausting his topic of 'absurditie' (chiefly represented by female vanity, lack of learning, and unripe preachers) is via literary allusion and quotation, of which there are over 160 instances in just under fifty pages.

The excessive, Burtonian 'literariness' of Nashe's anatomising to some extent reflects the ironic transitional nature of literary anatomies, or anatomical metaphor, in

general: insofar as the 'body' is present in such works at all, it is only through a rhetorical sleight of hand which implies that the subject involved comprises a 'body of knowledge' - one whose definite limits allow it to be comprehensively pierced and divided. The implicit presence of this organised, knowable and delimited body sanctions the totalising pretensions of the writer, who offers the 'whole story' on his chosen subject. The epistemological function of anatomy in this sense is ultimately conservative. The crucially pre-existing and stable human form (guaranteed, finally, by God himself), and the new medical practices surrounding it, are rhetorically manipulated to provide a vicarious objectivity, shaping and solidifying Nashe's otherwise subjective association of quotations and authors into a cohesive 'body' of text. Nashe's anatomy thus demonstrates the use to which 'taxonomic' habits (so dominant a few decades later) are typically put in an age when much of 'the activity of the mind' still consisted in '*drawing things together*', and when 'to know an animal or a plant' was 'to gather together the whole dense layer of signs with which it or they may have been covered'.<sup>63</sup> As Nashe himself puts it, 'I account of Poetrie, as of a more hidden and divine kinde of Philosophy, enwrapped in blinde Fables and darke stories'.<sup>64</sup>

It is interesting to note, however, that even in this early and arguably non-typical work (Nashe 'later shrugged it off as an "Embrion" of his "infancie"') the quotations are often relatively recent (Erasmus and Agrippa) or outrightly contemporary (Melbancke, Gosson, Greene et al).<sup>65</sup> The fact that Nashe does not rely on the more typical strategy of citing established authorities appropriately mirrors the very novel rhetorical power of his title. At the same time, moreover, Nashe's Anatomie is *avant-garde* insofar as it provides an early example of an increasingly popular, and

increasingly sophisticated, new rhetorical method. The degree to which medical anatomy had been imaginatively exploited by 1589 seems little appreciated by critics who have attempted to prove that Nashe's title must be narrowly indebted either to Stubbes or to Lyly.<sup>66</sup> If such a limited source were to be chosen at all, Nashe's friend Robert Greene would be a far more plausible inspiration. By 1589 Greene had published three anatomies, and later titles advertising themselves as 'laying open' various subjects suggest that his fondness for anatomical rhetoric did not diminish.<sup>67</sup> In reality, however, the writings of Greene, Stubbes, Lyly, and of the earliest English anatomists, Rogers and Woolton, were all just part of a larger anatomical culture already vigorous and extensive by the late 1580s. In addition to the various literary appropriations outlined in Chapter 1.2, Sidney had made at least seven direct or indirect references to dissection prior to Nashe's Anatomie.<sup>68</sup> Even in the absence of any of these factors, Nashe's own literary manipulations of anatomy would - as following pages should demonstrate - provide far better insight into his Anatomie than attempts to treat it as an isolated curiosity.

As already noted (Chapter 1.2a, pp.18-19), it was very shortly after his Anatomie that Nashe, in 1590, drew deliberate attention to the visceral connotations of the newly popularised term 'analysis'.<sup>69</sup> Appropriately reflecting the close intertwining of physical and intellectual dissection in this early stage of anatomical rhetoric, he claims that writers who 'vaunt the pride of contraction' are like those starving Scythians that 'tooke in their girdles shorter' to reduce the sensation of hunger. Such hacks 'doe bound their base humours in the beggerly straights of a hungry Analysis'.<sup>70</sup> In this the knowing pun on 'Analysis' as (an) 'anatomy' (that is, skeleton) echoes Dekker's use of 'Anotamie' to highlight emaciation (Newes from Hell, II,

pp.135-6). Moreover, though Nashe here appears to deride the vogue for analysis, he himself exploits its rhetorical pretensions when claiming that 'The Analasis of the whole is this...' (Strange News..., I, p.275, italics mine).

Nashe's most typical use of anatomy, however, is a directly visceral one. His writing shows a strong fascination with the raw fabric of the newly-perceived human body. Even when directly relevant to his subject, such imagery can be startling. In a battle soldiers lie 'sprawling and turning on the stained grasse, like a Roach new taken out of the streame'; 'a bundell of bodies' are 'fettered together in their owne bowells'; and 'the French King himselfe [had]... the braines of his owne men sprinkled in his face' (The Unfortunate Traveller, II, p.231). The latter image combines a vividly liquid and dynamic 'braining' (contrast 'sprinkled', for example, with 'dashed' or 'thrown') with a typically Nashean - or Bakhtinian - subversion of the official and hierarchical (raw and viscous bodily matter, in the (supposedly immaculate) face of a semi-divine figure). The familiar particularity of the 'Roach' is echoed elsewhere by the homely practices of the Roman executioner who 'would fish for a mans heart, and fetch it out as easily as a plum from the bottome of a porredge pot' (The Unfortunate Traveller, II, p.327).

Instances of viscerality where the subject matter itself is not obviously visceral are yet more striking, because of the covert, involuntary preoccupation with the interior or the dismembered which they imply. In The Unfortunate Traveller (London, 1594) we meet a 'Switzer Captaine' who is described as 'a notable emboweler of quart pots', and puritans who threaten to 'rent out the bowels of the church' (The Unfortunate Traveller, II, p.225, p.235). Jack Wilton, the tale's impish protagonist, is not merely afraid, but

unnerved to the point that 'if he [Jack's master]... had not soone cheered and refreshed us, the dogs had gone together by the eares under the table for our feare-dropped lims' (The Unfortunate Traveller, II, p.268). Gabriel Harvey, in Nashe's 'confutation' of his Foure Letters, is pictured as one who wished to 'have knockt out the braines of poore *Tullies Orator*', but who in fact, with his curious vocabulary, had merely 'puld out the very guts of the inkehorne'.<sup>71</sup> Nashe, in return, offers to 'unbowell the leane Carcase of thy book' (Strange News..., I, p.272).<sup>72</sup>

None of these usages is necessarily Vesalian. They could conceivably be inspired merely by animal butchery, warfare, or public executions. Nashe's frequent and often exact allusions to surgical anatomy, however, strongly suggest that some particular dissective association must be suspected. Thus, assailing Gabriel Harvey, he imagines his adversary as having caught a rat 'and made an Anatomie of [her]', giving a very precise glance at the specifications of the Lumleian lectures when he adds, 'and reade a lecture of three days long upon everie artire and musckle in her' (Have with you to Saffron Walden, I, p.67). Again, in mocking the failed astrological predictions of Gabriel's brother, John Harvey, for example, Nashe not only turns to dissection - '...as if he had lately cast the Heavens water, or beene at the anatomizing of the Skies intrailles *in Surgeons hall*' (Pierce Penillesse, I, p.196, italics mine) - but also gives it a local habitation. His query, 'Who but a Foppe wil labour to anatomize a Flye?' is given by the OED as the second example of the verb 'anatomize' in English.<sup>73</sup> Nashe's easy familiarity with medical anatomy is further supported by his defence of drama. 'In Playes' he claims, 'all coosnages, all cunning drifts over-guylded with outwarde holinesse, all strategems of warre... are most livelie anatomiz'd' (Pierce Penillesse..., I, p.213). The edge of paradox in the last two

words is almost certainly intentional, betraying a knowingly mordant wit; elsewhere Nashe asserts against Gabriel Harvey: '*Pierce Penilesse... is a most livelie anatomie of sinne*' (*Strange News... I*, p.306). The recurrent irony not only highlights Nashe's continuing self-identification as an 'anatomical' writer, but appears to depend, for its ironic impact, upon a general perception of the anatomised as somehow more than usually dead. The wit derives from the clash of two terms seen to imply a greater antithesis than mere 'life and death'.<sup>74</sup>

Perhaps the most startling indirect piece of anatomising in Nashe is his observation that, 'if titles of fame and glory be proposed to forward minds... they will make a ladder of cord of the links of their braines...' (*Pierce Penilesse*, I, p.180). His arresting corporealisation of 'rising on one's wits' is vividly and instructively Vesalian. Its vividness relates both to what *could* be seen, in the era of radically advanced illustration and public dissection, and to the *inclination* to see.<sup>75</sup> It is neatly and sharply instructive as an example of a new kind of metaphor - one dependent on the degree of internal bodily precision and observation rising in England exactly as Nashe wrote.<sup>76</sup> That 'links' arguably suggests a chain of sausages by no means degrades the accuracy of Nashe's image. Blending just the right amount of strangeness and familiarity, the (implicit) likeness is astute even as to the shared *colour* of cerebral matter and of uncooked sausage meat.

The most noteworthy anatomical moment within Nashe's writings is, however, an uncomfortably actual one. Jack Wilton, hero of *The Unfortunate Traveller*, has been imprisoned yet again, and sold by his accuser, the Jew Zadoch, to the latter's kinsman, 'Doctor Zacharie, the Popes Phisition', in order to fetch five hundred crowns as an anatomical specimen, rather than die by profitlessly

'casting... off a ladder' (The Unfortunate Traveller, II, p.304). At first glance Wilton's fate appears essentially exotic and unreal. The fantastic, limitless villainy and avarice of the stock Jew is combined with the alien decadence of Italy.<sup>77</sup> This extremity is compounded by the confluence of the miserly and pseudo-magical which Zacharie, 'dame Niggardize sole heire and executor', embodies: 'Out of bones, after the meate was eaten off, hee would alchumize an oyle, that hee sold for a shilling a dram' (The Unfortunate Traveller, II, p.304).

Fantastical and racially stereotyped as Zadoch and Zacharie are, however, the incident of Wilton the anatomical specimen appears to have more than a purely two-dimensional, comic status. The first argument against this is Nashe's ubiquitous fondness for the solidity (or viscosity) of the human body. This is vividly evident in the quotations given above. More pointedly, in his anti-Puritan pamphlet, A Countercuffe given to Martin Junior (1589), Nashe combines his general somatic invective (if you want to throw words hard, throw the body along with them) with the particular state violence threatened against the Martinist pamphleteers.<sup>78</sup> Here, recalling the mock torture of a 'puppet-Martin', 'by launcing and worming him at *London* upon the common Stage', Nashe applies the modish term 'Anotamie' to the theatrical parody of all too familiar Elizabethan mutilations (A Countercuffe..., I, p.59). The element of public shame alone - already suggested by Corvino's threats in Volpone - is clearly important. Given the ultimate fate of certain 'Martinists', however, as well as the presumably intimidatory intention of Nashe's pamphlet, it appears that anatomy (or rather vivisection) is used principally as an extreme of physical terrorism (see Rhodes, p.38). Hence, in later years we find Webster's characters offering such threats as, 'I'll fetch that shall anatomize his sin' (Appius

and Virginia, V,ii, 79), and 'I will stamp him into a Cullice: Flea off his skin, to cover one of the An[a]tomies, this rogue [a Doctor] hath set I' th'cold yonder, in Barber-Chirurgeons hall' (The Duchess of Malfi, V, ii, 75-79). In the latter case, Ferdinand's announcement precedes a stage direction, 'Throws Dr. down and beats him'.<sup>79</sup> Fantastical as Ferdinand's warning might be, one notes how the faintly mythical 'flea' becomes more concrete and visual when the skin imaginatively re-clothes another body. As suggested, anatomy seems to have appeared in some ways more impressively physical and horrifying than the relatively familiar and longstanding spectacle of public execution. Not only was dissection, as a metaphor for extreme torment, a powerfully defamiliarising practice, but, as Jonathan Sawday notes, anatomy probably grew more prominent as executions became, statistically, less common.<sup>80</sup>

That Nashe finds anatomy appealing in his ever more difficult quest for arresting and spectacular instances of violence is clear, too, in the specific case in point. Jack's expected fate follows closely after the scarcely less bizarre, and very physical ordeal of the Roman 'widow', Heraclide, who is raped atop the dead body of her husband, a plague victim (The Unfortunate Traveller, II, p.293). Running herself through in an agony of shame, Heraclide falls again onto the corpse, which 'not having been aired his ful foure and twentie howres, start[ed] as out of a dreame...' (p.295). Succeeding this apparently insurmountable pinnacle of inventive horror, Jack's expected 'anatomy' shows a notable parallel to the twin threats of Corvino in Volpone. In both cases the calculating, frozen and 'cold-blooded' violence of "clinical" investigation is set against a raw, savage and fantastical assault, and arguably proves more terrible.

In Nashe's version, the proto-clinicism of anatomy itself is reinforced by the faintly absurd capacity of

Zacharie and Zadoch to view all the world as purely *useful*. The dehumanised Jack Wilton becomes not merely a commodity, but a *scientific* commodity, stripped, inspected and punctured by Zacharie as though already dead. Similarly, Zacharie shows a loosely clinical, pragmatic detachment from the sordidness of his chemical sources (bones, spiders, mucous) in his hardheaded pursuit of gain. Here the perennially unsavoury ingredients of occult potions appear to touch the nascent, unflinching rigour and objectivity of empirical science; and to do so, not insignificantly, in the conveniently liminal figure of the Jew. Timothy Reiss's assertion, that 'The indication within discourse of an unfamiliar discursive class may be thought of as a "potentiality", not as anything like "an entity in its own right"' appropriately draws together both the 'unfamiliar discursive class' of which anatomy is an early symptom and cause, and the marginal Jewish stereotype.<sup>91</sup> This latter is, like anatomy itself in its nascent stage, denied the status of autonomous (human) entity, acting rather as a psychic projection sheet for various confused marginal ideas and phenomena.

A second point in favour of the semi-realism of Wilton's narrowly avoided dissection has been noted by Jonathan Sawday, via an entry in Stowe's annals for 1587:

The 20 of February, a strange thing happened, a man hanged for felonie at S. Thomas Waterings, being begged by the Chirurgions of London, to have made him an Anatomy, after hee was dead to all mens thinking, cut downe, stripped of his apparell, laide naked in a chest, throwne into a carre, and so brought from the place of execution through the Borough of Southwarke over the bridge, and through the citie of London to the Chirurgions Hall nere unto cripplegate: the chest being there opend, and the weather extreeme cold hee was found

to be alive, and lived till the three and twentie of Februarie, and then died.<sup>82</sup>

As Sawday rightly suggests, 'Nashe's dream of dissection... may not have been a dream at all'.<sup>83</sup> It is worth recalling here the local specificity of Nashe's 'anatomizing of the skies inтраiles in Surgeons hall' (Pierce Penilesse, I, p.196, italics mine). Whether or not Nashe read Stowe is unknown, but he did look at Holinshed; and certainly it would have been surprising if one so conversant with all scraps of London news had overlooked this bizarre incident - especially in view of the three days' space for which the victim lingered.<sup>84</sup> Had Nashe indeed encountered the tale it must still have been vivid in his memory in the early nineties.

Jack Wilton's fantasy, then, is in many ways very real. That vivisection, not dissection, is actually intended (rather than being merely a fearful delusion on Jack's part), is supported by the fact that no form of execution is cited, and that it would have been equally *profitable* to have had Jack hung, and to then sell his body. At once fiercely attracted to, and repelled by this extremity, Nashe approaches as close as he dare to human vivisection *via* Wilton's fearful anticipations: 'if a flea on the arme had but bit me, I deemed the instrument had prickt me... Not a drop of sweate trickled down my breast and my sides, but I dreamt it was a smooth edgd razer tenderly slicing downe...' (The Unfortunate Traveller, II, p.305).

Wilton's peculiar 'doubling' of himself as at once dead and alive in his waking nightmares exemplifies Nashe's fondness for externalising the interior of the body. A recurrent and forceful stylistic knack is here pursued to its furthest logical extreme. One cannot help but note, moreover, how Heraclide, and the 'other half' of her 'deceased' husband provide between them an effectual fantasy of resurrection.

The living wife revives her supposedly dead spouse precisely by dying herself, in a bizarre entanglement of life and death, which is then further complicated by the 'life-giving' act of procreation just performed atop the 'corpse' (The Unfortunate Traveller, II, p.293). The earlier scene thus seems to anticipate Jack's imagined straddling of this world and the next.

### c. Epistemological Implications of Nashe's Style

Central as actual *contemporary* dissective practice is to Nashe's self-consciously topical imagery, it can be argued that his writing, and anatomy itself, are ultimately both only symptoms of the broader epistemological shift occurring throughout the sixteenth and seventeenth centuries. Signalled in empirical terms by Vesalius, this new tendency is registered, at almost exactly the same moment, by that great sixteenth-century champion of the disorderly human form, François Rabelais (c.1494-1553). Although there is no certain proof of the direct influence of Rabelais upon Nashe, even Ronald McKerrow, in insisting on the lack of final evidence, acknowledges a widespread critical belief to the contrary.<sup>85</sup> The resemblance had, moreover, struck Nashe's contemporary, Gabriel Harvey, who derided his rival's 'fantastical mode of Aretine and Rabelays'.<sup>86</sup> The possibility that Nashe echoes Rabelais without consciously attempting to do so, however, does not weaken the argument for Nashe's epistemological significance. An absolute proof that Nashe was wholly unaware of his predecessor's writings would only strengthen the case for seeing Rabelais and Nashe as subject to similar cultural influences - namely, the transformative moments of continental, and English, medicine and dissection respectively.

It is appropriate, therefore, that

*the power of making an object come up close, of drawing it into a zone of crude contact where one can finger it familiarly on all sides, turn it upside down, inside out, peer at it from above and below, break open its external shell, look into its center, doubt it, take it apart, dismember it, lay it bare and expose it, examine it freely and experiment with it*

which Bakhtin attributes to Rabelaisian laughter, provides an equally good description of early modern anatomy.<sup>87</sup> Equally, both Rabelais and Nashe are conspicuously anatomical in their exuberant disregard for rigid boundaries between the inner and outer, or the accepted and taboo. For Bakhtin the grotesque body is associated with 'eating, drinking, defecation... sweating, blowing of the nose, sneezing... copulation, pregnancy, [and] dismemberment' - acts all 'performed on the confines of the body and the outer world' (Rabelais and his World, p.317). Bakhtin's further remark, that 'In all these events the beginning and end of life are closely linked and interwoven' (ibid.), is strikingly applicable to Jack Wilton's experiences on the confines of inner and outer, and life and death.

In Bakhtin's analysis this rapid and unabashed movement from inner to outer has a particular social and political edge. Startling and bizarre acts of consumption or elimination exemplify a general Rabelaisian fondness for 'uncrowning': the subversion of hierarchy by rude juxtaposition of high and low.<sup>88</sup> Nashe frequently rivals Rabelais's preoccupation with such subversive bodily gestures.<sup>89</sup> In Christ's Teares over Jerusalem (1593) he succeeds in revivifying even so hypostatized a figure as Aristotle, deftly sweeping aside centuries of dead commentary

to expose 'the round compendiate bladder of thy brayne' (Christ's Teares over Jerusalem, II, p.118). The abstract *thought* of a thinker made monumentally abstract by the time of the Renaissance is rudely collapsed into his *physical brain*, and this itself further degraded into the concrete, dynamic and everyday functions of the 'bodily lower stratum' (see Rabelais and his World, pp.368-436). In The Unfortunate Traveller, the irreverence for civic grandeur demonstrated by Pantagruel's urinating upon the citizens of Paris (Gargantua and Pantagruel, p.74) is paralleled by Jack Wilton's first encounter with Rome. Newly arrived in the city, and conspicuously uninterested in the weighty bulk of classical history that surrounds him, Jack tells us 'I was at *Pontius Pilates* house and pist against it' (The Unfortunate Traveller, II, p.280). In this gesture we see, under cover of a loosely 'pious' act, a defiant uncrowning or levelling of a hypostatized Christian history - a literal irrigation of a tradition Nashe finds intolerably dry. In part resembling Pantagruel's defamiliarising experiment in swabbing, Wilton's act regenerates a frozen mythical site, rudely jolting it from its unreal position in Christian history to the present physical landscape of Rome. Appropriately, even the location of the house is empirical ('The name of the place I remember not, but it is as one goes to Saint Paules Church...' (ibid.)).

Earlier in his adventures, Jack uses the language of bodily waste when acting out mock-sympathy toward one of his numerous gulls: 'my selfe that am but a poore childish well-willer of yours, with the verie thought that a man of your desert... should be so injuriously abused in hugger mugger, have wepte all my urine upwarde' (The Unfortunate Traveller, II, p.213). Nashe's reduction of emotion to physiology undercuts human compassion in a manner remarkably characteristic of The Unfortunate Traveller as a whole. Later on, for example, Nashe presents the body as no more than a

complex machine for processing matter, when Jack reflects that, 'To die bleeding is all one as if a man should die pissing. Good drinke makes good blood, so that pisse is nothing but blood under age' (The Unfortunate Traveller, II, p.308). The coming horror of his 'vivisection' is covertly deflected by a rhetorical sleight of hand: bleeding is much the same as pissing; one can hardly die pissing, therefore... Tellingly, however, the impression that life is thereby smuggled into the throes of death reflects Nashe's ubiquitous Rabelaisian delight in the raw, brutally material world, rather than any especial piety.

Nashe closely echoes the ability of Rabelais, in Bakhtin's discussion, to play off the oppressive extremes of medieval religious culture against the life-affirming properties of the body. Hell and its demons are familiarly mocked and thereby robbed of menace. This 'gay netherworld' of Rabelais (Rabelais and his World, p.391, citing Rabelais, pp.265-66) shows us a hell undermined by 'deliberately crude associations' (The Dialogic Imagination, p.385). A heretic is consigned to 'thirty thousand cartloads of devils... right under Proserpina's close-stool' (Rabelais, p.349); while Panurge's most 'demonic' experience proves comfortingly mundane, the relevant chapter telling of a cannonade which causes him to 'shit... himself out of utter fear, and of... the large cat Rodilardus, which he took for a Devil' (Rabelais, p.594).<sup>90</sup> In the following example, Nashe parallels both the comically large number of devils, and the unsavoury corporeal associations: 'What do we talke of one divel? there is not a room... but is pestred and close packed with a campe royall of divels... no place (bee it no bigger than a pockhole in a mans face) but is close thronged with them' (The Terrors of the Night, I, p.349). Nashe's devils are perhaps associated with the sinful (syphilitic) body especially - 'Infinite millions of them will hang swarming about a worm-eaten nose', while

'The wrinckles in old witches visages, they eate out to entrench themselves in' (ibid.) - but the description ultimately undercuts the demonic by forcing it (quite literally) cheek by jowl with the comic and unsavoury elements of the all-too-human. Typically grotesque, the images work by over-specifying ('pock-hole', 'wrinckles'), so that the undeniable vividness (like the force of the active 'eate out') is opposed by the ultimately non-perceptual quality of 'Infinite millions' around one nose.<sup>91</sup>

The Nashean, like the Rabelaisian body, is 'a body in the act of becoming... never finished, never completed' (Rabelais and His World, p.317). While it accomplishes this mutability and re-creation via certain typically Rabelaisian activities (eating, drinking, sweating, excretion and sex), what Nashe significantly adds is a whole range of images either dependent on, or liable to association with, Vesalian and post-Lumleian dissection. His desire to 'let my braines melt all to incke' (Christ's Teares..., II, p.15) might stand as both example and motto. Jack Wilton, in a moment of fear, confesses: 'Hee that had then ungartered me might have pluckt out my heart at my heeles' (The Unfortunate Traveller, II, p.267). The Jew, Zadoch, informed of his people's banishment from Rome, 'was readie to burst out of his skin and shoote his bowels like chaine-shot full at *Zacharies* face for bringing him such baleful tidings' (The Unfortunate Traveller, II, p.310). The satirist, impatient to write, 'must cast up certayne crude humours... that lay upon his stomacke' (Strange News..., I, p.295).<sup>92</sup> In Wilton's description of his lavish page's costume, the reference to 'my French dublet gelte in the bellie as though (like a pig readie to be spitted) all my guts had bin pluckt out' (The Unfortunate Traveller, II, p.227) gives an especially neat inversion of the inner and outer.<sup>93</sup>

Nashe's direct and indirect fascination with anatomy, and his general affinity with the sharp eye of a Vesalius or Harvey may, admittedly, seem to be tempered by the extravagance of his grotesque imagery. Harvey himself, however, employs quite similar descriptive techniques to convey the precise texture and colour of a newly-vivid human interior, likening parts of the inner body to 'a drying pottage of meat', 'Quiloa earth', 'an eagle stone', and to 'fluid metals, quicksilver'.<sup>94</sup> Exotic or startling as Harvey's or Nashe's similes and metaphors may initially appear, their strangeness is generated by a desire to make the reader see. In both cases the authority of written texts is displaced by a descriptive inventiveness privileging immediate, exact, and independent observation. In this their attitude is notably opposed to 'the restricted world-view' of a monoglossic stance, that of 'a man trying to preserve one and the same immobile pose... whose movements are made not in order better to see, but quite the opposite...' (The Dialogic Imagination, p.385).

Nashe, like Harvey, slices fearlessly through surfaces, at once exposing, defamiliarising, and rearranging the ordinary but arguably unrepresentative external features of the body (social or actual). Striving to free themselves from encumbering dogmas, systems, and hypostatized authorities and hierarchies, both figures perceive the truth as a thing of this world and of the present, susceptible to one's own keen-eyed investigation. In the midst of a glowing eulogy of Aretino, Nashe rhapsodises that, 'nere a line of his but was able to make a man dronken with admiration', and epitomises his idol's virtues with the claim that, 'His sight pearst like lightning into the entrailles of all abuses'.<sup>95</sup> Aretino, the ideal satirist, cleaves through all obfuscation with nimble, exact and unstoppable perspicacity, just as Nashe asks 'give mee my text pen againe, for I have a little more

Text to launce' (Strange News..., I, p.331); or, with greater fervour, wishes God himself to 'Lende my wordes the forcible wings of the Lightnings, that they may peirce unawares into the marrow and reynes of my Readers' (Christ's Teares..., II, p.15).<sup>96</sup>

A broader parallel between literary and medical anatomy is also evident in Nashe's writings. Like the potentially impious and destabilising explorations of Vesalius and Harvey, Nashe's prose itself effects a subtle dislocation of a pre-existent and divinely-guaranteed natural order. His extravagant and startling analogies implicitly mock a mode of thought which sees in the analogical an ultimately fixed and god-given harmony between divine creation, and the apparent 'correspondences' within it.<sup>97</sup> The rapid succession of images, by the very deftness with which they 'flash cinematically past the eye', at once startling, persuasive, and ephemeral, imply that reality itself is no more than the images a poet chooses to embody it, and the eloquence to convey it (Rhodes, p.21). Like the perspectival techniques so deftly manipulated by anatomical illustrations, Nashe's writing again intrudes 'an individualistic and accidental factor into an extra- or super-subjective world'.<sup>98</sup>

This implication lies, more subtly, behind Nashe's recurrent self-consciousness and self-reflexivity. Breaking off a harangue at John Harvey, he asks the reader, '...have I not an indifferent pretty vayne in Spurgalling an Asse?' and proceeds to involve his audience in the dynamics and contingency of writing with the reflection, 'if you knew how extemporall it were at this instant, and with what hast it is writ, you would say so' (Pierce Penilesse, I, p.199). Elsewhere a similar thrusting forward of the act of writing itself ('Descriptions, stand by, here is to be expressed the fury of Lucifer'; 'Text, stand to the Barre. Peace there belowe'; 'Whilst I am thus talking...'; 'What is there more...

that you would be resolved of? say quickly, for my pen is on foote againe') affords an almost Modernist confounding of representation and artistic technique.<sup>99</sup>

As Ann R. Jones observes, 'Nashe never commits himself to a central literary mode; he is more interested in succeeding at each speech in turn than in subordinating it to an overarching structure' (Ann R. Jones, p.64). Styles flow over one another without distinction or hierarchy, indirectly challenging the density and depth of the divine Word. Nashe's words, like those of Cervantes, 'wander off on their own, without content, without resemblance to fill their emptiness...' (Foucault, p.47). With this priority of superficialities, Nashe combines a necessary emphasis on speed and motion for their own sake: one must keep moving *forward* to disguise the fact that one can no longer move *within*.<sup>100</sup> So Nashe's efficient, depthless, adroitly functional prose looks ahead to the mechanistic human body, in which internal layers have only physical, not spiritual depth, and whose chief characteristic - as with Cartesian 'auto-mata' - is motion *for its own sake*.

Like Descartes, Nashe severely undermines traditional conceptions of the human soul. Of the few explicit references he does make to it, two in particular reflect the newly destabilised relations between spirit and matter. In Christ's Teares Over Jerusalem, the soul appears, appropriately, in a lengthy catalogue of *bodily* sufferings, enumerated by no less than Christ himself: 'My heart ranne full-butte against my breast to have broken it open, and my soule flutterd and beate with her ayrie-winges on every side for passage' (Christ's Teares Over Jerusalem, II, p.37). This lies amid references to 'eye-balls [wasted] well-neere to pinnes-heads with weeping', in the same way as - Nashe cannot resist adding - 'a barber wasteth his ball in the water', and to

'leane withered hands... shivered and splintered in their wide cases of skinne' (Christ's Teares Over Jerusalem, II, p.36, p.37). These scraps of body all belong to a Christ dominated by mortal and somatic qualities, and whose soul, associated with the heart, appears dangerously corporeal. The fluttering and beating, and 'ayrie-wings' could as easily evoke the pulse, and the *spiritus* of the arteries, as a kind of dove-like soul (recalling the Holy Ghost).

The paradoxically materialistic soul of Christ shows, moreover, unexpected parallels with that of a far more mundane Nashean creation. Deliriously anticipating his imminent vivisection, and having 'cald to minde the assertion of some philosophers, who said the soul was nothing but blood' Jack Wilton further speculates, 'what a thing were this, if I should let my soule fall and break his necke into a bason. I had but a pimple rose with heate in that part of the veyne where they use to pricke, and I fearfully misdeemed it was my soule searching for passage' (The Unfortunate Traveller, II, p.308). Even the soul of Christ's Teares, in this light, appears prone to a medical reductionism, no more than a form of air localised *in the blood* and 'searching for passage'. The 'assertion of some philosophers' would fit Fernel or Servetus.<sup>101</sup> Indeed, owing to Nashe's readiness to hit the exact descriptive nerve (the soul is not just pulsing blood, but is *that* 'pimple'), Wilton's soul is assuredly more perceptual, if not more material, than that of Servetus.

The flippancy of the episode in question cannot detract from its more general significance. As seen, indeed, Jack's solution to his fears is to collapse the soul still further into the body, and make blood a variant of urine (The Unfortunate Traveller, II, p.308). The parallel with Servetus is intriguingly strengthened here by the implicitly Stoic character of Jack's argument. Nashe's irreverent and demystifying continuum of bodily fluids strikingly echoes the

way that the *pneuma* of the soul is essentially different only in degree, rather than kind, from that of the body.<sup>102</sup> In the appropriately *avant-garde* hands of Nashe, then, the ever-present but typically less explicit dilemma of Christian pneumatology is expressed with forceful clarity. The potentially rarefied, spiritualised blood implied by Melanchthon, or in Donne's 'The Ecstasy' (see Chapter 3.1, Chapter 4.3 respectively) is capable, crucially, of transmuting downward as well as upward. For Nashe it instinctively suggests the bladder rather than the *rete mirabile*.

Perhaps because of his very facetiousness, Nashe exposes what even Donne, in unguarded moments, does not.<sup>103</sup> Superficially comic as it may be, there is nothing more emblematic of the Nashean soul than its imagined fate here: thought of not as evaporating or flowing out, but as ready to 'breake his neck'. As for Descartes a few years hence, the limits of the body condition understanding of the soul: while Nashe would prefer to tell us that the body dies with loss of soul, he in fact shows us a *soul* perishing from the rupture of its body. His ability to conjure so vividly the Cartesianism of the early- to mid-seventeenth century aptly reflects the prescience of his writings for which I have argued in preceding pages.

### 3. Robert Burton's Anatomy in Relation to Contemporary 'Anatomies' and 'Analyses'

One might at first glance say that The Anatomy of Melancholy begins as it means to go on. Having cited authorities as diverse as 'Zoroastes', Plato, and Pliny in support of Man's greatness, Burton proceeds to lament humanity's original fall, and the various miseries and afflictions proceeding from it (Anatomy, I, p.121, pp.121-28). Burton's discourse is hierarchical, textual, and centripetal. He is unable to say anything unless a suitable authority has said it first, and unable to comprehend the entire range of human sufferings save as, ultimately, all pointing to the single focal point of an omnipotent (and displeased) God. Like Donne in the Devotions, Burton sees 'Bodily sickness' as being 'for his soules health' (Anatomy, I, p.124).<sup>104</sup> Burton's Anatomy therefore corresponds strongly to Foucault's characterisations of pre-taxonomic knowledge. Phenomena are 'drawn together' instead of being rigorously 'discriminated', and the criterion for truth, failing divine revelation, is the word of a suitably respected (and usually dead) learned authority.<sup>105</sup>

Anthony Grafton has observed that 'where Medieval Humanists accumulated, Renaissance ones discriminated'.<sup>106</sup> Burton, despite his Renaissance situation, appears initially to prefer accumulation to discrimination. His attitude to knowledge is one seemingly oblivious of 'the great tripartition... into *Observation, Document, and Fable*' (Foucault, p.129). I will argue, however, that the seeds of taxonomy are also clearly visible in the Anatomy. On close inspection, Burton's book displays far more active use of medical anatomy than critics have typically recognised. Both the Anatomy's principles of division, and the physical

appearance of its prefatory synopses betray the rigorously discriminating character of the *physical* anatomy to which the literary variety is ultimately indebted; and suggest a respect - conscious or otherwise - for the organising and dividing power of Vesalian dissection. I will deal in this section with the two differing perspectives identified by Grafton in what he takes to be their historical sequence, subdividing the latter to acknowledge, respectively, Burton's more direct indebtedness to medical dissection, and the less obvious link between anatomy, and the book's analytical and spatial organising tables.

#### a. Burton as Accumulator

Opening the Anatomy at almost any page one can acquire an intriguing and highly improbable piece of information. Witches, the jealousy of beasts, Chiromancy, Physiognomy, and 'a country fellow... [who] had four knives in his belly' vie for one's attention with 'that great Bird Rucke that can carry a man and horse, or Elephant', and the 'young maid' who, as recently as 1571, vomited 'a live eel... balls of hair, pieces of wood, pigeon's dung, parchment, goose dung, coals... and stones, of which some had inscriptions').<sup>107</sup> Burton habitually credits reports of which he can almost certainly have had no personal experience. He states unequivocally, for example, that witches 'can cause tempests... which is familiarly practised in *Norway, Island*'. Tracing back his revealing, 'as I have proved' (Anatomy, I, p.197), one finds that the 'proof' consists of the various authorities cited on the previous two pages; while elsewhere he expressly states that, 'diverse diseases of the body and minde proceed from [stellar] influences, as I have already proved out of *Ptolomy, Pontanus, Lemnius, Cardan, and others*' (I, p.396).<sup>108</sup>

Certainty, for Burton, appears to be a purely intra-textual matter. His sense of the word 'proof' hinges on an implicit assumption that written authorities are a no less sufficient demonstration than personally verified phenomena. By these standards (which, for all their non-empirical character, may have seemed quite reasonable to his readers) Burton has indeed 'proved' his claims adequately.

Often, indeed, Burton does not trouble himself to state an opinion at all, but simply weaves a vast fabric of quotation and allusion, into which any trace of empirical certainty melts, immediately, upon contact.<sup>109</sup> When he begins yet one more tall tale with 'Abraham Hoffmannus relates out of *Plato*, how that *Empedocles* the Philosopher was present at the cutting up of one that died for love' (*Anatomy*, III, p.159), one feels that the barest gesture toward scepticism might be made, especially given the allegation that the victim's 'heart was combust, his liver smoakie' and so forth (*ibid.*). Burton simply concludes, however, with the droll *quod erat demonstrandum*: 'So doth love dry up his radical moisture' (*ibid.*) - this itself being yet another quotation.

At moments such as these Burton seems to imagine himself as a kind of neutral, scholarly camera, roving documentary-style over the literary landscape, and implying, as he does so, that he has faithfully transmitted what he saw. This impression, of the textual standing in for the actual, reflects the way that Burton, without actively deriding or ignoring the empirical, is never prepared to privilege it over the domain of the 'written' world. It so happens that the written world is the one which is most accessible to him, and he therefore has frequent recourse to it, without worrying that its truths are less verifiable than those gained by empirical means. To put it another way, it 'was not that [he] preferred the authority of men to the precision of an unprejudiced eye, but that nature, in itself, [was] an

unbroken tissue of words and signs...'. Knowledge therefore 'consisted in relating one form of language to another form of language' (Foucault, pp.39-40). Interestingly, though denied an actual camera, Burton appears to find an early modern substitute in the 'long-winged Hawke' which 'for his pleasure fetcheth many a circuit in the air, still soaring higher and higher' (Anatomy, II, p.33). Seeming momentarily to subject the text to the authority of the empirical ('I will first see whether that relation of the Frier of Oxford be true...' (ibid.)) Burton shows himself, on second glance, to be as hemmed in by book-learning here as elsewhere. The undeniable sense of an exhilarated freedom and spaciousness in fact reflects not an escape from the library, but a further plunge into it. The 'ample fields of Ayre' wherein Burton 'may freely expatiate and exercise my selfe' (ibid.) are *textual* spaces: on this one page alone Burton encounters not kites or eagles, but another twelve of his fellow writers.

As the faintly whimsical tone of the opening to Burton's 'Digression', and the emphasis on 'pleasure' imply, the author seems to *play* with truth and knowledge in a way which suggests an assurance, on his part, of a final, certain, God-given knowledge. This sense of an ultimate 'primary text' (Foucault, p.129) must already be a valid inference, given the lack of any other form of arbitration in Burton's defiantly non-concrete world. The suspicion is indirectly confirmed by a further clue. Across its various editions, 'the form of the Anatomy' according to Ruth A. Fox, 'never changed... in a large sense the book of 1651 is the same as the book of 1621, for it grew within the structure of anatomy which Burton describes in the title and in the... analytic tables of the first edition'.<sup>113</sup> The book is, then, 'organic', in that it grows internally, but remains, in its overall structure (the envelopes of organs, conduits of fluid, and

framework of bone) essentially unaltered. What this points to, in epistemological terms, is a 'sleight of hand' typical of literary anatomists as a whole (and already seen to some extent in the case of Nashe's Anatomie of Absurditie (above, 3.2b)). The rhetorical effect of the genre derives from an implicit claim that the facts or arguments assembled in such works are a kind of 'body of knowledge'. Like a body (or the geographical landmasses implicit in various literary 'maps'), they have definite limits, and can, therefore, be subject to the same totalising investigation as a human corpse. Arbitrary as these limits may seem to us, they are tacitly accepted as epistemologically significant. The pretensions to 'analysis' of literary dissectors are therefore not merely a question of *particular* rigour and comprehensiveness, but rely at a more general level on the assumption that 'truth' is ultimately stable and pre-existent, rather than contingent and subjectively created.

Given this epistemologically conservative use of the body, it is perhaps not surprising that, in the opinion of J.B. Bamborough, Burton 'seems not much interested' in the body *per se*.<sup>111</sup> Indeed, one of only three brief references to Vesalius is concerned with the (almost certainly apocryphal) tale of how this great innovator 'was wont to cut men up alive' (Anatomy, I, p.142); while Burton's citation of a post-mortem investigation involves the no less mythical case of 'one that died for love' (Anatomy, III, p.159). I want to argue, however, that Burton's title necessarily indicates a quite active recognition of the prominence of anatomy - albeit one not simply reducible to Burton's own personal 'interest'.

## b. Burton the Taxonomist

### i. Medical and Literary Anatomy

How, then, did the Anatomy relate to its surgical namesake? as I will attempt to show, the still novel status of 'anatomy' as a literary genre makes this question a subtle and complex one. Before dealing with the issue of the genre as a whole, it is worth stressing that Burton was arguably not as unfamiliar with surgical anatomy as Bamborough's remarks suggest. The 'Digression of Anatomy' (Anatomy, I, pp.139-47) is thorough, and - at least by the standards of other literary anatomies - well-detailed. Besides referring the interested reader to '*Galen, Bauhinus, Plater, Vesalius, Fallopius, Laurentius, Remelins*' Burton cites works 'in our mother tongue... as that translation of *Columbus* [Banister's Historie of Man (London, 1578)], and Microcosmographia, in 13 bookes' (Anatomy, I, p.140). The precise reference to the number of books in Helkiah Crooke's work suggests that Burton may well have seen the Microcosmographia. Certainly as committed a bibliophile as Burton must be a likely candidate for ownership of so curious and novel a publication; and his reference to '*Laurentius cap. 20 lib. 1*' (Anatomy, I, p.142) strongly suggests that he possessed, or had access to, a copy of Laurentius' popular Historia Anatomica (Paris, 1595).<sup>112</sup> Burton is seemingly aware, moreover, that the *rete mirabile* is by now a doubtful candidate for the role of body/soul mediator. He prefers, instead, 'certaine ventricles [of the brain], which are the receptacles of the Spirits' (Anatomy, I, p.146). In this he is as enlightened as any recent or contemporary anatomist (the opinion corresponding, again, with that of Laurentius as translated by Crooke).<sup>113</sup> Bamborough himself makes a convincing case for Burton's having known Robert Fludd, 'his contemporary at Christ

Church' (Anatomy, I, xx-xxi) - a figure who, just around the time of the Anatomy's first publication, appears to have been actively involved in dissection.<sup>114</sup>

Nor is Burton's work wholly removed from its visceral roots if one considers the broader implications of the anatomy genre up to and just after 1621. In the first decades after the literary anatomy arose so concretely from actual dissective practice, it was clearly far more 'embodied' than later, merely figurative rhetorical usages. As argued, the still inextricable nature of the two (literary and medical) referents had been clearly integral to Nashe's wordplay on those writers who compressed their material into 'a hungry *Analysis*' in 1590.<sup>115</sup> Both the growing prominence of medical dissection in London, particularly after 1616, and evidence within the new literary genre, suggest that this dualistic sense continued into the 1620s. William Cowper's The Anatomie of a Christian (London, 1611) not only promises to show 'what manner of man a true Christian is, in all his conversation, both inward, and outward', but, in the second edition of 1613, prefaces its text with a drawing of a naked (but live) man whose body is appropriately 'anatomised' by the imposition of blocks of text upon it, detailing various correspondences between parts of the body and parts of character.<sup>116</sup> In 1615 Joseph Andrews makes the derivation of his The Anatomye of Baseness unequivocally clear by adding 'or the four quarters of a knave' to his title. In 1623, Immanuel Bourne's sermon The Anatomie of Conscience asserts a visceral dimension simply by the occasion of its delivery - having been given at the Lenten assizes whose subsequent executions came increasingly to be associated with the supply of anatomical specimens gained from them.

Perhaps most interestingly, the case of Thomas Robinson cited in Chapter 1.2 bears re-emphasising here. The gloss which Robinson gives to his title The Anatomy of the English

Nunnery at Lisbon in Portugal (1622) shows how ambiguously visceral associations might relate, in the 1620s, to anatomy as a rhetorical device. The author warns that those who 'expect some Chyrurgicall mysteries, or profound Lecture upon a dissected bodie' will be disappointed (sig.A4r).

Revealingly, however, he then insists (referring to himself in the third person) that 'what hee promiseth by the Title, hee hath performed in the Treatise, and hath truly anatomized this handmayd of the Whore of Babylon; laying open her principall veines and sinewes in such sort, that hee is bold to challenge the proudest Doctor of her [the nunnery's] acquaintance to traduce his worke...' (sig.A4v). The peculiarly hybrid nature of rhetorical anatomy is neatly revealed in the juxtaposition of Robinson's deliberate distancing of his work from surgery, and his claim to have 'truly anatomized' his opponent, with unflinching (and subtly violent) dissective rigour. The accuracy and potential aggression of anatomy have been retained even while medical and surgical qualifications are disowned.

Burton's hypothetical *intentions* in employing the title 'Anatomy' could not, then, have straightforwardly limited the way in which his work was received. Even if his own apprehension of the genre were a relatively 'disembodied' one, many readers may have found it impossible not to have been aware of visceral connotations. As I will seek to demonstrate, however, it appears that the presence of the anatomised body was in fact too strong to require much explicit evocation. Such a hypothesis helps to explain Bamborough's puzzlement, when claiming that, 'Curiously the advances in science of which [Burton] shows little knowledge are in anatomy itself' (Anatomy, xxi) The word 'curiously' evidently implies that the title of Burton's book requires or suggests an especial awareness of medical anatomy on the

author's part, and thus appears to privilege medical over literary anatomy as a means of understanding Burton's work.

Bamborough does rightly note that literary anatomies 'implied an attempt to get to the bottom of things and reveal everything fully and methodically' (xxv), and links this to the explicitly anatomical advertisement of Burton's title page, which 'promises... that Melancholy will be "*Philosophically, Medicinally, Historically, opened & cut up*"' (xxv).<sup>117</sup> Despite this, the impression that Bamborough does not recognise the full extent of anatomy's cultural diffusion, or the importance of anatomy in more mediated, generic and rhetorical forms, upon Burton, is confirmed by his reference to "'Anatomies'" as 'something of a vogue in the late sixteenth century' (xxv). This statement implies only the more famous literary anatomies of Lyly (1578), Stubbes (1583), Greene (1584), and Nashe (1589), and is certainly misleading in purely statistical terms, given that thirteen anatomies were published in England prior to 1600, and twenty-seven between 1600 and the first edition of Burton's *Anatomy* in 1621.<sup>118</sup> Burton himself explains his title, in his opening pages, as a product of this generic context: 'For my part I have honourable Presidents for this which I have done: I will cite one for all, *Anthony Zara Pap. Episc.* his *Anatomie of Wit*, in foure Sections, Members, Subsections, etc.' (I, p.6).<sup>119</sup> It was in relation to both medical anatomy as a cultural phenomenon, and to the 38 literary anatomies published between 1576 and 1620 that Burton's book would have been recognised on its first appearance in 1621.

How does Burton's work, then, manifest the characteristics of literary anatomy? Probably the most obvious feature, besides the tale of Democritus' animal dissections, and Burton's own pseudonym, is the book's use of bracketed, skeletal contents tables as an organising system

[see Fig. 1]. I will deal with the spatial appearance of the tables, and further implications of a 'spatialised' knowledge, at length in the following subsection. Here I want to concentrate not on the physical arrangement of the tables, but on the way that rigorous principles of division and subdivision are used to 'anatomize' the book into partitions, sections, members, and subsections. It is this totalising systematisation that has prompted Jonathan Sawday to take Burton's Anatomy as 'a... paradigmatic textual example' of the scientific revolution's 'delight in particularization'. Burton's anatomical ordering framework makes him 'absolutely of his age' in reflecting a general, and extra-medical Renaissance 'culture of dissection', whose 'forms of division [were] derived from the human body' (Sawday, pp.2-3).

What I would add to Sawday's discussion is that, within Burton's 'anatomical' organising system, the word 'section' (and by association the book's title also) appears to have enjoyed a peculiar contemporary resonance, since wholly occluded. Burton's punning somatic 'Members' is frank enough about its derivation, especially given the admission, when faced with the diverse forms of madness, that 'it would aske an expert Vesalius to anatomize every member' (Anatomy, I, p.106). Again, the larger unit of the 'partition' readily suggests, in verbal form, a synonym for 'anatomise'; and it may not be accidental that Burton's work has three partitions, just as the human body, for Renaissance anatomists, was broadly divided into the 'three venters' of the head, trunk, and belly.<sup>120</sup>

But it is in fact Burton's 'sections' and 'subsections' which, for all their modern familiarity, probably carried the most pronounced anatomical associations in 1621 and following years. As already argued in Chapter 1.2a, the very notion of 'sectioning' literary works was an appropriately post-Vesalian phenomenon, arising, in England, at almost exactly



the same moment as the literary anatomy itself. Throughout Burton's Anatomy, his Latinate readers in particular must have been constantly reminded of the surgical connotations of a word derived from the Latin 'sectio', meaning a cutting, cutting off, or cutting up. This dissective undercurrent was clearly visible to Burton himself, who, in the 1621 'Conclusion to the Reader', glosses his removal of the 'mask' of his Democritus persona thus: 'The last Section shall be mine, to cut the strings of *Democritus visor*, to unmaske and shew him as he is' (Anatomy, III, p.469). A few lines on, moreover, he recognises that, 'I have laid my selfe open (I know it) in this treatise' (ibid.). Here Burton not only uses the word 'Section' in an overtly active and quasi-surgical sense, but recalls both the anatomical 'cutting' and 'opening' of his title page. That the laying open of his self, in particular, is anatomical, is confirmed not only by the numerous contemporary instances in which this term is synonymised with 'anatomy' but by Burton's earlier, more explicit admission: 'our stile bewraies us... I have layd my selfe open (I know it) in this Treatise, *turned mine inside outward..*' (Anatomy, I, p.13, italics mine). All these references combine to show that, notwithstanding Burton's admitted borrowing of his title and its divisional system of partitions, sections, and members, his apprehension of literary anatomy was not a purely intra-textual matter.

Burton's title almost certainly had more than one meaning for its author and contemporary readers: the sense of a skeletal outline or delineation, with its implications of a totality stripped of obfuscatory, non-essential surface matter was clearly important. So, too, was the notion that an 'Anatomy' 'contained' knowledge in a newly spatialised way. Both these aspects will be discussed in the following subsection. Concentration on these two aspects, however, risks obscuring the peculiarly active nature of early

literary dissections. To appreciate this historically localised facet of rhetorical anatomy it is helpful to think of Burton's title as 'The Anatomising (or Anatomisation) of Melancholy'. This sense of the literary anatomist as *performing* an act of dissection runs counter to the subtle but definite way that literary anatomies now tend, centuries later, to conjure the half-conscious impression of a 'box' or 'bag' of 'melancholy', 'absurditie', and so on.

Various points in the Anatomy confirm the impression that Burton's title connoted action and process as much as spatial depth. Firstly, most of Burton's uses of the word 'anatomy' are indeed active, verbal ones: 'Having thus briefly Anatomised...'; 'I will anatomise, and treat of...'; 'my purpose and endeavour is, in the following Discourse to anatomize this humor of Melancholy'; 'I have anatomized mine own folly'; 'If hereafter anatomizing this surly humor'; 'In the precedent Subsections, I have anatomized those inferior Faculties of the Soule...'.<sup>121</sup> Secondly, these and similar references to cutting tend to occur at the beginning or end of textual divisions. Burton thereby implies that he is about to (or has) cut, define, and divide the body of his subject: to 'make a section'. It is perhaps tempting, in view of Burton's association of anatomy with definition and distinction, to simply conclude that Burtonian 'anatomy' is essentially an abstraction of the particularizing skill of medical dissectors. But precisely what Burton and other literary anatomists cannot do, at this point, is to abstract the modish device of anatomy from the body, and institutional practices, with which it is bound up. Thus, in explicit references, Burton models himself on the didactic and nominally useful roles of physicians and surgeons: 'my purpose and endeavour is, in the following Discourse, to anatomize this humor of Melancholy, through all his parts and species, as it is an habite of an ordinary disease... to shew

the causes, symptomes, and severall cures of it, that it may be the better avoided' (Anatomy, I, p.110). Again: 'The three precedent species... [of Melancholy] I will anatomize, and treat of... that every man that is in any measure affected with this malady, may knowe how to examine it in himselfe, and apply remedies unto it.' (Anatomy, I, pp.169-70).

Perhaps more revealing than such broad medical parallels, however, are Burton's precise and concrete glances towards anatomy or the anatomised body. When he states that, 'According to my proper method, having *opened* hitherto these secondary causes, which are inbred with us, I must now proceed to the outward and adventitious...' (Anatomy, I, p.211, italics mine) he shows that his rhetorical 'method' of anatomy is one he automatically associates with the depth and space of the body, as much as with the divisions inscribed on it. Similarly, Burton seems to think of particularization in instinctively visceral, active, and spatial terms on at least two other instances. Admitting, firstly, that 'It is a most difficult thing to be able to discern these causes' he asserts nonetheless that he will 'adventure to guess as neere as I can, and rippe them all up, from the first to the last, *Generall* and *particular* to every species' (Anatomy, I, pp.171-2). While here the dissective synonym 'rip' may only appear to imply cutting the skin, elsewhere the pronouncedly three dimensional element of anatomy is clear: 'As a Purly hunter, I have hitherto beaten about the circuit of the Forrest of this Microcosme [i.e., the body], and followed onely those outward adventitious causes; I will now break into the inner roomes, and rip up the antecedent immediate causes which are there to be found' (Anatomy, I, p.372).<sup>122</sup> In this light, when Burton again confesses the difficulty of 'distinguish[ing] these melancholy symptomes so intermixt with others', one is inclined, even in the absence of more explicit cues, to take especial note of the suggestion of

depth he then offers: 'yet I... will descend to particularize them according to their species' (Anatomy, I, p.408).

It is necessary, then, to recognise that literary and anatomical division are, for Burton, inextricable. To say that dissection makes Burton think of partition and definition is misleading unless one also emphasizes that he and his contemporary anatomists could rarely define and divide without vividly and precisely connoting medical anatomy. Hence we find Burton moving seamlessly from what, to us, appear distinctly actual and figurative senses of 'anatomy'. He shifts, for example, from what might be taken as a concrete 'Anatomy of the Body' (Anatomy, I, pp.139-46) to his 'Anatomy of the Soule' (I, pp.147-61) without any explicit acknowledgement. Still more significantly, at the close of 'Democritus to the Reader', when acknowledging the danger of lapsing into an excessively satirical style, he slides effortlessly from a rhetorical to a corporeal usage of anatomy, then back to a rhetorical one, in one sentence: 'If hereafter anatomizing this surly humor, my hand slip, as an unskilfull Prentise, I launce too deep, and cut through skin and all at unawares, make it smart or cut awry, pardon a rude hand, an unskilfull knife, tis a most difficult thing to keep an even tone...' (Anatomy, I, p.113). If, however, this instance might appear to more than symbolically bracket off and contain actual anatomy within the textual variety (thereby implicitly subordinating visceral associations) it must be remembered that the sheer novelty of medical dissection at this point made it a forceful and vivid reality. A further moment in which Burton brackets 'real' anatomy within textual parentheses bears out this point: 'so, saith *Chrysostome*, doth envy consume a man: to be a living Anatomy: a *Skeleton*, to be a *leane and pale carcasse*' (Anatomy, I, p.263). Here, rather than subduing or 'textualising' anatomy, Burton has in fact revived and

updated Chrysostome's image via a sense of 'Anatomy' elsewhere modishly employed by Dekker to indicate emaciation (above, 3.2a, p.144). A 'living Anatomy' is not, crucially, the same as a skeleton: whether intentionally or not, Burton has made something new of an older figuration. Viewed from this perspective the slippage between the pen and the knife ('If hereafter anatomizing... I launce too deep') becomes an equally startling and visual juxtaposition.

Burton's anatomical tactics cannot, then, escape the focal point of the human body from which they originate, and whose presence was indeed probably so strong as to require little in the way of explicit cues for readers of literary anatomies in and after the 1620s. I want now to consider other effects of the anatomised body by looking at how the Anatomy's synoptic tables relate to medical and rhetorical anatomy.

### **ii. Medical Anatomy and Tabular Analysis**

Burton's prefatory tables [see, again, Fig. 1] clearly evidence a strong respect for the taxonomic.<sup>123</sup> Ruth A. Fox goes so far as to describe the tables as the book's 'exoskeleton' (Fox, p.5) - a characterisation which neatly epitomises the Anatomy's otherwise paradoxical blend of change and sameness in the years after 1621. Besides reflecting, in his mixture of system and disorder, a general epistemological tension, Burton is by no means unique in his attempt to lay a taxonomic grid over a morass of textual 'facts'. I will attempt here to clarify the origins and implications of Burton's tables by relating them to the spatial and analytic aspects of sixteenth- and seventeenth-century anatomical rhetoric.

The skeletal *précis* of the Anatomy is, as Walter J. Ong has shown, representative of a widespread and profound shift in early modern thought. In his study of Peter Ramus, Ong traces the growing tendency to think of ideas and books in spatial terms - a habit which he explicitly connects both to "'bodies" of knowledge', and to 'intellectual "anatomies"' such as those of Lyly, Nashe and Burton.<sup>124</sup> The broad influence and significance of these 'spatial models for thought processes' (Ong, p.315), as described by Ong, shows remarkable similarities with the epistemological circumstances surrounding Vesalian dissection and representation. They are associated, in aesthetic terms, with Panofsky's analysis of the 'abstract space' of artistic perspective (Ong, p.314) and with the new taxonomic order so integral to Foucault's thesis: 'Out of the twin notions of content and analysis is bred the vast idea-, system-, and method-literature of the seventeenth and eighteenth centuries' (Ong, p.315).

As I have argued, both in the present section, and in Chapter 1.2a, however, Ong's brief remarks on 'statements... words... and concepts... as "containing" truth' (Ong, p.315) only hint at the extent to which anatomy appears to have promoted a spatialising and materialising of knowledge and argument. In making the link between 'books identified by their titles as "keys" to one thing or another', and the cognate sense of ideas as "'opened" in an analysis' (Ong, p.315), Ong rightly shows that this spatial aspect could exist without corporeal overtones. Nonetheless, while notions of the 'content' and 'depth' of literary works were present in England prior to the resurgence of anatomy in the 1570s and 80s, evidence strongly suggests that dissection was often used to re-express, and arguably to reinvent, the 'three dimensionality' of knowledge. Not only was the term 'opening' very frequently used, in late Tudor and early Stuart times, to refer to a

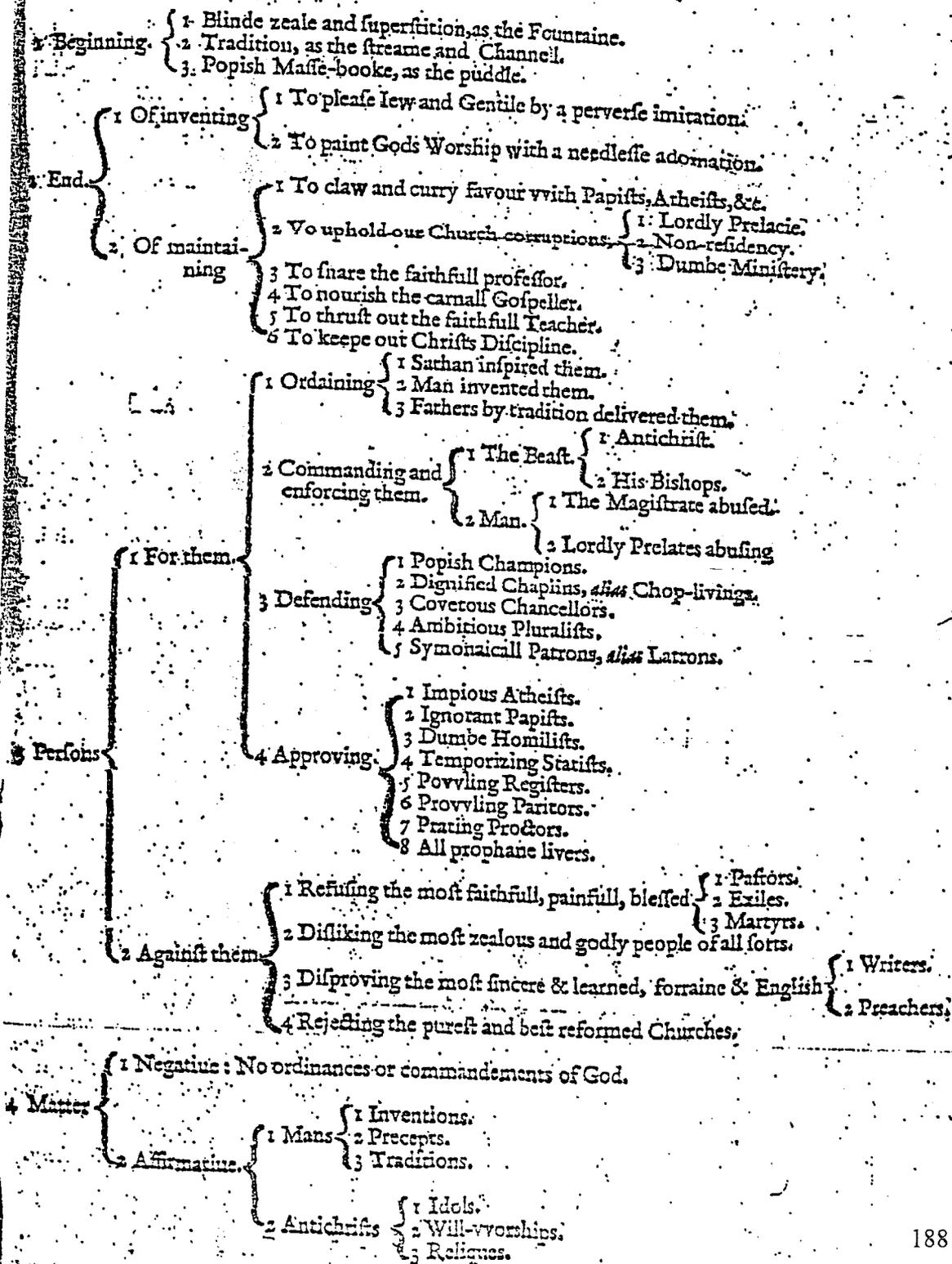
dissection or autopsy, but the association seems clear on the evidence of relevant literature alone.<sup>125</sup> The Puritan divine Paul Baynes (or his editors, as Baynes died in 1617) affords an especially strong example. There appeared, under Baynes' name, two titles which 'opened' different topics, as well as the pronouncedly corporeal, The diocesans tryall. Wherein all the sinnews of D. Downams Defence are brought unto three heads, and orderly dissolved ([Amsterdam], 1621).<sup>126</sup> His An entire commentary upon the whole epistle of the Apostle Paul to the Ephesians... (London, 1643), in which the text was 'learnedly and fruitfully opened, with a logicall analysis...' therefore appears to imply the interchangeability of 'anatomy' and 'analysis' peculiar to this period. Similarly, Thomas Mocket's A View of the Solemn League and Covenant... (London, 1644) promises that the Covenant will be 'analysed, opened, proved, and fully cleared from 24 objections...'; while Simpson Sidrach followed his Reformation's preservation: opened in a sermon preached at Westminster before the honourable House of Commons, at the solemne fast, July 26. 1643... (London, 1643) with The Anatomist Anatomis'd... (London, 1644).

Moreover, the pretensions to exhaustiveness and exactitude of 'analyses' must often have depended on public anatomy not only generally, but via the continuing and increasingly prestigious displays of public dissection performed, after 1615, by William Harvey. Burton's own tabular 'synopses' to parts I and II of the Anatomy would almost certainly have been associated with the rigorous corporeal partitioning with which 'analysis' was so closely bound up. As already argued, these 'skeletal' frames were the necessary principles of limiting organisation for an otherwise sprawling 'body' of work. In addition to this widely recognised overlap between the skeletons of the anatomy theatre and the printed page, Burton's third

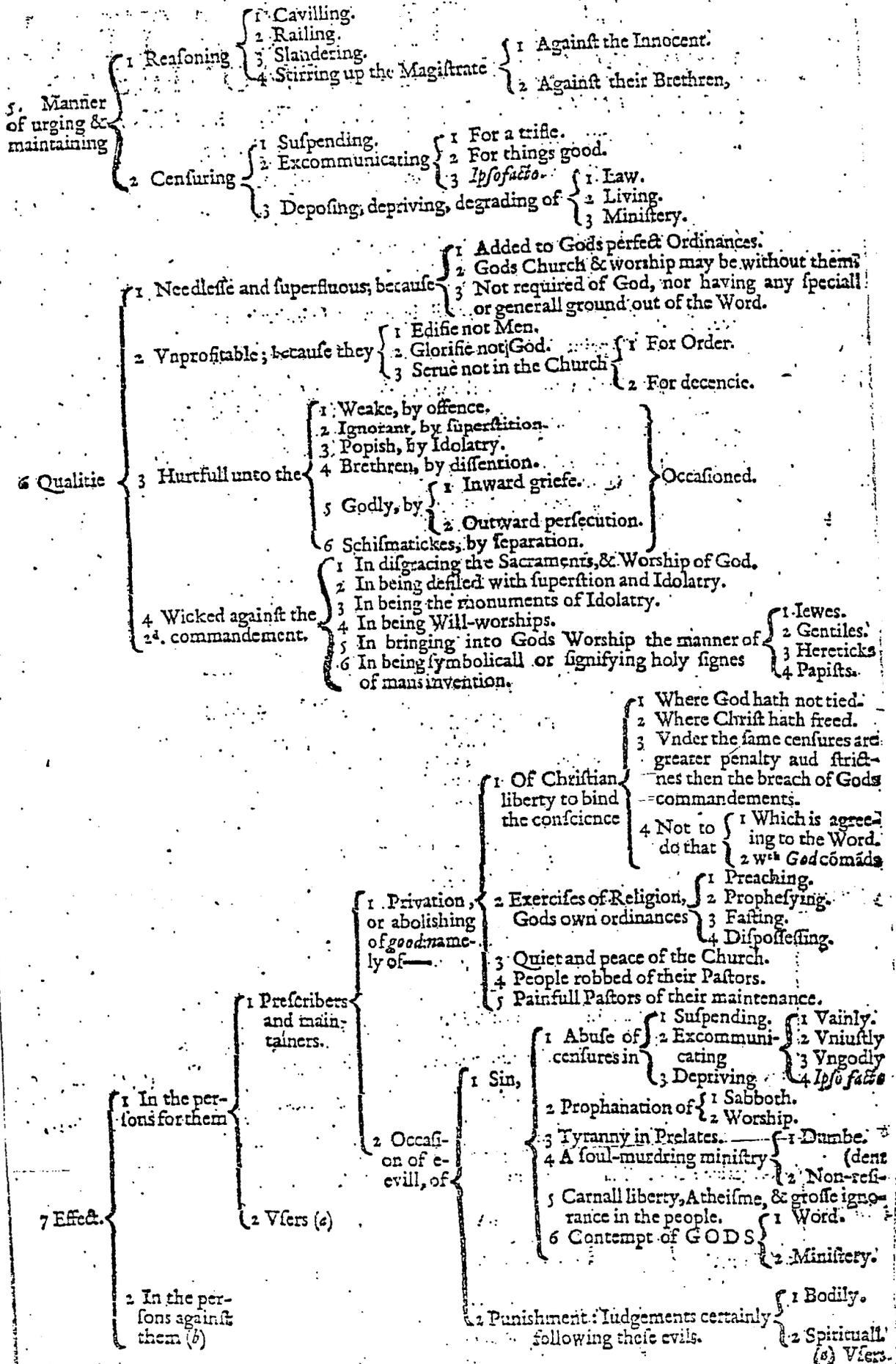
partition appears to gesture more precisely to the strengthening fashion for tabular, or spatial, analysis and anatomy. Here his tables are no longer a 'synopsis' but an 'Analysis' - a difference which implies that the more conspicuously dissective associations of the latter term have, during the book's composition, gained sufficiently in force and visibility to recommend it as a substitute.

Ong's chief illustration for the extremes of Ramus' tabulating mentality also merits further comment. The work in question is a 'spatially updated' edition of Ramus' Dialectic, Marcus Rutimeier's The Methodical Idea (Bern, 1617).<sup>127</sup> Preceding the Anatomy by barely four years, Rutimeier's prefatory tables might easily be mistaken, at first glance, for those of Burton. Rutimeier's book, which appears four years *after* the first, unofficial, edition of Johann Remmelin's emphatically spatialised 'opening' of the human body (Catoptrum Microcosmicum (Ulm, 1613), is seen by Ong as 'entirely representative... of the huge international Ramist tradition' (Ong, pp.317-318). Perhaps still *more* representative of the changes Ong investigates, however, is an English work published very shortly before Burton's Anatomy (and, in probability, while the latter work was already being composed), John Sprint's The Anatomy of the Controversed Ceremonies of the Church of England (n.p., 1618) [Figs. 2a-d].<sup>128</sup> All that survives of Sprint's Anatomy is three sides of prefatory tables, now bound at the front of A True, Modest, and Just Defence of the Petition for Reformation, Exhibited to the King's Most Excellent Majestie.<sup>129</sup> Superficially very similar to the 'exoskeleton' of Burton's book, Sprint's charts are, in fact, more characteristic of the spatial models described by Ong - at once more comprehensive and less cluttered - than those of its more famous successor. In contrast to the very clean and clear appearance of Sprint's tables, Burton, especially on

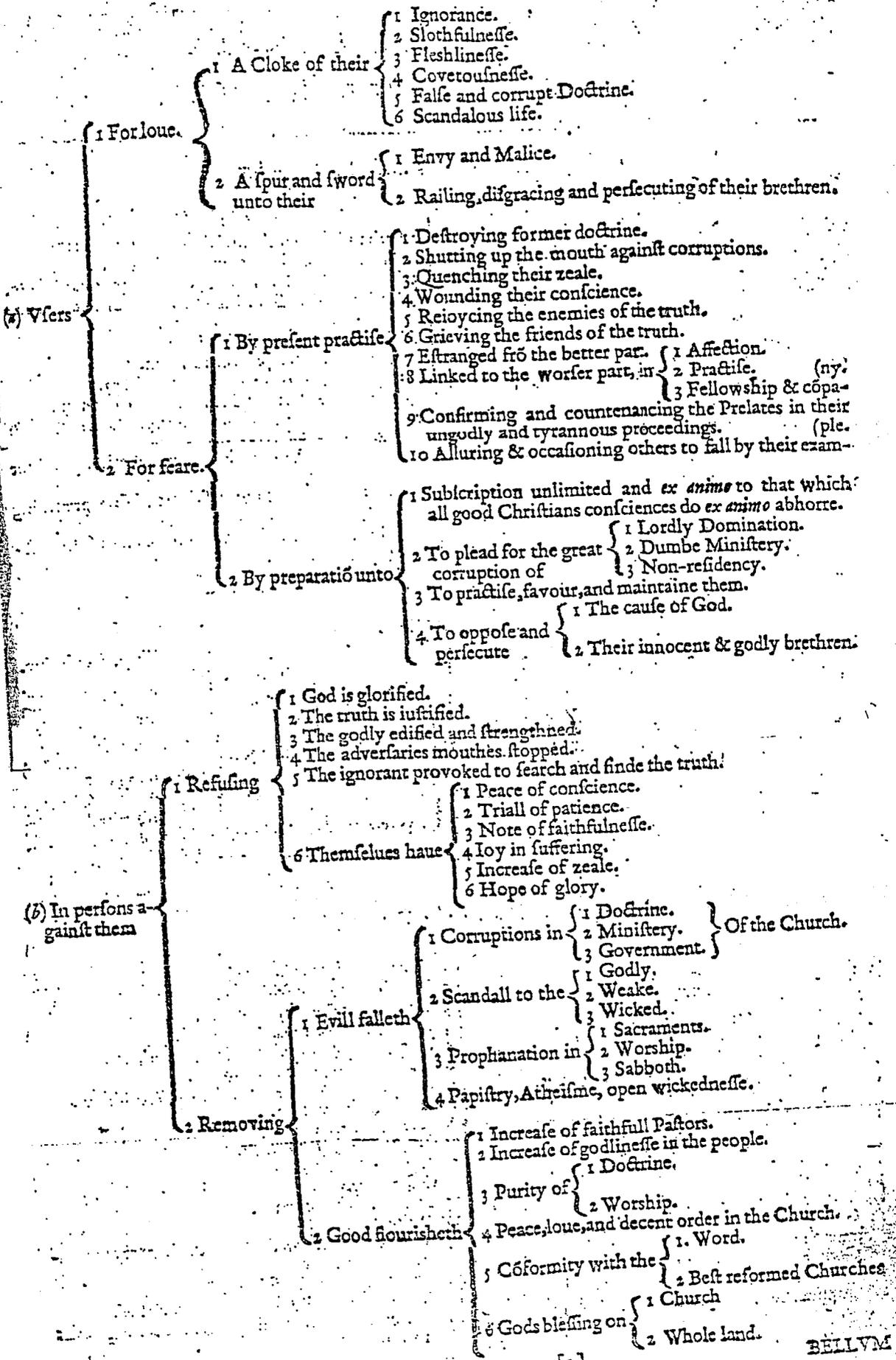
# THE ANATOMY OF THE CONTROVERSED CEREMONIES OF THE CHURCH OF ENGLAND, BEING *considered in their Nature and Circumstances.* By *John Sprint* Minister of *Thornby* in GLOUCESTERSHIRE.



The Anatomie of the Ceremonies.



The Anatomie of the Ceremonies.



# BELLVM CEREMONIALE.

## THE CEREMONIAL BATTLE.

Behold the Leaders and the Souldiers.

*The better part disclaimes them.*

- 1 God neuer planted, nor his spirit inspired them.
- 2 Christ hath freed us from them.
- 3 Holy Apostles neuer taught, nor practised them.
- 4 Christian Churches reformed haue abolished them.
- 5 Word of God condemnes them.
- 6 Purest Writers conclude against them,
- 7 Godly Martyres suffered for them.
- 8 The godly zealous Exiles vvithstood them,
- 9 The most Reuerend Bishops vvishd them removed, to further the Gospell.
- 10 Our foundest Doctors taught against them.
- 11 Our faithfull and vnreproued Pastors refuse them.
- 12 All sincere Professors are offended at them, and detest them.

*The worse sort retains them.*

- 1 Sathan inspired them, Man invented them.
- 2 Antichrist enthrals us vvith them.
- 3 Romish Apostates euer taught & practised them.
- 4 Antichristian Romish church deformed retains them.
- 5 Masse booke justifieth them.
- 6 Popish vvriters patronise them.
- 7 Vngodly Bishops persecute for them.
- 8 Carnall contentious Exiles stood for them.
- 9 The most tyrannous proud Prelates suppresseth the Gospell for them.
- 10 Our popish Rabbins & corrupt Statifs plead for them.
- 11 All scandalous Non-residents, Non-preaching Ministers use them.
- 12 All popish carnall & vvicked haters of God rejoyce in them.

### The Weapons.

- |   |                                  |   |             |
|---|----------------------------------|---|-------------|
| { | 1 Offending sword of the Spirit. | { | 1 Faith.    |
|   | 2 Defending shield of            |   | 2 Patience. |

- |   |                               |   |                                     |   |                                |
|---|-------------------------------|---|-------------------------------------|---|--------------------------------|
| { | 1 Offending                   | { | 1 Sword 2 edges                     | { | 1 Railing, slandering, (ning.) |
|   |                               |   | 2 Cannon                            |   | 2 persecuting, imprisoning.    |
| { | 2 Defending by the buckler of | { | 1 Fathers traditions, of authority— | { | 1 Excommunicating.             |
|   |                               |   |                                     |   | 2 Suspending.                  |
|   |                               |   |                                     |   | 3 depriving of Living          |
|   |                               |   |                                     |   | Lavv.                          |
|   |                               |   |                                     |   | 4 degrading or deposing        |
|   |                               |   |                                     |   | 2 Mens precepts.               |

### The Event of the Battell.

- 1 Humiliation in Gods fight.
- 2 Exercise of Christian patience.
- 3 Tryall of faithfullnesse.
- 4 Vnity of faith.
- 5 Increase of loue among themselues.
- 6 Godly zeale inflamed.
- 7 Conformity vvith Christ and the godly.
- 8 Peace of conscience.
- 9 Ioy in suffering.
- 10 Furtherance of the Gospell.
- 11 Christian liberty maintained.
- 12 Offences removed.
- 13 The elect conuerted.
- 14 The truth cleared.
- 15 Gods blessing on their life & labors that vvithstand them.
- 16 Gods holy name glorified.
- 17 Pleasing the godly, greiuing the vvicked.
- 18 Confidence and gladnesse at the iudgement day.

- 1 Increase of pride before God and Man.
- 2 Practise of Antichristian crueltie.
- 3 Discovery of unfaithfullnesse.
- 4 Endlesse dissentions.
- 5 Increase of contentions among brethren.
- 6 Superstitious zeale occasioned.
- 7 Conformity vvith Antichrist and Worldlings.
- 8 Conscience accusing.
- 9 Terror in persecuting.
- 10 Hindrance of the Gospell.
- 11 Bondage enforced.
- 12 Offences given.
- 13 The vvicked hardened.
- 14 Papistry cloked.
- 15 Gods iudgments on the hand of them that maintaine them.
- 16 Gods holy name blasphemed.
- 17 Griewing the godly, pleasing the vvicked.
- 18 Confusion and trembling before the iudgements seat of God.

the penultimate page of the first synopsis, seems unable to abstract sufficiently from his book's swamp of details. On the last page of his synopses, he writes almost complete sentences - 'Why they are so fearefull, sad, suspitious without a cause, why solitary, why melancholy men are witty, why they suppose they heare and see strange voices, visions, apparitions' (Anatomy, I, p.119) - where he might simply have stated, 'Diverse symptoms examined'. Taken alongside Burton's own admission (above, 3.3.b.i), that he in fact borrowed his title and principles of division from Anthony Zara, the relative lack of visual clarity in the Anatomy's skeletal outline suggests that the tables reflect current literary fashion rather than a pronouncedly 'taxonomic' or 'analytic' mentality on the part of their author.

Although there is no conclusive proof that Sprint influenced Burton (with neither Ong's nor my own argument requiring such a direct link) the possibility that Burton was acquainted in some way with the more obscure writer is fairly high. Sprint was still at Christ Church until at least 21 May 1599, the year in which Burton took up a studentship at the same institution (DNB; Anatomy, I, xiii). Sprint's presence at Oxford would, indeed, have been yet more forceful in following months, when, after preaching vociferously Puritan sermons at the university church, he was reprovved by John Howson, the vice chancellor, and finally imprisoned. In 1618 Sprint's prominence may have equalled the notoriety which he had enjoyed at the turn of the century. Beside his Anatomy, he published in this year a work called Cassander Anglicanus (London, 1618), in which he now argued for 'the necessitie of conformitie.. in Case of Deprivation' (ibid., subtitle), and which subsequently attracted Puritan attention, engaging him in written controversy throughout the year.

There is, moreover, one particular quality of Sprint's work which, if it had caught Burton's attention, would almost

certainly have impressed his memory. For it appears, in fact, that Sprint's charts are not the synopses of a *missing* anatomy, but are in fact the anatomy itself. This hypothesis is supported, firstly, by the physical appearance of the piece: two folio sheets printed on both sides, and folded into the accompanying 'Petition'. It seems unlikely, on the one hand, that a polemical work such as this would appear, at any length, in folio; and probable, on the other, that the format was chosen precisely for its high visibility, to maximise the impact of its spatialised design if posted up in a public place. The 'Bellum Ceremoniale' of the final verso is evidently by Sprint also - no other author is given, and the 'Weapons' section of the Battle closely mimics the bracketing arrangement of the Anatomy itself. If this last page, which has no lead-in word for that following, is Sprint's work, it does indeed seem that the four pages comprised an entire work in themselves. Ong's claim that, in Rutimeier's book, 'the spatial component... has been allowed to exert its maximal force' is partly based on Rutimeier's use of spatially associated names ('outline', 'table', 'analysis') for his charts. Insofar, however, as Ong's claim rests on the fact that these outlines 'make up the greater part of his edition' (Ong, p.316), it may be said that Sprint's anatomy is in fact a stronger candidate for the role allowed to Rutimeier.

Even if Sprint's piece were shown conclusively to be only the elaborate synopses of a missing book, the analytic force attributed would, of course, still be signalled clearly by the decision, in 1618, to set them alone, as a sufficiently persuasive argument in themselves. In either case, the synopses enjoy a kind of *quod erat demonstrandum* status, as if simply by their imputed 'laying bare' and analysis, they present the need for reform as a straightforward logical necessity. One might, indeed, detect

a subtle allusion toward the growing empirical power of anatomy proper - where, even as early as 1540, Vesalius had insisted upon the physical body as ultimate arbiter of (previously theoretical) medical disputes: 'I do not say so, but *I show you here in these bodies the vein without pair...*'.<sup>130</sup> Far more than Burton's, then, Sprint's Anatomy is sophisticatedly deployed as a kind of skeleton; it is not the whole 'body', but *is* its entire framework, and is arguably clearer *because of* the lack of any organic matter which might obscure its essential lineaments. Without, again, insisting on direct influence, it is possible to see Sprint's tables as an especially prominent example of an 'analytical' presentation whose growing popularity and sophistication may have prompted Burton's re-styling of his contents table for the third partition.

In the light of Sprint's Anatomy, Burton's work appears as a neat variation of the tension integral to literary exploitations of the body in the sixteenth and seventeenth centuries. Just as Donne and others so often welcome in the new spirit of taxonomy by rhetorically manipulating the Vesalian body for ostensibly religious ends, so Burton slots the analytic grid of his synopses between the reader and the otherwise conservative accumulation of textual authorities. While Burton's book is thus poised between two ostensibly different mentalities, Sprint's astutely glimpses the ultimate result of this implicit power struggle. Boldly dispatching with the obfuscatory and accidental matter of the body, its bare skeleton strikingly parallels the stark, functional anatomy drawings of the eighteenth century - the author's seeming prescience, indeed, aptly echoing the *avant-garde* productions of Eustachio and his artist, Giulio Musi (Chapter 1.3).

Burton's work is therefore only one example of a large and vigorous tradition of anatomical rhetoric which, as already argued, draws its coherence 'not from similarities among the works, but from... reference to the pre-existing institution of medical anatomy'.<sup>131</sup> Insofar as literary anatomies in general help to publicise a form of medical enquiry increasingly characterised by empirical rigour, Burton's writings may be seen as caught up in an epistemological tide which shows the powerful spell exerted by anatomy, as a spectacular advance guard of taxonomy proper. This spell is, significantly, capable of bewitching even the most reactionary thinkers. Moreover, Burton's synoptic tables, despite the implications of the above quotation, in fact *do* derive, by this stage, more from printed media than from actual anatomy. As the comparison with Sprint in particular demonstrates, this element of the Anatomy is (notwithstanding Burton's hypothetical reasons for employing it) *avant-garde*: as the most fully-developed taxonomic expression of dissection, such 'analytical' skeletons abstract anatomy's organising and referential aspects from the more contingent, sensuously overwhelming realities of the dissecting slab. On one hand, then, the particularizing zeal of dissection aptly recommends Burton's book to a taxonomic and protoscientific mentality in which, according to Bacon's approving quotation of Plato, "'...he is to be held as a god who knows well how to define and divide'" (Novum Organon, IV, p.164). Equally, medical anatomy proper can be seen, in the hands of a figure such as Descartes, to risk 'hollowing out' the older religious meaningfulness of the body.

On the other hand, the anatomically derived tendency to 'embody' ideas and knowledge also offered the early-seventeenth century a renewed sense of epistemological depth and substance which mitigated dissection's *avant-garde*

aspects. As argued, Burton does not appear to have been making a deliberately taxonomic move in employing spatialised contents tables, and his outline is itself not especially clear or rigorous. More generally, the notion of 'bodies of truth' opened and explored by 'anatomists' and 'analysts' suggests how the anatomised body was especially well-suited to effecting the transition between medical anatomy and taxonomy in general. Even Burton's apparent interest in the form, rather than the content, of anatomy may be said to share this conservatism. Although emphasis on anatomy's particularising skill leans potentially toward taxonomy, in fact the very form of literary anatomies, as Ong's and my own discussion show, often insisted on, or helped to promote, a three-dimensional 'content'. When this implicit depth was allied to the reassuringly definite boundaries which a 'body of knowledge' suggested, the most methodical 'anatomising' could be intellectually conservative in its meaningless illusion of order. The deceptively totalising claims of tabular anatomy or analysis in particular seem to fall all too clearly under the stricture of - once again - Francis Bacon:

...those who have handled and transmitted sciences... set them forth with such ambition and parade, and bring them into the view of the world so fashioned and masked, as if they were complete in all parts and finished. For if you look at the method of them and the divisions, they seem to embrace and comprise everything which can belong to the subject. And although these divisions are ill filled out and are but as empty cases, still to the common mind they present the form and plan of a perfect science.

(Novum Organon, IV, p.85.)

Especially given the length of Burton's Anatomy, it is instructive to note that the antidote proposed by Bacon is: 'aphorisms; that is, short and scattered sentences, not linked together by an artificial method..' (ibid.).

### Conclusion

This chapter has attempted to trace and clarify the effects of public dissection and anatomical imagery by examining significant literary instances in the lifetimes of Melanchthon, Servetus, Nashe, Donne, and Burton. The imaginative appeal of anatomy for both secular and religious writing is seen to begin almost simultaneously with De Fabrica (1543), in the writings of Servetus and Melanchthon. Later, during the first stages of England's similar anatomical revival, it betrays a particular epistemological stance in the hands of the journalistic and opportunistic Thomas Nashe. While Nashe is probably the most easily identifiable exploiter of anatomy within English literature at this period, the literary anatomy as a general phenomenon is clearly still gaining strength throughout the earlier seventeenth century. The ambivalent 'anatomical' stance of Robert Burton shows how the shadow of taxonomy proper already invades a world otherwise notable for its 'resemblance' thinking. Burton's immensely unwieldy 'body of knowledge' is, at first glance, a seemingly perfect echo of the claim that 'The only possible form of link between the elements of this knowledge is addition. Hence those immense columns of compilation, hence their monotony' (Foucault, p.30). This purely cumulative, apparently indiscriminating character is partially checked, however, by the analytic skeleton of the synopses. Burton therefore echoes, in his own way, both the

mixture of taxonomical rigour and analogical thinking found in Servetus, and the mingled piety and proto-scientific scrupulousness of Vesalian Natural Philosophy, as adopted by Melanchthon.

My two final chapters will now focus on the poetry and prose of John Donne. By examining the impact and progress of anatomy from Vesalius, through Donne's age, this chapter serves to show the particular context within which Donne was to use anatomical conceits and vocabulary. It aims also to position his writings at a point of especially fine equilibrium between the lingering attitude of perceptual wonder epitomised by Vesalius' De Fabrica, and the growing force of conceptual aggression associated with Bacon and Descartes.

## Chapter Four

### Anatomical and Corporeal Imagery in Donne's Secular Poetry

#### Introduction

This chapter looks at representations of the body in Donne's poems, and at how a new sense of the body, related to dissection, is directly and indirectly visible. A review of factual details is given, firstly, on Donne's awareness of medicine. Section two then examines ways in which the body - and the anatomised body especially - affords a more than purely metaphorical dramatisation of 'interiority' in both Donne's poetry and in a number of contemporary instances, imaginary and actual. Section three provides context for the arguments of section four by outlining Renaissance uses of the term 'spirit', and the particular interface between pneumatology and anatomy in Donne's England. 'The Funeral', The Progresse of the Soule, and especially 'The Ecstasy', are seen, in section four, to display a precarious relationship of the spiritual and corporeal, and one which must be understood as distinctively Vesalian. The chapter looks, finally, at Donne's Anniversaries as poems marked both implicitly and explicitly by the epistemological instability of early Jacobean England. The broad overview of epistemological transition thereby provided serves to introduce the detailed analysis of anatomy and religion in my final chapter.

### 1. Donne's Knowledge of and Exposure to Medicine.

From earliest youth Donne would have been habitually surrounded by medical preoccupations, owing to the activities of his step-father, John Syminges, an eminent physician and sometime President of the Royal College of Physicians. As a consequence, from age eleven Donne was residing in a house hard by St. Bartholomew's hospital.<sup>1</sup> It was in fact the surgeons of St. Bartholomew's who were responsible for the 1577 reissue of Thomas Vicary's Anatomy, and medical discussions must have been relatively common in the Syminges household - where in 1582, the papers founding the Lumleian Lectures were themselves signed (Carey, p.16).<sup>2</sup> While Donne was at this point only ten years old, it should be remembered that just two years later he was sufficiently advanced to matriculate at Oxford. As noted in Chapter 1.2b (above, pp.35-36), this early medical atmosphere would have been reinforced, in Donne's formative years and adult life, by his involvement in the legal circles which so often overlapped with medical ones.

The adult Donne, besides being quite regularly afflicted with illness, appears also to have been intrigued by his symptoms. A letter 'To Sir G.B.', stating that, '...I am at least half-blind, my windows are all as full of glasses of waters as any mountebank's stall' reveals a patient sufficiently preoccupied with his health and with medicine to try a great range of possible curatives.<sup>3</sup> Elsewhere Donne refers to '[m]y physicians' (Gosse, II, p.39, 'To Sir H[enry] G[oodyer]', 14 March [1614]). While it is known that Donne had more than one doctor during the malady recorded in the Devotions Upon Emergent Occasions ('*The Phisician desires to have others joined with him*'), the fact is more noteworthy in this (probably) earlier case than in that of his most serious

non-fatal illness.<sup>4</sup> He is sufficiently interested in his own physical state to remark elsewhere, 'I eat and digest well enough, and it is no strange thing that I do not sleep well, for, in my best health I am not much used to do so' (Gosse, II, p.271, 'To Mrs Cokain', [January 1631]). Circumstances such as these perhaps contributed persuasively to the more aphoristic view that

There is no health; Physicians say that wee,  
At best, enjoy but a neutralitie.<sup>5</sup>

The numerous crises and disasters of health which beset Donne's entire family, while far more a feature of everyday life than they would now be, seem to have been at least as bad as those suffered by his historical and social peers.<sup>6</sup> When he tells a correspondent, 'There is no person but myself well of my family' matters are especially dismal, but only by a few degrees.<sup>7</sup> In an early sermon he resignedly notes the predominance and ubiquity of disease: 'We can scarce expresse the number, scarce sound the names of the diseases of mans body: 6000 year hath scarce taught us what they are, how they affect us, and how they shall be cur'd in us' (Sermons, II, Lincolns Inn, n.d.).

The extent to which Donne had accustomed himself to the inevitability and suddenness of mortality is attested by the almost incidental observation, *á propos* of a comment on his own recovery, that '...I have scaped no better cheap, than I have paid death one of my children for my ransom'. Still more strikingly, he continues, 'Because I loved it well, I make account that I dignify the memory of it, by mentioning of it to you, else I should not be so homely'.<sup>8</sup> As well as being characteristic of the elaborate and self-effacing courtesy of Donne's letters, this statement no doubt tells us something about differences between family relations, circa 1614, and

the present. It tells us also, unsurprisingly, about the ability of religion to filter, positively or negatively, almost every aspect of early modern experience. However, given what is known of Donne and his personal misfortunes, it seems only reasonable to allow that these words reveal, too, something of an acquired emotional resilience in the face of physical calamities. Clearly he draws on his own experience when, toward the end of his life, he asks his congregation, 'Now, beloved, who hath seene a father, or a friend, or a neighbour, or a malefactor dye, and not beene affected with his dying words?'.<sup>9</sup>

Besides references to the illnesses of himself and his family, Donne often uses metaphors which show a mind preoccupied with, and well-versed in, contemporary medicine. With some of the self-effacement just noted, he laments how 'my fortune hath made me such as I am, rather a sickness and disease of the world than any part of it...' (Gosse, I, p.194, 'To Sir Henry Goodyer', [1608?]). He is aware that '...some poisons, and some medicines, hurt not, nor profit, except the creature in which they reside contribute their lively activity and vigour...' (Gosse, I, p.122, 'To Sir G. M[ore]'); that 'you would not go into a medicinall bath without some preparatives' (Sermons, VIII, p.174); and of the way in which '...hearbes, and roots, by dying lose not all,/But they, yea Ashes too, are medicinall' (Anatomy, ll.403-404).<sup>10</sup>

Numerous fragments of medical discourse are scattered throughout Donne's prose works. On one occasion a single sermon yields seventeen references to, or analogies with, medicine or sickness, and Donne generally demonstrates an impressive knowledge of structure, pathology, and diagnosis.<sup>11</sup> He recognises that 'Phisicke works' by drawing 'the peccant humor to it selfe, that when it is gathered together, the weight of it selfe may carry that humour away...' (Devotions, p.54); and explains how 'naturall... bodies have

*Cutem, et Cuticulam*' a 'little thin skin which covers al our body', and which 'may be broken without pain or danger, and may reunite it selfe, because it consists not of the chiefe and principiant parts'.<sup>12</sup> He is aware that 'the frame of our body hath 248 bones' (Essayes, p.94), and that, although these bones themselves 'hath no sense... feele no paine... [t]hose little membrans, those filmes, those thin skins, that cover, and that line some bones are very sensible of paine, and of any vexation...'.<sup>13</sup> On the consequences of broken veins we learn that '...there is a way of castration, in cutting off the eares: There are certain veines behind the eares, which, if they be cut, disable a man from generation...' (Sermons, V, p.55, n.d.); and that a 'danger in vomiting is, that often times it breakes a veine within, and that is most commonly incurable' for this vein will '...breake... at the heart'.<sup>14</sup> Pursuing the question of vomiting, he notes how '...in a vomit in a bason, the Physitian is able to shew the world, what cold meat, and what raw meat, and what hard and indigestible meat he had eaten...' (ibid., p.237).

Elsewhere Donne flickers between a meditation on the Passion, and contemporary cerebral physiology: 'And as the braine through bony walls doth vent/By sutures, which a Crosses form present...' ('The Crosse', Poems, p.326); while in 1609 there appears the following diagnosis:

I fear earnestly that Mistress Bolstrod will not escape that sickness in which she labours at this time... yesternight... by the strength of her understanding and voice... by the evenness and life of her pulse, and by her temper, I could allow her long life... But the history of her sickness makes me justly fear... for she hath not for many days received so much as a preserved barberie but it returns, and all accompanied by a fever, the mother, and an extreme ill spleen.<sup>15</sup>

This analysis is in tone ('I could allow') invested with something of the authority of a professional physician; and Donne's pessimism proved, indeed, sadly justified, the patient dying on the fourth of the following month. In another letter, of 1622, we learn of the medical vogues of the period: 'Every distemper of the body now is complicated with the spleen, and when we were young men we scarce ever heard of the spleen'. Similarly, 'In our declinations now every accident is accompanied with heavy clouds of melancholy, and in our youth we never admitted any'.<sup>16</sup>

Donne's apparent command of Paracelsian medical theory suggests that his knowledge was by no means entirely conservative. Despite Paracelsus' having died in 1543, Paracelsianism began its greatest flourishing in Britain only from the 1560s and onwards.<sup>17</sup> Donne's attitude veers ambivalently from the sardonic -

With new diseases on ourselves we warre,  
And with new Physicke, a worse Engin farre  
(Anatomy, ll. 159-160)

- to the apparently neutral. In the latter case we find him on several occasions referring to that "Balsam" or "Mummy", the terms which Paracelsus used to describe 'the natural healing power of the tissues [in] counteracting putrefaction'.<sup>18</sup> According to 'the later physicians', when 'our natural inborn preservative is corrupted or wasted, and must be restored by a like extracted from other bodies; the chief care is that the mummy have in it no excelling quality, but an equally digested temper'.<sup>19</sup> Similarly, in 'Loves Alchymie' Donne concludes that 'women... at their best/Sweetnesse and wit... are but *Mummy*, possest' (Poems, p.65) and in An Anatomy of the World attributes the

putrefaction of the world to the loss of Elizabeth Drury, who represented its 'intrinsique balme, and... preservative' (Anatomy, 1.57). More explicitly, he explains in a sermon already cited how 'If a man doe but prick a finger, and binde it above that part, so that the Spirits, or that which they call the *Balsamum* of the body, cannot descend, by reason of that ligature, to that part, it will gangrene...' (Sermons, II, p.81, n.d.). Certainly this appears to tip the balance in favour of Donne's belief in at least some aspects of Paracelsian theory.

Whatever his final opinion, it is clear that Paracelsus' ideas attracted Donne's imagination. Thus, in the treatment of religious 'maladies', 'there be some Cankers, (as *Judaisme*) which cannot be cur'd without the *Cabal*; which is (especially for those diseases), the *Paracelsian* Phisick of the understanding...' (Essayes, p.11). Both Paracelsus, and the new rise of empiricism represented most conspicuously by Vesalian anatomy, converge in the belief that, 'because we are in the consideration of *health*, and consequently of *physick*... we embrace that rule, *Medicorum theoria experientia est, Practise is a Physicians study*'. He goes on to support the Paracelsian maxim with a further assertion and analogy: '...he concludes out of events: for, says he [i.e., Paracelsus] He that professes himself a Physician, without experience, *Chronica de futuro scribit*, He undertakes to write a Chronicle of things before they are done, which is an irregular, and a perverse way (Sermons, II, pp.76-77, *Lincolns Inn*, n.d.).

Notwithstanding the absence of a date, this reference, like all those from Donne's sermons, must have been made in the period after England had acquired its own Vesalian 'chronicle', Helkiah Crooke's imposing anatomical compilation, Microcosmographia (London, 1615). As already noted (Chapter 1.2a, p.28) there is a strong possibility that

Donne was aware of this work even prior to its publication. Certainly one is reminded of Microcosmographia's striking skeletal plates when Donne observes that, 'Painters have presented to us with some horreur, the sceleton, the frame of the bones of a mans body...'.<sup>20</sup> Although the date given for this sermon (1620) is conjectural, it would almost certainly have been delivered some time after both Crooke's work, and Harvey's installation as Lumleian Lecturer.<sup>21</sup> Moreover, the phrase 'with some horreur' strongly suggests that Donne had seen accurate skeletal drawings of the kind increasingly familiar after Vesalius.

He may, indeed, have possessed one himself. In his Will he bequeathes 'to Doctor Winniff Dean of Gloucester and residentiary of St. Paul's the picture called the Skeleton which hangs in the Hall' (Gosse, II, Appendix B, p.360). This might of course have been simply a *memento mori*; yet it does not have to have been *solely* one even if it was. Just as the *memento mori* theme was clearly incorporated into Vesalius' skeletal plates, so it was very likely that pictures which fell into the *memento mori* category would themselves, by this time, have begun to utilise Vesalian graphic techniques.<sup>22</sup> If Donne had wanted a picture of the human skeleton, he may well have been attracted to one worthy of that new anatomical science which so clearly intrigued him. The sermon reference to 'Painters' does not, of course, exclude engravings, as painters were often responsible for the preparation of woodcuts and engravings. No less a studio than Titian's is alleged to have been behind part of Vesalius' De Fabrica.<sup>23</sup> It is worth adding, moreover, that if Potter and Simpson's date for the sermon (Easter Term, 1620), is correct, Donne's reference could have been made only a few weeks after the Lumleian dissection, which in 1618 took place on 25 February, and in 1623, on 27-29 March.<sup>24</sup> Particularly astute viewers of this event should also have known that, following the

prescribed order of dissections of the Lumleian Lectures, Harvey himself was to make, in the following winter or spring, the demonstration of the skeleton. Given that the only previous opportunity (due to the death of the preceding lecturer, Thomas Davies, in 1615) had been in 1612, this spectacle must have been anticipated, by the anatomically curious, with some eagerness.

I hope here to have demonstrated something of the importance of the specificity and newly material character of the body in post-Vesalian medical culture, and how this caught Donne's imagination. The following section will examine the various creative uses of the Vesalian body within Donne's poems.

## 2. The Invading Body

I want now to consider Donne's somatic figurations of emotion and of self in relation to contemporary examples, both literary and actual, of the inner body as a material analogue to character traits or affective conditions. While the instance of 'A Valediction: of my Name in the Window' is examined separately because of its peculiar religious implications, all the poems discussed show, to some extent, an involuntary attraction to the novel qualities of the Vesalian body. As in the case of Melanchthon's anatomically revised De Anima, the new, rigorously anatomised and illustrated human body, and the craft of dissection itself, seem to have insinuated themselves into Donne's poetry because of their powerful aesthetic and psychological appeal. At the same time, Donne's recurrent unease at the growing autonomy and explanatory power of medical investigation appears to be ultimately inextricable from his more positive

admiration for anatomy. The instance of his first 'Problem' stands as perhaps the best summary of this anxiety. Wondering why Courtiers are 'sooner Atheists then men of other Condition?', he likens the imputedly Machiavellian, purely political worldview of the Court to those implicitly Faustian, irreligious 'phisitians' who, 'contemplating Nature and finding many abstruse things subject to the search of reason, thinke therefore that all is so'.<sup>25</sup> The almost Cartesian glimpse, here, of an autonomous human mechanism, is something which must be recognised as an ever-present 'dark side' of Donne's attraction to the new interior body. The ability of this startling somatic landscape to exceed the bounds of pious Natural Philosophy had, indeed, already been dramatically illustrated, years since, by Michael Servetus.

Nevertheless, anatomy remains irresistibly compelling for literary purposes. Donne's persistent anatomical interest indeed seems attested by the way that, in certain of his references, he appears simply to presume that anatomy's simultaneous novelty and familiarity will afford a good rhetorical impact, rather than alluding to it for any precise reasons of logic or poetic decorum. So, when he observes that

Worst malefactors, to whom men are prize,  
Do publike good, cut in Anatomies

the isolation of the remark, amidst various brief satirical inventions, suggests the forcible impression made by anatomy as a public event, rather than any intrinsic relevance to the poem as a whole.<sup>26</sup> Some of Donne's contemporaries exemplify this involuntary fascination as strongly as he does. Thomas Nashe, for example, portrays a famine-stricken mother, planning to eat her dead son: 'I will bloodshot mine eyes, that all may seem sanguine they look on. Some dead man that is already slain, I'll anatomize and embowel, the more to

flesh my fingers in butchery'.<sup>27</sup> Here the impression of one indulging a personal fascination is reinforced by the oddity of the mother deliberately seeking further gore - which, Nashe seems to forget, she could feasibly consume *instead of* her son. A few years afterward, Thomas Dekker describes how Don John's 'Urinalist' (or physician) administered discomfoting remedies, adding by way of a vogueish afterthought, '(As if he sate in Barber-Surgions Hall/Reading Anatomy Lectures)'.<sup>28</sup>

A similar arbitrariness is found in 'Love's Exchange', where Donne notes how

For this, Love is enrag'd with mee,  
Yet kills not. If I must example bee  
To future Rebels; If th'unborne  
Must learne, by my being cut up, and torne:  
Kill, and dissect me, Love; for this  
Torture against thine owne end is,  
Rack't carcasses make ill Anatomies

(Poems, pp.67-68).

The poem appears to be tailored to the pursuits of Donne's coterie audience.<sup>29</sup> Most notable in references to the 'dispensation' and '*non obstante*' (8, 11), this tone is evident also in the martial metaphor of the fourth stanza. With the self-consciously modern young lawyers of his circle in mind, Donne is especially likely to seek the most novel and modish vehicle for the twist of his conclusion. Anatomy here is used as a badge of cultural *savoir faire* in much the same way as it was, a little earlier, by Lyly, Greene and Nashe. It may be, though, that its status, for Donne, is slightly altered. Writing after the foundation of the Lumleian Lectures, he is referring to a social practice necessarily less strange and marginal than that which

preoccupied the university wits of the late 70s and 80s.<sup>30</sup> To some extent accorded a similar *institutional* status as warfare and law, anatomy here is ambiguous: still startlingly novel, but reinforced by a subtle element of corporate prestige which commends it to a poet and audience more socially elevated than Nashe and Greene.<sup>31</sup>

At this time the novel force and spectacle of anatomy have, however, by no means been wholly tamed or absorbed by the institution of the Royal College of Physicians. Dissection remains compelling just because it is still culturally free-floating. As the continuing quantity and variety of literary anatomies demonstrate, no one social body had a monopoly on the cultural use of anatomy. Donne's final stanza partly reflects this relative elasticity of reference. Donne is perhaps slightly less arbitrary in his usage than Nashe or Dekker, in that dissection is potentially now the fate of executed criminals. A 'Rebell', however, is not a straightforward criminal; and if by this term Donne implies treason, then quartering would be more probable. Donne does therefore seem here to be letting anatomy use his poem ('invading' it) rather than using it to serve the strict logical or imaginative needs of his topic.

#### **a. Psychic and Somatic Interiority**

A sense of anatomy's modishness again seems necessary to the rhetorical impact of 'The Legacie' and 'The Dampe'. In these cases, however, use of anatomy is more sophisticated than that found in the *merely* fashionable instance of 'Love's Exchange'. Comparison of Donne's imagery with the way that contemporary examples similarly blur psychological and physical interiority is used, in the following discussion, to clarify the distinctive metaphorical qualities of the

anatomised body in late Elizabethan and earlier Stuart culture.

The persona of the tormented lover in 'The Legacy' portrays himself as metaphorically 'dead' because 'I dye/As often as from thee I goe'. The following lines comprise the second, and the opening of the last, stanzas:

I heard mee say, Tell her anon,  
           That my selfe, (that is you, not I,)  
           Did kill me, and when I felt mee dye,  
 I bid mee send my heart, when I was gone,  
 But I alas could there finde none,  
           When I had ripp'd me, and search'd where  
           Hearts did lye;  
 It kill'd mee againe, that I who still was  
True,  
 In life, in my last Will should cozen you.

Yet I found something like a heart,  
           But colours it, and corners had...

(Poems, p.63).

This 'substitute heart' Donne means to send instead, but finds at the last that 'no man could hold it, for twas thine'. The image of 'self-dissection' presented here implies Donne's precise or general familiarity with the self-dissecting figures depicted in anatomical texts from as early as 1521, and affords an early, secular instance of those images of dissection and self-dissection later found scattered throughout Donne's sermons.<sup>32</sup> On one level, the poem simply expands a very well-worn conceit into three dimensions, relying on the startling juxtaposition of the unremarkable 'send my heart' with 'When I had ripp'd me...' to provide its poetic effect. On another, however, it is evident

that the 'search' for a heart, and the *finding* (to one's surprise) one's lover's heart instead, implies finding out something about oneself. The frequent instances of the word 'anatomise', both in the genre of the literary anatomy, and in individual usages show that anatomy was generally considered well-suited to a faithful and persuasive description of any topic or entity. Here, though, there is a further, more precise correspondence between medical dissection and psychic or amorous interiority. The sudden, vertiginous exposure of previously unprobed recesses is more than a merely metaphorical way of 'exploring the self'. Besides the appropriate dramatisation which the vehicle of anatomy provides, the notion of interior physical analogues or symptoms to psychological or emotional states is not in fact as purely whimsical as might be imagined. Various contemporary or near-contemporary poems yield similar instances.

Sidney, for example, tells of how

...I did impart  
My selfe unto th'Anatomy desirde,  
In steade of gall, leaving to her my hart...

This earlier 'anatomy', however, is introduced far more indirectly than Donne's self-dissection. For Sidney has first described

...a fish, by strangers much admirde,  
Which caught, to cruell search yields his chiefe part:  
(With gall cut out) closde up againe by art,  
Yet lives until his life be new requirde.<sup>33</sup>

Both the use of this example as an introduction to the anatomical conceit, and the strangeness which the two

'embowellings' (of fish and man) implicitly share, suggest that Sidney, writing prior to 1581, did not feel able to anticipate swift recognition of an image founded on the notion of self-dissection. Although Donne's assumed audience of fashionable young lawyers may have influenced him in his more knowing usage, one suspects that the relatively early stage of revived medical, and nascent literary, anatomy prevailing in the late 1570s must be largely responsible for Sidney's relatively tentative and indirect image.<sup>34</sup>

Other examples confirm the suspicion that, although 'The Legacy' could have been written before the institution of the Lumleian Lectures, the new demonstrations gave to anatomical allusions a social prominence far greater than the humble society of the Barber-Surgeons alone had been able to establish. We find Ben Jonson inverting Lear's desire for anatomical understanding of evil (Chapter 3.2a) when he wishes

O that you could but by dissection see  
 How much you are the better part of me;  
 How all my Fibres by your Spirit doe move,  
 And that there is no life in me, but love.<sup>35</sup>

Notwithstanding its playfulness this image clearly derives its rhetorical force from a subtle conflation of emotion and physiology. Besides the anatomical precision of 'Fibres', the further suspicion, that 'Spirit' implies (or puns upon) the medical spirit of the blood, suggests an ingenious somaticising of 'lovesickness'. This may be detected even in the final line: given the very commonplace belief in spirit as the essential ingredient of 'life', love itself, in the form of the woman's spirit, is indeed the animating force within the poet's body.<sup>36</sup> Echoing the amorous self-dissection

of 'The Legacy' - where the lover finds not his, but his beloved's, heart within him - the initial play on 'better' as 'larger' presents the beloved as bulking *physically* within the poet. This physicality, once again, typically depends on a new, Vesalian sense of the inner body.

George Gascoigne's much earlier (probably c.1573) version of this conceit, however, compares to Jonson's formulation rather as Sidney's self-dissection does to that of 'The Legacy'.<sup>37</sup> 'The Anatomye of a Lover', though it begins, similarly: 'To make a Lover knowne, by plaine Anatomie,/You lovers all that list beware, loe here behold you me', is notably lacking in somatic precision when compared to Jonson.<sup>38</sup> In the following catalogue of the body there are no 'Fibres', or sinews and ligaments - only a heart, and 'lights and lungs' beneath the list of external features. Even Gascoigne's dissection, however, shows some trace of a feature common to Sidney, Jonson and Donne: in each case anatomy affords a new rhetorical space - one equally congenial to self-expansion and expression, and which, crucially, is at its most vital and compelling in these first years of its discovery and exploitation.

Where the visceral self-hood of 'The Legacy' does appear to differ from the usages of Gascoigne, Sidney, and Jonson is in its subtle ambivalence about the self *per se*. The much clearer sense, later found in the sermons, of the self as impiously secretive or proud, is here obliquely evident in the poem's reference to 'corners'. Notwithstanding gender questions (the heart in fact belongs to the woman) the corners may imply egotistical deviousness or shadowy refuges for sinful impulse. In 1613, for example, Donne's friend and contemporary, Joseph Hall (1574-1656) spoke of 'the policy of the Devil' who, 'because he knows he hath no right to the heart, he can be glad of any corner'.<sup>39</sup>



'picture'. We are obliged, nonetheless, to admit the lingering tension between magic and an empirical science as yet not fully conscious, in view of the faintly Paracelsian 'dampe of love' - an occult vapour able (albeit poetically) to 'massacre' the onlookers.

The following two stanzas, concerning the amorous powers of women and men, respectively, suggest a whimsically combative love poem which is no longer concerned with its dissective opening. If the anatomical allusion is thus again partly arbitrary here (given its lack of subsequent development) its deliberate shock value as a startling introduction is once more apparent. It seems probable, also, that this shock tactic is employed for the benefit of a quite specific, and relatively élite, audience. As pointed out above, in March 1623 Sir Simonds D'Ewes troubled himself so far as to spend most of three days at one of Harvey's public dissections (D'Ewes, I, p.230). The 'friends curiositie' was no doubt often echoed by that of the coterie of law students to which such poems were addressed.

Other evidence shows, moreover, that the Lumleian Lectures were not the sole source of anatomical spectacle:

...one Swinburne, a clerk... put on a resolution to play, and pursued it three or four days, and upon Saturday, in three hours, lost at the Tunns £1000, and went home to bed and died. I spoke with some that were present at his opening, and the physician pronounced him poisoned, but they think it to be received before his loss

(Gosse, I, p.310, [July 1612]).<sup>40</sup>

Donne's letter to an unnamed correspondent suggests that unscheduled post-mortems must have occurred with reasonable frequency.<sup>41</sup> Although the letter is placed by Gosse during Donne's time abroad in 1612 (*ibid.*, p.309), the mention of

'the Tunns' informs us that the incident itself occurred in England, and not on the more anatomically advanced European continent. In this light, the poem's opening, 'When I am dead, and Doctors know not why,/And my friends curiositie...' becomes far less a flight of imagination than the kind of casual reference to be expected in the coterie poems circulated amongst 'curious' young lawyers. 'Doctors know not why' would fit with the suddenness of death in the case of Swinburne. Even if Donne himself had never attended such an event, it would have formed a conspicuous and quite regular phenomenon in a society where the average life expectancy was age forty.<sup>42</sup> His report from 'some that were present' reveals one of two things. The informants might simply have been physicians or surgeons; Donne was of course known to be friendly with his own physician, Simeon Foxe, by the 1620s (see Bald, p.452; Devotions, p.28). More probably, however, these were in fact laymen, given the absence of any reference to 'physicians' or 'surgeons'. It can in this case be inferred that post-mortems, whether scheduled or unscheduled, were regarded as worthwhile spectacles - ones which, moreover, were as *merely* spectacular as they were educational.<sup>43</sup>

Two features, then, are integral to the contemporary resonances of both 'The Legacy' and 'The Dampe'. One is the increasing familiarity of anatomy and of post-mortem examinations - a familiarity which, in the early-seventeenth century, had still not dulled the edge of novelty surrounding such procedures. A second is the reliance of both pieces on a subtle blurring between figurative, and directly symptomatic, understandings of human interiority. As noted, both actual and literary examples from the early Stuart period show that Donne's embodiments of emotion were not as *merely* fanciful as they could now appear. If Gosse's date of 1612 is correct, it places Swinburne's autopsy close to the more famous post-

mortem, on 7 November 1612, of Prince Henry. In an account 'penned in presence of all the aforesaid physicians' Theodore de Mayerne linked 'the abundance of blood' in the pia mater, and of 'very cleare water' in the ventricles of the brain with 'divers humours gathered together' and 'convulsion, ravings, and drousines' respectively.<sup>44</sup> Again, when Donne preached a sermon, early in April 1625, over the dead body of James I at Denmark House, he may well have been aware that James' head had, 'about the 29th of March' been effortfully broken open 'with a chissell and a sawe' and found 'so full of braynes as they could not, uppon the openninge, keepe them from spillinge, a great marke of his infinite judgement'. The fact that his 'lites and gall [were] black' was 'judged to proceed of melancolly', while the more amateur medical diagnosis of Simonds D'Ewes, hearing James' heart to be 'great but soft' found this consistent with a king 'as very considerate, so extraordinary fearfull'.<sup>45</sup>

Spectators in all such cases, then, whether laypersons or physicians, must often have expected to behold clear physical indications of the subject's mode of death. As already noted, Harvey himself was ready to directly link the texture of the heart with variations of sensibility (O'Malley *et al*, p.175), and fictional instances again echo this tendency. Robert Burton gives accounts of 'the cutting up of one that died for love', whose "'heart was combust, his liver smoky, his lungs dried up, insomuch that he verily believed his soul was either sod or roasted through the vehemency of love's fire"' ; and of those hydrophobia victims, consumed by 'a hot and dry' poison, whose autopsies revealed 'no water, scarce blood, or any moisture left in them' (Anatomy, III, p.159, I, p.134). In neither case does Burton show any overt scepticism. Again, in Webster's sketch of 'The Roaring Boy', we are first told that this worthy 'sleepes with a Tobacco-pipe in's mouth', and then that 'I have heard of some (that

have scap't hanging) begg'd for Anatomies, only to deterre men from taking Tobacco'.<sup>46</sup> Here Webster imagines the unorthodox case of a non-felon, set at high premium by surgeons (whose assistants had sufficient trouble acquiring dead convicts) because of his specific pathological condition. The image may, in part, be a twist of comic effect, but cannot be *merely* comic. To the Elizabethans the exotic modishness of tobacco could have seemed sufficiently outlandish to prompt suspicion of those direct and particular internal signs now photographed precisely to deter the takers of tobacco.<sup>47</sup> Poetical musings on bodily interiority as revealing definitive truths - of a somatic or emotional kind - cannot, then, be discounted as pure word-play.

#### **b. Anatomy, Selfhood and Resurrection**

The more problematic manipulation of interiority found in 'A Valediction: Of My Name in the Window' adds religious overtones to the issues of selfhood and emotion considered above. The lover, having scratched his monogram into the glass with a diamond, first proceeds to intertwine himself with his mistress:

Tis much that glasse should bee  
 As all confessing, and through-shine as I,  
 Tis more, that it shewes thee to thee,  
 And cleare reflects thee to thine eye.  
 But all such rules, loves magique can undoe  
 Here you see mee, and I am you

(Poems, p.87).



Emparadis'd in you, (in whom alone  
 I understand, and grow and see,)  
 The rafters of my body, bone  
 Being still with you, the Muscle, Sinew,  
and Veine,  
 Which tile this house, will come again.

Till my return repair  
 And recompact my scattered body so

(Poems, p.87-88).

Further strengthening the entanglement noted earlier, with characteristic precision Donne introduces into his mistress not merely a vague 'soul', but his own three souls - vegetative, sensitive, and rational ('grow', 'see', and 'understand'). He then goes on to reclothe the skeleton entirely by invoking the notion of ultimate bodily resurrection - 'recompact my scattered body so'.<sup>49</sup> The play on the Christian belief at first appears little more than an extravagant way of depicting the straightforward return of the lover himself, from wherever his absence has taken him. Yet the stress on physical (as well as spiritual) resurrection cannot be overlooked. This doctrine not only makes the body acceptable in a 'spiritual' context, but can, in some cases, actively privilege it. In this instance, where the 'soul' itself would have provided a sufficient kernel of attachment to the beloved, Donne insists on drawing in the entire body. Given the obvious dissective connotations of a skeleton which has been re-named in honour of the anatomical process it becomes justifiable to see stanza five, and the opening of six, as comprising a kind of 'anatomy in reverse'.<sup>50</sup> Here Christian resurrection, the ultimate defiance of the mortal, perishable body, is paradoxically expressed in terms of the human form at its most absolutely

reduced, divided, and (seemingly) irreparable. The opposition, moreover, is double - the reconstitution is achieved by God, but the (hardly less skilled) reduction, by man.

Casual and facetious as the conceits of the poem might initially seem, they in fact betray an implicit desire to defy the extreme somatic analysis of the anatomy theatre. Resurrection, prior to Vesalius, could still have been imaged in terms of flesh re-collecting about a skeleton. This miraculous regathering lacked, however, the dissective associations attaching to (an) 'Anatomie'. In keeping with the fashionable allusions to dissection cited above, Donne instinctively seeks out the newest and most impressive form of physical annihilation available. In doing so he displays a kind of proto-scientific scrupulousness; the intellectual rigour of his faith requires God's power to be tested (potentially 'falsified', one might say) against the startling new powers of Harvey and his peers.

The role of the self, in this defensive rhetorical gesture, is no less ambiguous than that of the body. Just as for Servetus, some decades earlier, the complexity and depth encountered when negotiating the recesses of the new body are, to Donne, suitably mimetic of an increasingly sophisticated psychic interiority. Faintly echoing Romeo's notion of his intrinsically 'embodied' name, the signature which the 'Anatomy' imaginatively represents is, crucially, an essential kernel of the speaker's *self*. Both the body and the signature/self are importantly *irreducible* beyond this point. Much of the wit behind Donne's anatomical metaphor is indeed lost if 'anatomy' is not recognised as implying the fashionable new sense of 'abridgement'.<sup>51</sup> The signature, like the brief but purportedly exhaustive literary dissections, is at once reduced and complete.

Donne therefore may be seen to cleave to the self, in Cartesian fashion, as a final rock of certainty. To this extent, confidence in the immortality of the soul appears covertly supported by the inability to conceive that something as precise and unique as one's own selfhood could be destroyed. The assertion, 'So shall all times finde mee the same' thus acquires an ironic metaphysical charge, extending from earth into heaven, and investing 'mee' with an ambiguous emphasis. Ultimately it is not possible, however, to detach the self and the body. Both are at once anchored in, and supportive of, religious faith. The poetic transformation of a signature into a skeleton epitomises the way that self-assurance, and religious re-assurance, simultaneously converge in the intricate frame of the bones - a structure as durable, integral and pervasive as the human ego itself.

Although the examples given in this section are not explicitly or exclusively spiritual, 'A Valediction' in particular alerts us to the dangerously permeable borders between the spiritual and the somatic. In this chapter's fourth section I will examine instances in Donne's poetry which cross these borders. Before doing so I will give two brief outlines: first, of the notion of 'spirit' and 'spirits' in general during Donne's lifetime; and second, of the evident tension between the 'spirits' of medical physiology, and the investigation of the anatomised body.

### 3. The Context of Donne's Poetic Images of Anatomy and Spirituality

#### a. Renaissance Notions of Spirit

Due to the loss of many features of spiritual physiology once ubiquitous and taken-for-granted, references to spirits are especially prone to be either overlooked or misread. In a Whitsunday sermon, Donne himself gives an account which, at the level of conceptual distinctions, is relatively clear:

The Spirit is sometimes the soule... sometimes it signifies those animall spirits, which conserve us in strength, and vigour... And also, the superior faculties of the soule in a regenerate man...

(Sermons, V, p.60 [?1622]).

In practice, however, the word clearly enjoyed a much wider spectrum of meanings. In Randle Cotgrave's French-English dictionary of 1611, the entry for 'Esprit' reads: 'The Spirit, Soule; Heart; breath, heat; mind, thought; opinion; wit; conceit; also, life, courage, metall, stomacke, vivacitie, liveliness, or smartnesse of humor; also, a ghost, or spirit'. This list, with its slippery gradations of the immortal, physiological and figurative, stands as an appropriate reflection of the spirit-matter continuum so often implied by Renaissance discussions of body-soul integration. The appearance of 'Heart' between 'Soule' and 'breath' may, indeed, reflect the continuing uncertainty as to whether this, or the brain, was the seat of the soul itself.<sup>52</sup> The gradual obliteration, from the later-seventeenth century onward, of the physical end of this continuum is again subtly indicated by Cotgrave's exemplary French phrase, 'Voici un estoffe qui n'a que l'esprit'. This

is translated by Cotgrave as 'this stuff is but slight, or hath no substance in it' (ibid.). By referring to a lack of substance where we might now assume the absence of an *intangible* animating force (a certain *je ne sais quoi*, as it were), Cotgrave again suggests just that edge of the physical which, in the Vesalian world, made the boundaries of spirit and matter so sensitive a region.

Notwithstanding the comfortably abstract definition of his Whitsunday sermon, Donne himself enters this zone frequently. The following, relatively straightforward examples illustrate the physicality of a term now often understood as the epitome of the nebulous:

As bodies change, and as I do not weare  
Those Spirits, humors, blood I did last yeare;

O let me not launch out, but let mee save  
Th'expense of braine and spirit...;

...freely on his she friends  
He blood, and spirit, pith, and marrow spends.<sup>53</sup>

The debauchee in these last lines is the proverbially lustful sparrow, who by his venereal excesses 'himselpe in three years ends' (l.210).<sup>54</sup> In all the above the tendency to synonymise 'spirits' with substances such as 'blood', 'brain', 'pith' and 'marrow' shows both their physicality, and their physiological importance. Even to synonymise 'spirits' with 'humors' is still to physicalise, rather than to abstract, them. If humors are less obviously material than blood and pith, yet, according to Burton, 'A humour is a liquid or fluent part of the Body...' (Anatomy of Melancholy, I, p.140).

In 'The Dreame', we find Donne reflecting on how

That love is weak, where fear's as strong as he;  
 'Tis not all spirit, pure, and brave,  
 If mixture it of fear, shame, honour, have  
 (Poems, p.53).

Although 'spirit' here might at first seem equivalent to a present day token of admiration ('Spirit!'), it in fact serves to shift the figurative and abstract 'love', tainted by fear, to a physiological level.<sup>55</sup> Reflecting this technical usage is the distinction between 'all spirit' and one which has 'mixture'. This is specific to a kind of Renaissance physics of spirit - one most obvious in relation to medical, bodily spirits, but necessarily shading into the area of the immortal soul also. Donne alludes to the nature of spirits more than once:

...hee that would say, spirits are fram'd  
 Of all the purest parts that can be nam'd,  
 Honours not spirits halfe so much, as hee  
 Which sayes they have no partes, but simple bee.<sup>56</sup>

Again, in a sermon of 30 April 1615, he notes that 'spirits cannot be divided' (Sermons, I, p.164).<sup>57</sup>

It might be claimed that the spirits of 'The Dreame' are still partly 'poetical', in the sense of being *merely* figurative. The elements of the 'mixture', such as 'fear' and 'shame' are after all psychological, not chemical ones. The distinction between psychology and biochemistry is, however, one which the Renaissance would have been far less likely to recognise. Moreover, the reason anything mixed with 'fear' and 'shame' cannot be 'all spirit' is, to the Renaissance, a matter of definition: spirits have no parts. This insistence on definition causes love to be analysed not so much in terms

of 'spirituality' as we conceive it, but rather along the lines of Renaissance physics.

In the 'Elegie on the Death of the Incomparable Prince Henry' of 1612, we are given a glimpse of just how thoroughly medical spirits are integrated into the physiology of the body as a whole. Donne eulogises the deceased as

...his great father's greatest instrument  
 And activest spirit to convey and tie  
 This soul of peace, through christianity...  
 (Poems, p.254, ll.32-34).

Elsewhere Donne explicitly refers to this knotting and unifying spirit, whose role is 'to unite and apply the faculties of the soul to the organs of the body' (Sermons, II, p.262). Here it is, appropriately, difficult to be sure whether Donne is using the more technical sense of spirit to pun on the looser meaning of 'a spirited individual', or in fact *only* referring to medical spirits, and effectively using spirit as a plural noun, with the same sense as 'milk' or 'cheese'. Certainly the rigorous decorum involved is lost if the physical aspect is not registered. Henry, appropriately the 'activ'st' spirit, and therefore of the 'animal' variety, the nimblest and lightest in the body, provides the interface between the body of 'Christianity' and the 'soule of Peace', James I. Only if the high degree of integration which these active spirits themselves enjoyed in medical theory is appreciated, can the full force of the conceit, and its careful 'sacralising' of James and Henry be fully felt.

Perhaps the most conspicuous misreading of Donne's 'spiritual rhetoric' occurs in John T. Shawcross's glossing of the poem 'A Funerall Elegie'. This piece was written shortly after the death of Elizabeth Drury, subject of the

'Anniversary' poems (Anatomy, p.50). As with An Anatomy of the World, in this shorter poem, Elizabeth Drury's death has 'wounded' the world, which is therefore 'decrepit' (21, 29). There follows a world/body analogy which proceeds through a conventional list:

The world containes  
Princes for armes, and Counsailors for braines,  
Lawyers for tongues, Divines for hearts...

(Anniversaries, ll.21-3)

and so forth. The precise reason for the world's decrepitude, however, is that

...those fine spirits, which doe tune and set  
This Organ, are those peeces which beget  
Wonder and love; and these were shee; and shee  
Being spent, the world must needs decrepit bee

(*ibid.*, ll.27-30).

It seems clear enough that the 'fine spirits' are those of a loosely organic world/body; they tune and set it by 'attuning' the body and soul. Not only was damage to, or absence of the spirits associated with death, but it is appropriate here, as in the case of Prince Henry, that Elizabeth Drury should correspond to the most noble aspect of the body. It is clearly the body which is implied by the preceding 'armes', 'braines' and 'hearts', and Donne is precise enough in his physiology, and sufficiently taken with the significance of animal spirits, to analogise Elizabeth Drury with these and not (for example) the heart or merely 'lifeblood'.<sup>58</sup>

In Shawcross's edition, however, 'This Organ' is footnoted as 'the funeral elegy which Donne is writing' (Shawcross, p.287). 'Fine spirits' is not glossed at all. A kind of triple pun, whereby the world/body as an 'Organ' also becomes a musical instrument, is precisely what might be expected from a mind as agile as Donne's.<sup>59</sup> But how 'spirits' are supposed to tune something which is *merely* a musical organ is not at all clear. C.A. Patrides more reasonably gives 'This Organ' as 'the world at large' (with the body conceivably being implied as well).<sup>60</sup> He also notes, however, that 'fine spirits' are 'exquisite individuals'. Again, they probably are these, also; but what they must, fundamentally, be, is those medical spirits formed from 'the thin and active part of the blood' (Sermons, II, p.261, 16 June 1619).

One is strongly inclined, moreover, to suspect that spirits are not recognised as part of the world/body analogy precisely because their relatively high degree of physicality is itself unappreciated. Perhaps more significantly, the implication of a *world*, as well as a body, vitalised by 'spiritual' power is therefore also likely to go unnoticed. The various 'stomackes', 'backes', and 'feet' are relatively conventional and dry features of the world/body analogy. But if 'spirits' are properly recognised as bodily spirits, and 'This Organ' as the 'organic' world/body, a striking degree of animism appears in Donne's conceit.<sup>61</sup>

Something as intangible as 'animism' is necessarily difficult to quantify. Donne's animistic overtones here are probably *more* 'poetic' - in the present day sense of 'whimsical' or 'fanciful' - than the notions of Paracelsus and Robert Fludd. Nonetheless, there are reasons, both general and particular, for seeing animism as a significant feature of Donne's religious psychology. If animism is taken to mean the attribution of life to things in which no signs of organic life are evident, then certain of Donne's

statements do appear animistic. We find him asserting that 'Precious stones are first drops of the dew of heaven...', that '...stones may have life' and that 'neither... is it unreasonably thought by them, that thought the whole world to be inanimated by one soule, and to be one intire living creature'.<sup>62</sup>

To be fair to commentators who miss such associations, one must acknowledge the potential for (sometimes heretical) confusion which the ambiguous status of 'bodily spirits' offered even to the Renaissance writer. As Cotgrave's entry for 'esprit' demonstrates, a certain vagueness of definition was common.<sup>63</sup> No actual referent existed to provide an independent test of the various versions of the concept, which could therefore proliferate freely. Even the careful distinctions of Donne's Whitsunday sermon, quoted at the start of this section, are subtly prone to such slippage. At a casual glance, the movement between 'the Spirit' as 'sometimes the soule... sometimes... those animall spirits' and sometimes, 'the superior faculties of the soule in a regenerate man...' (Sermons, V, p.60 [?1622]) might appear carefully Scholastic. At least two points argue against such a straightforward interpretation, however. Firstly: when Donne states that, although '...we know that they [the Angels] are *Spirits* in Nature, but what the nature of a spirit is, we know not...' (Sermons, VIII, p.105, 19 November 1627) what is perhaps most significant is the sense that he does in fact want to know. A second point concerns the way that Donne's latter two Whitsunday definitions compare with certain of Melanchthon's remarks.<sup>64</sup> If the 'regenerate man' is nearer God, there appears a likelihood of slippage into the physiological sense of spirits. These provide the juncture of soul and body, through rarefaction of the physical, while the 'superior faculties', through a more abstract refinement, provide that of the soul with God. Even without the added,

inbuilt confusion of two senses sharing the same word, one might anticipate a faintly heretical understanding of 'spiritual refinement', one which supposed the *bodily* spirits to become more rarefied in proportion to the overall piety of the individual.

Donne himself, in another sermon, recognises the dangers of this uncertain area: '...diverse others of the Antients have taken *Soule* and *Spirit*, for different things, even in the Intellectual part of man, somewhat obscurely, I confesse, and, as some venture to say, unnecessarily, if not dangerously...' (Sermons, V, p.355, n.d.). This recognition by no means excludes Donne's own writings from such perils. The risk of heretically corporealising the soul is, indeed, intrinsic to a physiological theory designed to unite the material and perishable with the immortal and ethereal. Moreover, as stressed in Chapter 2.4 (above, p.112) early-seventeenth century pneumatology involved far more sense of *process*, and hence of a nuanced continuum between spirit and matter, than the neater, switch-like alternation supplied by the nodal point of Descartes' pineal gland. On hearing Donne reflect that 'when upon the consideration of Gods miraculous Judgements or Mercies, I come to such a melting and pouring out of my heart, that there be no spirit, that is, none of *mine own spirit* left in me...' one needs to recall both the popular notion of spirits steaming off recently dead (or indeed live) bodies, and Joseph Hall's reference to 'spiritual powers' placed by God 'rather... in the heart than in the brain', in order to fully appreciate the peculiar slippage between the figurative and the actual this 'pouring out' might have connoted.<sup>65</sup> I will now look more closely at instances of tension between medical and immortal spirit in early-seventeenth century England.

### b. Anatomy, Pneumatology, and the *Rete Mirabile*

Two particular examples can serve to briefly recapitulate the ambiguous, evidently transitional stage of body-soul relations in early Stuart England. As stated in Chapter Two, an odd disjuncture is visible between Crooke's Microcosmographia of 1615 and its abridged, pictorial version, the Somatographia anthropine of 1616. The first book's Vesalian drawing of the *rete* includes Vesalius' unequivocally sceptical qualification (this is a structure found only in animals); the second misleadingly gives merely the drawing and explanatory labels, as though dealing with a standard (and human) anatomical feature. Even if Crooke's oddly contradictory publications are seen as purely careless and accidental, the impression given to readers must itself remain important.

A second marker in the history of Renaissance anatomy and pneumatology suggests, however, that more than sheer chance may have been involved. As also stated in Chapter Two, in 1623 the esoterically inclined physician Robert Fludd had the *rete* specially re-drawn for his occult Triple Anatomy. The ultimate significance of this gesture is hard to determine - not least because Fludd, who almost certainly carried out some anatomies around this time (see above, 2.3b), had the opportunity to see the inside of the head for himself.<sup>66</sup> What does seem evident is that the psychological and physical aspects of the *rete*, in this case, are effectively split into far more distinct components than had previously been the case. The side most clearly emphasized by Fludd is the psychological one - the *rete*'s attractiveness as, essentially, a refuge for the mysteriousness of spiritual processes. Although Fludd must have had some anatomical authority himself, it seems likely that other physicians and anatomists would not have equated the *rete* of the Triple

Anatomy with the activities of the dissecting theatre. To put the opposition forcefully, one can here distinguish a *rete* used as a deliberate badge of occultism from one that either was or was not evident in the human body, in the same way as heart, lungs and liver. The *rete* was, therefore, effectively dematerialising.

Donne himself gives two reasonably extended comments on body-soul relations. The first is relatively abstract and unparticularised:

In the constitution and making of a natural man, 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 doe, and they doe the office, to unite and apply the faculties of the soul to the organs of the body, and so there is a man

(Sermons, II, pp.261-2, 16 June 1619).

Typically, however, the almost Scholastic quality of this stolid exposition is again thrown into a very different light by the second of Donne's allusions to bodily spirits. In a sermon of 1621 he recognises that 'we know the receipt of the ventricle, the stomach of man... and wee know the receipt of all the receptacles of blood, how much blood the body can have; so wee doe of all the other conduits and cisterns of the body...'.<sup>67</sup> This statement, according to Geoffrey Keynes 'is startling because Harvey's lectures, their substance not yet published to the world, would seem to be the only source from which Donne could have got knowledge of these quantitative measurements of the capacity of the viscera...'.<sup>68</sup> That Keynes is right to draw attention to dissection, if not necessarily to Harvey himself, is

compellingly urged by Donne's subsequent reflection. Glancing at his chosen text (Proverbs 25.16, 'Hast thou found honey? Eat so much as is sufficient for thee, lest thou be filled therewith, and vomit it'), he reflects that, by contrast with the *body*, '...this infinite Hive of honey, this insatiable whirlpool of the covetous mind, no Anatomy, no dissection hath discovered to us' (Sermons, III, p.236). The knowledge of which Donne speaks appears, then, to be just that which the Lumleian Lectures had sought to promote since 1584. The lectures seem also to have presented Donne with a sobering contrast: 'When I looke into the larders, and cellars, and vaults, into the vessels of our body for drink, for blood, for urine, they are pottles, and gallons; when I look into the furnaces of our spirits, the ventricles of the heart and of the braine, they are not thimbles...' (ibid.).

The ostensible thrust in these lines is, clearly, a somatic parable of humanity's excessive worldliness. Hence Donne concludes that 'for spirituall things, the things of the next world, we have no roome; for temporall things, the things of this world, we have no bounds' (ibid.). Viewed in the light of Thomas Nashe's more irreverent interchanging of blood and urine (The Unfortunate Traveller, II, p.308,) Donne's *contemptus mundi* stance acquires an especially topical and uncomfortable edge. The implicit hierarchy which Donne seeks to assert (the mundane 'larders' and 'cellars' opposed to the richly allusive 'Hive of honey' and 'insatiable whirlpool') is undermined by Nashe's conspicuously indiscriminate jumbling of the excretory and ethereal. Donne's complaint, therefore, may be read as an aptly literal summary of the distinctive problems which Vesalian anatomy posed for Christian pneumatology: the newly-examined body does indeed 'have no roome'.

To interpret the sermon passage in this way (as a recognition that anatomy has disrupted a longstanding

physiology of body and soul) it is not necessary to show that Donne attended an anatomical demonstration. The possibility, however, that Donne has indeed really 'looked', does seem a compelling one - especially given the length of his detour through the body. Not only does he state this, but the whole force of his contrast itself depends on a perceived physical disparity. The suspicion that, if he had not witnessed a dissection, he may have seen Helkiah Crooke's Microcosmographia of 1615, is reinforced by the striking similarity between his own (rhetorical) disappointment, and Crooke's human *rete mirabile*: 'so small... a good eye can scarcely discern it' (Microcosomographia, p.526). Laurentius, the original author of this remark, had accordingly favoured the alternative location of the choroid plexuses. The inadequate 'rete' to which he refers was probably the cavernous sinus - a cerebral formation which, at approximately one by two centimetres, is accurately captured in Donne's 'not thimbles'.<sup>69</sup> If it is difficult to understand how Donne's reiterated 'look' could be merely figurative, the date of the sermon also points to the proximity of an actual anatomy. Donne was speaking on 8 April 1621. It is generally assumed that Harvey began the six-year Lumleian cycle afresh in 1616. This means that, in February or March (conceivably as little as two weeks before Donne spoke) Harvey would have been undertaking the fifth year of the prescribed cycle, making the anatomy of the skeleton. The spectacle would, then, have provided only a general image of dissection, rather than exposing the visceral or cerebral areas mentioned by Donne. We know, nonetheless, that skeletal representations impressed Donne, and it seems probable that such a spectacle would have been well-attended.

Whatever Donne's own experience of public or published anatomy, one thing is clear from the passage alone: both heart and brain are readily associated with the processing of

bodily spirits. It seems probable that Donne himself was personally curious about the physiological aspect of the soul, insofar as it related to the body. Such curiosity would be natural not only because of the fresh perspectives literally 'opened up' in this area by anatomy, but because a debate still continued at this point as to the most essential region of spiritual processing within the body - one about which Donne himself appears undecided: 'My soul may... reside principally in my heart, or in my braine...'.<sup>70</sup> As noted, in 1623/4 Joseph Hall seemed certain that the heart was the seat of 'all the spiritual powers'. What is most interesting about Hall, however, is his implicit recognition, some years before Descartes' similar attitude was known, of the anatomised body as the most natural point of reference in any discussion of the heart. Speaking on the text Jeremiah 17.9, 'The heart is deceitful above all things', he admits that, 'When ye hear of the heart, ye think straight of that fleshy part in the centre of the body, which lives first, and dies last... That is not it, which is so cunning...' (Hall, V, p.137). His first task is to shift his auditors' attention away from this rawly empirical level, to the heart's various figurative significations. Again, a physiological slant is certainly integral to the subtle slide between the metaphorical and anatomical noted above in the case of Donne's 'pouring out' of cardiac spirit (Sermons, IX, p.177). In the case of both Hall and Donne, then, it seems tacitly assumed that heart or brain are of most interest for their pneumatological functions, and that these functions are the concern of anatomists at least as much as of theologians.

Hall's and Donne's spiritual allusions suggest a notable gap between pneumatological theory and practice - one which broadly parallels the general ambiguity surrounding the *rete* during Donne's lifetime. Section four looks, firstly, at 'The Funerall' and The Progresse of the Soule as poems in which a

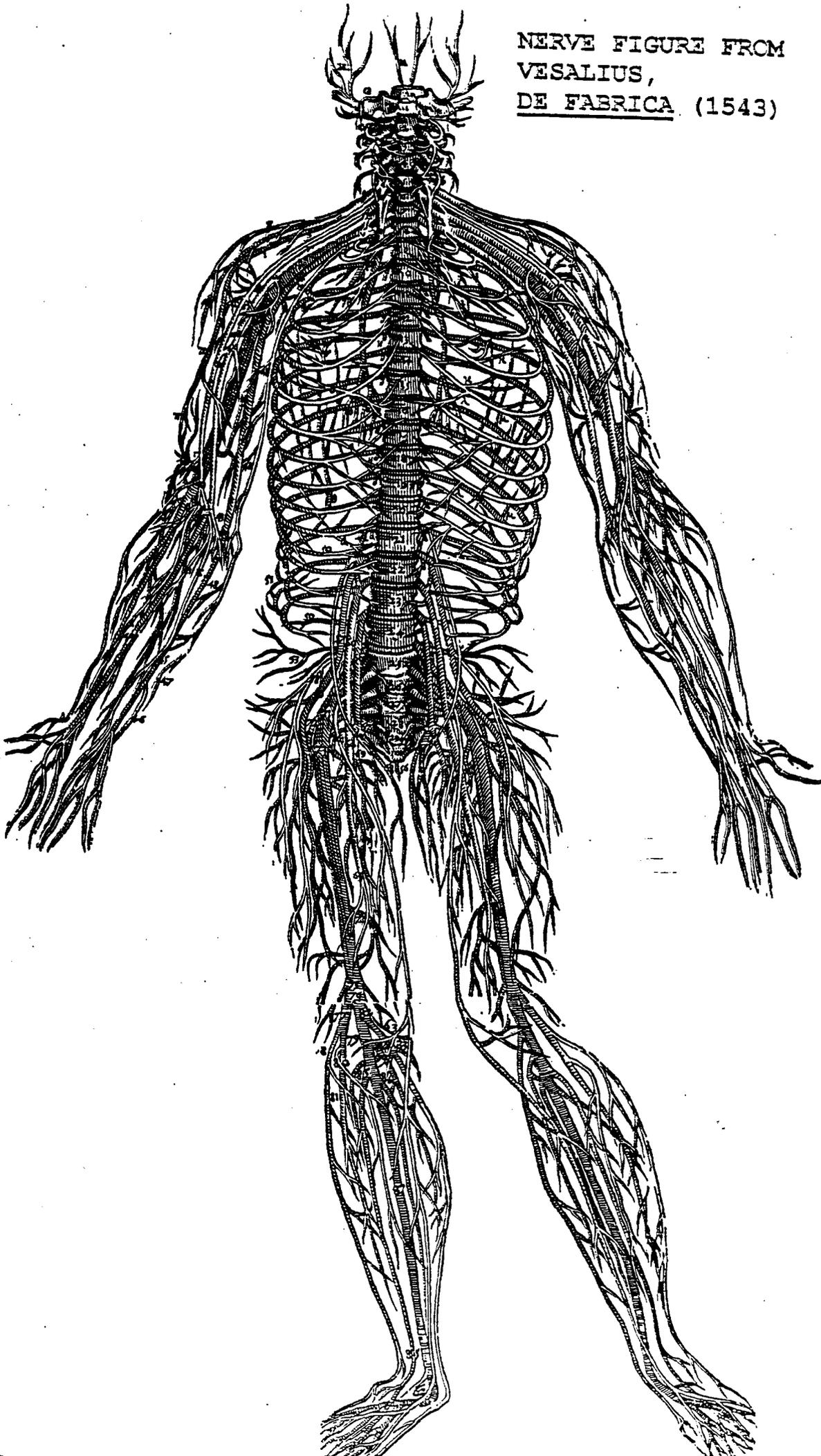


At a functional level Donne has to be referring to the nerves, which, via the unifying hegemony of the animal spirits, did indeed 'tie those parts, and make me one of all' (l.11), and whose mediation between body and soul he has implied by likening the 'thread' to 'my outward Soule' (l.5).

The visual parallel, however, is far more immediate than the theoretical one. A 'sinewy thread', falling from the brain 'through every part', must at this time have been the most concise and accurate verbal reflection of the intricate tracery seen in the famous Vesalian image of De Fabrica [Fig. 1].<sup>71</sup> The enjambment between 'fall' and 'Through' serves to reinforce the vertiginous depth and capacity of a body whose interior volume is as yet freshly startling. Visual similarity to the Vesalian plate is further suggested by the fact that the nerves in the poem inversely parallel 'Those haire which upward grew' (l.12). 'Haires' are perhaps the only bodily feature at once as fine and profuse as the delicate filigree of the woodcut.

The dynamics of the image, with its disregard for the boundaries of the internal and external body, closely recalls Nashe's proclivity for a rhetoric of disembowlement and somatic inversion. In the implicit analogy between nerves and soul (both of which 'make mee one of all') Donne's poem also reveals a potentially deeper, if indirect, materialism. Although the 'outward soule' comprised by the 'wreath of haire' might at first appear to be paralleled with the immaterial one (to 'heaven... gone'), it is the 'sinewie thread' which in fact provides the most conspicuous analogue, both aesthetically and functionally, to the ring of hair. If Donne does not actually identify the soul with the nerves, he nonetheless exposes, momentarily, the underlying danger of an ethereal entity which is yet somehow continuous with, and dependent on, the mechanism of the body. His parallelism of the numinous and the somatic must ultimately connote the

NERVE FIGURE FROM  
VESALIUS,  
DE FABRICA (1543)





autonomous ramifications of the Vesalian interior.<sup>74</sup> Donne might then actually be said to throw across the gap between heaven and earth not the soul, but the body. Here, as so often in the sermons, the reassuring solidity of the human form fills a rhetorical gap in a way neatly mimetic of its wider, and growing, epistemological dominance.

The interplay between word and image implicit in Donne's 'pith' and 'sinewy thread' epitomises the increasing dominance of pictorial over textual modes of representation. Notwithstanding Donne's poetic skill, the potentially sparse and abstract lines acquire their fullest effect in conjunction with the visual echo of anatomical illustration. In the realm of the internal body especially, pictures have so notably outstripped words that the persuasiveness and vividness of the former play by far the greatest part in prompting and conditioning the somatic conceits of poets. Donne himself might simply have intended a straightforward micro/macrocosmic parallel between body/soul and earth/heaven. The independent and assertive force of anatomical depictions threatens, however, to recontextualise his lines in a way similar to Servetus' distinctive reinterpretations of Christian pneumatology.

**b. "The Lower Bulks Unduly":  
Corporeality in 'The Ecstasy'**

The newly-complicated relations of substance and spirit produced by Vesalian anatomy are nowhere more finely balanced than in 'The Ecstasy'. The success or failure of the poem turns on a crucial somatic feature - the *rete mirabile*, or one of the substitutes for it proposed and debated by sixteenth- and seventeenth-century anatomists. A compressed and appropriately dense version of the elaborate tracery seen

in the Vesalian figure, the entangled venous network of the rete forms a nominally spiritual centre which yet remains, ultimately, inextricable from the poem's veiled but insistent thread of corporeality. In theory, the bodies of the two lovers, after the extended rarefaction which the poem describes, should be sufficiently spiritualised to transcend orthodox distinctions between flesh and spirit. The viewer would, ideally, see 'Small change, when we're to bodies gone' (Poems, p.56). How persuasive this etherialisation of the two lovers is, however, depends on the reader's feeling about the preceding seventy-five lines. At least one famous commentator has been notably disappointed by the poet's attempt. Herbert Grierson felt that Donne had:

not entirely succeeded in what he here attempts. There hangs about the poem just a suspicion of the conventional and unreal Platonism of the seventeenth century. In attempting to state and vindicate the relation of soul and body he falls perhaps inevitably into the appearance, at any rate, of the dualism which he is trying to transcend. He places them over against each other as separate entities and the lower bulks unduly.<sup>75</sup>

This summation clearly identifies the two key facets of the poem with which I wish to deal. I will look, first, at the imputed excess of corporeality ('the lower bulks unduly') before turning to the associated question of the boundary between body and soul.

In the opening stanza of the poem, a general sensuality is derived from the transposition of the human body into the natural world:

Where, like a pillow on a bed,  
 A pregnant banke swelled up, to rest  
 The violet's reclining head,  
 Sat we two, one anothers best

(1-4).

We then pass to the physical body proper:

Our hands were firmly cemented  
 With a fast balm, which thence did spring,  
 Our eye-beams twisted, and did thred  
 Our eyes, upon one double string

(5-8).

The strikingly tactile quality of 'cemented' is reinforced by the preceding 'firmly', while the 'fast balm' further solidifies the interlocking hands by a fusion which is effective for its assonance as much as for its implicit viscosity. The active and heavily stressed 'spring' (rather than, say, 'rise') provides a sharp additional dynamism. If the use of 'balm' seems - by its Paracelsian, spiritual associations - to rarify what otherwise might be reduced to 'sweat', it is important to remember that 'balm' or 'balsamum' was for Donne also an integral part of human physiology (see Chapter 4.1, pp.204-5).<sup>76</sup>

The entanglement of the lovers' 'twisted' eye-beams points, equally, to a peculiarly materialistic Renaissance theory of vision, connoting an entanglement quite as tangible and physical as modern notions of pheremonal attraction. Although there seemed in the early-seventeenth century to be no firm agreement as to whether vision involved 'intramission or extramission' (receiving light rays or emitting them) Donne does appear, in this case, to favour the latter view, which is a notably proactive one.<sup>77</sup> Within two lines he

compresses, moreover, not only a general theory of optics, but a neoplatonic interchange whose technical details are more fully expounded by Marsilio Ficino:

*Lycias* he stares on *Phaedrus* face, and *Phaedrus* fastens the balls of his eyes upon *Lycias*, and with those sparkling rays sends out his spirits. The beams of *Phaedrus* eyes are easily mingled with the beams of *Lycias*, and spirits are joyned to spirits. This vapour begot in *Phaedrus* heart, enters into *Lycias* bowels: and that which is a greater wonder, *Phaedrus* blood is in *Lycias* heart.<sup>78</sup>

The sense of almost cannibalistic osmosis is such that 'Lysias, whose blood and body contain with every passing day more and more of Phaedrus' likeness', will 'in time appear like Phaedrus "in some colours, or features, or feelings, or gestures"'.<sup>79</sup> The 'double string' of Donne's image augments this active, Ficinian exchange, suggesting a kind of perpetual circulation of spirits within a closed loop. The phrase must also, notwithstanding John Carey's gloss of 'a loop of string, with four pierced eyes on it' (Carey, p.138), in fact involve a play on the 'strings' of the optic nerves. Such an association almost certainly lies behind both Nashe's closely contemporary, 'I have crackt mine eye-strings with excessive staring' (Christ's Teares, II, p.56), and Donne's later image of a man pulling 'at an Oare, till his eye-strings, and sinews, and muscles broke' (Sermons, IX, p.383, penitential psalms, n.d.). The pronouncedly material optics of the poem are, moreover, echoed in Donne's religious writing, where we learn that:

[Christ's transfiguration] gave him not another face, but it super-emitted such a light, such an illustration upon him, as, by that irradiation, that coruscation, the beames of their eyes were scattered, and disgregated, dissipated so, as that they could not collect them, as at other times, nor constantly and confidently discern him..

(Sermons, III, p.118, n.d.).

Here the supposedly miraculous act of an omnipotent god is juxtaposed with an oddly detailed, partly Stoic theory of vision.<sup>80</sup>

The shadow of materialism seems to intrude, moreover, in a distinctively Democritean form, in Donne's belief that:

...th'atomies of which we grow,  
Are souls, whom no change can invade  
(47-8).

By the kind of 'performative paradox' seen so often in Donne's purportedly sensual language, these lines undermine the attribution of immutability to the lovers' 'new soule' by the very image which asserts it. The materialistic, Democritean, and potentially atheistic associations of 'senseless atoms' were, as has been shown in the case of Melanchthon, well known as early as 1550 (see above, Chapter 3.1b, p.142).<sup>81</sup> Here Donne is of course intending to parallel the (then unsplittable) atom with the soul, theologically understood as simple, indivisible and unchanging. Nonetheless, the unfortunate suggestion that human beings do indeed 'grow' merely from 'Atomies' is something which corresponds suspiciously well with Donne's anxieties about the material world. It stands as an especially neat example of a new discourse infecting an older one: typically Donne

cannot resist a relatively novel and vivid term such as 'Atomies', so that his supposedly spiritual intentions are countered by the increasing pervasiveness of materialistic vocabulary.<sup>82</sup>

The lover then proceeds to wonder: 'Our bodies why doe wee forbear?', arguing that,

We owe them thanks, because they thus,  
Did us, to us, at first convey,  
Yielded their forces, sense, to us,  
Nor are dross to us, but allay

(50-56).

'Allay', echoing the metallic, alchemical resonance of the 'new concoction' (27) again supplies a typically material analogue to spiritual experience. John Carey, in stressing of the 'gold to aery thinnesse beate' ('A Valediction: Forbidding Mourning') that it is, though semi-ethereal, ultimately still *metal* (Carey, p.186) indeed has the sanction of Donne himself: 'As light a thing as a Spangle is, a Spangle is silver; and leafe-gold, that is blowne away, is gold...'.<sup>83</sup> 'Allay' is, of course, intended to lift the body toward the soul, rather than *vice versa*. In view of the supple thread of corporeality woven throughout the poem, however, one may be inclined to agree again with Grierson that in fact here, as elsewhere, 'the lower bulks unduly'.

The question therefore arises as to whether the lovers have ever escaped their bodies at all. C.S. Lewis, who thought 'The Ecstasy' a 'nasty' poem, evidently felt not: 'Love does not prove itself pure by talking about purity' nor 'keep on drawing distinctions between spirit and flesh to the detriment of the latter and then explaining that the flesh is after all to be used'.<sup>84</sup> If Lewis's view hardly constitutes a very balanced appreciation of the poem, it is instructive

when compared both to Grierson's appraisal, and to the predominance of physicality I have outlined in this reading. It seems to be just this predominance that elicits from Lewis the term 'nasty'; while his seemingly unreasonable criticism of the poem's thesis suggests that he is really reacting against not the argument itself, but rather the too sensual language and imagery in which Donne has phrased his attempted reconciliation of spirit and flesh.

### c. The Spirit-Matter Boundary

The second key aspect of 'The Ecstasy' - that of boundaries, and mediation across them - is addressed in the central stanzas of the poem's argument:

On man heavens influence workes not so,  
 But that it first imprints the ayre,  
 Soe soule into the soule may flow,  
 Though it to body first repaire.

As our blood labours to beget  
 Spirits, as like soules as it can,  
 Because such fingers need to knit  
 That subtile knot, which makes us man:

So must pure lovers soules descend  
 T'affections, and to faculties,  
 That sense may reach and apprehend,  
 Else a great Prince in prison lies.

(57-68)

The etymology of the term 'influenza', a malady deriving from the 'influence of the stars', gives some indication of how

unfigurative the conceit of the first stanza actually is.<sup>85</sup> The word is better appreciated, indeed, if hyphenated as 'influence' - 'influx' or 'in-flowing'. Donne more than once displays belief in the power of stellar influence himself, explaining how we can 'clothe ourselves, and... shadow ourselves' against 'the Dog-starre [which] hath a pestilent breath, an infectious exhalation...' (Devotions, pp.51-2); and that, 'As the ayre workes upon our bodies, this *Prince of the Ayre* [the Devil] works upon our minds' (Sermons, IX, p.400, penitential psalms, n.d.).<sup>86</sup> 'Imprints', too, has a tactile quality which one does not expect to find associated with 'air'.<sup>87</sup> Air capable of receiving this imprint becomes strikingly grainy and smudged. Such palpability, a kind of Democritean materialising of space itself (and echoed by Donne's belief that, in the event of thunder or cannonfire 'the Ayre is condensed above the thicknesse of water, of water baked into *Ice*, almost *petrified*, almost made stone' (Devotions, p.62)), exemplifies the physical vitality Donne's language so often acquires at moments of ostensibly great spirituality.<sup>88</sup> Paracelsus, a figure who undoubtedly did believe in celestial 'influence', refers to such emanations as the "'smell, smoke, or sweat" of the stars'.<sup>89</sup> Here the potentially abstract divine influx is given a naturalistic realism by the evocation of bodily processes (cf. the 'pith' stringing heaven and earth), as well as by the organic association of 'smoke'. No less striking than Paracelsus' phrase is Donne's own reference to 'honey in the dew of the flowres, whence it is drawne', dew itself being 'but *Coeli Sudor*, a sweaty excrement of the heavens, and *siderum saliva*, the spettle, the fleame of the starres' (Sermons, III, p.233, April 1621).<sup>90</sup>

The degree of material detail and texture which infect Donne's analogical mediation (as in the macrocosm, so in the microcosm...) therefore sets the tone for the succeeding

negotiation between body and soul. For the following stanza, as its references to 'blood' and 'fingers' imply, has quite specific material associations of its own. The discussion of the body's 'larders', 'vaults', and its spiritual 'thimbles' has suggested that Donne was precisely, rather than only generally, aware of the material details concerning body-soul unity around this time. Certain specific clues indicate that these may indeed have been at the forefront of his attention. In Microcosmographia Crooke notes that '...in the ventricles... [the spirits] are boyled and labored...'; while Donne's 'knit' parallels, at the level of process, at least one description of the *rete* as a structure: '...Rete mirabile, so called from the wonderfull knittings of the twigges of arteries proceeding from the soporall about the basis of the braine at the sides of the sell of os sphaenoides...'.<sup>91</sup>

Even the 'strings' of the optic nerves implied in lines 7-8 could, moreover, connote both cerebral physiology in general, and the precise 'nerve centre' of the *rete mirabile*, which was understood to lie just above and behind the eyes [see Fig. 2].<sup>92</sup> Notwithstanding ongoing disruption to the traditional site of the *rete*, the continued involvement of spirits in almost all bodily processes, including vision, would require some form of linkage between the eyes and the animal spirits. Donne's 'subtile knot' must have either implied the *rete mirabile* as the necessary medium of 'labouring' and processing, or have tacitly acknowledged the recent disruption to this traditional site, which various anatomists had now relocated in different areas of the brain.

Throughout 'The Ecstasy', Donne repeatedly deals with the question of boundaries: between one person and another; between impersonal physical entities (metals and plants); between heaven and earth; and between soul and body. As in The Progresse of the Soule, he essentially straddles these boundaries by means of material substances: the 'new



concoction' received by the hypothetical observer; the hybrid flower derived from the transplanted violet; a hybrid metal ('allay'); and the air which, though less tangible and delimited, is still chemically active, 'imprinted' by heavenly in-flowings.<sup>93</sup> Does some equally definite corporeal locus correspond to the knitting and labouring spirits themselves? As suggested, these were far more material, in Renaissance medical theory, than a modern reader might immediately recognise. It seems likely also, however - especially given Donne's references to the body's spiritual 'thimbles', and to the 'pouring out' of his heart's spirits - that not only a physiological process, but also some anatomical site for this process, is implied in 'The Ecstasy'. Even without trying to decide if Donne had in mind the heart or brain (or which precise area of the brain) one senses that the very existence of the debate on suitable structures or organs for spiritual processes is itself significant. Although proponents of various options might appear convinced about their particular choices, both the lack of unanimous opinion, and the undeniable dis-location of the body-soul juncture, are ultimately relevant to the supposedly excessive materialism of Donne's poem. The subtle but recurring air of over-assertion in its spanning of various boundaries ('balme', 'cimented', 'concoction', 'entergraft', 'Atomies', 'allay') may in fact reflect both a general climate of materialism, and an unconscious spiritual anxiety in the face of an increasingly destabilised pneumatological theory. The spiritual process implied in Donne's poem stands poised between the positive wonder of a physicalised, re-vivified soul (one whose bodily mediation is now explored in the anatomy theatre), and the ultimate price to be paid for subjecting the spiritual to so close an empirical scrutiny. Not long after the ill-fated meeting of traditional faith and anatomical investigation, Christian

pneumatology begins to realign itself into the distinct camps of Cartesian dualism, and Fluddean esotericism. The *rete* is, by Donne's later life at least, shifting from orthodoxy toward occultism, in a way which must attract renewed suspicion to the Paracelsian 'imprinting' of the air.<sup>94</sup>

The 'window of opportunity' created by the odd new juxtaposition of theological notions and visceral reality was evidently still just ajar in the 1620s. To refine the fenestral metaphor a little, it may perhaps be imagined as blowing open and shut, in a troubled epistemological and religious climate. One can, however, give the last word on this ambiguity to Donne himself. In an undated St. Paul's sermon, he observes that God had 'So great a care... of those [ceremonial] things', which, 'though they be not of the revenue of Religion, yet [they] are of the subsidy of Religion, and, though they be not the Soule of the Church, yet are they those Spirits that unite soule and body together' (Sermons, X, p.116, St. Pauls, n.d.). Here we find the Church of England's own tension between reaction and reform used to explicate the correct (as Donne sees it) relationship of material and divine. While spirits are still granted the same function traditionally allotted to them, their status is as implicitly marginal or 'subsidiary' as the revalued practices of Roman Catholicism have become within early Stuart England. Appropriately, both the material rites of Church ceremony, and the confluence of material and spiritual afforded by the *rete mirabile*, have acquired a similar taint of the superstitious and magical. Although Stuart Protestantism relinquished the material framework of devotion only in piecemeal fashion, the process clearly was underway in Donne's lifetime, with any regression to High Church ceremony being conspicuously imposed from above, and no longer able to rely on solid popular acquiescence. In the

early-seventeenth century the soul is 'dephysicalised' in equally piecemeal fashion, following the replacement of the *rete mirabile* by the choroid plexuses, and Descartes' further substitution of the pineal gland. This last, significantly, provides a physical focus effectively immune to physical investigation, and in certain senses no more than a theoretical concession to older, more corporeally integrated notions of body and soul. In both cases, sites of physical mediation between matter and spirit (whether anatomical or iconic) come to seem anatagonistic to, rather than supportive of, the numinous. The evaporation of spirituality from these definite physical loci appears, with hindsight, as preparatory to an epistemology which will ultimately set matter *against* spirit as uncompromisingly as the theology of the Scholastics, replacing the nuanced body-soul continuum with a binary, mutually exclusive opposition. Spirit, increasingly, is understood as what matter is not, rather than an etherealised form of the material.

It is finally unsurprising, then, that Grierson's view of 'The Ecstasy' should find the 'lower' aspects of the human organism to 'bulk unduly' in a context so pronouncedly corporeal as that of late Tudor and early Stuart England. Equally, the 'nastiness' apprehended by Lewis is an unconsciously astute response to a poem which obliquely chronicles a key stage in the literal 'dis-integration' of Christian pneumatology. The poem's ill-fated attempt to re-spiritualise an ever more brutally material and demystified body is appropriately paralleled by Fludd's suspiciously forced allegiance to the newly occult *rete* of the 1620s - a frail material icon significantly overcharged with displaced and delocalised religious energies. The Triple Anatomy must have been in preparation for some time before 1623, so that what appears to be, on Fludd's part, a defensive rearguard action in the face of mounting scepticism, could have been

sparked only a short time after Donne's 1621 sermon (Sermons, III, p.236), if not before.

The parallel is tellingly strengthened by the way that Donne's 'insatiable whirlpoole of the covetous mind' is in fact not something 'undiscovered' or undemonstrated by anatomists. As emphasized, Donne himself talks of 'looking' into the 'ventricles of the... brain' (Sermons, III, p.236). To enquire how Donne here precisely distinguishes between 'mind', 'brain', and 'soul' must finally be a futile task. It is, indeed, precisely the dangerous and perpetual blurring of all three terms which lies behind his faintly defiant 'no Anatomy...' - a rhetorical attempt to seal off and defend a last, embattled enclave of the mysterious and ethereal in a zone too irreverently scrutinized by the surgeon's eye. Within the space of a very few years, then, both Donne and Fludd are engaged in rhetorical strategies whose final aim - to preserve one last, perhaps literal, inch of spiritualised matter from the relentless scalpel of analysis - is remarkably similar. In the following section I will investigate two of Donne's most sustained poetic efforts to respiritualise, and control, a changing world.

##### **5. Anatomy and Corporeality in the 'Anniversaries'**

Like 'The Ecstasy', Donne's two 'Anniversary' poems, An Anatomy of the World (London, 1611), and The Progresse of the Soule (London, 1612) are marked by an uneasy coexistence of physical and spiritual elements. Although in some ways monoglossic and reactionary in their attitude to a changing world, they yet exhibit a recurring fascination with the activities of a nascent scientific mentality. I will attempt to show here how Donne at once recoils from, and cleaves to, the discoveries of New Philosophy; and how reactions to the

poems as a whole have, from Donne's time to our own, implicitly reflected the larger cultural tensions played out within these two pieces. Although the first poem, given its place in the genre of the literary anatomy, and its allusions to the practice of dissection, is of more interest, I will look briefly at its sequel also. Besides its echoes of the Anatomy's ambivalence, the Progresse is relevant because the critical responses which I will seek to explain apply, probably or definitely, to both poems. In order to illustrate Donne's evident attitudes to change and stability it will be necessary to look at the astronomical innovations and shocks which may have influenced such attitudes. This section will also make use of other material (notably from the sermons) which illuminates the stance outlined in the Anniversaries.

The conservative religious tendency of the first poem is most evident in its apocalypticism.<sup>95</sup> Apocalyptic thought was, at this point, a mode of thought quite as topical as anatomy itself. Donne's sustained and detailed outline of the world's ever-increasing decadence, and the accompanying eschatological overtones, were part of a widespread strain of belief in the late-sixteenth and early-seventeenth centuries. Apocalypticism can be found also in La Primaudaye's French Academy, and in works by Henri Estienne, Lambert Daneau, Antonio de Torquemada, George Gascoigne, Sheltco Geveren, and Sir Richard Barckley.<sup>96</sup> Joseph Hall, generally thought to have written the prefatory poems to Donne's Anniversaries, was himself apparently 'noted in the University, for his ingenuous maintaining... that... *The World groweth old*'.<sup>97</sup> In the year before Donne published his elegy, indeed, one John Hull gave a more dramatic version of the earth's moribund state, warning of the imminent 'burning of the world' as a result of the 'iniquity of the times, and atheisme of the age'.<sup>98</sup>

Like these and other writers, Donne evidently sees the world as having reached a state of physical decrepitude - one

which is, of course, ultimately bound up with mankind's first transgression:

The world did in her Cradle take a fall,  
 And turn'd her braines, and tooke a generall maime  
 (Anatomy, 196-97).

Various of the specific symptoms of this malaise, as given by Donne, are common apocalyptic property. The relative shortness of life, as contrasted with the times

When Stag, and Raven, and the long-liv'd tree,  
 Compar'd with man, dy'de in minoritee  
 (Anatomy, 115-16)

is noted also by Gascoigne, and by the clerics, Edwin Sandys and Frances Shakelton.<sup>99</sup> The decrease in human stature ('We're scarce our Fathers shadowes cast at noone' (Anatomy, 144)) is mentioned by de Torquemada and Simon Goulart, and again by Banister (who indeed explains the apparent errors of Galen and Hippocrates by the fact that 'dayly, and.. throughout the world, the stature of man in all pointes decreaseth'); and that of mountains by Shakelton.<sup>100</sup> Donne's belief in the general sterility of the soil and eccentricity of climate (Anatomy, 377-86) is supported by Geveren: 'The aire is sometimes corrupt, sometime with untimelie showres... The fruitfulnessse of the field is not such as it hath beene aforetimes'.<sup>101</sup> Finally, the sun, 'being now falne nearer us' (Anatomy, 274) is also understood, by Shakelton and Leroy, to have somehow moved toward the earth.<sup>102</sup> The latter notes that it is now '9,976 German miles closer to the earth.. than in the time of Ptolemy'.<sup>103</sup>

To the extent that it partakes of the apocalyptic viewpoint Donne's poem is (like Burton's attribution of

illness to original sin (Chapter 3.3, p.169) eminently monoglossic. All phenomena are drawn to one organising centre, rather than examined individually. This inability to perceive change, and astronomical change in particular, in any other than religious terms, is something which Donne also exhibits in more subtle ways. Between lines 268-277 he laments the newly chaotic revolutions of sun and stars, and proceeds to link this astronomical chaos with the increasingly skilled and thorough stellar charting and observations of the astronomers themselves:

For of Meridians, and Parallels,  
 Man hath weav'd out a net, and this net throwne  
 Upon the Heavens, and now they are his owne.  
 Loth to go up the hill, or labor thus  
 To goe to heaven, we make heaven come to us.  
 We spur, we raine the stars, and in their race  
 They're diversely content t'obey our pace.

(Anatomy, 278-84).

The covert logic of Donne's conceit is that mankind is guilty of Faustian presumption in attempting, effectively, to rearrange, redescribe, and generally control the heavens. The appropriate response to such folly is not outright anger, but satire. Notably, it is in Donne's most famous satirical work, Ignatius His Conclave that he refers to 'Galilaeo... who of late hath summoned the other worlds, the Stars to come nearer to him, and give him an account of themselves'.<sup>104</sup> In each case, there is essentially a mockery of what is constructed as an attempted 'creation by fiat' on the part of the astronomers, standing over against that of the Almighty himself. Monoglossia is therefore intrinsic to the satire, as the astronomers' folly is only foolish if Aristotelian cosmology is seen as absolutely unchallengeable. Comic effect

is produced by the effectual substitution of the astronomer for God ('summoned... to him'). Donne instinctively presents the phenomena not as a discovery, but as the invention, by astronomers, of one more type of monoglossic discourse: '...now they are his owne'. He appears unable to conceive of the astronomer as occupying a more neutral position: that of an *observer* in the kind of world science will increasingly promote: one simply 'out there', neither comprehended by Scripture, nor 'created' by man, but pre-existing, and susceptible of gradual discovery.<sup>105</sup> As Francis Bacon aptly notes, 'things in themselves new will yet be apprehended with reference to what is old'.<sup>106</sup>

Even in this satirical undercutting, however, Donne indirectly captures the outlook of Bacon, Descartes, and Galileo. The horse, a conspicuous example of mankind's ability to control and utilise the natural world, is here metonymic of a far more radical and comprehensive seizure of nature *per se*. Redirecting it through the new ordering filter of a scientific discourse (the 'net' of 'Meridians and Parallels'), the astronomer aggressively yanks the very firmament from the realms of myth to the confines of the observatory. Nor is this the only sign, in the poem, that Donne cannot simply contain the problems raised by 'new philosophy' within the parameters of a single religious explanation. His observation that,

Th'Ayre shows such Meteors, as none can see,  
Not onely what they meane, but what they bee  
(Anatomy, 387-88),

though at first glance typically apocalyptic, essentially concedes the inadequacy of the apocalyptic stance ('none can see, /... what they meane'). In a Verse Letter, Donne had ascribed the appearance of meteoric phenomena in the

supposedly unchangeable firmament to miraculous divine intervention.<sup>107</sup> The more open-ended response of the Anatomy, however, effectively recognises the 'new starres' (260) as beyond the limits of traditional systems of knowledge.<sup>108</sup>

In the light of Donne's general attraction towards the novel one could indeed argue that the Anatomy is ultimately as concerned with change for its own sake, as it is with subordinating new phenomena to a totalising theological scheme. The evils of Paracelsus' 'new phisicke' (Anatomy, 160), and the various 'New starres' (Anatomy, 260) sighted since that of Tycho Brahe in 1572, parallel Donne's modish references to anatomy itself.<sup>109</sup> In both 'Anniversary' poems, the sheer amount of attention and space Donne devotes to such matters is itself significant. Thus, in the 'journey' of Elizabeth's soul in The Progresse of the Soule, Donne's claim that she 'Dispatches in a minute all the way/Twixt Heaven, and Earth', is countered by the following fifteen lines, which accompany her with meticulous care past 'Meteors', 'th'Ayrs middle region', the moon, Venus, Mercury, Mars, and Jupiter (190-204). Despite the alleged elimination of the physical realms between human and divine, Donne feels obliged to acknowledge the changing nature of the cosmos.<sup>110</sup> If the references to 'Argus', 'Mars his camp', and to 'Jove' are reassuringly mythicising, the fact that Elizabeth's soul

...baits not at the Moone, nor cares to trie,  
Whether in that new world, men live, and die  
(Progresse, 195-196)

suggests that the moon, like the 'netted heavens' described above (Anatomy, 278-280) has been jolted from the mythic to the perceptual plane by the intrusions of Galilean astronomy.<sup>111</sup>

Other references show, similarly, a writer who is in fact not able to disentangle himself from the mundane world, and the newest empirical investigations of it (as he conveniently purports to extricate his dead subject) but caught up in an ambivalent relation of repulsion and attraction. An allusion to the newly-emerged belief in a plurality of worlds -

...freely men confesse, that this world's spent,  
When in the Planets, and the Firmament  
They seeke so many new...

(Anatomy, 209-11) -

is complicated intriguingly by Donne's later concession, that 'subtile men have, with some appearance of probability, imagined, that in that heaven, in those manifold Sphears of the Planets, and the Starres, there are many earths, many worlds, as big as this, which we inhabite..' (Sermons, IX, p.47, April, 1629). His preoccupation is still more curiously attested in a metaphor intended to elevate sainthood over polytheism, where he speculates on the possibility that '...there can be other worlds imagined besides this, that is under our Moone,', and concludes: '...if there could be other Gods imagined of those worlds, besides this God.. I had rather be one of those Saints in this heaven, then of those Gods in those other worlds.' (Sermons, IX, p.90, [April 1629]).<sup>112</sup> The extraordinary contemplation of 'other Gods' suggests that Donne had extrapolated the theoretical consequences of new astronomy with remarkable thoroughness.<sup>113</sup>

The overtly conservative, monoglossic and orthodox stance of apocalypticism is, then, undermined both by certain precise images, and by a more general tendency to linger, a little too lengthily and exactly, on those earthly changes which the Anatomy enumerates. A similar schism can be

identified in the poem's nominal generic status, as one of the period's numerous literary anatomies. I will look, at the end of this section, at the way Elizabeth Drury herself provides a covertly reassuring focus for the otherwise broadly diffused and centrifugal anxieties Donne cites. Here it is sufficient to note that this effectual compression is paralleled more subtly - and therefore more successfully - by Donne's use of the literary anatomy. Just as with Burton, and certain of the genre's more obscure writers, Donne implicitly limits and contains his anxieties by the effectual 'embodiment' which the poem's title connotes. As already suggested in Chapters One and Three, what may now appear little more than a rhetorical fancy has, for the Renaissance, rather more tenacious epistemological roots. The 'body of knowledge' sectioned by the authorial scalpel both depends upon, and reasserts, an underlying belief in pre-existing, substantial, and securely-defined fields of inquiry - ones which, finally, are guaranteed by God. In this sense, then, the use of 'anatomy' is again conservative and arguably defensive. It allows Donne to manage, psychologically, the 'worlds sicknesse', a 'Hectique fever' which, he tellingly insists, is otherwise '*not to be contrould*' (*Anatomy*, 239, 243, 244, *italic mine*).

Typically, however, there are subtle incongruities between this conceptual possibility, and the way in which it is expressively realised. Donne's poem actually earns its title more painstakingly than the bulk of the genre.<sup>24</sup> Its structure derives in part from the (slightly varying) refrain which emphasises Elizabeth Drury's death:

Shee, shee is dead, she's dead..

...

And learnst thus much by our Anatomee

(*Anatomy*, 325-7).

According to Louis Martz, this recurring refrain (appearing five times, at lines 183, 237, 325, 367, and 427) splits the poem into five sections. Moreover, each of the five sections can itself be split into three further sections: a meditation, followed by a eulogy, and concluding with the refrain quoted above.<sup>115</sup> Notwithstanding the typically Catholic nature of this implicit partitioning (see Martz, pp.223-26) it may be said that anatomy, like other proto-scientific tendencies, here establishes itself in parallel to, or under cover of, religious culture. The associations of Donne's poem mean that a religious organising principle has been nudged into the strikingly empirical context of the dissecting theatre - the scene of the most compelling and extensive analysis yet achieved, arguably, in any sphere of knowledge.

In addition to this formal scrupulousness, Donne's attention to the didactic purpose of anatomy displays an exactitude which suggests the presence of the dissecting theatre as an at least partial reference point. We find him proposing that

I (since no man can make thee live) will trie,  
What we may gaine by thy Anatomy

(Anatomy, 59-60)

and addressing the reader's imagined objection:

...there is none  
Alive to study this dissectione

(ibid., 65-66).<sup>116</sup>

He goes on to refer to the over-riding factor dominating all dissections before the time of refrigeration or fixatives:

But as in cutting up a man that's dead,  
 The body will not last out, to have read  
 On every part, and therefore men direct  
 Their speech to parts, that are of most effect;  
 So the worlds carcasse would not last, if I  
 Were punctuall in this Anatomy;  
 Nor smels it well to hearers, if one tell  
 Them their disease, who faine would thinke they're

well

(435-443).

This glance at the priorities observed as a consequence of limited time again shows a writer more interested in actual anatomical practice than his less scrupulous fellow 'anatomists'. Donne's characteristic rhetorical agility and love of paradox ('Nor *smels* it well to hearers...') injects into the poem something of the technical minutiae and raw sensory experiences of the dissecting room.

David Hedric Hirsch has indeed suggested that even the reference to a world 'crumbled out again to his atomies' is in fact slyly dissective, punning on the ultimate Greek root of 'Atomi' ('from "a", meaning "not", and "temnein", to cut' (Hirsch, p.74)). In doing so he alludes to 'two other contemporary definitions of *atomi*, "an anatomical preparation, especially a skeleton", or, more loosely, "an emaciated or withered living body"'.<sup>117</sup>

That the poem's anatomical rhetoric was indeed not directed into a vacuum is attested by both historical and literary evidence. Although Donne's Anatomy preceded the appointment of Harvey as Lumleian lecturer (August 1615, see O' Malley et al, p.7) it appears that anatomy was, by this

time, sufficiently conspicuous to attract controversy as to just who might view it. Dekker, in a play dated around 1604/5, is clearly expecting knowing laughter from his audience when he has a character wryly observe

Thus nice Dames sweare, it is unfit their eyes  
Should view men carv'd up for Anatomies,  
Yet they'll see all, so they may stand unseene,  
Many women sure will sinne behind a Skreene.<sup>118</sup>

Additionally, while the Annals of the Royal College of Physicians do not supply any certain dates for dissections in this period, an entry for 24 February 1608, does record the decree that 'the bodies dissected by the anatomy lecturers should afterwards be buried in wooden coffins at the expense of the College' (RCP, III, i, p.6). It appears from this that an anatomy had just occurred, or was about to. Again, on 26 June 1609, '...Dr. Pope was advised that... he should prepare to give the next public anatomy lecture in the College during the following year about the time of the Purification of the Blessed Virgin: this he undertook [i.e., 'assented to']' (ibid., III, i, p.23).<sup>119</sup> The Annals of the Barber-Surgeons, moreover, do state unequivocally, on 28 March, 1610, that 'This day wee had the bodie of one... [blank] to desect for an Anotomy and Mr Doctor Gwyn did reade upon the same'.<sup>120</sup> That an annual Lumleian dissection took place in 1611 is strongly suggested by the fact that on 'The morrow of St John the Baptist's Day [24 June (Cheney, Dates, p.53)]', 1610, 'Dr. Palmer was to be advised by the Beadle that he should prepare for the Anatomy lecture to be given next spring in the College' (RCP, III, i, p.23).

If, in the Anatomy, Donne does not appear conspicuously troubled by the concrete social institution to which he alludes, he offers, in the succeeding poem, a representation

of the body which is both problematic and highly topical. Where The First Anniversary consistently deprecates the condition of the terrestrial world as a whole, in The Progresse of the Soul it is the body ('a small lump of flesh', 'This curded milke', 'A Province Pack'd up in two yards of skinne' (The Progresse of the Soul, 164, 165, 176)) which Donne seeks to marginalise and devalue. The most sustained and striking example of this tendency occurs at the opening of the poem, where Donne illustrates the illusory life evident in the 'dead world':

...as sometimes in a beheaded man,  
 Though at those two Red seas, which freely ran,  
 One from the Trunke, another from the Head,  
 His soule be saild, to her eternall bed,  
 His eies will twinckle, and his tongue will roll,  
 As though he beckned, and cal'd backe his Soul,  
 He graspes his hands, and he puls up his feet,  
 And seemes to reach, and to step forth to meet  
 His soule; when all these motions which we saw,  
 Are but as Ice, which crackles at a thaw:

...

So struggles this dead world, now shee is gone

(The Progresse of the Soul, 9-22).

There are of course specific historical and cultural reasons why such a passage should appear more grotesquely inappropriate to twentieth-century eyes than to those of the Renaissance. The relative familiarity of public executions would be chief among these.<sup>121</sup> Different notions as to the construction of poetry probably apply also. What, in the above lines, appears to us a failure of 'good taste' is merely an attempt to render a poetical conceit in the most forceful way imaginable.<sup>122</sup>

Even by Renaissance standards of corporeality and of poetic decorum, however (see again Tuve, p.77), this appears to border on the insensitive. We know, indeed, that Donne suffered 'many censures' for 'my book of Mistress Drury' (see letter in Gosse, I, pp.305-6, [April 1612]). These appear to have applied to both poems, given the absence of any qualification, and the publication of the two as one 'book' in the month in which Donne writes. The above passage is an obvious candidate for such censures, and points to Donne's having stretched his subject, overburdening it with a general (if unadmitted) religious anxiety which the frail memory of Elizabeth Drury (and the Jacobean public) would not bear.

Donne's implicit confidence in his ability to spiritualise the most brutally corporeal representations thus appears as an unconscious need to challenge, and overcome, the physical world. The perceived failure to sufficiently subdue the corporeal may imply not just Donne's overconfidence in the power of the spiritual to elevate the mundane, but also a more general shift in the balance between the earthly and the supernatural. The reception of such an image depends not only on the writer's conscious intentions, but - to use an appropriate metaphor - on how much the physical and social worlds, and the body in particular, are able to break through the poetic skin with which the writer seeks to bind them. Although public executions, at this time, would have been no more prominent or familiar than forty or fifty years previously, the anatomized body, and its graphic portrayal (which certainly were) must have affected the way the body was apprehended in such an image as Donne uses. It could be said that the very nature of the visceral had itself been altered, now that the artistry and skill of anatomists and anatomical illustrators provided such compelling representations of the internal body. That these representations to some degree superseded those of the

quartering and associated mutilations is suggested forcefully by contemporary rhetorical uses of 'anatomy' (implying 'medical anatomy') to express physical terror.<sup>123</sup>

Some twenty-five years later, René Descartes emphasises the autonomy of the mechanical body by referring to those 'severed heads' which 'continue to move about and bite the earth although they are no longer alive'.<sup>124</sup> A later formulation of the same point, in which Descartes states that 'the machine of the body', in such cases, 'moves despite the soul', vividly highlights the implicit paradox earlier recognised by Donne.<sup>125</sup> How does the human body exhibit motion when devoid of that (the soul, 'saild, to her eternall bed') which is allegedly responsible for all its actions? Descartes' repeated use of the example, and his assumption, in the letter to More, that the phenomenon is common knowledge ('This is very clear') indicates that the associated theological anxieties were themselves topical and widespread.

It appears, then, that just as the supposedly 'illustrative' function of the image is rather a covert *assertion* of the power of spirit over matter, so the apparently incidental explanation which Donne includes is really a central focus of concern. Such a reading explains a good deal of the longstanding hostility to both 'Anniversary' poems. In each case, Donne is simply not writing within his given remit. It could appear initially that the Anatomy's extravagant apocalyptic pessimism is merely an extended conceit (chosen as suitable to the lamented daughter of Sir Robert Drury). In fact, however - especially given the strength of apocalypticism in Stuart England - the case might convincingly be reversed. Donne is using Elizabeth Drury as a pretext to talk about apocalypticism, rather than vice versa. Donne himself does appear to recognise the incongruity between the poems' occasion and their content, in his use of

subtitles for both the 'First Anniversary' ('wherein, by occasion of the untimely death of Mistress Elizabeth Drury, the frailty and the decay of this whole world is represented') and the second ('wherein: by occasion of the religious death of Mistris Elizabeth Drury the incommodities of the soul in this life and her exaltation in the next, are contemplated') (Anatomy, p.63, p.87). These oblique disclaimers, however, did not exempt Donne from the 'many censures' of his readers.

The question therefore arises: does the recurring dissatisfaction with these poems in fact stem from Donne's failed attempt to fuse the particular subject of the pieces with a far more general, and fundamental, religious disquiet? The perceived awkwardness and hyperbole of the poems seems, from this perspective, to be a consequence of pouring the right emotions into the wrong poetic receptacle - one which, consequently, assumed a contorted shape. Although Elizabeth Drury's death affords a superficial reason for the sustained pessimism and eulogy of the pieces, the real driving force behind the poems (the poet's sense of spiritual emptiness) resurfaces in the baffled response of readers. Ben Jonson's observation: 'Done's Aniversarie was profane and full of blasphemies... [and] that if it had been written of the Virgin Marie it had been something' indeed seems little different, *mutatis mutandis*, from that of Frank Manley: 'The main problem with the "Anniversaries" is that they are unable to support the weight of their own hyperbole'.<sup>126</sup> In a sense, the poem was indeed written of 'the Virgin Marie', because a latter-day reconstruction of this figure suited Donne's unavowed inclinations at this point.<sup>127</sup>

Donne's covert psychological motivation, however, produces a peculiar hybrid of neoplatonic eulogy and apocalyptic lament - a combination whose incongruity is, arguably, no more than a microcosm of Christianity's own

struggle to contain and absorb the increasing power of Natural Philosophy. That Donne himself was relying, implicitly or explicitly, on a form of neoplatonic rhetoric is supported by his own responses to contemporary criticism:

..my purpose was to say as well as I could; for since I never saw the gentlewoman, I cannot be understood to have bound myself to have spoken just truth; but I would not be thought to have gone about to praise anybody in rhyme, except I took such a person, as might be capable of all that I could say.<sup>128</sup>

This to the modern eye appears peculiarly evasive and oblique. The response to Donne's 'unanswerability' (owing to his not having seen Elizabeth Drury), might simply be, 'No, but then best not to have written it at all'. The following 'innocent-til-proven-guilty' approach (implied by Donne's 'might be') hardly suffices either. This is a sound reason for not imprisoning someone, but scarcely for awarding her a medal.

Donne, does, of course, have the sanction of Sidney's Apology in dealing with what *should* be, rather than what is. While most branches of knowledge are 'captived to the truth of a foolish world', 'the poet, disdainng to be tied to any such subjection... doth grow in effect into another nature, in making things either better than Nature bringeth forth, or, quite anew, forms such as never were in Nature...' (Apology, p.111, p.100). It is, indeed, in poetry that the Creator himself 'with the force of a divine breath... bringeth forth things far surpassing [Nature's] doings... (Apology, p.101).

Donne's defensive parting shot seems similarly to imply the importance of general, rather than particular truth: 'If any of those ladies think that Mistress Drury was not so, let that lady make herself fit for all those praises in the book,

and it shall be hers'.<sup>129</sup> The implied anonymity of 'those ladies' matches both the response to Jonson (that the poem in fact involved 'the idea of a woman' (Drummond, p.3)), and the impression that Elizabeth Drury herself needed to be only *potentially* deserving of Donne's eulogy: 'such a person, as might be capable of all I could say'. Like the addressee of 'Aire and Angels', fit for Donne's admiration despite her anonymity, Elizabeth Drury is a sufficient vehicle through which to apprehend a higher truth. Donne's apparent slipperiness may in fact reflect his belief that he is, finally, telling the truth about *something*, if not about his patron's daughter. It is tempting, therefore, to conclude that Donne implicitly relies on the 'poetic glue' which Foucault's 'resemblance' *epistémé* affords in bridging what, to our eyes, may appear a significant gap between particular and general truth.

The role of resemblance thinking in these poems may, however, be more problematic. Is Donne in fact covertly attempting to reassert the validity of ideal, divinely guaranteed truth *via* his idealisation of Elizabeth Drury, rather than simply, calmly expressing such notions? An anxious desire to recreate the threatened epistemological mode of resemblance thought would explain the apparent over-assertion identified in the Anniversaries by critics since their first publication. In this light it can be argued that the hostility to Donne's 'failed' poems ultimately stemmed from a similar anxiety to that which prompted their creation. The 'many censures' were in fact an unconscious defensive response to the 'unconscious' of the poems. These, in reworking Donne's own fears, formed an epistemological 'bad dream' - not of the past, but of the present and future. To state the case a little more precisely, critics may indeed have been reacting to the subliminal impression that poetry itself was failing. As a mode of expression and of knowledge,

poetry was accorded an especial privilege during the Foucauldian epistemé of resemblance, which *promoted* occult, 'poetical' connections rather than merely allowing them. Failed poetry of so serious a type as this was, then, the symptom of a failing system of knowledge, and necessarily provoked violent response.

### Conclusion

I have attempted here to show that Donne was generally well-versed in, and frequently exposed to, medical and dissective phenomena, and that such knowledge and experience were rhetorically utilised by him for a variety of purposes. Although it is to a certain extent justifiable to distinguish the corporeal references found in Donne's nominally secular, earlier poems from those of the Anniversaries, sermons and Devotions, there is clearly some fundamental continuity between the two groupings. 'A Valediction: Of My Name in the Window', for example, foreshadows the more anxious, and rigorously explicated discussions of resurrection found throughout the sermons, making explicit and developing the often uneasy association, in Donne's mind, between anatomy and the re-formed body of the afterlife. A more basic and fundamental thematic constant, however (and one visible in Shakespeare, Dekker, Jonson and Sidney) is the use of the Vesalian interior to supply material analogues for psychological or spiritual situations. Seemingly playful in 'The Legacy' and 'The Dampe', Donne's attempts to anatomically localise and fix otherwise elusive and nebulous emotional conditions are ultimately revived in more serious devotional contexts. These latter examples, from the sermons and Devotions, seem already to be gestating in the

transitional instances of 'The Ecstasy' and the two Anniversary poems. In the former, the tendency to concretise emotional states, though still partly secular, essentially spans the amatory and the spiritual because of the emphasis on body-soul integration. Donne may be seen here to glance sideways at the conflict between anatomy and religion, exemplifying, in doing so, the ability of anatomical questions to cross traditional epistemic or generic boundaries. In the Anniversaries, and the first most especially, there is a clearer and more direct attempt to yoke a particular poetic task to the service of wide-ranging spiritual concerns. Here Donne's conspicuous efforts to demean or explain away the changing material world may be seen to invert the relatively carefree somatic imagery of the 'Songs and Sonnets'. In either case, the body is stubbornly and solidly present, and must be negotiated, willingly or unwillingly. The following chapter deals with its continued, and evidently strengthening effect upon Donne's religious imagination.

## Chapter Five

### Anatomy and Religion

#### Introduction

This chapter considers the interaction between the anatomised body and problems of faith implicit and explicit in Donne's overtly religious writings. My first section sets out primary data on the Lumleian anatomy lectures, in order to suggest possible connections between Donne's dissective references and the London anatomical season. Section two argues for the presence of conflicting epistemological tendencies in the Devotions and the sermons. Sections three, four and five each explore particular aspects of this ambivalence. One apparent result of Donne's uncertainty is a need to actively create and recreate the felt presence of God. In section three the evidently violent divine power, and the correlative masochism which this produces - most notably in the Holy Sonnets - are seen as related to the problem of spiritual distance and emptiness which underlies and often motivates the anatomical and corporeal imagery of the Sermons. The seemingly ironic presence of such earthly phenomena in these contexts constitutes an implicit tribute to a powerful, increasingly autonomous new discourse - that of anatomically-based medicine. My fourth section considers certain of Donne's discussions of resurrection in relation to the increasingly pervasive discourse of anatomical enquiry. Donne's more direct anatomical and visceral images can then be understood as part of a general drive toward rhetorical force and violence, conditioned by feelings of spiritual abandonment and guilt, as well as by a fear (registered with varying degrees of consciousness) of the anatomised body. This fear

seems to acknowledge the disruption of older notions of matter and spirit, in which the soul had been unproblematically accommodated in a subordinate body.

The fifth and final section in particular shows how Donne's rhetorical exploitations of the body rely on the as yet transitional, unstable relations of religion and anatomy. Donne's use of the latter to 'flesh out' and resolidify the former is not yet prohibited by any overt sense of the new body as threatening traditional Christianity. Tension between the two discourses remains, at this stage, subterranean and sporadic. Retrospectively, however, many of Donne's corporeal or anatomical images appear indirectly marked by such a tension. The particular problems which seventeenth-century Natural Philosophy presented to orthodox Christian notions of bodily resurrection provide an explicit and localised example of the more diffuse, but clearly no less pressing, anxieties reviewed in this final section.

## **1. The Sermons and The Lumleian Lectures: Possible Links**

### **a. The Lumleian Lectures**

In many of the examples to be discussed in this chapter, Donne's somatic references appear to be highly concrete, and should be understood as part of the newly vigorous dissective culture of early Stuart London. I will present evidence, from the Annals of the Royal College of Physicians and from Donne's sermons, for a probable 'dissective season' stretching broadly from late October to late March; give a general overview of respective dates for relevant sermons and anatomies; and (tentatively) outline possible dating for

certain currently undated sermons. I would stress from the outset that the notion of Donne's visceral and generally corporeal language being influenced by the sixteenth- and seventeenth-century promotion of dissection in London is not *dependent* on definite chronological parallels between sermons and anatomies. Nonetheless, given the amount of suggestive evidence which exists, it seems worthwhile at least to include some of this, in order to let the reader draw his or her own conclusion.

Two general working hypotheses will govern my subsequent discussion of the College Annals. With regard, firstly, to lectures for which no precise date (or indeed any absolute confirmation of their having occurred), is available, I will be working on the assumption that they did nonetheless take place. Certain entries in the College annals show that what might now be considered very noteworthy events (such as a three-day Harveian dissection) were not recorded in college records around the time of their occurrence. As already noted, Simonds D'Ewes' diary proves that Harvey did indeed dissect from 27-29 March 1623.<sup>1</sup> The only reference to this by the College, however, is on 28 November 1622, when Dr. Goulston was excused from anatomising because 'Dr. Harvey this year was lecturing on the whole of anatomy...'.<sup>2</sup> Again, an entry for 7 March 1627/8, referring to 'names for the candidature for the Anatomy Lecture' states that 'Dr Meverall was chosen for the following year' (RCP, III, ii, p.251). The reference is probably to the Goulstonian lecture of December 1628, but the event itself is acknowledged in the Annals only by the oblique entry, 'During the days of the special public anatomy lecture, the President thought that the College should meet' (10 December 1628, RCP, III, ii, p.260).

A second point concerns the Annals' use of dates. Although for convenience I will be referring to comments or decisions which 'happened on' such a day as is given above

the relevant citation, it is clear that there may be quite a considerable lapse between the date given and the actual occurrence of the recorded business. Under '5 February 1629', for example, there are over two pages of entries. Among them it states that 'The Ordinary Anatomy Lectures were given in the College buildings by the Lecturer Dr. William Harvey on 26 February 1629' (RCP, III, ii, p.275). Given that the next explicit date heading is '5 March', it seems that at some points a month's worth of business would be recorded under one single date, with individual dates specified in the text where necessary.<sup>3</sup>

Although there is slightly more evidence on Lent anatomies than on those between October and December, it appears that, particularly after 1624, the anatomical season ran from approximately late October to late March or early April. It is certain that there was a dissection in December 1629 (RCP, III, ii, p.269), and probable that this occurred from around 1624, when, on 30 October 1624, Robert Fludd and others had volunteered as dissectors for the new Goulstonian anatomy of December (RCP, III, ii, p.188, p.260). It seems that dissections also took place, at least intermittently, in November or December from 1583. In this year, 'as President[,] Dr. Gifford [was] granted a dispensation for ever from the public dissection of the human body' (entry for 11 November, RCP, II, p.21). More definitely, in 1587 Dr. Fryer was 'enjoined to perform his public Dissection carefully... in the Michaelmas Term 1588' (25 June 1587, RCP, II, p.47). Michaelmas ran from 6 October to 25 November (Cheney, Dates, p.67), and while this may seem early for an actual dissection, the date tallies very neatly with the fact that, on 10 October 1589, 'Dr. Browne was allocated 26 shillings and eight pence... for his expenses in connection with the body' (RCP, II, p.60).<sup>4</sup> The attempt to more effectively secure bodies (presumably by bribery to various

parties, perhaps also for beatings incurred by the crowd) suggests that the College was beginning to take the Lumleian increasingly seriously at just the time when certain of the most famous literary 'anatomies' were circulating.<sup>5</sup> Again, on 20 March 1591, Dr. Muffett was excused from what appears to have been the Lumleian dissection, but 'enjoined to deliver the public Anatomy Lecture in the next Michaelmas term' (RCP, II, p.76). It seems, then, that at this point, and (as far as can be judged) in the years up to 1628, when December was exclusively preferred over October or November, lectures were often given in both early and late winter, from the beginning of the Michaelmas term until at least the end of March.

Within this broad winter season, however, the months of February and March appear to have been particularly active ones. As I will be arguing in some detail below, the dependence of the Lumleian on the annually shifting Lenten assizes and consequent executions is consistent with the known dates for dissections. Later Easters and Lents evidently produced later dissections.<sup>6</sup> Further apparent anomalies seemingly unrelated to the penitential season may well be due to the fact that both London and Middlesex, in the early-seventeenth century, had in certain years more sessions than the rest of the country (Cockburn, p.30). Opportunistic use of a suddenly available corpse in such instances may explain the fact that Harvey, according to the editors of his lectures, seems to have at least once performed a nominally Lumleian dissection outside of Lent.<sup>7</sup> Other evidence does suggest, nonetheless, that Lent was far more readily identified with dissection than were the weeks before or after.

It seems probable that the additional demonstrations of the Barber-Surgeons would have typically been occurring in February or March in those occasional years when the Lumleian did not. The Barber-Surgeons' Annals for 28 March 1610 state

that, 'This day wee had the bodie of one... [blank] to desect for an Anotomy and Mr. Doctor Gwyn did reede upon the same' Barber-Surgeons, II, p.365). That this encouraged the perception of Lent as a dissective, as well as penitential, season, is attested by certain of Donne's sermons in or after Lent.<sup>8</sup> In addition to the Barber-Surgeons' public dissections, it appears from their records that private anatomies, licit and illicit, were also relatively frequent, and many of these, also, could be expected to occur in Lent, when bodies were fairly readily available.<sup>9</sup>

That the Lumleian lectures appear to have been tied substantially to the Lent Assizes is consistent not only with pragmatic considerations (the problem of obtaining a fresh, reasonably healthy corpse) but also with four of the five definite dates available for lectures between 1584 and 1631. These are 16-18 April 1615, 25 February 1618/19, 27-29 March 1623, 26 February 1629/30, and 9 March 1631/2.<sup>10</sup> A sixth date, for a three-day dissection on 11, 12 and 14 December 1629, is available for one of the Goulstonian lectures. Besides these known dates, there exist also four approximate ones.

One of these is again for the Goulstonian: 'During the days of the special public anatomy lecture, the President thought that the College should meet' (RCP, III, ii, 10 December 1628). Taken alongside the above reference, this strongly suggests that the lecture was imminent when this record was made. Three other entries point to the Lumleian. The college Annals for 28 March 1586, which report new measures 'to improve attendance at the lectures on Surgery' suggest that a thinly-attended dissection had just taken place (RCP, II, p.38). On 24 March 1588/9, 'Dr. Turner was enjoined to administer the public dissection in the College within a year' (RCP, II, p.57) - again, the anatomy of 1588 appears to have recently occurred. At almost exactly the same

date three years later, 'A dispensation was granted to Dr. Muffett for the delivery of his Anatomy Lecture for the time being, because at the command of the Earl of Essex he had been summoned to France... He was enjoined however to deliver the public anatomy lecture in the next Michaelmas term' (20 March 1591/2, RCP, II, p.76). All three of these entries correspond closely or exactly to Holinshed's 'end of the yeare' [24 March] (O'Malley *et al*, p.4). Although later anatomies clearly did stray from this specification, it seems possible that, for a brief period, some attempt was made to adhere precisely to the Lumleian's original stipulation. This being the case, the shifting dates of Easter and Lent may have played less of a role than they appear to have done in subsequent years. All the three March entries are, however, Lenten ones. The following tables show how possible and certain datings, respectively, relate to the date of Easter.<sup>11</sup>

**Table 1. Comparison of Possible Dates for Lumleian Anatomy Demonstration with Easter Dates**

	1586/7*	1588/9*	1591/2*
<u>Lumleian</u>	c.28 Mar	c.24 Mar	c.20 Mar
<u>Easter</u>	16 Apr	30 Mar	26 Mar

**Table 2. Comparison of Known Dates for Lumleian Anatomy with Easter Dates**

	1615/16	1618/19	1623	1629/30	1631/2
<u>Lumleian</u>	16-18 Apr	25 Feb	27-29 Mar	26 Feb	9 Mar
<u>Easter</u>	31 Mar	28 Mar	13 Apr	28 Mar	1 Apr

Excepting April 1616, these dates all fall within Lent.<sup>12</sup> In the case of securely-dated dissections, the last four columns show a remarkably similar amount of time elapsing between the Lumleian and Easter Sunday. While the hypothetical datings do not exhibit the same pattern, they do in fact exhibit an *internally* consistent lapse in the latter two cases; the four day difference in the date of Easter is reflected by a four day difference in the probable dating for the Lumleian. It is also worth noting, with regard to the hypothetical datings, that the actual anatomies may have been some days previous to the discussions cited.

The hypothesis of a Lenten anatomical season is consistent, also, with many of Donne's dated sermon references to anatomy and the anatomised body. Tabulations of sermon dates for Donne's direct and indirect references to anatomy, and the corresponding Easters and Lenten seasons, run as follows:

**Table 3. Dates of Donne's Direct References to Anatomy Compared to Easter Dates**

<u>Sermon</u>	2 Apr 1620	8 Apr 1621	25 Dec 1627	13 Apr 1628	2 Jun 1628
<u>Easter</u>	16 Apr	1 Apr		13 Apr	13 Apr

**Table 4. Dates of Donne's Indirect References to Anatomy Compared to Easter Dates**

<u>Sermon</u>	24 Mar 1616/17	19 Apr 1618	13 Apr 1623	5 Apr 1628
<u>Easter</u>	20 Apr	5 Apr	13 Apr	13 Apr <sup>13</sup>

In the case of the first table, three of the references occur either within, or close to Lent. Of the two which do not, the December instance does fall very near to the usual date of the Goulstonian lecture. As noted above, this new, 'extraordinary' demonstration appears to have been inaugurated by 1625 (RCP III, i, p.188), to have occurred around 10 December in 1628 (RCP, III, ii, p.260) and in 1629 definitely took place on 11, 12, and 14 December (RCP, III, ii, p.269). In the case of the 1627 reference, therefore, Donne could have been speaking as little as ten days after a College dissection. With regard to the second table, three instances are Lenten ones, with a fourth coming two weeks after Easter. Although the evidence ultimately remains inconclusive, comparison of both tables shows that Donne's direct references to anatomy appear to have at least had more chance of falling close to an actual dissection than do his more oblique corporeal allusions. The occasion of 1620 contains two fairly well-separated references ('Solomon dissects the world' (III, p.48), 'Solomons Anatomy' (III, p.51), suggesting that Donne was deliberately vivifying his sermon *via* the echo of a recent event. While the closest known dating for a Lumleian dissection, in 1618, was on 25 February, over a month prior to April, this probably reflects the relatively early Lent of that year (Easter falling on 28 March). The next dated anatomy, that intended for 1622, occurred on 27-29 March 1623; the following Easter was 13 April. Given the evident influence of Lent in determining the timing of dissections, the demonstration of 1619/20 could well have been a late March one also. If so, similar circumstances could have obtained for the sermon of 1621, shortly after an Easter Sunday of 1 April.

It should be stressed, also, that the anatomical imagery of the sermons matches the broader cycle of the Lumleian, as well as the available evidence on the probable winter season.

According to the statutes of the Lumleian foundation, in the sixth and final year of each cycle, there would be no dissection, only reading 'of Holerius'.<sup>14</sup> This, starting from Harvey's commencement in 1616, when he began the course afresh (O'Malley et al, p.7) would give vacant years in 1621/2, and 1628/9. These dates are consistent both with the college records, and with the general and precise anatomical references of Donne's sermons. Apart from the instance of 2 June 1628, which appears to be non-topical, none of the citations I have discovered falls in a year when the anatomy would have been omitted by reason of statute.

#### **b. Anatomical and Corporeal Images in Donne's Sermons**

Donne's proclivity for anatomical or corporeal rhetoric around Easter and Lent in particular relates most suggestively of all to various undated sermons in volume IX of his sermons. Sermon number 9 contains two direct anatomical references, and one technical allusion to 'lancination' and 'phlebotomy'. The sermon's Folio heading, 'Preached in Lent to the King, April 20, 1630', is shown by Potter and Simpson to be erroneous, either as regards the date, or Lent, given that in 1630 'Easter fell on 28 March' (Sermons, IX, p.26). If Lent is taken to be correct (and this attribution, though not the date, does indeed recur in LXXX Sermons (Potter and Simpson, *ibid.*)), and the year 1630 hypothetically retained, the date must be no earlier than 40 days before 28 March. Even if the year remains un conjectured, a Lent sermon clearly has to be some time in February, March, or April. Potter and Simpson show that the sermon must almost certainly have been given after Donne's 'First Sermon Preached to King Charles' (Sermons, IX, p.27), delivered on 3 April 1625. This leaves successive Easters (and respective

Lenten seasons) of 17 April 1625; 9 April 1626; 25 March 1627; 13 April 1628; 5 April 1629; and 28 March 1630 (Cheney, Dates, p.159). Moreover, besides the support of the Folio and LXXX Sermons, and the penitential subject matter, there is the fact that only two of Donne's dated anatomical references in the sermons fall later than April. Given the evidently timely nature of dissective imagery, one might then be tempted to make the three instances in the sermon (Sermons, IX, p.214, p.217, p.223) the basis for dating it sometime between November and April, rather than merely noting the potential coincidence of a Lent sermon, and the year's annual anatomy. The combined weight of evidence, from both Potter and Simpson, and Donne's usual habits in this context, make December, February, March or early April very likely choices.

Although the Lent heading of sermon number 9 lends it most interest in this context, a similar argument can to some extent be applied to the volume's series of undated sermons on the penitential psalms.<sup>15</sup> Potter and Simpson themselves suggest Advent or Lent as probable times of year, owing to the penitential theme (Sermons, IX, p.35); but consider, also, the possibility that part of the series could have been preached in Advent, and the remainder in Lent, after a short break (*ibid.*). They also give reasonable - if not conclusive - evidence for the series falling in winter 1624-5 or later (*ibid.*, pp.34-7). If it would be rash to support their hypotheses purely on the basis of dissective references in the sermons, it is nonetheless striking how instances do run throughout this series. In the first, number 11, there is one explicit anatomical image (p.256) along with a kind of materialisation of sin that sits appropriately close by ('a burden, a complication, a packing up of many sins' (p.258)). In the third, number 13, there is again one direct reference, and another to 'ligament' and 'sinew' (p.297, p.312). In number 16 there occurs the metaphor of self-examination ('...we

would pierce but so deepe as might make you search your wounds...' (p.354)). In number 17 there is a final overt reference to anatomy (p.385), while in number 18 we once more find Donne's characteristic embodying of sin ('...a Complicated, a Multiplied, a Compact sinner, a Body, rather a Carkasse of Many, of All sins..' (p.401). This would appear to be the only occasion on which three dissective references fall so closely together. A winter or spring dating is consistent both with Potter and Simpson's approximation, and with Donne's tendency, elsewhere in the Sermons, to make such allusions during the 'dissective season'.

As noted, Potter and Simpson suggest that the length of the series might have resulted in it spanning both Advent and Lenten periods, after a break for the celebratory interval of Christmas (Sermons, IX, p.35). Lent, from 1625 onward, could have begun as early as 14 February or as late as 9 March. The known date for the early winter lecture in the 1620s is 11-14 of December (RCP, III, ii, p.269); for the Lumleian, 27-29 March 1623, and 26 February 1629/30 (RCP, III, ii, p.275). If the series had indeed been preached either side of Christmas, Donne's allusions would have run in quite close parallel with the two annual College dissections. The references in sermons 11 and 13 (the first and third of the series) could have both been made in December, and that from number 17, in February or March.<sup>16</sup>

Other evidence strongly suggests that Donne was, moreover, not alone in his tendency to merge the rhythms of the dissective year with those of the church calendar. In 1623 Immanuel Bourne published a sermon he had delivered at the previous year's Lent Assizes in Derby, this printed version appearing under the title, The Anatomie of Conscience, or, A Threefold Revelation of Those Three Most Secret Bookes:

- {1. The Booke of Gods Prescience
- {2. The Booke of Mans Conscience
- {3. The Booke of Life.

As Easter in 1623 was 13 April, and sermons such as this were preached at the opening of the Assize circuits (Cockburn, p.65), Bourne must have originally spoken in the second week of March. The fact that Harvey performed his three day Lumleian from the 27-29 of this month means that the sermon's title could have been prompted by the exceptional character of that year's dissection. Even in the absence of any such link, it seems probable that the fixed routine of particular assize sermons at the opening of all local sessions (Cockburn, p.65) had indeed begun to encourage identification with the coincident phenomena of the Barber-Surgeons' and the Physicians' demonstrations. While Bourne's repeated quotation from Revelation, 20.12, 'And the Bookes were *opened*, and another booke was *opened*, which is the Booke of Life' (*Anatomie*, p.1, italics mine) may have had a purely scriptural resonance, the possibility of a dual decorum, subtly realigning biblical text with contemporary events, is certainly supported by Donne's own habits, and by the frequency with which 'opening' now connoted dissection. Again, a few years later, Michael Wigmore's A Dissection of the Braine (London, 1641), a sermon preached at the Lincoln assizes in 1640, and including precise anatomical detail, strongly suggests the connection between public anatomies and the assizes, whether held in London or not.<sup>17</sup>

Again, although nominally unconnected to the Lent Assizes, Joseph Hall's remarkably precise references to the heart, in a sermon of 2 February 1623/4 (Works, V, p.137), look very much as if they may have been a nod toward the dissecting season. When Hall was speaking, Lent was fairly imminent (Easter of 1624 falling on 28 March (Dates,

p.159)), and his Gray's Inn audience, besides having a probable dilettante acquaintance with medicine and anatomy, would certainly have been aware that the Assizes were approaching. Moreover, if Hall's materially exact references to 'that fleshy part in the centre of the body, which lives first, and dies last', and is invested with 'all the spiritual powers' (Works, V, p.137) seems anatomically influenced in its own right, his appreciation of the rawly visceral is still more pronounced some years earlier, in a work entitled Heaven Upon Earth (London, 1606).<sup>18</sup> Having already given an analogy between a suppressed conscience and a suppressed nosebleed, and explained how, in such cases, blood will typically burst from the mouth (p.33) he presently illustrates the extreme possibilities of human fortitude by referring to 'Greenham that S. of ours' who was able, when 'spred quietly upon the forme looking for the Chirurgians knife' to exhibit 'a resolved patience' while 'his flesh [was] carved and his bowels rifled' (pp.72-73).<sup>19</sup>

In conclusion, three main points can be emphasised. One is that Donne's apparent attention to the London anatomical season appears to be confirmed by general evidence from the College annals, and from other primary sources. Specific links between sermons and anatomies, such as those suggested above, must remain tentative, but are nonetheless supported by the overall framework of existing evidence. Besides the fact that the relevant citations from the sermons are typically confined to early or late winter, it is highly probable that a writer and speaker as scrupulously alert to decorum as Donne would indeed have cut his comments, as it were, to suit the time of year.

The second point is that many of Donne's securely dated references (two anatomical citations of 2 April 1620, 8 April 1621, and three more general corporeal images, on 24 March 1616/17, and shortly before 12 February 1619/20) coincide, in

terms of year, with what appear to have been particularly flourishing periods of activity among literary anatomists. As noted in Chapter 1.2a, the ten years following Harvey's appointment as Lumleian Lecturer and the publication of Crooke's Microcosmographia (1615-1624), saw twenty-two literary anatomies published, with seven appearing between 1625-34.<sup>20</sup> It can be claimed with high probability that Donne's imagery, as cited above, is part of this overall burst of anatomizing. At the very least, he must have been making such allusions to an audience increasingly familiar with dissective rhetoric. Although anatomy is especially attractive to him when discussing sin and confession, the overall range of different uses of the Vesalian body in the Sermons implies that in fact Donne, like the literary anatomists of the period, was in part caught up in the non-rational spell exerted by the dissected body.

A third and final point is that, as already suggested, Donne may be viewed as employing a kind of 'dual decorum', using both texts and language appropriate to Easter, on the one hand, and to the London anatomical season, on the other. In this he provides a neat mirror of the epistemological tension surrounding religion in the period as a whole. As with his other exploitations of the metaphorical potential of the newly perceived body, the rhetorical gains must also be understood as potentially subverted, 'Trojan horse' fashion, by the admission of an increasingly alien, and increasingly powerful, discourse into traditional religious language. In the following section I will attempt to show how this new mode of thought relates, in general terms, to the orthodox aspects of Christian epistemology.

## 2. Words and Bodies: Epistemological Tensions in the Devotions and Sermons

### a. Words

*Seeing ye shall see, and shall not perceive...*<sup>21</sup>

Donne's notions of correctly 'seeing' the world (Acts 28.26) reflect a mentality which in many ways parallels that presented in Foucault's characterisations of resemblance. A major element of this epistemology is the demotion of precise physical and sensuous detail, and a corresponding priority of the textual or abstract over the actual and concrete. We find Donne insisting, for example: '*O blessed and glorious Trinity, O holy, & whole Colledge, and yet but one Phisician, if you take this confession into a consultation, my case is not desperate, my destruction is not decreed...*'<sup>22</sup> Significantly, what reassures him is that, '*If your consultation determin in writing, if you refer mee to that which is written, you intend my recovery: for al the way, O my God, (ever constant to thine owne wayes) thou hast proceeded openly, intelligibly, manifestly, by the book'* (*Devotions*, pp.48-49). The passage neatly exemplifies the priority of 'words' over 'things': although the consultation involves the body, it suitably 'determin[s] in writing' (*ibid.*). Further consideration of this divine authorship follows:

al the way, O my God... thou hast proceeded openly,  
intelligibly, manifestly, by the book. From thy first  
book, the book of life, never shut to thee, but never  
thoroughly open to us; from thy second book, the booke  
of Nature, wher though subobscurely, and in shadows,  
thou hast expressed thine own Image; from thy third  
booke; the Scriptures, wher thou hadst written all in  
the Old, and then lightedst us a candle to read it by,  
in the New Testament...

(Devotions, p.49).<sup>23</sup>

Like the body in particular, 'Nature' in general is clearly not, here, an autonomous realm. Knowledge of the natural world derives authority from association with the pre-eminent books of the Old and New Testaments. The question of the empirical *opposing* the textual is simply not recognised as one worth considering. The 'real world' here is part of a hierarchy of 'books', rather than an empirical domain straightforwardly opposed to a textual one. Hence experience (the 'book of the world'), is used merely to footnote the privileged book of Scripture. Because 'the *foundations of the Church are the Scriptures*', those who 'present *reasons of probability, of verisimilitude, of pious credulity, not deduc't out of the Scriptures,*' are seen to 'fall into that *regular Irregularity*... which Saint Augustine justly makes the *Character, and Specification, of an Heretike, to seeme to proceede upon reasons, and not deduce those reasons from the Scriptures*' (Sermons, VIII, p.73, 1 July 1627).<sup>24</sup> St. Augustine (Donne's favourite authority after the Bible itself) here gives a definition of heresy which precisely describes the offence of Michael Servetus. In reality Servetus may only have failed to derive his reasons from *orthodox Scripture, rather than Scripture per se*. The crucial point, however, is that he has seemed to oppose his

own empirical knowledge to the ultimate authorities of the Old and New Testaments.

Donne, on the other hand, unequivocally subordinates the book of the world when he emphasises that

If another man see, or thinks he sees more than I; if by the help of his Optick glasses, or perchance but by his imagination, he sees a star or two more in any constellation; it adds no limb, no member to the constellation, that was perfect before...<sup>25</sup>

Donne initially appears to be guilty of self-contradiction on this question. Figuratively refusing, here, to look into the telescope, elsewhere he explicitly criticises conservative Aristotelians, immovable in their dogma despite 'many experiences of new stars'.<sup>26</sup>

In seeming to support Kepler *et al*, however, Donne has not stepped out of the older *epistemé* or 'paradigm'. What must not be overlooked is the way in which Kepler's work is used in Biathanatos. His empirical research functions as a secondary, subordinate 'text' to prove a point involving the pre-eminent text of Scripture. Kepler's research has the status of a gloss or footnote whose claim to veracity implicitly *depends on* its association with divine authority. This point explains the apparent inconsistency in Donne's treatment of Galileo. The empirical use of the 'Optick glasses', which seems to us the ultimate recourse for factual verification, is part of a 'text' (the natural world) which, in the epistemology of 'the written world' cannot be employed save as a handmaid to Scripture. Natural phenomena or occurrences tell one first about the divine mind and divine intentions, and only secondarily (if at all) about themselves.

**b. The Usefulness of Foucault's Description of  
Renaissance Thought**

The Foucauldian analysis of Renaissance epistemology has, of course, met with opposition. George Huppert, for example, argues that it falsely extrapolates a general occultism from the activities of particular figures who were, in fact 'avowed magicians, and... seen as such'.<sup>27</sup> At first glance it does seem plausible that the 'Book of Creatures' (and accompanying correspondences) would have been apprehended less concretely by Donne than it was by, for example, Paracelsus, and other 'avowed magicians'. At least two significant objections, however, can be made to such a judgement. On the one hand, magic itself appears to have been less marginal than Huppert implies. As already suggested (Chapter 1.1b, pp.8-9), for Pico della Mirandola magic was simply 'the practical part of natural science [and]... the active side of the knowledge of nature' (Cassirer, p.149). Moreover, if belief in applying dead pigeons to a feverish body to draw off vapours; in the malign influence of the dogstar; in honey as the sweat of the stars; and in those 'Lapland... Witches [who] are said to sell winds', is magical, then Donne himself was clearly not free from such tendencies.<sup>28</sup> As noted, indeed, both Donne and Paracelsus appear to draw directly on the same prominent textual authority for their 'magical' notions of celestial influence (see Chapter 4.4c, p.248).

Huppert seems, secondly, to ignore the disparity between Renaissance and modern ideas of the actual. Paracelsus appears initially to take more 'literally' the theory of correspondence because of the way he filters it through a range of particular natural examples. Such a definition of the 'literal', however, must be at least partially misleading. It privileges the 'natural' and concrete over the

'written' world in a way which confounds Renaissance epistemology with our own. Prior to the rise of a systematised mainstream empiricism, to value the evidence of the natural world was not to be more closely allied with the 'real' one. Donne's own formulation puts the point well:

My God, my God, Thou art a *direct God*, may I not say, a *literall God*, a God that wouldest be understood *literally*, and according to the plaine sense of all that thou saiest? But thou art also (Lord I intend it to thy glory, and let no prophane mis-interpreter abuse it to thy diminution) thou art a figurative, a metaphoricall God too..

(Devotions, p.99).

Significantly, there does appear here a faint nervousness as to the status of metaphor. Having inserted his tell-tale caution, however, against 'prophane misinterpreters', Donne is clearly arguing for a God whose displaced, 'metaphoricall' presence (one which is *necessarily*, to at least some degree, 'occult') must be understood literally, once certain signs have been read by the perceptive believer. Similarly, he goes on in following lines to commend God's '*Curtaines of Allegories [and] third Heavens of Hyperboles*' (Devotions, p.99). It appears that for Donne, as for his contemporary (and possible acquaintance) John Hoskins (see Bald, p.43), hyperbole indeed exaggerates 'that rather you may conceive the unspeakableness, than the untruth' of the subject.<sup>29</sup> It can hardly be considered simply a rhetorical abuse of the reader's credulity if it is an attribute of divine communication.

The faintly paradoxical character of Donne's 'metaphorical' God suggests that Huppert, in setting apart the 'avowed magicians' and mainstream intellectuals,

emphasises oppositions which the Renaissance was slower to recognise. Foucault's characterisation of Renaissance knowledge largely avoids such anachronistic distinctions by approaching the question from another angle. Magic was merely one especially marked example of a knowledge which '...consisted in relating one form of language to another form of language; in restoring the great, unbroken plain of words and things; in making everything speak'.<sup>30</sup> Donne himself certainly hears God's speech as manifold and ventriloquistic:

...what *Thunder* is not a well-tuned *Cymball*, what  
*hoarsenesse*, what *harshnesse* is not a cleare *Organ*, if  
 thou bee pleased to set *thy voice* to it? And what *Organ*  
 is not well plaied on, if thy *hand* bee upon it? Thy  
*voice*, thy *hand* is in this *sound* [of bells], and in this  
 one *sound*, I heare this *whole Consort*...

(Devotions, p.88).<sup>31</sup>

Typifying Bakhtin's monoglossic discourse, with its drive towards 'cultural... and political centralization of the verbal-ideological world', this divine omnipresence channels, and indeed subdues, opposing qualities of sound through one 'authoritative' central speaker.<sup>32</sup> If the language is not entirely 'cleansed of all possible associations with crude real life' (The Dialogic Imagination, p.385), such associations are undoubtedly minimised by the very logic of Donne's argument: one hears God first, and crude reality ('hoarseness' and 'harshnesses') second, if at all. Typically, Donne reinforces divine priority by careful choice of words. The use of 'consort' implies some degree of internal differentiation, but only within an overall unity of sound (compare Bacon, three years later, on 'that music which we call broken music, or consort music').<sup>33</sup> The unified composition has, of course, one musical author.

A related instance of divine speech reveals other benefits: 'God multiplies his mercies to us, in his divers ways of speaking to us... says *David*, *The heavens declare the glory of God*; and not onely by showing, but by saying; there is a *language* in the heavens...' (Sermons, X, pp.109-110, n.d.). Numerous examples of striking meteoric phenomena were of course attested by credible authorities, just prior to and during Donne's lifetime.<sup>34</sup> More generally, this 'language' appears to recall a monoglot, pre-Babel state. Though a man '...understand no tongue but his owne, he may heare God in the motions of the same, in the seasons of the yeare, in the vicissitudes and revolutions of Church, and State, in the voice of Thunder, and lightnings, and other declarations of his power...' (Sermons, X, pp.109-110). Perhaps what is most interesting about these remarks is how closely they match Foucauldian notions of Renaissance epistemology and perception. For Donne concludes, with characteristic love of paradox: '...he calls us to *behold*, (which is the office of the eye) and that that we are to behold, is the voice of God, belonging to the eare; seeing is hearing, in Gods first language, the language of *works*.' (Sermons, X, p.110). In The Order of Things Foucault characterises the shift toward a proto-scientific epistemology precisely by stressing how, after '...that uniform layer, in which the seen and the read, the visible and the expressible, were endlessly interwoven, vanished... The eye was destined thenceforth to see and only to see, the ear to hear and only to hear' (Foucault, p.43).

Consistent with the general priority of the divine is the particular theory of sense-perception implied in the Devotions. Where modern science might privilege the cerebral cortex as a dominant organ, for Donne it is '...my soule that sayes to mine eye... I will make thee see, and my soule that sayes to mine eare... I will make thee heare' (Sermons, IX, p.357, penitential psalms, n.d.).<sup>35</sup> Just as, without the

cerebral cortex, data absorbed by eyes or ears would be largely meaningless, '...without that soule, that eye and eare could no more see nor hear, then the eyes and eares of an Idol...' (ibid.). Here the soul, like the 'sinewie thread' of 'The Funerall' (Chapter 4.4a), explains functions now understood in a strictly physiological sense. This account of sense-perception has a loosely Aristotelian provenance.<sup>36</sup> Beyond this, however, it is difficult not to suspect a shade of over-assertion, as if Donne answers just those presumptuous 'phisitians' who think all phenomena equally 'subject to the search of reason'.<sup>37</sup> At the heart of this opposition lies the question of physiological autonomy. The opponents Donne attempts to refute are seen as implicitly subverting God by denying his immediate involvement in bodily processes. 'The proud man', for example, 'hath no understanding; He hath forgot his letters, his Alphabet; how he was spelled and put together, and made of body and soule' (Sermons, IX, p.385, n.d.). The proud man, like those too deeply immersed in the material world, has forgotten the dependence of the material on the written (or spiritual), and needs to be reminded.

The priority of the 'written' world (and correspondingly 'one-dimensional' status of the 'real', empirical, one) is subtly illustrated, in the Devotions, even at the level of typographical presentation. '[M]ost of Donne's seemingly confusing italics' Anthony Raspa notes, are 'uncredited scriptural quotations or paraphrases' (Devotions, xxxvii). Elizabeth Savage similarly remarks on how Donne '...incorporates biblical words or phrases directly into his own sentence structure. Examples of this appear at almost any point in the Devotions'.<sup>38</sup> Donne's distinctive apprehension of 'reality' is evident in the use of plain type for words not invested with the luminosity of Scripture, and which act as mere supporting links or settings for the gem-like

citations he wishes to privilege. When he observes: 'I find stonie hearts too, and... I have found *Hearts, that are snares*' (Devotions, p.59) the unitalicised heart may be said to be less prominent because it is both less figurative and less 'authorised' - and, therefore, literally less significant. What has been *said* (or written) is more real than what has been seen, because it has behind it the voice of the ultimate guarantor of truth. The way that the scriptural words 'stand out' matches the three-dimensional prominence of the scriptural book, over the comparatively one-dimensional book of the natural world.

Monoglossia, then, may broadly be defined, in Donne's writing, as talking only about God, or with God as the ultimate fixed point of reference and stability. As Rosemond Tuve notes: 'In all this poetry the extent to which the universe and the particulars within it are instinct with meaning is alarming to a modern mind...'. The subsequent loss of this significance means that '...much of the imagery turns either to naïve inanity or witty bravado if one forgets to read all images with a quickened sense of what they may stand for'.<sup>39</sup> Tuve's description both parallels Foucault's attention to the 'solid and secret bonds of resemblance or affinity' (Foucault, p.58), and captures the tendency of the Devotions to shift almost without pause (or evident consciousness of having shifted) from a physical pretext to spiritual and figurative developments. In the thirteenth Expostulation, where 'The Sicknes declares the infection and malignity thereof by spots' (Devotions, p.67, italics mine), 'witty bravado' is perhaps the kindest description of something which may to modern readers appear faintly distasteful. The spots are necessarily more physically apparent than the heart, having broken out 'upon my *Breast*' (Devotions, p.70). Again, however, their physical aspect is rapidly marginalised in favour of a moral turn: 'Thy

corrections may go far, and burne deepe, and yet not leave me spotles' (Devotions, p.69). At the close of these 49 lines, in which there are twenty instances of 'spots' or its cognates, the disfigurement has become 'to mee as the *Constellations of the Firmament*, to direct my Contemplation to that place, where thy *Son* is, thy *right hand*' (Devotions, p.70). In the following 'Prayer' they form, appropriately, 'the *letters*, in which thou hast written thine owne *Name*' (ibid.). Finally, Donne asserts that, 'When I open my *spotts*, I doe but present him with that which is *His*, and till I do so, I detaine, and withhold *his right*' (ibid.). The intended sense is presumably that of confessing sins, but given the particular physical situation, a straightforward eruption of bodily secretions is just as likely to suggest itself.

Pre-armed with Tuve's warning ('the universe and the particulars within it are instinct with meaning') one can again find a plausible explanation (other than mere feverishness on Donne's part) in Bakhtin's description of monoglossia: 'Unitary language constitutes the theoretical expression of the historical processes of linguistic unification and centralization, an expression of the centripetal forces of language' (The Dialogic Imagination, p.270). What appears at first to be a rash juxtaposition of the divine and the distasteful implicitly relies on the 'centralizing' power of orthodox Christian discourse. Here as elsewhere religious belief acts as a kind of epistemological glue, allowing the magician and the poet to see similarities and connections less readily apparent to others. Both figures are confident that this power can subdue potentially disparate elements into one unified shape. For resemblance epistemology in its most assured forms, indeed, it was surely as much a case of *revealing* a pre-existing shape or pattern, as of creating one. The physical, one might say, was already sufficiently inhabited by the divine to yield easily to such

manipulation. Yet such confidence will not always be justifiable. Like the 'beheaded man' of the second 'Anniversary', the attempt to transform bodily disfigurements into 'the *Constellations of the Firmament*' (Devotions, p.70), in particular, is dangerously poised between the sublime and the ridiculous. One might say, indeed, that in Donne's writings the body sporadically and insistently 'disfigures' the (spiritual) firmament. Throughout the Devotions it casts before it the shadow of an increasingly autonomous Natural Philosophy. Too powerful for its traditionally subservient role, the Vesalian or Harveian body offers a new centre of reference and explanation which, like the body of Servetian theology, speaks too much about itself, and too little about God.

### c. Bodies

Donne himself pays an ambivalent tribute to this autonomous new body when he admits that:

It is too little to call *Man* a *little World*; Except *God*, *Man* is a *diminutive* to nothing. *Man* consistes of more pieces, more parts, then the world; then the world doeth, nay then the world is. And if those pieces were extended, and stretched out in *Man*, as they are in the world, *Man* would bee the *Gyant*, and the world the *Dwarfe*, the world but the *Map*, and the *Man* the *World*. If all the *Veines* in our bodies, were extented to *Rivers*, and all the *Sinewes*, to *vaines of Mines*, and all the *Muscles*, that lye upon one another, to *Hilles*, and all the *Bones* to *Quarries* of stones, and all the other pieces, to the proportion of those which correspond to them in the *world*, the *aire* would be too litle for this *Orbe* of *Man* to move in, the firmament would bee but enough for this *star*; for, as the whole world hath nothing, to which something in man doth not answere, so hath man many pieces, of which the whol world hath no representation

(Devotions, p.19).

Few prose or poetic descriptions of the body appear as dependent upon the investigations of the anatomists as this. The evocations of veins and bones have the wondering quality of a junior medical student, confronted for the first time with articulated lungs capable of spanning a football pitch. Particularly compelling is the material detail and suggestion of depth, in 'all the muscles that lie upon one another'.<sup>40</sup> Not only is it very difficult to understand this as referring to the muscles as perceived externally, but when Donne does

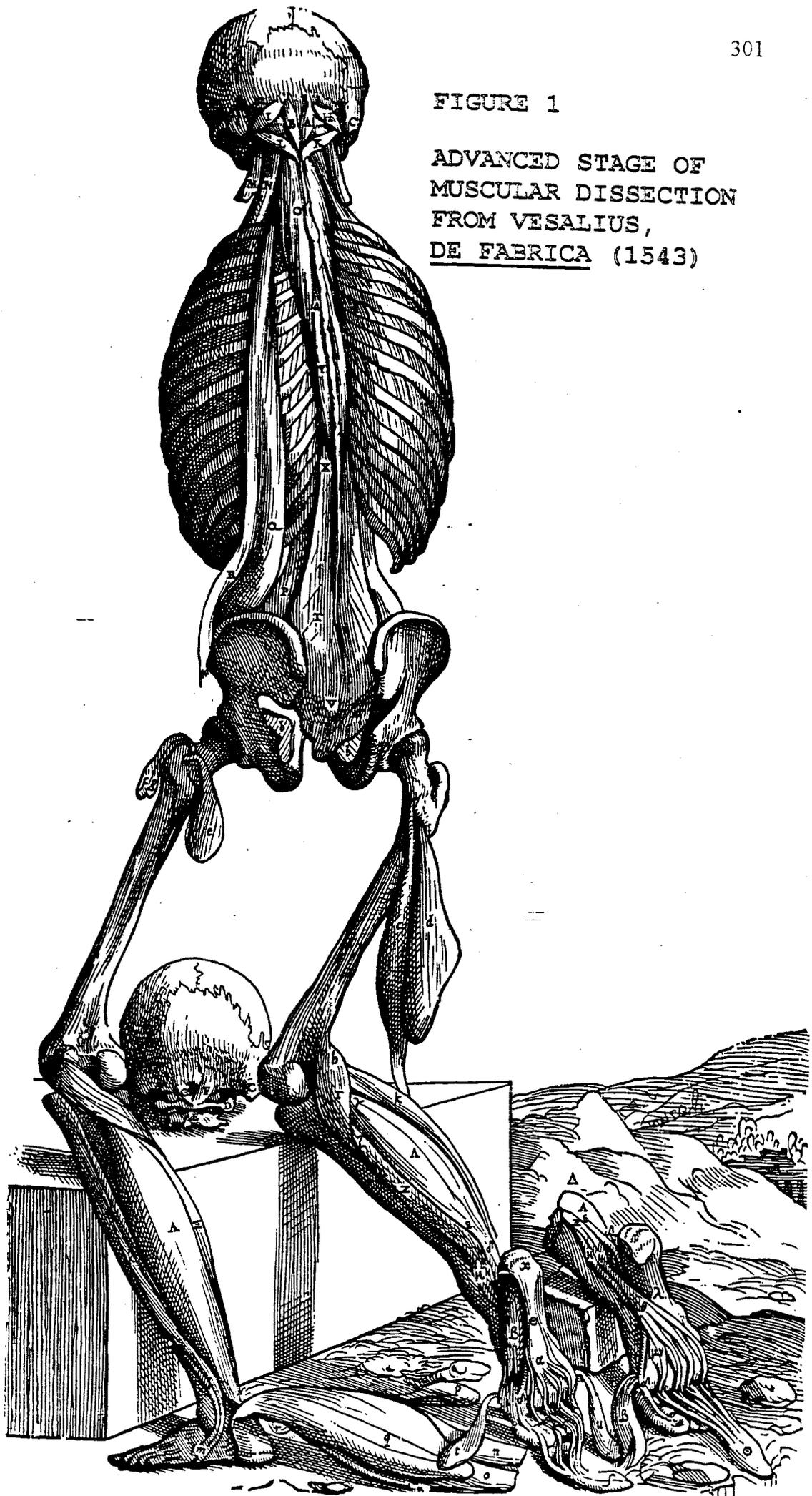
talk elsewhere of exterior graphic depiction, his image of 'a Painter, which [sic] makes an eye, and an eare, and a lip, and passes his pencil *an hundred times over every muscle*' (Sermons, V, p.38, Whitsunday, [?Lincolns Inn], italics mine) suggests that, increasingly, the outside automatically connotes the inside.

The famous 'musclemen' sequence of Vesalius' De Fabrica is designed precisely to maximise the viewer's appreciation of the layering of the muscles.<sup>41</sup> Firstly, individual figures are dissected in a way which reveals different muscular levels on a single plate. This is further enhanced by the perspectival shading, which gives a kind of bas-relief quality within two dimensions [see Chapter 1, Fig. 10].<sup>42</sup> Secondly, the overall sequence itself progresses from the superficial musculature down to an almost naked skeleton [see Fig. 1].<sup>43</sup> Certain new muscles, moreover, are distinctly identified for the first time. As Saunders and O'Malley remark, the tenth plate is probably 'the first illustration in the history of anatomy to show the piriformis, gemelli and obturator internus muscles' (Illustrations, plate 33, p.110).

John Carey believes that the Devotions passage shows Donne 'musing upon the ancient notion of the microcosm... and rejecting it because he feels it does insufficient justice to the complexity of man's body' (Carey, p.137). While partly supporting this statement, I would wish to alter the emphasis given by the word 'rejecting' - a term which implies too final and decided an attitude. In analysing this passage it is important to remember that the Devotions is a work almost pathologically addicted to poetical ingenuity.<sup>44</sup> Donne's metaphorical agility, effectively running ahead of him, causes him to speak more than he would wish to be held to account for.<sup>45</sup> The evident incongruity between this 'stream-of-consciousness' element and Donne's more usual self-consciousness is consistent with the work's dual

FIGURE 1

ADVANCED STAGE OF  
MUSCULAR DISSECTION  
FROM VESALIUS,  
DE FABRICA (1543)



circumstances of composition. Talking aloud is precisely what would be expected of one in the grip of high fever, while the self-conscious aspects result from polishing carried out after Donne's recovery.<sup>46</sup>

Because of the relatively unguarded character of the Devotions it is more suitable to see Donne as playing with, rather than emphatically 'rejecting', the microcosm. The passage represents a transitional moment between a human form 'saturated with analogies' (Foucault, p.22) and a new, three dimensional, autonomous body. The newly-apprehended and startling depths, recesses and bulk of this changed somatic landscape are rendered vividly, if indirectly, by the rapid juxtaposition of the convex and concave: rivers, mines, hills and quarries. That 'Donne's language blocks the body in and communicates it to our spatial sense' (Carey, p.137) is therefore true. But the further conclusion, not drawn by Carey, is that it is precisely *anatomy* (and anatomical renderings) which promote the 'spatial sense' most powerfully. As stressed in Chapter 1.3, 'flap-anatomies' such as Johann Remmelin's Catoptrum Microcosmicum (Ulm, 1619) afforded, between public anatomies themselves and the illusionistic reliefs of textbook illustration, a persuasive mimesis of depth and complexity clearly linked to the insistent three dimensionality of anatomical science.<sup>47</sup> Particular conflicts within the passage, as well as the more general imagistic restlessness of the Devotions as a whole, further indicate that Carey's alleged 'rejection' is too emphatic a verdict. On the one hand, Donne's reflection that 'man hath many pieces, of which the whol world hath no representation' adumbrates with remarkable precision Francis Bacon's criticism of an epistemology which, although 'there be many things in nature which are singular and unmatched, yet... devises for them parallels and conjugates and relatives which do not exist' (Novum Organon, IV, p.55). More

generally, Donne's effectual loosening of the bonds of resemblance thinking does have some affinity with Harvey's later, more emphatic rupture between man and the firmament: 'what we commonly derive from the starres, is bred and borne at home, and within us'.<sup>48</sup> On the other hand, however, just that micro-macrocosmic parallelism which Donne is supposed to have dispensed with resurfaces in the figure of man as an 'Orbe' or 'star'. Carey's paraphrase of a 'gigantic humanoid craning its neck among the planets' (Carey, p.137) distorts this figuration of humanity, which is at this point conceptual and not perceptual - an orb does not look like a gigantic humanoid.

Carey's gloss does, however, help to reveal the covert psychology of Donne's reordered microcosm. The fact that 'it is too little to call man a little world' reflects not only the newly-perceived scope of the Vesalian body; it stems also, more subtly, from the growing assertiveness of a human self often manifested (as in the cases of Gascoigne, Sidney, and Jonson) through anatomical representations.<sup>49</sup> Elsewhere we find Donne observing that 'Man is an abridgement of all the world', and proceeding to emphasise how, 'as some Abridgements are greater, then some other authors, so is one man of more dignity, then of all the Earth'.<sup>50</sup> Setting the two statements together, one has a clear sense of the restless Ego, as well as the restless body, seeking to push out the bounds of an epistemology and cosmology both experienced, increasingly, as inadequate to changing forms of knowledge and feeling.

Elsewhere in the Devotions Donne's allusions to dissection are more explicit, and more intimately juxtaposed with the discourse of orthodox Christianity:

I offer not to counsell them, who meet in *consultation* for my *body* now, but I open my infirmities to them, I anatomise my *body* to them. So I do my *soule* to thee, O my *God*, in an humble confession...

(Devotions, p.48).

Both the degree of Donne's humility, and the implied 'thoroughness' of his confession, are ultimately dependent upon the discipline of Vesalian dissection. While for Jonson's *Corvino* and Shakespeare's *Lear* (Chapter 3.2a) anatomy is the most extreme and vivid form of corporeal terrorism, for Donne it empowers a rhetoric of spiritual prostration (and, arguably, a masochism, as will be seen more clearly in the Holy Sonnets) which transmutes the somatic into the pious. The thoroughness of the confession is proved by the fact that

...there is no *veine* in mee, that is not full of the blood of thy *Son*, whom I have crucified, and Crucified againe, by multiplying many, and often repeating the same sinnes; ...there is no *Artery* in me, that hath not the *spirit of error, the spirit of lust, the spirit of giddiness* in it; no *bone* in me that is not hardned with the custome of *sin*, and nourished, and soupled with the *marrow of sin*; no *sinews*, no *ligaments*, that do not tie, and chain sin and sin together

(Devotions, p.48).

Donne's precisely physiological analogy not only builds up a whole 'body of sin' *from the inside*, with the fibrousness, detail and density of sinews, marrow, veins and bones, but accurately discriminates between veins (carrying blood), and arteries (containing spirit). At a general level, the fact that Donne's body literally *is sin* fits the belief that

illness itself is a direct consequence of the Fall.<sup>51</sup> This doctrine is revived and afforded a more definitely physical anchorage than that available to pre-Vesalian anatomy. By association with the new intricacy and solidity of both corporeal representation and investigation, the metaphor itself acquires a new intricacy, subtlety and power.

The effectual insertion of Scripture *into* the body ('the spirit of error, the spirit of lust...'), shows Donne's continuing commitment to a mode of thought where the world depends on the book, and not *vice versa*. The juxtaposition between this older form, and a discipline which increasingly resists the predominance of text over observation means, however, that Donne cannot entirely control his transfusion of the divine word into the proto-scientific body. Like Melanchthon's sensual devotional language, Donne's corporealised scripture connotes a body which wavers perilously, in the manner of a *trompe l'oeil* image, between piety and materialism. A body once mastered by spirit now threatens to absorb and eclipse it. Just a few years earlier, indeed, Nashe's Jack Wilton had vividly illustrated the triumph of the purely somatic. Jack, anticipating his imminent vivisection, 'cald to minde the assertion of some philosophers, who said the soul was nothing but blood' and indeed 'had but a pimple rose with heate in that part of the veyne where they use to pricke, and... fearfully misdeemed it was my soule searching for passage' (The Unfortunate Traveller, II, p.308.)

Wilton's fearful musings are obliquely echoed by Donne, elsewhere in the Devotions, when he wonders, 'My God, my God, why is not my soule, as sensible as my body? ...why is there not alwayes a pulse in my Soule, to beat at the approach of a tentation to sinne?' (Devotions, p.8). In this plea there again appears an instinctive cleaving to the body at a moment of spiritual intensity - an all but literal 'embodiment' of

religious feeling. The reader is confronted with a 'corporeal soul' generated (as it were spontaneously) by the force of religious feeling. Donne paradoxically seeks to galvanise the spiritual by associating it with the most dynamic aspects of the human body, involuntarily conceding defeat in his wish for an organicised soul, rather than a more fully 'en-souled' body.

If Donne hardly wished to equate the soul itself with the perpetual, febrile motion of spirit or blood, certain contemporary parallels suggest that others were not so scrupulous. One can imagine some readers associating the above desire for a 'pulse in the soul' with Fludd's writings on 'The Pulse, or the new and secret history of the pulses, drawn from sacred sources yet compared with the sayings and authority of the ethnic physicians'.<sup>52</sup> Fludd's occult pneumatology and physiology combines medical knowledge with literalistic interpretations of Scripture - an alliance neatly symbolised by his drawing of the divine hand emerging from clouds to clasp the human wrist (Godwin, p.65). What Fludd pictures, Donne only muses on. Yet, while the latter does so in ostensibly whimsical vein, the common tendency - to corporealise the spiritual - is as striking as the respective dates (1624 for Donne and 1629 for Fludd.)

Like the Anniversaries, the Devotions provide a convenient mask for the 'talking out' of religious anxiety, deflecting the full force of the writer's unease via the ostensible theme of his illness. The later work manifests very similar religious fears in slightly different form. Donne betrays here the nervous 'parental psychology' of one who yearns for a more forceful apprehension of the divine, and who would rather this presence were reproachful and chastising, than imperceptible. The newly vigorous language

and associations of the anatomized body provide a material and earthly focus and expression for spiritual unease. For all its taintedness, the body has, as already emphasised, a vital function in exhibiting divine artifice. The plates of the Vesalian body vivify and sophisticate such a time-honoured role, displaying vastly *more* artifice than the comparatively simplistic renderings common just a few years earlier. The post-Vesalian body has, too, less explicit qualities which are equally important. Especially in its earlier, fresher stages, Vesalian dissection and representation has an aesthetic, visceral immediacy which appeals precisely by its non-rational, non-intellectual aspects. One can equate these with the persuasive aspects of poetic and religious language. The Vesalian body, like any other form of signification dependent on allusion rather than direct statement, is rhetorical. It is clearly not accidental that something as arresting and conveniently non-rational as the body becomes attractive at a time when intellectual and philosophical assertions of faith are increasingly insecure. By combining the seventeenth-century body with older traditions of visceral Hebraistic language Donne creates an imagery sufficiently dense, complex and solid to satisfy the demands of a tough-minded, but destabilised, religious faith.

At one point in particular the reassuring solidity and density of the corporeal, and the 'paternal' wrath of God visited upon it, coincide notably. Recognising, 'the ordinary discomfort that accompanies that phrase, That the house is visited, And that, that thy markes, and thy tokens' are upon the patient', Donne nonetheless goes on to ask: 'But what a wretched, and disconsolate hermitage is that House, which is not visited by thee, and what a Wayve, and Stray is that Man, that hath not thy Markes upon him?' For, 'These heates, O Lord, which thou hast brought upon this body, are but thy chafing of the wax, that thou mightest seale me to thee;

These spots are but the letters, in which thou hast written thine owne Name...' (Devotions, p.70).

These lines precariously balance the corporeal vigour and immediacy ('These heates... thy chafing of the wax') of the new *epistemé* with the divine script of the older: '...but the letters, in which thou hast written thine owne Name.' Donne covertly subordinates mundane physical disturbances by making his body 'wax', and his fever a friction of the divine hand. Appropriately, it is the sensuous immediacy of a bodily fever which, figured as a constantly renewed sense of the divine hand 'kneading' significance into the human body affords Donne adequate spiritual reassurance. The impression of this wish for a *continual* and active reassertion of the spiritual echoes the sense of his constantly cutting back and unconsciously defying the encroaching physical world in the Anniversaries.<sup>53</sup>

It can, indeed, be related to the heretical beliefs of Michael Servetus. A crucial feature of Servetus' pantheistic pneumatology was precisely that, rather than merely 'inspiring' Adam's body once, God continually and actively inspired humanity *via* a form of (loosely Stoic) world-spirit. Donne, like Servetus, wants an immediate and dynamic God. His desire for this 'stern Father' (or stern physician) is captured by the admission that, 'I need thy *thunder*, O my God... speake *louder*, that so... I may hear *nothing but thee*' (Devotions, pp.112-13). Here as elsewhere the faint quality of trying *too hard* to hear and see God points to a tension between saying that the world is a book complementing the Bible, and simply, calmly acting as if this was so.

I have already suggested that, in the case of Nashe's writings, religious faith (or, more precisely, an implicit belief in language as divinely guaranteed) may be ironically undermined precisely by its own dexterity of expression. The *truth* of what is said is in fact equivalent to the

forcefulness and skill of the writer, so that truth itself threatens to degenerate into a matter of mere literary virtuosity and personal invention. In the Devotions, Donne may equally be viewed as creating, rather than simply describing, the spirituality to which he refers.

Foucault identifies something very similar to this in the case of Cervantes' Don Quixote (first part published 1605): 'Each [of Don Quixote's exploits]... consists, not in a real triumph... but in an attempt to transform reality into a sign. Into a sign that the signs of language really are in conformity with things themselves'. In Don Quixote, however, 'writing has ceased to be the prose of the world; resemblances and signs have dissolved their former alliance', so that 'words... without content, without resemblance to fill their emptiness... are no longer the marks of things; they lie sleeping beneath the pages of books and covered in dust'.<sup>54</sup>

When he craves God's '*thunder*', Donne gives a similar impression of one trying to conjure ultimate significance back into the world of matter. In this he presents a suggestive inversion of Philip Neri (to whom he demonstrates some antipathy in Ignatius His Conclave (Healy, p.xxix, and pp.73 ff.)), and who was reportedly wont to cry, in his religious ecstasies, 'O Lord go farther from me, and let me have a less portion of thee'.<sup>55</sup> Donne, conversely, betrays an attempt to work himself up into a kind of 'typological ecstasy', so as to turn reality back into a sign. Precisely after his citation of Neri, he wonders, by contrast, 'who would be loath to sink, by being over-fraited with God, or loath to over-set, by having so much of that winde, the breath of the Spirit of God?' (Sermons, I, p.186, 21 April 1616). Neri or his followers, of course, might well view the Protestants of Jacobean England as drained of spirituality, needing to draw their God closer, rather than asking him to

'go farther from me'. Where the Catholic mystic was too full, Donne is in fact too empty.

Various strands are entangled in the above examples of corporeal spirituality. Prominent among these are the emergent human subject, the implicit presence of Vesalian anatomy, and the force of a religious belief whose very over-assertion testifies to attendant spiritual anxiety. All three aspects are captured closely by Cassirer's summary of the question of form in Renaissance science and art, for both of which:

the "object" is now something other than the mere opposite, the... *ob-jectum* of the Ego. It is that towards which all the productive, all the genuinely creative forces of the Ego are directed and wherein they first find their genuine and concrete realisation. The Ego recognizes itself in the necessity of the object; it recognises the force and the direction of its spontaneity.<sup>56</sup>

Donne appears caught in tension somewhere between the two positions (respectively, rejection and embrace of the material world) outlined here. A crude opposition between the divine and the material is complicated by the mediating factors of the Ego and incipient hard science. The anatomised body represents, paradoxically, the ultimate spectacle of the transience and corruption of flesh, and the most detailed display of divine craftsmanship. It captures, therefore, both of the qualities attributed by Cassirer to the 'object' *per se* - at once symbolic of *contemptus mundi* thinking, it yet has the ability to assert divine omnipotence just as effectively as it bespeaks human frailty. Its attractiveness as a highly concrete site in which to root both religious faith and individual selfhood further problematises its ambivalent

status. Behind Donne's imagery there appears the unconscious desire to almost literally 'flesh out' a threatened religious discourse. At the same time, however, in providing a powerful form of expression to the writer, the body cannot help but be implicated in a degree of self-creation. The following section considers the entanglement of guilt, selfhood and corporeal violence which is found in the Sermons and Holy Sonnets.

### 3. "Glorious annihilation": Divine Violence in the Sermons and Holy Sonnets

*...so the love of man towards God... is not permanently settled, if there be not a reverential fear, a due consideration of greatness, a distance, a distinction, a respect of Rank, and Order, and Majestie.<sup>57</sup>*

Certain of Donne's pleas for divine punishment connote a more benign deity than the absolutism of this quotation might suggest. Filtered through a medical vocabulary, references to '...these medicinall Physicks, these after-afflictions', and 'Corrections, by which God intends to establish us in that spirituall health...' appear quite neutral, invoking, as they do, the controlled and ordered skills of the physician.<sup>58</sup> Elsewhere, however, God's direct, physical, and embodied presence seems to intrude more oppressively. 'If there be any... that was never affected with... the glory of God', human agency remains impotent to persuade him; rather 'It must be God's work to bruise and beat him, with his rod of affliction'.<sup>59</sup> Similarly, 'His good way is, to beate us into his right way againe, by his medicinall corrections, when we put ourselves out of his right way' (Sermons, VI, p.60).<sup>60</sup>

The bruising and beating insisted on by Donne here clearly involve a more precisely identifiable and immediate agent of punishment than do 'corrections'.

The psychological drive uniting such instances appears to be the need for divine attention. The writer would prefer this attention, or presence, to be strongly felt, whether wrathful or benevolent, than for it to be weak. Donne's insistence that, 'It was a harder and an angrier speech then it seemes, when God said to his people, *Why should yee bee smitten anymore?*', and his desire for God not only to 'Burne off my rusts', but to 'thinke mee worth thine anger' ('Goodfriday, 1613. Riding Westward', Poems, p.330) all show a clear recognition of this need. The threats 'Why should I keep you at Schoole any longer? Why should I prepare Physick, or study your recovery by corrections any farther?' (Sermons, IX p.331) share one common feature: they imply a withdrawal of God's sustaining and directing presence.<sup>61</sup> The common motivation of Donne's medical and punitive imagery is further attested by occasional fusions of the two kinds.

We find him warning, for example: 'Think not thy valour sufficiently tried, if... thou hast stood in a haile of bullets without winking, or sate the searching of a wound without starting...'; explaining that 'it is more fearfull then any rack, or torture, when He comes to search and sift a conscience' (Sermons, IX, pp.408-9, n.d.). This not only gives a squeamish somatic twist to the probing of conscience (sufficient, indeed, to raise a wince in anyone familiar with Renaissance medicine and surgery), but has a definite edge of passive sexuality also. Alerted by bawdy references to the female genitalia as a 'wound', we have additionally the more immediate example of 'The Comparison': 'And such in searching wounds the surgeon is/As we, when we embrace, or touch, or kisse' (Poems, p.104, ll.51-2).<sup>62</sup> Here the euphemistic 'embrace' can be read as implying intercourse, given its

parallelism with the explicitly penetrative references to the 'last act' of the misfavoured couple: 'As when a plough a stony ground doth rent' (p.104, l.48). Elsewhere in his sermons Donne assures his sinful congregation that 'We would not dwell upon increpations, and chidings, and bitternesses'; merely 'pierce but so deepe as might make you search your wounds, when you come home to your Chamber, to bring you to a tenderness, not to a paleness or blushing here' (Sermons, IX, p.354, penitential psalms, n.d.). Most notable in this is the way that Donne's merging of psychic and somatic depth mimics his recurrent dependence on the new three-dimensional landscape of the Vesalian body. The consequent edge of squeamishness which the physical, as well as moral, penetration of the sinner raises echoes the earlier probing of conscience. More subtly, the further intimacy of 'in your Chamber' deepens the atmosphere of sensuality, suggesting the 'essential relationship between private property and private selves'.<sup>63</sup>

We find this pious sufferance of pain far less passively represented in another example:

...so when my crosses have carried me up to my Saviour's Crosse, I put my hands into his hands, and hang upon his nailes, I put mine eyes upon his, and wash off all my former unchast looks, and receive a soveraine tincture, and a lively verdure, and a new life into my dead tears, from his tears...

(Sermons, II, p.300).

If it is difficult to overlook the pronounced sensuality of this, it is still more so to ignore Donne's self-identification with the crucified Christ - an identification which, for some, could have been perceived as approaching usurpation, and which is, moreover, by no means unique:

There cannot be so great a crosse as to have none. I lack one loafe of that daily bread that I pray for, if I have no crosse, for afflictions are our spiritual nourishment; I lacke one limbe of that body I must grow into, which is the body of Christ Jesus, if I have no crosses; for, my conformity to Christ, (and that's my being made up into his body) must be accomplished in my fulfilling his sufferings in his flesh.<sup>64</sup>

These lines afford one of the most compelling examples of the body at once sustaining, and threatening to displace, conventional religious faith. Faced here with the unconscious sense of spiritual emptiness found throughout Donne's poetry and prose, one is struck by the way in which the 'lack' is filled precisely by the materially bounded human form. Pious feeling is, again, all but literally 'fleshed out' and resolidified by being made to pass through the density of a body whose depth and substance have very recently been thrust dramatically back into public view.<sup>65</sup> Having selected a suitably corporeal phrase ('the afflictions of Christ in my flesh') from I Colossians 24, Donne proceeds to adapt the citation. Paul talks of 'afflictions' suffered 'for his [Christ's] body's sake, *which is the church*' (ibid., italics mine), whereas Donne appears, if taken at face value, to talk *only* about bodies (suggesting, indeed, that this is in fact his real, unconscious preoccupation). Moreover, where Paul wishes to enjoy sufferings '*in my flesh*' (ibid., italics mine), Donne's curious shift to 'his flesh' implies at once a

surprisingly immediate physical relationship with Christ's body, and, again, a covert desire to usurp this body's central role.

A similarly paradoxical mixture of willed self-punishment, hubris, sensuality, and anxiety is evident in Donne's wish to have 'all the joyes of all the Martyrs, from Abel to him that groanes now in the Inquisition... condensed into one body of joy' (Sermons, IX, p.153, n.d.). Possessed of this conglomeration of corporeal agony and pious delight, the speaker would experience 'all this joy of all these Martyrs', which would 'be such a joye, as would worke a liquefaction, a melting of my bowels' (ibid.). Here, perhaps more strikingly than at any other point, the sensuous force of Donne's religious feeling spontaneously bursts into a solid three-dimensional mass which one might describe as a kind of 'hyper-' or 'meta-body'. The fact that it is only in the ultimate *spiritual* resting place ('yet shall I have it *abundantius*, in the world to come' (ibid., p.154) that he will enjoy this bizarre embodiment still further problematises an already intriguing hybrid of the sensual and pious.

The peculiar juxtaposition of fleshly masochism and self-aggrandisement found in both of the above quotations is most fully developed, however, in the 'Holy Sonnets'.<sup>66</sup> Louis Martz has demonstrated the close parallel between Donne's identifications with Christ, and the deliberately empathetic and sensuous imaginings encouraged in the meditational exercises of the Jesuits.<sup>67</sup> While Martz concentrates on the 'Holy Sonnets', his reading would seem also to cover the literally 'im-passioned' speaker in the sermon passages above. Such a suspicion is reinforced strongly by the conflation, elsewhere, of Donne's desire for suffering - 'he shall bring that scourge, that is some medicinall correction

upon me' - with the tell-tale phrase, 'and so give me a participation of his Agony...'. Even 'if he draw blood, if he kill me, all this shall be but *Mors raptus*, a death of rapture towards him into a heavenly, and assured Contemplation, that I have a part in all his passion' (Sermons, II, p.211, Easter-day, 1617). The pronouncedly empathetic, arguably even ecstatic, character of Donne's imagined agonies, and the way that 'Contemplation' loosely echoes the Jesuit 'Meditation' appear to confirm the source posited by Martz. This can hardly render Donne's physical identifications unproblematic, however. The very fact that, as an avowedly Protestant preacher, he is attracted to expressions of piety derived from baroque Catholicism, must rouse the suspicion that the ultimate rhetorical thrust of such language exceeds his control.<sup>68</sup> Even in the passage just given, indeed, a faint but typical lapse toward the nascent Ego might be detected in the wish for 'such an intire interest in his whole passion, as though all that he did, or suffered, had been done, and suffered *for my soule alone*'.<sup>69</sup>

In the Holy Sonnets the speaker desires to be battered, ravished, buffeted and scourged, and indeed, as one critic has argued, appears to "adopt the postures commonly defined for the 'girls' of the erotic verse".<sup>70</sup> As the most cursory glance over these nineteen poems suggests, the Freudian analysis of masochism sheds vital illumination on the underlying psychology demonstrated in the sequence.<sup>71</sup> The speaker's request, 'burne me o Lord, with a fiery zeale/...which doth in eating heale' (V), and his belief that, 'Those are my best dayes, when I shake with feare' (XIX) exemplify a recurrent desire for a violent, often punitive intervention in his sinful life. Sonnet XVII, meanwhile, sets out an explicit creed of sublimation which symbolizes the poems' rechanelled sensuality and emotion: 'Since shee whom I lov'd hath payd her last debt/...Wholly on heavenly things my

mind is sett'. Debate admittedly persists as to whether or not the woman 'ravished' into heaven was in fact Ann Donne. Nonetheless, even without an absolutely certain candidate for the 'she' of the poem, the piece may stand as a kind of rhetorical admission, by Donne, of a posture unconsciously adopted in various other parts of both poems and prose. God now is openly acknowledged to '...wooe my soule for hers'; while in the following poem, the speaker's 'amorous soule' wishes to 'court thy [Christ's] mild Dove/Who is most trew, and pleasing to thee, then/When she'is embrac'd and open to most men' (XVIII).<sup>72</sup> Sonnet XIII dispels the fear of divine wrath by, significantly, the reassurance of Christ's physical exterior: 'This beauteous forme assures a pitious minde'; referring also to the speaker's 'profane mistresses' *en route* to this conclusion. Self-conscious and deliberately contrived as this 'argument from appearances' is, it aptly symbolises both the persistent edge of sensuality, and the strong intuitive, emotive elements in the sequence as a whole.

Before exploring the most revealing of these poems, however, it is worth considering the caution of Deborah Shuger on the question of self-punishment (or wish for external punishment). Because, for Shuger, 'inwardness is itself shaped by culture', and 'the relation between "inside" and "outside" more resembles a Mobius strip than nesting-boxes', we cannot 'translate Donne's valorization of guilt as masochism; the experience *qua* experience has already been interpreted, so that to alter its name is to alter its essence'. Shuger concedes that 'We might postulate a primal feeling - the need to be punished', but emphasizes that 'the nature of the experience depends on whether that feeling is interpreted as redemptive or pathological'.<sup>73</sup> This warning seems to me to be valuable. Nonetheless, while respecting the historically bound nature of a 'redemptive', pre-Freudian desire for punishment, I hope, by drawing parallels between

Freud's account of masochism, and Donne's poems, to point up certain elements and complexities which may elude a more straightforwardly religious reading. Even outside of the 'Holy Sonnets' there are passages of prose which betray so glaring a similarity to masochistic psychology that the parallel begs to at least be considered. Donne reflects, for example, that 'though [the Lord] come in corrections, in chastisements... if thou turne with murmuring, this is the turning of a Serpent, to sting God, to blaspheme him...'. His conclusion, that one should, therefore, rather 'turne like a Worme... [and] turnest humbly to kisse the rod, to licke and embrace his foot that treads upon thee...' (Sermons, V, p.370, n.d.) is a startling adumbration of sado-masochistic imagery, centuries prior to Sacher-Masoch himself.

The key features in the Freudian analysis of masochism are: a sexual passivity, expressed as a desire for pain, or more indirect forms of humiliation; a pre-existent sense of guilt; and a recognition that 'masochism is [often] nothing more than an extension of sadism turned round upon the subject's own self' (Freud, VII, pp.71-2). Keeping in mind Shuger's perspective, it might be objected that a crucial driving force behind the poet's self - namely, guilt - is, for his period, apprehended as 'redemptive', not 'pathological'. Such a caveat appears well-supported by the first poem. The sense of violence willed upon the self is certainly clear - 'Thy Grace may wing me to prevent his art,/And thou like Adamant draw mine iron heart'; yet the force and power of 'Adamant' derives precisely from an external, divine counterbalance to the speaker's individual impulses. Noting that guilt is associated with a universal and independently embodied sinfulness ('our old subtle foe'), we might reformulate the opposition between pathology and redemption as one between the micro- and macrocosmic, the autonomously meaningful self, against a universe which

invests subjects with ultimate meaning ('a temple of thy spirit divine' (II)). Meaning in the first case is pathological, because hermetically sealed into the individual and his life history. For Donne, however, the experience must remain redemptive because his self is perpetually open to, and suffused by, the presence of the divine.

The weight of such an opposition, however, as a check against a 'non-religious', masochistic reading, must depend on *how* subordinate the subject is. This itself, of course, cannot be gauged directly from that subject's overt statements of humility or fear. There are numerous indications that Donne's admission, 'not one houre my selfe I can sustaine' (I) should not be taken at face value. As pointed out, even in the religiously saturated Devotions, Donne exhibits an ultimate inability to resolve the tension between his self and his God. In spite of his persistent avowals that illness and pain are spiritually desirable, he is capable of a striking lapse which effectively reverses this position: 'In *poverty* I lack but other things; In *banishment* I lack but other men; But in *sicknesse*, I lack my *self*' (Sermons, II, p.80, Lincolns Inn, n.d.). Rather than apprehending the presence of that 'corrective' Father which sickness or suffering should prompt, he instead laments the distortion of the individual Ego consequent on physical disorder.

So, in the 'Holy Sonnets', Sonnet IX is equally divided between the assertion of the poet's (reasonable) self and an inscrutable, omniscient God. After musing on the injustice of a damnation inflicted on only mankind, out of all creation, the speaker intervenes with a *volta* at line nine - 'But who am I that dare dispute with thee/O God?'. We may read this pretended self-criticism as not wholly sincere, and as suitably epitomising a recurrent schism between the human subject and the almighty. A little more indirectly, we might

also stress the first part of the question ('But who am I?') over the latter. What is really at stake is not in fact the speaker's temerity in disputing with God, but the establishment of a self-knowledge that would at least legitimise such disputation, and give clearer status and grading to the position of the querulous human subject. The first problem is a macrocosmic, clearly religious one; while the second adds a new, opposing element of individual psychology. We should not, then, be overly surprised at the consequent tension, visible in the redemptive mixture of both '*thine onely worthy blood*' and '*my teares*' (IX, ll.10-11).

It is in Sonnets XI and XIV that the threads of emergent selfhood, guilt, and religious faith and doubt, are most densely and intriguingly knotted. With his invocation '*Spit in my face, you Jewes, and pierce my side,/Buffet, and scoffe, scourge, and crucifie mee*', (XI) the speaker echoes, and compounds, Donne's identification with the passion.<sup>74</sup> While Martin Coyle reads this opening as a kind of dramatic monologue spoken by Christ (Coyle, p.144), the following explicatory lines - '*For I have sinn'd, and sinn'd, and onely hee,/Who could do no iniquitie, hath dyed*' (italics mine) - unequivocally show this to be the voice of the poetic speaker, re-enacting and reflecting on the original passion. Suitably, the undeniable violence of the opening is itself ambivalent, shifting from a proud defiance to the familiar self-punition and fundamental guilt implied by '*For I have sinn'd*'; a change of tone, one might say, from '*Do your worst*' to '*Please do your worst*'.

Donne goes on to make the ambiguous admission (or boast), '*My sinnes... passe the Jewes impiety*' - something which, elsewhere, he himself recognises as faintly presumptuous: '*Doe not thou then give malitious evidence against thy selfe, doe not weaken the merit, nor lessen the value of the bloud of thy Saviour, as though thy sinne were*

greater than it...' (Sermons, II, p.331, 30 January 1619/20).<sup>75</sup> In the simultaneous assertion of power and weakness, *hubris* and guilt which Donne's 'surpassing sinfulness' implies, we may detect Freud's identification of masochism (excessive passivity) as sadism (excessive assertion) 'turned round upon the subject's own self' by guilt (Freud, VII, p.72).

Just such a juxtaposition of self-assurance and self-annihilation reappears in Sonnet XIV. As Martin Coyle notes, in the very desire for God's transformative and redemptive violence - 'Batter my heart, three-person'd God' - the speaker is in fact giving an order to his Creator and Redeemer: a fact which ultimately 'reflects the knowledge the speaker has of his own power and separateness from God' (Coyle, p.144). If this distinctive and precarious position of the emergent self is combined with the Freudian account of masochism, Sonnet XIV appears remarkably close to an early-modern version of Sacher-Masoch's nineteenth-century creation. The most explicitly sensual and passive moment of the poem is, of course, the speaker's desire, having presented himself as a bride fought over by rival suitors of light and darkness ('am betroth'd unto your enemie'), for God to 'ravish' him. This, however, is only part of a complex process, whereby the very humbling and reduction of the speaker, constituting as they do a powerful attention to him as a subject, permit a degree of 'self-focus' and self-exploration which may augment that self at the expense of the very power to which he (nominally) prostrates himself. At the same instant, the sense of religious abandonment so often correlative to Donne's most forceful and corporeal language is betrayed by the felt inadequacy of a God who will only 'knocke, breathe, shine, and seeke to mend', rather than 'breake, blowe, burn and make me new'. As with Hooker, 'graphically physical participation ["in the wounds of our Redeemer we there dip our tongues"] seems driven by feelings

of forsakenness and distance' (Shuger, pp.77-8).<sup>76</sup> The persistent demand for (typically physical, sensual and personal) divine attention which arguably forms the most dominant motif of the 'Holy Sonnets' is attested by this allegedly insufficient force. Yet, even while the speaker deflects charges of self-obsession or importance by his acceptance of punishment, he indirectly expresses just that effect which the apprehension of the divine gaze produces. The weight of precisely *self*-directed violence is required so that the "I" may rise and make "me" new.

Glancing back, then, at the confession, 'not one houre my selfe I can sustaine' (I), we may identify an individuality which at once dimly suspects its own self-exploration to be performed at the expense of the divine, and simultaneously uses the ferocity of the divine gaze to emphasize and define that self in perilous isolation. Donne's ambivalence appropriately mirrors the status of 'selfhood' in a period which saw this quality as, primarily, 'the inability to govern the self' (Sawday, 1997, p.30). The nascent Ego develops in the darkness of guilt and sin, yet does not fully exist until meekly, voluntarily exposed before the sight of Him who sees, and sustains, all. So, when Donne insists that '... a man truly penitent is a daily executioner upon himselfe, and punishes after, the sins which he hath committed before... for satisfaction to the justice of God', it is indeed 'him selfe' and the need for an incessant, diurnal reassertion of God's wrathful presence, which are most significant. Donne's self-hood can neither directly accept its own *hubris*, nor relinquish the access to divine presence which self-punition allows: 'If thou flea thy selfe with hair-cloathes, and whips, it is nothing towards satisfaction of that infinite Majesty, which thou hast violated, and wounded by thy sin...'.<sup>77</sup>

If the accommodation of the early modern God into Freud's analysis of masochism necessarily reshuffles the components of the latter, it does not seem to quite scatter them. Most importantly, Freud's model acts to show how seriously the nascent self must be taken at this point. The 'absolutism' Shuger sees in Donne's God results from an underlying, unadmitted sense of a *diminished* spiritual presence - a 'desire for any contact with God, even painful' (Shuger, p.190). Like a phobic object Donne's God is disproportionately charged with externalised but unresolved neurotic energies. While the redemptive must, for Donne, outwardly triumph over the pathological, it is precisely his restless need to constantly recreate, and reassert, divine power which indicates the 'pathological' aspect of his faith. In another sense, however, the self and the almighty are here subtly interdependent and mutually reinforcing, caught up in a complex play of different psychological and religious forces. Produced, in part, by unstable spiritual energies, the absolutist God, directing the force of his gaze on *individual* sin, is attractive precisely for his power to covertly nourish a new degree of self-hood.

My aim in this analysis has been to suggest a religious, psychological driving force behind Donne's most emphatic corporealising imagery. I hope, in arguing for this, to have acknowledged and demonstrated the necessary complexity of such motivation. The 'Holy Sonnets' appear as so conspicuously dramatic, and marked by a sense of such spiritual crisis, because they do indeed dramatise spiritual tensions within the personality of their author - tensions from which the speaker is not detached, but which are dynamically and richly enacted as he writes. The implicit model of Loyolan meditational exercises convincingly identified by Louis Martz seems, rather than anchoring Donne to one tradition of orthodox Christian expression, to have

licenced and encouraged an emotive spontaneity: a tone of 'subtle theological analysis punctuated with passionate questions and exclamations' (Martz, p.47). It is just this affective and personal strain which acts as a subterranean channel for the Sonnets' involuntary, and most intriguing, spiritual contradictions - an aspect of the poems which flows *through* Donne's unconscious, rather than *from* his deliberate intention. As he himself registers in two moments of brief insight: 'Reason your viceroy in mee, mee should defend,/But is captiv'd' (XIV) - so that, 'to vex me, contraries meet in one' (XIX).

I hope too, in considering the general vigour, force and sensuality of Donne's religious rhetoric, to have suggested certain unconscious motivations for his more directly visceral imagery. The punitive corporeality displayed above provides a framework for the anatomical language of Donne's sermons. In such imagery the overbearing power of God is refracted through the newly galvanised and empowered medium of his most immediate and impressive achievement - a body which in reality is an appropriately hybrid creation, owing as much to Vesalius as to the Almighty itself. In Donne's sermons the 'absolutist' God of the 'Holy Sonnets' will be seen to recur in slightly altered guise, filtered through visceral language and associations which seem, at times, to be the only sufficient means to either represent his presence, or acknowledge (and compensate for) his distance.

#### 4. Annihilation and Resurrection

*What needs all this heat, all this animosity,  
all this vehemence about the Resurrection?<sup>78</sup>*

Certain aspects of the corporeal preoccupied and evidently intrigued Donne to a high degree: chief among these was the role of the human body in the resurrection of the human individual, at some unspecified time after death. His assertion that 'The Kingdome of Heaven hath not all that it must have to a consummate perfection, till it have bodies too' is but one of numerous such instances scattered throughout the sermons.<sup>79</sup> Perhaps unsurprisingly, given how frequently and insistently Donne refers to the necessity of spiritual *and* bodily resurrection, the post-Vesalian body succeeds in transforming even this most rarefied arena of corporeality. This may in part reflect an especial sensitivity, on Donne's part, to the body as an artful construction. In a period relatively inured to physical horrors, Donne appears noticeably disturbed by the use of state violence. Speaking, with typical attention to the composition of his audience, to a Lincoln's Inn congregation, he does not openly dispute the magistrate's right '...to give judgement upon a particular man that stands before him...' notwithstanding the judge's knowledge that 'those limbs which make up a Cabinet for that precious Jewell, the image of God, to be kept in, must be cut into quarters, or torne with horses; that that body which is a consecrated Temple of the Holy Ghost, must be chained to a stake and burnt to ashes'. He goes on to stress, however, that one who: '...is not affected in giving such a judgement... hath no part in the bowels of Jesus Christ...' (Sermons, III, p.160, Lincolns Inn, n.d.).

A similar instance both reinforces this opinion, and hints at an underlying motivation for it. Donne talks of 'Transgressors... that put Gods Organ out of tune, that discompose, and teare the body of man with violence... those inhumane persecutors, who with racks, and tortures, and prisons, and fires, and exquisite inquisitions, throw downe the bodies of Gods true servants, to the Idolatrous worship of their imaginary Gods' (Sermons, VI, p.266, St. Pauls, Easter Day 1625). He then enters into a quite lengthy case against the use of torture, supported by his favourite authority, St. Augustine, and by St. Jerome (*ibid.*, pp.266-7), concluding that 'though S. *Augustine* would not say, that torture was unlawfull, yet he sayes, It behoves every judge to make that prayer... If there bee some cases, in which the Judge must necessarily proceed to torture; O Lord, deliver me, from having any such case brought before me' (*ibid.*, p.267).

The explicit reason Donne gives for opposing physical violence sheds a particular light on the relation between anatomy and bodily resurrection. Before citing Augustine and Jerome as opponents of torture, he notes the opinion, of certain 'ancient Fathers', that 'the soul it self should lack the glory of heaven, till the body were become capable of that glory too' (Sermons, VI, p.266). Although recognising this to be an 'error' (*ibid.*), he nonetheless proceeds: 'They therefore oppose God in his purpose of dignifying the body of man... who violate, and mangle this body, which is the Organ in which God breathes' (*ibid.*). It is as if, in a period where the artistry and complexity of the body are represented and appreciated to a hitherto unknown degree, the destruction or damage of this treasure is especially terrible to a pious Christian - a kind of miniature crucifixion. This belief suggests once again Donne's ability to filter spiritual concerns through the concrete medium of the body (and, often,

the newer, highly complex body) in a kind of positive corporeal meditation. The tinge of Servetian animism ('the Organ in which God breathes') appropriately indicates the danger attendant on any strongly physical mediation of the spiritual: that the two will blur heretically, or the physical simply predominate.<sup>60</sup> The sense that pronounced physical interference with the body is somehow an attack on the almighty himself ('They therefore oppose God..') must be of crucial importance to the understanding of Donne's fascination with medicine, anatomy, physical violence, and the somatic in general. If the structure and function of the body are positive aspects of his reverence for 'God's temple', and torture and execution negative ones, anatomy, arguably, lies midway between the two poles, unsurpassed in its display of divine artifice, but equally unrivalled as a metaphor for sustained and intense physical suffering.

At times Donne seems to fear, however, something far more serious than the merely temporary destruction of God's workmanship. In a Lincoln's Inn sermon he asks his congregation, 'Shall I imagine a difficulty in my body, because I have lost an Arme in the East, and a leg in the West? Because I have left some bloud in the North, and some bones in the South?'. He then proceeds to reassure them with an analogy: 'Doe but remember, with what ease you sate in the chaire, casting an account, and made a shilling on one hand, a pound on the other... because all these lay easily within your reach' and requires them to 'Consider how much lesse, all this earth is to him, that sits in heaven, and spans all this world, and reunites in an instant armes, and legs, bloud, and bones, in what corners soever they be scattered' (Sermons, III, p.109, n.d.). The seemingly complacent and abstract assurance of this is characteristically undermined, however, by Donne's involuntary fascination with the precise physical circumstances of death and resurrection. His

subsequent comment that, 'I have had no looking-glasse in my grave, to see how my body looks in the dissolution' (Sermons, II, p.110), implies by its very vividness a strong preoccupation with the spectacle of bodily corruption.

Donne's interest in the resurrection of the body appears, then, to be less abstract than his metaphor of armchair accountancy might suggest. The general suspicion that he in fact *does* unwillingly 'imagine a difficulty' in reassembling a dissolved and dispersed body is strongly reinforced by both the frequency of his references to the process, and the elaborately nervous care with which he rehearses, and answers, so many possible obstacles to it. In the sermon just quoted from, he feels compelled - as if persuading himself more than his auditors - to address the dilemma of bodies consumed by fish and animals, concluding with the ironic question, 'can hee not as easily make thee up againe of nothing, as he made thee of nothing at first?' (Sermons, III, p.97). Irony, however, is replaced by a tinge of over-assertion when he elsewhere warns that 'Curiously to dispute against our Resurrection, is seditiously to dispute against the dominion of Jesus' (Sermons, IV, pp.358-9). The absolutism of this dominion (and accompanying 'sedition') notably contrasts with the preceding lines, which seem more persuasive than didactic: 'water and earth, and fire, and ayre, are the proper boxes, in which God laies up our bodies, for the Resurrection' (ibid.).

Elsewhere Donne's references exhibit a similar combination of absolutist aspects with concessions to empiricism: 'Where be all the splinters of that Bone, which a shot hath shivered and scattered in the Ayre? Where be all the Atoms of that flesh, which a *Corrasive* hath eat away, or a *Consumption* hath breath'd, and exhal'd away from our arms, and other Limbs? In what wrinkle, in what furrow, in what bowel of the earth, ly all the graines of the ashes of a body

burnt a thousand years since?'.<sup>81</sup> His previously *general* evocations of dismemberment (arms, legs, and blood) have now become noticeably more concrete and minute. Visceralising the earth itself, he wonders, 'In what corner, in what *ventricle* of the sea, lies all the *jelly* of a Body drowned in the *generall flood?*' (ibid.). In doing so he only means, of course, to elevate God's power correspondingly, and to demonstrate that '...the Resurrection of the *Body* is discernible by no other light, but that of *Faith*, nor could be fixed by any lesse assurance then an *Article* of the *Creed*' (ibid.). This brief moment of theological abstraction and authority is curiously hemmed in by relentless physical particularity, however, in a way which appropriately reflects the encroachment of the taxonomic body upon a traditional Christian soul. Donne insistently details how, after, 'One humour of our dead body produces worms, and those worms suck and exhaust all other humour', then 'all dies, and all dries, and molders into dust, and that dust is blowen into the River, and that puddled water tumbled into the sea, and that ebs and flows in infinite revolutions' (Sermons, VIII, p.98).

Perhaps most telling of all, however, are those moments when the abstract and the particular are not merely disproportioned, but unintentionally blurred together, so that Donne seems to address the matter of bodily reconstitution as a problem of physics, rather than of theology. Admitting that 'the greatest arguments against the Resurrection... [are] of this kinde, when a Fish eates a man, and another man eates that fish...' (Sermons, IV, pp.326-7, Whitehall, first Friday in Lent, 1622/3), he not only implies that such arguments are frequent and current, but implicitly undermines the supposedly '*absolute dominion*' of Jesus (Sermons, IV, p.359, italics mine). Clearly no argument can be '*greater*' than another if God's power over all physical obstacles is truly unlimited. Donne, however, proceeds to place the dilemmas of

the food chain, and the transformation of matter, on a level with the raising of Lazarus, after three years in the grave; explaining that 'When a body is resolv'd in the grave to the first principles, or is passed into other substances, the case is somewhat neere the same [as the problem of men eaten by fish]; and therefore would Christ worke upon a body neere that state, a body putrified... therefore... this Miracle raised him most estimation...' (ibid.). Here Donne again implies degrees of difficulty in resurrection (from, say, a day old corpse, to the extreme case of Lazarus, or of consumed and intermingled flesh).<sup>82</sup> This stance, which recalls the quite precise, optical explanation of Christ's miraculous 'transfiguration' (see Chapter 4.4b, p.245 (Sermons, III, p.118, n.d.)) is a very different attitude from the bland appeals to God's omnipotence, and his original creation *ex nihilo*, seen above (Sermons, III, p.109, p.97).

The absolutist, or non-empirical, theological arguments for resurrection may be termed, loosely, magical; Donne's instance of Lazarus, with its attention to the importance of material processes, verges on the empirical and proto-scientific. In a sermon preached shortly after his Lenten one, Donne himself concedes that it 'was well said... among the Ancients... The Omnipotence of God, hath alwaies been the Sanctuary of Heretiques... in all their incredible doctrines, God is able to do it, can do it' (Sermons, IV, p.357, S. Pauls, Easter Day 1623). Still more remarkably, in a passage on moral, rather than bodily, dissolution he paradoxically warns that, 'Howsoever God can do all things, he cannot restore a Virgin, that is fallen from it, to virginity againe'. This is because 'God is a Spirit, and hath reserved more power, upon the spirit and the soule, then upon the body' (Sermons, IV, p.360, ibid.). Notwithstanding (indeed very probably *because of*) their non-anatomical context, these lines offer perhaps the neatest example of tension between

the 'magical' power of God, and the strengthening forces of medical empiricism. The bizarrely contradictory status of a God who 'can do all things', yet cannot restore a Virgin indeed further supports the impression that Donne's unconscious anxieties about the status of disintegrated matter, rather than his logical rigour, predominate at just this point.

In the case of the Lent sermon (IV, pp.324-44), the date means that Donne's anxiety about the reduced and dissipated human body would have been especially sharply focused. Although given by Potter and Simpson as 28 February (Sermons, IV, p.29) the first Friday in Lent was in fact 7 March, Easter day being not 28 March, as is elsewhere stated in the same volume (IV, viii), but 13 April (Cheney, p.159). It was in this spring that Harvey was due to undertake a three day Lumleian dissection: a spectacle not witnessed since 1616, and not due to recur until 1629. Although, in 1622/3, the lecture actually spanned 27-29 March (D'Ewes, I, p.230), it seems highly probable that a three day dissection would have been a subject of conversation some time before it began, particularly as its actual date was probably uncertain until just before the event itself. One is strongly inclined to wonder, therefore, if the rhythms of the London anatomical season, as much as Donne's own involuntary fascination with the decaying body, prompted the spectacle of 'that brain that produced means to becalme gusts at Councell tables, stormes in Parliaments, tempests in popular commotions' reduced to generating 'nothing but swarmes of worms and no Proclamation to disperse them' (Sermons, IV, p.333, Lent, 1622/3).

If Donne's persistent and elaborate enquiries on this subject really are less assured than he pretends, one can imagine that the anatomised body would unnerve him not only by its revelation of complexity, but by the spectacle of that complexity in its most complete state of reduction and

disarray. The separate arms and legs, and even shivered bone, present a relatively crude, and one might say uninteresting, challenge by comparison with the remains of a corpse after a three day dissection. Donne himself appears to recognise this polar opposition when illustrating the paradox of '...Gods Method', which is 'to preserve by destroying... Gods first intention even when he destroyes is to preserve, as a Physitians first intention, in the most distastfull physick, is health'. The fact that 'even Gods demolitions are super-edifications, his Anatomies, his dissections are so many re-compactings, so many resurrections' (Sermons, IX, p.217, penitential psalms, n.d.) is used to emphasize the ultimately salutary and benign character of earthly sufferings; but clearly implies, at the same time, Donne's sense of two radically opposite states of the body.<sup>83</sup> The fact that God is made to oversee both dissection and 're-compaction' constitutes a characteristic attempt to deflect the anxiety prompted by the spectacle of absolute wreckage visible in an anatomised corpse.

Related to this involuntary preoccupation is Donne's incipient awareness that anatomy has at once problematised the theological body by its revelation of internal complexity, and faintly hollowed and demystified it. In this latter sense, he adumbrates the concessions and adjustments shortly to be made by Descartes to a body which can no longer conform to previous, non-empirical features of Christian pneumatology. Even before the sermons, indeed, and before Descartes himself was yet twenty, Donne had likened human bodies to

...small pocket-clocks, whose every wheele  
 Doth each mismotion and distemper feele,  
 Whose *hand* gets shaking palsies, and whose *string*  
 (His sinews) slackens, and whose *Soule*, the spring,  
 Expires, or languishes...<sup>84</sup>

As noted in the case of The Progresse of the Soule, however, Donne's dealings with an increasingly self-sufficient physiological mechanism are not always so assured. When he inquires, 'Is your soul lesse then your body, because it is in it?' (Sermons, II, p.338, Lincolns Inn, 30 January 1619) one strongly senses that he is asking himself, as much as his congregation. The question recalls both the seeming over-assertion of, 'it is my soule that sayes to mine eye... I will make thee see, and my soule that sayes to mine eare... I will make thee heare' (Sermons, IX, p.357, n.d.), and his reference to the startlingly capacious 'larders, and cellars, and vaults... of our body' (Sermons, III, p.236, White-hall, 8 April 1621). His overt response to the new dominance of this previously unsuspected interior space - 'How easily lies a letter in a boxe, which if it were unfolded, would cover that boxe? Unfold your soul, and you shall see, that it reaches to heaven...' (Sermons, II, p.338) - significantly flattens its overwhelming three dimensions into two, and shows a telling recourse to something both written, and (presumably) signed - in this case by the ultimate authority.

Donne seems, then, to wage a sporadic, unstated rhetorical war against the anatomised body, as he does against the Vesalian body in general. He reflects elsewhere on how, 'A man may upon the hearing of something that strikes him... feel this springing, this exultation, this melting, and colliquation of the inwardest bowels of his soul...' and proceeds to insist that, although 'no *Naturall Philosopher* can call it by a name, no *Anatomist* assigne the place where

it lyes...' yet, 'many of you who are here now, feele it, and understand it this minute' (Sermons, IV, p.159, S. Pauls, Midsommer Day 1622). Donne here reveals two distinct areas of epistemological and religious tension. His instinctive association of the 'Naturall Philosopher' and the 'Anatomist' shows, firstly, how the supposedly 'God-centred' practice of Natural Philosophy is increasingly to be characterised by the most insistently taxonomical branch of empirical inquiry.<sup>85</sup> Less obviously, but more revealingly, the reader is presented with an implicit opposition between faith (the inward 'springing' and 'exultation') and an empirically grounded reason (the lack of any corporeal analogue for such a feeling). Here Donne's rhetorical weapon against the somatic and taxonomic is not God's directly written Book of Scripture, but the more obliquely inscribed 'Book of the World'. The 'bowels' of God's foremost, human, creation are, the anatomical allusion makes clear, very much actual ones. The peculiar character of the Vesalian interior is nowhere more aptly epitomised than in Donne's effectual use of the body ('bowels of his soul') *against* the body ('no Anatomist...'). Responding to the perceived excess of materialism which the anatomists in particular are felt to exemplify, these lines tellingly betray the plight of a spirituality whose once general interior refuge has been ruthlessly and comprehensively particularised. Again seeming to foreshadow Cartesianism, Donne's opposition suggests that a human soul denied any reference or location on the taxonomic grids of the body must now be mystically and defiantly reinserted by a rhetorical appeal to pious enthusiasm.

The religious rhetorician can no more shelter in the body than can the soul. No longer easy fodder for glibly non-concrete metaphors, the human interior asserts its brute somatic identity with such force that the mere mention of

'bowels' prompts a necessary topical aside.<sup>86</sup> The role of the unconscious and involuntary is further attested by the way that the spontaneous faith evoked here contradicts, or at least conflicts with, at least three of Donne's own statements, and by the fact that elsewhere the emotive, visceral, and spontaneous are in fact equated with *Satan*, rather than with God: 'Our nobler faculties are always assisted with the grace of God to resist him [the Devil], though the belly, the bowels of sin, in sudden surprisals, and ebullitions, and foamings of our concupiscencies, be subject to him...' (Sermons, X, pp.183-4, n.d.).<sup>87</sup>

Insisting upon an ultimate mystery beyond the reach of the most penetrating scalpel, Donne implicitly realigns and 'dematerialises' religious feeling in a way consistent with the brevity of the anatomical window of opportunity. In the Songs and Sonnets anatomy had offered liberating possibilities for an agile mind content to play, irresponsibly, with a newly represented body. Under closer scrutiny, however, and in the more severe forum of the pulpit, the previously exuberant mode of the poems is replaced by a constraint and an awkwardness which reflect the precariously balanced religious status of the Vesalian body. In the realm of ultimate truth and certainty, what was initially exhilarating in its unfamiliarity and scope becomes a menacingly large, unmanageable and pervasive presence.

## 5. Anatomy and Embodiment

*It is an unwholesome health of the body, that occasions the sickness of the soul.*<sup>88</sup>

Donne's anxieties about resurrection and anatomy betray an implicit respect for the craft of the dissector. Elsewhere he describes 'The Cabalists', those most highly practised in the craft of arranging and manipulating verbal matter, as 'the Anatomists of words'.<sup>89</sup> Faintly mocking as this praise perhaps is, the metaphor betrays, nonetheless, both a clear respect for anatomy as the 'state of the art', and a sense of its at least rivalling, and possibly superseding, that other process which, for him, exemplified the laborious and painstaking exploitation of material substance: namely, alchemy.<sup>90</sup> When, later on in life, he asks, 'What Anatomist knowes the body of man thorowly, or what Casuist the soule?' (Sermons, VIII, p.255, S. Pauls, Whitsunday 1628), he seems to imply that even the anatomists do not know - an implicit tribute which is reflected in the opinion that, 'You may as well call him an Anatomist, that knowes how to pare a naile, or cut a corne, or him a Surgeon, that knowes how to cut, and curle haire, as allow him understanding, that knowes how to gather riches...' (Sermons, IX, p.385).<sup>91</sup>

This reverence frequently combines with Donne's fondness for the corporeal and the physically forceful. Loosely materialising conceits, such as the sinner who will 'have *crumbled* away thy soul' shade into the more immediately somatic quality of that divisive 'wal [i.e., the Ceremonial Law]... which the Devil hath built now in the Christian Church'; a structure which he 'hath mortar'd... in the brains and bloud of men, in the sharp and violent contentions arisen, and fomented in matters of Religion' (Sermons, II, p.111).<sup>92</sup> This visceralised sin is elsewhere subjected to a

startlingly perceptual wrench when Donne stresses the need to 'labour to hide our miseries, to swallow our own spittle, as Job speaks, and to sponge up our teares in our braines, and to eate, to smother our sighs in our own bosomes' (Sermons, VIII, p.199, 5 April 1628). The inventive jolt by which the texture and tactile quality of the brain, and its moistness (rather than its conceptual associations), are exploited for the sponging of tears, both recalls Nashe, and suggests that the *sight* (by speaker or auditors) of a dissected brain is integral to the impact of the conceit.<sup>93</sup> Similarly, while the extremes of human misery and peccability are captured by the relatively conservative Hebraistic image of 'this sinner [in whom]... despaire shall have sucked out *all the marrow of these bones*' (italics mine), Donne very swiftly applies a novel and topical wrench, explaining 'so you have this sick sinner dissected and anatomized' (Sermons, II, p.85, Lincolns Inn, n.d.).<sup>94</sup> Anatomy stands as equal, or superior, to the imagistic power of a body robbed of its innermost pith.

Anatomical conceits appear attractive to Donne because of their ability to mimic, novelise, and arguably surpass the more traditional somatic vocabulary of Scripture. The precarious relationship of support and subversion which exists between the new body and the material gravity of pious language is neatly exemplified in a St. Paul's sermon of Christmas 1627, where the 'cypher' which God gives to Moses is the Almighty's 'bosome name, his viscerall name, his radicall, his fundamental name, the name of his Essence, *Qui sum, I am...*' (Sermons, VIII, p. 144).

This positive 'embodying' is complicated a few lines on by the warning that, 'For matter of beleefe, he that beleeves not all, *solvit Jesum*, as S. John speakes, he takes Jesus in peeces, and after the Jews have crucified him, he dissects him, and makes him an Anatomy. We must therefore teach all...' (Sermons, VIII, p.146). These lines, spoken just two weeks

after the customary date of the 'Extraordinary', or Goulstonian, anatomy lecture, implicitly conflate the extreme of physical violence so readily associated with dissection, and the seriousness of 'violating' Scripture.<sup>95</sup> Here, as elsewhere (see Chapter 4.2b on a 'A Valediction: Of My Name in the Window') there appears to be a pun on the word 'Anatomy', implying both a dissected corpse, and 'an abridgement'. Revealingly, the 'violation' of analysing Scripture, rather than accepting it *en masse* as guaranteed by a single, absolute authority, is expressed via the most aggressively taxonomic facet of nascent science. Foucault's description of sixteenth-century language as something which is, at least in its most sacred forms, part of the fabric of the world itself (Foucault, p.43), therefore appears to be implicit in Donne's warning. Interference with Scripture, as the fate of Servetus himself so grimly attested, constitutes a subtle but threatening dislocation of reality. Servetus' theology essentially refused to 'teach all' because, rather than obeying the monoglossic authority of orthodox Christianity, it reread biblical teaching through the medium of a body which had begun to form a new centre of authority in its own right. Astutely embodying the subversive rise of analytical mentalities in the figure of the 'dissected' Christ, Donne's metaphor itself obliquely identifies just that taxonomic skill which made Servetus' ideas such a formidable threat. That medical anatomy is fundamentally coeval with the growing force of analysis in general seems confirmed, subtly, by the tension between the sacred and vital body of Christ, and the vacant, inert somatic matter of the dissection room. The impression that Donne is extemporising with reference to a local and recent anatomical event is supported also by the fact that, while the Latin root, 'solvere', has a fairly wide range of meanings ('loosen, undo... dissolve, break up, separate'), glossing it

as 'anatomy' requires sufficient wrenching to suggest a knowing inventiveness on the speaker's part.<sup>96</sup>

Elsewhere, condemning more direct forms of blasphemy, Donne's rhetorical medium is again characteristically somatic:

He is come into thy mouth, to thy tongue; but he is come thither as a diseased person is taken into a spittle to have his blood drawn, to have his flesh cauterised, to have his bones sawd; Christ Jesus is in thy mouth, but in such execrations, in such blasphemies, as would be Earthquaks to us if we were earth...

(Sermons, I p.308, 19 April 1618).<sup>97</sup>

This extraordinary passage is arguably more violent than the 'anatomised' Christ seen above - the saviour is here alive when 'cauterised' and 'sawd'. As stressed above, in an age with almost no efficient anaesthetic, when an essential requirement for surgery was several strong men to hold down the patient, the ferocity of Donne's similes can hardly be underestimated.<sup>98</sup> The cabbalistic tinge attaching to a conceit which invests (even poetically) the use of a name with such conspicuous physical power appropriately parallels the extremity of physical violence; as, arguably, do the suspicions of transubstantiation which must, at this time, have infected images of a Christ undergoing radical material alteration in a speaker's mouth.<sup>99</sup> The 'written' and the empirical realms are here balanced in a precarious relationship. Language is seen as able, potentially, to shatter the innermost core of the physical world. In thereby asserting the priority of writing and speech, however, Donne instinctively cleaves to the most powerful evocation of material violence. The intriguing metaphor of human earthquakes may indeed be read as yet another attempt to

obliquely reinsert the divine into the physical world. Earthquakes, like the punishment Donne solicits in the 'Holy Sonnets', are ultimately indicative of divine presence and power. Here, however, as in the 'Holy Sonnets', Donne evokes such presence *too* forcefully just because his sense of it is in fact fundamentally insecure. The earthquakes become, therefore, no more than a suitably excessive transmutation of his own spiritual disquiet.

An equally curious fusion of the textual and the somatic is evident when Donne reflects that, 'this Hand, this *And* in our Text, is as a ligament, as a sinew, to connect and knit together that glorious body as Gods preventing grace, and his subsequent grace' (Sermons, IX, p.312, n.d.).<sup>100</sup> Donne figures the end of his text ('Thou forgavest the iniquity of my sin') as 'a wide doore'; and the '*And*, this particule of connection' as the hand that shuts the door. The 'Hand' or '*And*' parallels the importance of 'our Confession', which must 'come between and tie the knot', after which 'God, that moved us to this act, will perfect all' (ibid.). Not only, then, does Donne favour the organic link of 'a ligament' (finding it, tellingly, impossible to resist adding 'as a sinew'), but precisely at the most abstract and spiritual point of his passage, where 'Confession' is required, he characteristically inserts the most tough and exact somatic material. The body once again intrudes at the crucial spiritual moment. It does so because Donne unconsciously finds in it an appropriate analogue to the verbal density and force of 'Confession' - a mode of language which, perhaps more than any other, epitomises the distinctive relationship of 'words and things' at this time.

A potential anxiety may be suspected behind these images, in part because of their power and inventiveness. Is Donne, in fact, unconsciously aware that the language in which he purports to 'embody' or clothe religious truths is

rather entirely *constitutive* of feelings and ideas which have no other substance than words? Such a feeling, however unadmitted, would explain frequent over-assertion, and the tendency to value inventiveness, above all else, as a means of vivid persuasion. Richard Waswo astutely notes that, in the Renaissance, 'both the philosopher and the poet are enmeshed in the same contradiction', caught 'in a linguistic field whose energy they admire, hence wish to promote, and fear, hence wish to control'.<sup>101</sup> This characterisation of rhetoric might, with very little alteration, be transposed onto Donne's (unconscious) attitude toward the anatomised body. Itself part of a 'linguistic field', the newly-perceived human form has an energy, density and spectacular force which are indeed at once admired and feared. William J. Bouwsma situates such a tension precisely in Donne's lifetime, when he notes how, 'In Hooker's time, rhetoric continued to be distrusted' despite the fact that 'most... great Renaissance figures' owed more to rhetoric, in the sense of Protagorean sophistry, than to Socratic philosophy.<sup>102</sup>

Such ambivalence is particularly prominent when Donne, warning his congregation against 'an imaginary faith, and emptiness in believing' argues that rather one must 'know also what, and why, and how you come to that belief. Implicit believers, ignorant believers, the adversary may swallow; but the understanding believer, he must chew and pick bones, before he come to assimilate him... [i.e., the believer]'.<sup>103</sup> Just as the language of Scripture is felt to have a kind of knotty, sinewy resilience, so the most resilient believer, in this strikingly cannibalistic metaphor, offers a meal likely to stick in the throat of the Catholic 'adversary'. Interestingly, however, the non-rational, but suitably tough, human body is obtruded by Donne as a half-admitted substitute for that very rational vigour

which had traditionally 'fleshed out' Catholic piety in its long dominance of Western philosophy.<sup>104</sup>

Donne deploys, here, the detailed *articulation* of the body as a parallel to the particularised, taxonomic belief which must 'know... what, and why, and how...'. A loosely impressionistic, affective belief is only 'implicit', and cannot therefore be satisfyingly taken hold of, and convincingly dissected into its constituent parts. Ironically and significantly, however, the Donnean, like the Melanchthonian, body, appealing as it may be in its anatomical particularity, is arguably congenial to Donne in just that impressionistic, non-rational sense which he condemns.<sup>105</sup> The aesthetic and emotional power deriving from the minuteness and complexity of post-Vesalian illustration can serve, for Protestant natural philosophy, as an entire argument in itself. The mute eloquence which may obviate further rational comment is potentially dangerous, in that it allows the body to 'speak for itself' in ways that may come to escape the monoglossic control of orthodox Christianity.

Probably the largest sub-group of Donne's embodying and anatomical images is that concerning sin and confession. In a range of usages which at once reinforces and develops the corporeal piety of the 'Holy Sonnets', the body frequently stands for sin, and anatomy (as the most comprehensive of the invasive and violent medical practices exploited by Donne) for confession, purgation, or redemption. So, 'in David's act upon himselfe' his statement '*I have not hid mine iniquity...*' is paraphrased by Donne: 'I have displayed to my selfe, anatomized mine owne conscience, left no corner unsearched, I am come to a perfect understanding of my own case...' (*Sermons*, IX, p.297, penitential psalms, n.d.). Alongside the obvious insistence on spiritual openness, there immediately appears that ambiguity and unease which haunt the pious Christian's

attempt to 'come to a perfect understanding of my own case'. As the example of the 'Holy Sonnets' warns us, self-understanding (here notably indebted to the hard-earned knowledge of the anatomy theatre) verges dangerously on self-obsession or self-love. Both David's 'perfect understanding', and Donne's 'better knowledge', enjoy a temporary complicity with the epistemological independence of the early modern empiricist - one which bears out Jonathan Sawday's identification of the way in which 'a scientific culture of "personal experience", and the pieties of "self-identification" with the pain of Christ's passion, [might] support, or even merge into, one another' (Sawday, 1997, p.35).

If Donne's auto-anatomy constitutes a striking, but not overly particularised 'dissective' confession, in other instances the body seems more precisely evident, its solidity and complexity defying attempts to abstract it. The audience is warned of, '...a Complicated, a Multiplied, a Compact sinner, a Body, rather a Carkasse of Many, of All sins, all that have fallen within his reach' (Sermons, IX, p.401). They will not '...consider sin here... as a staine, such as Originall sin may be, nor as a wound, such as every actual sin may be'; the first is insufficiently three-dimensional, one might infer, and the second lacks intricacy. Rather, Donne envisages it as 'a burden, a complication, a packing up of many sins, in an habituall practice thereof' (Sermons, IX, p.258, n.d.).<sup>106</sup> Donne insists on a dense, organic intertwining which is not merely structurally, but functionally, mimetic of the body. As sinfulness is a dynamic, perpetual 'practice', so the body is a dynamic, 'habitual' necessity of human existence. Both sin and the body are associated with the impiety of 'inwardness', of cultivating an interior ego which threatens to rival the almighty. Both, too, are intuited as devious, secretive,

immeasurable and worryingly autonomous. The implicit association of human failing and human organism is confirmed by the attempt, in the same sermon, to puncture and deflate the overweening body of selfhood and sin. Donne's recognition that 'the body of man, and consequently health, is best understood, and best advanced by Dissections, and Anatomies, when the hand and knife of the Surgeon hath passed upon every part of the body, and laid it open', prompts his evidently submissive belief that 'so when the hand and sword of God hath pierced our soul, we are brought to a better knowledge of our selves, then any degree of prosperity would have raised us to' (Sermons, IX, p.256, penitential psalms, n.d.). Even this seeming humility, however, is typically complex and ambivalent. The characteristic desire for God's fearful presence, and the accompanying edge of masochism, are counterbalanced by the tinge of egotism in the 'better knowledge of our selves'; something which both matches the increasingly self-contained human mechanism promoted by anatomy, and corresponds to the 'self-focus' afforded by God's (benign or hostile) gaze.

So, when Donne talks of '...thine habitual, and customary, and concatenated sins, sin enwrapped and complicated in sin, sin entrenched and barricadoed in sin, sin screwed up, and riveted with sin', he not only echoes the dense and knotty ramifications evoked above, but dimly suggests, by the mechanistic 'riveted', an adumbration of the Cartesian body as a self-driving machine. A further irony, here, appears in the way that Donne characterises the Creator's power to overwhelm the profusion of human faults. Though this sin 'may stand out, and wrestle even with the mercies of God, in the blood of Christ Jesus; yet if thou bring every single sin into the sight of God, it will be but as a clod of earth, but as a graine of dust in the ocean'.<sup>107</sup> The suspicion that the volume, depth, density and sophistication of the image is

inspired by the Vesalian body is echoed by the impression that God, in his reduction of this impious body, has effectively 'anatomised' it into 'every single sin', to the minute constituent elements of 'earth' and 'dust'. Just as it is the post-Vesalian body that most effectively images the tough and entangled dimensions of sin, it is the skills of Vesalius' successors which ruthlessly 'lay open' and particularise all human failings. Even in asserting divine power, Donne indirectly involves the most advanced reaches of empirical investigation, in a way that epitomises the ultimately irresistible force of nascent science. In terms of the sermon's dating, it is worth noting that anatomy may have been a topic of court gossip at just this time. The Royal College annals for 1629/30 record, on 9 January, that 'Sir James Fullerton had proposed to the King with the greatest persistence that Dr. James Primrose should read a public medical lecture in this city' (RCP, III, ii, p.271).

The above examples alert us to the presence of the body in Donne's reflection that 'the hidinge of our groaninges in our desires is to wrap up all sorrow for sinne in a verball confession and enumeration of our sinnes, without any particular contrition for the sinne, or detestation of it...' (Sermons, II, p.59, Lincolns Inn, n.d.). He then proceeds to pierce, divide and lay bare his own contrivance: 'We must hide neither [our groanings nor our desires]; but anatomise our soule in both, and find every sinnewe, and fiber, every lineament and ligament of this body of sinne...' (ibid.). Again, here, the sinful human *psyche*, devious, intricate and secretive, appropriately represented by the new, labyrinthine body, must be laid open before the Lord; and again, the most effective metaphor for this process is anatomy. It combines a satisfying material, dynamic potency with the perceived force and power of God's presence. In this light, its extremes of somatic reduction transform into equally exhaustive forms of

spiritual purgation. This unconscious attraction is solidified by the more overt sense of respect for anatomy evident in Donne's minute descent to fibres, sinew, and ligaments.

Perhaps most significantly, however, his admiration is manifested involuntarily, by the implication that the mere words of confession may easily lack sufficient emotional vigour and intensity. Just as with the resilient 'bones' of the 'understanding beleever' (Sermons, IV, p.351), here it is, typically, the need for a more persuasive equivalence to this affective force that calls up the simultaneous violence and rigorous exposure of dissection. In this covert preference for an exemplary empirical *practice* over a potentially weak verbal assertion, Donne neatly encapsulates the growing rivalry between written and empirical authority. His seeming attempt to reintroduce the spiritual, when he continues, 'And then [find] every breath of that newe spirit, every drop of that newe bloud, that must restore and repayre us' is arguably subverted by the somatic predominance he himself has conjured, so that the 'bloud' is actual, not figurative, and 'spirit' the medical spirit of the blood. Donne may, indeed, have intended this punning sense himself. Probably what he did not intend was the paradoxical consequence of attempting to 'anatomise' an abstraction. Because one can hardly divide and reduce the soul (theologically accepted as simple), the figurative gesture ironically returns to the body - further implying, indeed, that the *body* has been found in the soul, rather than *vice versa*.

One of the most extraordinary auto-anatomies in all Donne's writing is that of God himself: '...our Medium, our way to see him is *Patefactio sui*, Gods laying himself open, his manifestation, his revelation, his evisceration, and embowelling of himselfe to us, there'.<sup>108</sup> This astonishing

image seems to conflate God with the crucified Christ (the sermon date being Easter) discussed earlier; and is thus typical of Donne's ability to balance between religious and metaphorical decorum, on the one hand, and a vivid and potentially unorthodox topicality, on the other.<sup>109</sup> The figure of God 'embowelling' himself would have been an extremely unlikely possibility prior to Vesalius or Harvey. As already seen (Chapter 4.2a) even the relatively conventional disembowelling of monarchs (or eminent citizens in general) for purposes of embalming, had become notably medicalised in the case of Prince Henry, in 1612, and of James I in 1624.<sup>110</sup> That Donne, in this particular case, leans toward the medical and anatomical rather than the generally visceral is further suggested by the phrase 'Gods laying himself open'. Not only is this expression frequently synonymous with dissection in many literary anatomies or analyses; but it is also used in an explicitly anatomical context by Donne, who elsewhere associates 'Dissections, and Anatomies' with 'the hand of the Surgeon [that] hath passed upon every part of the body, and *laid it open*' (Sermons, IX, p.256, penitential psalms, n.d., italics mine).<sup>111</sup> The shift from 'manifestation' and 'revelation', to 'evisceration' and 'embowelling' is characteristic of other anatomical images, where a general action is particularised into dissection, and, like the modish 'no Anatomist' (Sermons, IV, p.159, St. Pauls, Midsommer Day, 1622) suggests a faintly extempore invention, prompted by a spectacle recently seen or discussed.<sup>112</sup>

The sermon itself fell on Easter day, 13 April.<sup>113</sup> Although the date of the Lumleian anatomy must again remain conjectural here, one certainly was scheduled to take place (the cyclical omission of the sixth year being due to occur after the following Christmas.)<sup>114</sup> Probable or certain datings for years just before and just after this time suggest that the event should have occurred some time in the period from

25 February to 29 March - that is, between forty-six and twelve days before Donne's sermon (see above, 5.1, for further details).<sup>115</sup>

The only 'decorous' reason for Donne's otherwise inexplicable shift from 'manifestation' to 'embowelling' must be the unrivalled ability of dissection to evoke the most thorough and unremitting exposure of that which is hidden. This being so, the tribute Donne implicitly pays to the likes of Harvey and Crooke is great indeed; for, as made clear by lines earlier in the sermon, what is at stake is no less than 'our *sight* of God in heaven... the patefaction, the manifestation of God Himselfe...' (ibid., p.220, italics mine). Donne's anatomical twist to his chosen text (I Corinthians 13.12, 'For now we see through a glasse darkly, but then face to face; now I know in part, but then I shall know, even as also I am knowne') thereby constitutes a particularly acute tension between religious and scientific epistemology. Science, insofar as it requires empirical verification, is clearly not possible when one's perception of worldly phenomena is, *a priori*, flawed and incomplete. Yet, despite this implication, it is the eminently empirical discipline of anatomy which Donne chooses to vivify the final, absolute knowledge of humanity and God, 'face to face'.

Probably the most conspicuous, and self-consciously topical, instance of the body as a forceful materialisation of sin is found in a sermon of 1616. 'There is in us', Donne warns, 'a heart of sin, which must be cast up; for whilst the heart is under the habits of sin, we are not only sinful, but we are *all sin*...'. Moreover, 'when sin hath got a heart in us, it will quickly come to be that whole *Body of Death*, which Saint Paul complains of, who shall deliver me from the Body of this Death?'. Typically, the potentially abstract 'heart of sin', and the Pauline 'Body of Death' both pull loose from their scriptural grounding, and assume a Vesalian life of

their own: 'when... [sin] is a heart, it will get a *Braine*'. This latter, Donne cannot resist explaining, 'shall minister all *Sense*, and *Delight* in sin; That's the office of the Brain; which shall send forth sinews and ligaments, to tye sins together; and pith and marrow to give a succulencie, and nourishment, even to the bones, to the strength and obduration of sin; and so', he notes, 'it shall doe all those services, and offices for sin, that the brain does to the natural body'. As if faintly lost in the wonder of the newly-perceived interior (and notably recalling the long meanderings through it of Philip Melanchthon (see Chapter 3.1b, pp.140-41)), Donne proceeds to emphasize how 'sin will get a *liver* to carry blood and life through all the body of our sinful actions', adding helpfully, again, 'That's the office of the liver'.<sup>116</sup>

Perhaps more than anywhere else, here Donne appears to deliberately play on the close proximity of the annual dissection. His careful listing of sinews, ligaments, pith, marrow, brain and liver would seem sufficiently particularising to suggest anatomy even in the height of summer. Here, however, Donne is speaking precisely at the 'end of the yeare', the exact date specified by Holinshed for the Lumleian demonstrations. It is notable not only that Donne's sermon falls squarely on the appointed day of the Lumleian, but that the date of Easter, 20 April, is consistent with a late March anatomy.<sup>117</sup> At the very least, one is strongly inclined to suspect that Donne is speaking with a knowing glance at the *traditional* procedures of this time of the year, even if an actual dissection is not imminent or recently concluded.

This impression of topical reference is supported by a more indirect, but no less convincing aspect of the passage. Clearly the body is, on one level, attractive simply for its forcible mimesis of the acuteness and intensity with which

Donne apprehends the problem of sin. Additionally, though, both the extent to which Donne is drawn into the body here, and his earlier, mechanistic image of it as 'riveted with sin', raise the intriguing, opposite probability: that sin is in fact vitally necessary to implicitly re-spiritualise an increasingly autonomous human frame. It is, essentially, the covert, monoglossic assertion of the original manufacturer's signature. As Shuger might put it, sin, epitomising the dependency and subordination of all human actions and processes, opposes a 'sealed', pathological individual whose behaviour, good or bad, is a purely internal and limited affair. The passage may be read as not merely playing on the local and novel activities of Harvey *et al*, but in fact as obliquely attempting to subordinate them, subtly reaffirming the broader Christian associations of a mechanism which is otherwise beginning to constitute an independent object of study in itself. From this perspective, one is inclined to suspect that Donne, in referring to the 'office' of the brain and of the liver, not only intends a sly glance at the verbal explanations of the anatomist, but perhaps unconsciously wishes to emphasize that the 'offices' of the body's organs are not as purely functional as they increasingly begin to seem.

An arguably more remarkable instance of extempore, or involuntary, 'anatomising' occurs in a Lincoln's Inn sermon, when Donne imagines the dissolution of the entombed Christ, in order to stress that, *had* this occurred, it would have been 'but a slumber' in comparison with 'the effusion of his precious blood, the contusion of his sacred flesh, the extension of those sinews, and ligaments which tied heaven, and earth together...' (Sermons, III, p.103). Perhaps the most obvious internal parallel is Donne's earlier image of the *bodily* 'pith' as *spiritually* bridging heaven and earth.<sup>123</sup> In terms of external reference, it is surely a powerful tribute

to the influence of early modern anatomy that, after countless evocations of Christ's suffering on the cross, he is here, for perhaps the first time, imagined as an assemblage of pinioned sinews and ligaments. Clearly it is the exact organic texture, tension, and purpose of this bodily material which Donne foregrounds, in order that heaven and earth may be 'tied'. In seeking to represent the crucifixion as a more drastic physical annihilation than even bodily dissolution, Donne inadvertently reduces the crucified Christ himself, so that the most conspicuous symbol of spirit's triumph over matter becomes, momentarily, *only* a metonymically rendered body. The somewhat abstractly dissected Christ, 'made an anatomy' by the incomplete transmission of his teachings (Sermons, VIII, p.146) seems to resurface here as a more definite subject, 'in process' on the dissection slab. That Donne is addressing a Lincoln's Inn audience must, of course, maximise the likelihood of his presuming a shared (albeit *dilettante*), anatomical awareness among his congregation. Although the sermon has no certain date, Potter and Simpson make a convincing case for its having been preached shortly after 30 January 1619/20, preferring Easter, in accordance with the themes of death and resurrection, but allowing Lent also (Sermons, III, pp.6-7). This latter dating in particular would place the sermon squarely within the habitual dissecting period. In addition to the external evidence supporting direct parallel with the Lumleian, the image of Christ's sinews and ligaments is, moreover, so unusual that a topical allusion must in fact be one of the best explanations for it.

As the image of an 'anatomised' Christ most vividly suggests, what must finally be stressed about Donne's recourse to anatomical language, for all his ability to filter through it orthodox preoccupations with faith,

confession and sin, is its essentially involuntary, and therefore precarious, character. The recurrent habit of shifting from a general phrase to the specific simile or metaphor of dissection suggests that Donne's corporeal extemporisings reflect the unconscious general spell of anatomy, as well as the particular local promptings occasioned by Lent or Easter. The artful revivifying of immemorial phrases continually threatens to transform an image into something very different. This loss of control over an attractive source of religious metaphor appears in one of the series of penitential sermons discussed above in 5.1b. Donne's typical sleight of hand, in describing 'Job's Anatomy, Job's Skeleton, the ruins to which he was reduced' (Sermons, IX, p.214, n.d.), can to some extent be explained simply by topical dissective circumstances. He goes on, less straightforwardly, to reflect that 'every sin is an incision of the soule, a Lancination, a Phlebotomy, a letting of the soule blood, and then, a delight in sin, is a going with open veines into a warme bath, and bleeding to death...' (Sermons, IX, p.223). A sinner falling victim to a 'Roman death' is certainly an apt and effective corporealisation of the fatal, and self-willed, draining of spiritual redemption. Yet the use of 'Lancination' and 'Phlebotomy' is clearly a stylistic indulgence, prompted by Donne's unwitting fascination with medicine, and invasive medicine in particular. Contradicting his usual parallelism between painful, violent, or 'distastfull physick' (Sermons, IX, p.217, n.d.) and confession (not sin), he seems tellingly to let the metaphorical vehicle of surgery use *him*, rather than *vice versa*.

### Conclusion

This chapter has sought to show how the new vocabulary of corporeality available in the early-seventeenth century was attractive to Donne for a variety of rhetorical purposes. The verbal density and force of such imagery served to re-solidify the language of religious devotion in general, and at times to imply the especial power, and almost Cabalistic efficacy, attributed to Scriptural and related terms. Covertly, corporeal and generally violent imagery clearly played a role in the tentative but inexorable process of defining the status of the emergent Ego. Anatomy and the anatomised body were particularly appealing as vehicles for the exposure and admission of human sin, in all its devious intricacy.

The opposition between Donne's nervous and defensive allusions to anatomy and to the body in his references to resurrection, and the more positive metaphorical exploitation apparent in his tendency to concretely embody religious feeling, provides an apt mirror of his own general ambivalence, and of the fluid, uncertain relations of body and soul still prevailing at this point. Both the repeated appearance of corporealising metaphor, and the sometimes peculiarly empirical discussions of bodily resurrection, help to indicate that Donne's somatic language was, ultimately, part of a wider and highly dynamic process of embodiment and viscerality. Even had Donne been (improbably) oblivious of this dissective climate, his filtering of devotional energies through the intricacy and depth of the body would still tie him crucially to the general rise of spatializing models of thought and expression identified by Walter Ong - a trend which, indeed, is seen to be especially prominent in Rutimeier's 'tabular' Dialectic of 1617.<sup>119</sup> Just a few months before the Anatomy of Melancholy appeared Donne indeed neatly

captures Burton's distinctive interplay between spatial analysis and two-dimensional text in an image which, at first glance, exemplifies the most limiting aspects of sixteenth-century epistemology. His belief that 'The Scriptures are as a room wainscotted with looking-glass, we see all at once' (Sermons, III, p.57, Whitehall, 2 April 1620) perfectly echoes, from one angle, Foucault's knowledge which 'condemned itself to never knowing anything but the same thing'. From another, however, it in fact constitutes an eminently spatial representation of thought, and one which conjures this space into the reader's mind all the more effectively by its illusory multiplication of the room's volume.

Ultimately, despite all the accumulated evidence which suggests that Donne wrote from direct experience of at least one actual public dissection, we are left with no absolute confirmation of such a hypothesis. One final scrap of information on contemporary attitudes to anatomy can, however, be cited here: 'Now as the Parson is in Law, so is he in sicknesse also: if there be any of his flock sick, hee is their Phisician... If all fail, then he keeps good correspondence with some neighbour Phisician, and entertaines him for the Cure of his Parish'. This guide to the eclecticism of the pastoral role continues resourcefully, 'Yet is it easie for any Scholer to attaine to such a measure of Phisick, as may be of much use to him both for himself, and others. This is done by seeing one Anatomy, reading one Book of Phisick, having one Herball by him'.<sup>120</sup> Although published in 1631, this passage presumably refers to the pastoral duties Herbert had himself undertaken since 1628, when he moved from London to Wiltshire.<sup>121</sup> We know that Donne knew Herbert from at least the latter part of 1625.<sup>122</sup> In the light of this seemingly casual and familiar reference, we must surely take Donne's own habitual viscerality as very

topical and local both in its derivation, and its expected associations among readers and listeners.

### General Conclusion

I have attempted to trace the effects of Vesalian anatomy on literature and thought, and on conceptions of the Christian body and soul, in the hundred years after the first appearance of De Humani Corporis Fabrica (Basle, 1543). The examples of Servetus and Melanchthon show how immediately (and, in the first case, drastically) the new body affected early modern culture. Similarly, as the medical innovations of the continent were belatedly adopted in England, the various forms of literary anatomizing, and the vigorously corporeal diction of Thomas Nashe in particular, represent a new rhetoric of the body radiating from the specific new medical practices of late Tudor and early Stuart London. With the particularly heightened spate of literary dissection in the 1640s, and the rise of Cartesianism and mechanism in general, anatomical and analytic thought appear to be entering a definite new phase. Nonetheless, it seems still justifiable to view the dissective imagery and rhetoric of Donne and Burton as a late stage in the overall window of opportunity outlined in these chapters.

Although any such boundaries remain subject to ambiguity and qualification, Donne's corporeal and anatomical rhetoric does exhibit a certain pattern. The usages of many poems are either quite obviously linked to self-exploration (the self-dissection of 'The Dampe' and 'The Legacy') or at least loosely 'self-defining', because of their role in identifying the youthful poet as a fashionably alert coterie writer ('Loves Exchange'). With the 'Holy Sonnets', the link between corporeality and selfhood is clearly problematised, but yet retains traces of Donne's earlier self-definition. Notwithstanding the considerable uncertainty of their dating, the Holy Sonnets may be seen, at least symbolically, as a

turning point in Donne's manipulations of the human body. The imagery of the sermons inverts the more or less confident anatomical self-assertion of the 'Songs and Sonnets' into anatomical prostration and self-exposure. Viewed in this light, the violent corporeality of the Holy Sonnets, the Devotions, and certain sermons represents a psychological hinge between the exuberant, expansive physicality of secular poems, and a language of force which, in the sermons, is typically directed against the self, rather than with or through it.

The writings and the phenomena discussed in this thesis all point, in one way or another, to the central danger underlying the newly explored body: the soul, in some uncertain but fundamental sense, had been permanently unhoused. Notwithstanding this all but literal dis-location, however, and its visible manifestations in the more anxious and curious instances discussed above, the situation necessarily felt different to those *in medias res*, than to us who now distantly review it. Because of this, it is important to stress the 'opportunity', as well as the 'anxiety' of the period. Most obviously visible in Nashe, and in the younger Donne, this expansiveness and revelling in new possibilities is still evident - albeit darkened by relative sobriety and unease - in Donne's Devotions and sermons.

Such inventive opportunity is, again, well-captured by the notion of a 'window' which, unlike the inwardly reflective surfaces of Donne's looking-glass room (Sermons, III, p.57), opens out onto intriguing and at times intoxicating new spaces. One may only glimpse, and one may never escape, for very long, the monumental and immemorial religious structure into which the new aperture has been carved. But the new space remains exhilarating, nevertheless, and it is, quite definitely, the assertive three dimensions

of Vesalianism which unite the heresy of Servetus, the irreverence of Nashe, the corporeality of Donne, and the spatialised thought of John Sprint and Robert Burton. Common to Servetus, Melanchthon and Donne in particular is the desire for an immediate, dynamic, and active godly presence. Most extremely expressed in Servetus' conflation of physiology and pantheism, this tendency is persistently evident, also, in Donne and Melanchthon's corporeally filtered devotional language. In these (nominally) more orthodox writings the emotive and somatic strains of religious discourse combine, at moments, to suggest an almost erotic love of God.

The unstable and imaginatively fertile character of the window opened by Vesalianism is confirmed by certain of the aesthetic, religious, and literary phenomena apparent before and after De Fabrica. The mingled wonder and piety of Vesalian illustration contrast with the rigid schematisation of the eighteenth century almost as greatly as with the text-bound representations of the Middle Ages. Similarly, the potential for confusion and ambiguity which anatomical enquiry brought to the previously abstract body-soul relations of medieval Aristotelianism, although far reaching in its consequences, was checked substantially by the dualistic solutions of Descartes. The new range of formal and rhetorical techniques deriving from Vesalian anatomy can, of course, only be viewed from Vesalius onwards. Nevertheless, literary anatomies and analyses also exhibit similar changes. In their infancy vernacular analyses were as inescapably visceral as anatomies and anatomy proper. Later, as the rhetorical appropriation of anatomy gradually ossified into (so to speak) 'a dead metaphor', the situation was reversed: intellectual dissections themselves came to connote the rigorous, penetrating, but essentially disembodied, form of enquiry now long since understood by the terms 'anatomy' or

'analysis'. This shift in particular helps to mark the distinctness of the period considered in preceding chapters. Although such a change itself was almost certainly a piecemeal one, and its precise causes are difficult to plot with certainty, its occurrence shows that the window of opportunity had started to close. The three dimensional body which Vesalius and his successors had reclaimed from the dominance of Aristotelian textual abstraction thus began, once again, to fall flat upon the page.

## APPENDIX

Literary Anatomies and associated forms to 1650

Works are given throughout in date order.

All works are first editions unless otherwise stated.

Certain titles appear in more than one of the following categories.

Literary Anatomies: noun forms

Augustino Mainardo, An Anatomic: that is to say a parting in pieces of the mass, ([Strasburg]1556)

Thomas Rogers, A Philosophicall Discourse, entituled, The Anatomie of the Minde (London, 1576)

John Woolton, Bishop of Exeter, A Newe Anatomie of Whole Man, as well of his body, as of his soule... (London, 1576)

John Lyly, Euphues, the Anatomie of Wit (London, 1578)

Robert Greene, Mamillia... Anatomie of Lovers' Flatteries [London, 1583?]

Philip Stubbes, The Anatomie of Abuses (London, 1583)

Robert Greene, Arbastro, the Anatomie of Fortune (London,

1584) Robert Greene, Planetomachia [with] A marvelous anatomie of Saturnistes (n.p., 1585)

Palmerin D'Oliva. The mirrour of nobilitie, mappe of honor, anotamie of rare fortunes..., trans. by Anthony Munday (London, 1588)

Thomas Nashe, The Anatomie of Absurditie (London, 1589)

Robert Fill[e]s, The Anatomie of the Soule (London, 1590)

Anon., A Myrroure for English Soldiers; or, an Anatomy of Accomplished Man at Armes... (London, 1595)

- "T.C., Traveller" [Thomas Harington], An Anatomie of the Metamorphosed Ajax (London, 1596)
- John More, Preacher, A Lively Anatomie of Death (London, 1596)
- Lewis Thomas, Demegoriai. Certaine Lectures upon Sundry Portions of Scripture.. 6. The Anatomy of Tale-Bearers (London, 1600)
- Anon., The Worlds Anotomy [sic], (mutilated, ?London, ?1600)
- William Burton, Certaine Questions and Answeres Concerning the Attributes of God.. whereunto is Annexed Another Treatise called the Anatomie of Belial, 2 parts [London, 1602]
- Anon., The Anatomyes of the True physitian, and Counterfeit Mountebank [trans. by Francis Herring of Johann Oberndorf, De veri et falsi medici cognitione] (London, 1602)
- Anon., The Anathomie of Sinne, brieflie discovering all the branches thereof (the Genealogy of Virtue) (London, 1603)  
(this work is sometimes attributed to Joseph Hall and Richard Humfrey)
- Thomas Bell, The Anatomie of Popish Tyrannie.. (London, 1603)
- Robert Underwood, A Newe Anatomie. Wherein the body of man is very fit and aptly (two ways) compared: 1. To a household. 2. To a cittie (London, 1605)
- Robert Pricket, Times anotomy [sic] (London, 1606)
- Simion Grahame, The Anatomie of Humours (Edinburgh, 1609)
- William Cowper, The Anatomy of a Christian Man (London, 1611)
- John Donne, An Anatomy of the World (London, 1611)
- James Mason, The Anatomie of Sorcerie (London, 1612)
- John Andrewes, The Anatomye of Baseness or the four quarters of a knave (London, 1615)
- Roger Gostwyke, The Anatomie of Ananias (London, 1616)
- Robert Anton, Vices anotomy scourged and corrected in new satirs (London, 1617)

- Charles Pierse, Vertues anatomie. Or a compendious description of that late right honorable... the Lady Cheany... (London, 1618)
- John Sprint, The Anatomy of the Controversed Ceremonies of the Church of England (n.p., 1618)
- George Strode, The Anatomie of Mortalitie: Devided into Eight Heads (London, 1618)
- Henry Hutton, Follie's Anatomie: or, Satires and Satirical Epigrams (London, 1619)
- Bartholomew Robertson, The Anatomie of a Distressed Soule: Wherein, the faults of the elect, are discerned from the sinnes of the wicked... (London, 1619)
- John Davies of Hereford, The Writing Schoolemaster; or, The Anatomie of Faire writing ([ent. 9 June 1620])
- Pierre du Moulin, the elder, The Anatomie of Arminanisme: or The opening of the controversies lately handled in the Low-Countreyes (London, 1620)
- Richard Brathwait, Times Curtain Drawne, or the Anatomie of Vanitie (London, 1621)
- Robert Burton, The Anatomy of Melancholy (Oxford, 1621)
- Anon., News from the Low Countreyes, or, the Anatomy of Calvinisticall Calumnyes (London, 1622)
- Thomas Robinson, The Anatomie of the English Nunnery at Lisbon in Portugal (n.p., 1622)
- Immanuel Bourne, The Anatomie of Conscience [Lent sermon at Derby] (London, 1623)
- G[eorge] L[auder], The Anatomie of the Romane Clergie; or, a Discoverie of the Abuses Thereof (London, 1623)
- Isaac Causaubon, [doubtful or suppositious works], The Originall of Idolatries... with the true source and lively anatomy of the sacrifice of the masse (London, 1624)
- J[ohn] M[ayo], The Anatomie of Pope Joane (London, 1624) (see also John Mayo, The Popes Parliament... Whereunto is annexed an Anatomie of Pope Joane, more apparantly opening her whole

life and storie (London, 1591); I have highlighted the 1624 edition because of the greater prominence given there to the 'Anatomie')

"O.A." [?Oliver Almond], The Uncasing of Heresie, or, the Anatomie of Protestancie ([St. Omer], 1624)

James Hart, The Anatomie of Urines (London, 1625)

Ephraim Huit, The Anatomy of Conscience (London, 1626)

Thomas Morton, A Treatise of the Three-fold State of Man, or An Anatomie of the Soule (London 1629)

Jean D'Espagne, Anti-duello: The Anatomie of Duells, with the symptomes thereof - published by his Majesties command (London, 1632)

'Hocus Pocus, Junior' [pseud.], The Anatomie of Legerdemain (London, 1634)

Anon., The Anatomy of a Woman's Tongue, divided into five parts: a Medicine, a Poison, a Serpent, Fire, and Thunder, 5<sup>th</sup> ed. (London, 1638)

Martin Parker, A Briefe Dissection of Germaines Affliction: with warre, pestilence and famine (London, 1638)

Anon., The Phantastick Age: or - the Anatomy of England's Vanity, in Wearing the Fashions of several Nations [ballad] (London, 1640)

Dwalphintramis [pseud.], The Anatomy of the Service-Book (London, 1640)

Anon., The Puritan's Impuritie: or the Anatomie of a Puritane or Separatist... (London, 1641)

Pierre du Moulin, the elder, The Anatomie of the Masse, trans. James Montaine (London, 1641)

Michael Wigmore, A Dissection of the Braine: a Sermon Preached at the Assizes in Lincoln, 1640 (London, 1641)

Samoth Yarb [Thomas Bray], The Anatomy of Et-Coetera, or the Unfolding of that Dangerous Oath in the Close of the Sixth Canon (London, 1641)

- Anon., The Anatomy of the Separatists, alias, Brownists  
(London, 1642)
- Anon., The English Fortune-Teller... wherein is set forth the Anatomie of our Decaying Common-wealth (London, 1642)
- J.M., Heads of All Fashions: Being a Plaine Desection or Definition of Diverse and Sundry Sorts of Heads... and Allegorically Shewing the Diversities of Religion... [verse]  
(London, 1642)
- R[ichard] W[ard] Minister, The Anatomy of Warre (London, 1642)
- Anon., The Anatomie of the French and Spanish Faction...  
(London, 1644)
- Alexander Forbes, An Anatomy of Independency; or, a Briefe Commentary upon the Apologeticall Narration of Mr. Thomas Goodwin, and Mr. Philip Nye... By argument, laying naked the dangers of their positions; and from experience, discovering their spirits and wayes (London, 1644)
- Anon., A New Anatomie, or Character of a Christian, or Roundhead... Imprimatur, John Downame (London, 1645)
- Edmund Gregory, An Historical Anatomy of Christian Melancholy  
(London, 1646)
- John Lilburne, An Anatomy of the Lords Tyranny and Injustice Exercised upon Lieutenant Colonel J. Lilburne, now a Prisoner... (London, 1646)
- Anon., Treason's Anatomie, or the Duty of a Loyall Subject...  
(London, 1647)
- Anon., Westminster Projects, or the Myserie of Derby House Discovered, being an Anatomy of the design of the present Grandees of State at Derby House (London, 1648)
- Lenticus Mercurius [pseud.], The Anatomy of Westminster Juncto; or, a Summary of their Designes against the King, City, and Kingdom (London, 1648)
- Anon., A Dissection of all Governments... (London, 1649)

Henry Denne, The Levellers Designe Discovered: or the Anatomie of the Late Unhappie Mutinie (London, 1649)

Jeremy Shakerley, The Anatomy of Urania Practica: or a Short Mathematicall Discourse... (London, 1649)

Cuthbert Sydenham, An Anatomy of Lieutenant Col. John Lilburne's Spirit (n.p., 1649)

Thomas Watson, Rector of St. Stephens, Walbrook, Gods Anatomy upon Mans Heart [sermon, 27<sup>th</sup> Dec. 1649], (London, 1649)

Joannes Wollebius, The Abridgement of Christian Divinitie, trans. by A. Ross (with The Anatomy of the Whole Body of Divinity) (London, 1650).

My thanks are due to John G. Norman for alerting me to certain of the above, and to T.J. Arthur for the 'anotomy' of Robert Anton.

#### Literary Anatomies: verb-forms

Sir Francis Walsingham, Sir Francis Walsingham's Anatomizing of Honesty, Ambition, and Fortitude Written in the year 1590 (this work appears in JH esq., Cottoni Posthumi; Divers Choice Pieces of that Renowned Antiquary Sir Robert Cotton (London, 1672); although this work may be a retrospectively imposed 'anatomizing' (and has been omitted from the total count), it is worth noting that Cotton himself (1570-1631) was a contemporary of Walsingham's, and that Walsingham had quite prolonged dealings with the Royal College of Physicians from 1586 onwards (see Annals of the College of Physicians of London 5 vols, trans. by J. Emberry, S. Heathcote, M. Hellings, II, p.38 (at Wellcome library, RCP, London))).

John Dando [pseud.] and Harry Runt [pseud.], Maroccus Extaticus. Or, Bankes bay horse in a trance. A discourse set down in a merry dialogue, between Bankes and his beast:

Anatomizing some abuses and bad trickes of this age (London, 1595)

George Phillips, The life and death of the rich man and Lazarus anothomized by way of meditation (London, 1600)

William Folkingham, Feudigraphia. The synopsis or epitome of surveying methodized. Anatomizing the whole corps of the facultie... (London, 1610)

Thomas Tuke, The Christians Looking Glasse.. his fidelity truly discovered, and pride against God and man, anatomised... (London, 1615)

Clement Cotton, The Converts Catechisme: wherein, by way of question and answere; are seven of the divine graces of the holy spirit anatomized... (London, 1616)

Anon., The Abuses of the Romish Church Anatomized. By a Well-willer to Sion... (London, 1623)

Edward Sutton, The Serpent Anatomized (London, 1626)

John Wingfield, Atheisem Close and Open, Anatomized (London, 1634); Thomas Heywood, Philocothonista, or the Drunkard, Opened, Dissected and Anatomized (London, 1635)

Richard Younge, Sinne stigmatized... Also, that enmity which God proclaimed in Paradise betweene the seed of the Serpent and the seed of the woman, unvailed and anatomized (London, 1639)

Anon., The Frogges of Egypt or the Caterpillars of the Commonwealth truly dissected and laid open (London, 1641)

Anon., The Times Dissected... (London, 1641)

Anon., The Wrens Nest Defiled, or Bishop Wren Anatomized, his life and actions dissected and layd open... (London, 1641)

Sarah Miller, The Brownist Heresies Confuted, Their Knavery Anatomized... (London, 1641)

Michael Sparke, Scintilla, or, A Light Broken into Darke Warehouses. With observations upon the monopolists of seaven severall patents... Anatomized and layd open in a breviat... (London, 1641)

'Thomas Tell-Troth', A Charitable Church-warden. Or, an Hypocrite Anatomiz'd (London, 1641)

Anon., The Soundheads Description of the Roundhead, or the Roundhead exactly anatomized... (London, 1642)

'John the Baptist, saint', Tyrannical Government Anatomized: or, a Discourse concerning Evil Counsellors. Being the Life and Death of John the Baptist... (London, 1642)

Anon., The Churches Complaint Against Sacriledge: or sacriledge truly dissected and layed open... (London, 1643)

'JS gent.', Some New Observations and Considerations upon the Present State of Things in England. The differences between King and Parliament impartially disputed, the persons on both sides truly anatomized... (London, 1643)

John Sedgewick, Antinomianisme Anatomized... (London, 1643)

R[ichard]W[ard], The Character of the Warre or the Miseries Thereof Dissected and Laid Open From Scripture and Experience (London, 1643)

Anon., Divinity and Philosophy Dissected and Set Forth, by a Mad Man (Amsterdam, 1644)

Anon., Englands Troubles Anatomized... written by a Captaine, servant to his Majestie (London, 1644)

Anon., Prerogative Anatomized: or an exact examination of those protestations and professions whereby she hath attempted... to preferre herselfe above the Parliament (London, 1644)

Sydrach Simpson, The Anatomist Anatomis'd. Or, a short answer to some things in the book... An anatomy of independencie... (London, 1644)

Robert Fage, The Lawfulnesse of Infants Baptisme... till a more particular and compleat answer come forth to anatomize the fallasies of the said book, entituled, The fallasie of infants baptisme (London, 1645)

John Taylor, the water poet, Rebells Anathematized and Anatomized... (London, 1645)

Anon., English, plain English; or, the Sectaries anatomized..  
(London, 1646)

Thomas Johnson, A Plea for Free-Mens Liberties, or the  
monopoly of the eastland merchants anatomized.. (London, 1646)

Anon., The Army Anatomized: or, a brief and plain display of  
the humble, honest and religious actings of the General Sir  
Thomas Fairfax.. (London, 1647)

Anon., A Speedy Hue and Cry.. Wherein the Presbyterians are  
displayed, opened, anatomized, and described in their true  
colours.. (n.p., 1647)

Thomas Ford, The Times Anatomiz'd, in severall characters  
(London, 1647)

[?T. Underhill], Moro-Mastix: Mr. J. Goodwin Whipt with his  
own Rod. Or, the Dissecting of the Sixteenth Section of his  
Book.. Hagio-Mastix (London, 1647)

John Wildman, Truths triumph, or treachery anatomized, being  
an impartial discovery of the false, and treacherous  
information of M. Masterton against LCJ Lilburne.. (London,  
1647)

Anon., An Agitator Anatomized: or, the Character of an  
agitator (London, 1648)

Edward Calamy, B.D., Minister, The Pulpit Incendiary  
Anatomized: or a Vindication of Sion Colledge.. (London, 1648)

Mercurius Melancholicus, The Second Part of Crafty Crumwell..  
A trage commedie wherein is presented, the late treasonable  
undertakings.. of the rebells.. But ile their plots dissect I  
vow, and whip their treacherie (London, 1648)

Edward Buckler, Death Dis-sected: or, A fort against  
misfortune in a cordiall.. (London, 1649)

Franciscus Leninsula (pseud.), The Kingdoms Divisions  
Anatomized. Together with a vindication of the armies  
proceedings (London, 1649)

Thomas Brookes, The Hypocrite Detected, Anatomized,  
Impeached, Arraigned.. (London, 1650)

Nicholas Cowling, A Survey of Tyrannie: or, the Anatomizing of Tyrants... (London, 1650).

### Latin Anatomies

Anon., Anatomia Lutheri (n.p., n.d.) (the source for this work shows that it was written in or before 1568, probably by a Jesuit author: Martin Luther (Appendix, Miscell.), Dem Ehrwürdigen Herrn Doctoris Martini Lutheri, Gottseligen, Triumph, und Verantwortung, wider die gottlosen Schmehschrift, der neuen Münch, der Jesuiter, welche sie unter dem Titel, Anatomia Lutheri... (Wittenberg, 1568)

Johann Friedrich Coelestinus, Pantheum, Sive Anatomia et Symphonia Papatus... (n.p., 1568/9)

Joachim Magedburg, Anatomia Manichaeae Heresios... ([?Hamburg], 1580)

Lorenz Faust, Anatomia Statuae Danielis (Leipzig, 1586)

Andreas Berckavius, Anatomia Calviniana [?Magdeburg, ?1600]

Angelo Sala, Anatomia Antimonii; id est Dissectio tam Dogmatica quam Hermetica Antimonii (Lugduni, 1609)

Gaspar Cichocki, Anatomia Consilii editi de Stabilienda pace Regni Poloniae Jesuitis... (Cracow, 1611)

Bartholomaeus Rubeus, Anatomia, id est Dissectio Spiritualis Cordis B. Caroli Card. [Charles Borromeo, Saint, Cardinal, Archbishop of Milan] (Venice, 1616)

Jean Baptiste Morin, Nova Mundi Sublunaris Anatomia (Paris, 1619)

Joannes Daniel Mylius, Anatomia Auri, sive Tyrocinium Mediochymicum... (Frankfurt, 1628)

Gregorius Queccius, Anatomia Philologica (Noribergae, [?1632])

Matthias Untzer, Opus Chimico-Medicum, in quo Anatomia Spagirica Trium Principiorum... (Halae Saxonum, 1634)

Joannes Sophronius Kozak, Anatomia Vitalis Microcosmi, in qua Naturae Humanae... (Bremae, 1636)

Anon., Anatomia Societatis Jesus... (n.p., 1643)

Nicolaus Burgers, Anatomia Calixtina, h.e. Vindiciae Catholicae... (Moguntiae, 1644).

### Analyses: Noun forms

Petrus Ramus, The Latine Grammar of P. Ramus translated into English; whereunto is joyned... a grammaticall analysis uppon an epistle of Tullie ([Cambridge], 1585)

John Morgan, A Short Analysis of a part of the second chapter of S. James... (London, 1588)

Richard Turnbull, An Exposition upon the Canonically Epistle of Saint James: with the tables, analysis, and resolution, both of the whole epistle, and everie chapter thereof; with the particular resolution of everie singular place (London, 1591)

Henoch Clapham, Bibliotheca Theologica: or, a librarye theological containinge, 1. A generall analysis or resolution... (Amsterdam, 1597)

Sir William Temple, A Logical Analysis of Twentie Select Psalmes (London, 1605)

Joseph Hall, Heaven upon Earth: or Of True peace, and tranquillity of minde (London, 1606) (with folding plate entitled, The Analysis or Resolution of this treatise concerning tranquillitie)

William Perkins, A Godlie and Learned Exposition upon the Whole Epistle of Jude... Wherunto is prefixed a large analysis... (London, 1606)

Thomas Brightman, A Revelation of the Apocalyps... illustrated with an analysis and scolions: where the sense is opened by the scripture... (Amsterdam, 1611)

James Forester, The Marrow and Juice of Two Hundred and Sixtie Scriptures... With 1 A Generall Harmony and Connexion of all these together: and 2 A particular analyse of every one of them: ... Extracted by James Forrester (London, 1611)

John Brinsley (trans.) Cato translated grammatically... for continuall practice of the grammaticall analysis and genesis (London, 1612)

Ralph Handson, Analysis or resolution of merchants accounts (London, 1633)

Edward Edwards, The Analysis of Chyrurgery, being the theorique and pratique part thereof (London, 1636)

Paul Baynes, An Entire Commentary upon the whole epistle of the Apostle Paul to the Ephesians wherein the text is learnedly and fruitfully opened, with a logicall analysis... (London, 1643)

Ephraim Huit, The Whole Prophecie of Daniel explained, by a paraphrase, analysis and briefe comment... ([London], 1643)

Richard Ward, The Analysis, Explication, and Application, of the Sacred and Solemne League (London, 1643)

Anon., The Covenanters Catechisme: or, A brief and familiar analysis and exposition of the Covenant (London, 1644)

Lawrence Sarson, An Analysis of the I. Timoth. I. 15... (Cambridge, 1645)

Giovanni Diodati, Pious and Learned Annotations upon the Holy Bible... Also, a methodicall analysis upon severall book [sic] of the Old and New Testament, setting down the chiefe heads contain'd therein... (London, 1648).

### **Analyses: verb forms**

Nicholas Byfield, An Exposition upon the Epistle to the Colossians. Wherein ... the text is methodically analysed... And besides, the very marrow of most common-places is aptly diffused through-out the body of this exposition... And

further, many chiefe cases of conscience are here resolved.  
All with convenient variety and brevity (London, 1615)  
 William Morray, Nine Songs collected out of the Holy  
Scriptures... translated, paraphrased in prose, summed,  
analysed, notted [sic] upon... (Edinburgh, ?1634)  
 Thomas Mocket, A View of the Solemn League and Covenant... in  
which, that Covenant is analysed, opened, proved, and fully  
cleared from 24 objections... (London, 1644).

**Titles employing forms of 'lay open' or 'rip'**

Stephen Bredwell, Detection of Ed. Glovers hereticall  
confection... A present preservative. Wherein with the laying  
open of his impudent slander against our whole ministry, the  
reader shal find a new built nest of old hatcht heresies  
discovered... (London, 1586)

James I, A fruitefull meditation, containing. A plaine and  
easie exposition, or laying open of the 7. 8. 9. and 10.  
verses of the 20. chap. of Revelation... (London, 1588)

Martin Marprelate [pseud.], Certaine minerall, and  
metaphisicall schoolpoints... Wherin is layd open, the very  
quintessence of all catercorner divinitie... (London, 1589)

Michel Hurault, Antisixtus. An oration of Pope Sixtus the  
fift, uppon the death of the late French King, Henrie the  
third. With a confutation upon the sayd oration, wherein all  
the treacherous practices of the house of Lorraine, are  
largely described, and layde open... (London, 1590)

Robert Greene, A notable discovery of coosenage... Plainely  
laying open those pernicious sleightes... (London, 1591)

Robert Greene, The blacke bookes messenger. Laying open the  
life and death of Ned Browne... (London, 1592)

Figueiro Vasco, The Spaniards Monarchie... Layd open in an  
adversieiment... (London, 1592)

John Udall, A commentarie upon the Lamentations of Jeremy. Wherein are contained; first, the method and order of every chapter laid open in severall tables... (London, 1595)

John Fotherby, The covnenant betweene God and man, plainely declared in laying open the first and smallest pointes of Christian religion... (London, 1596)

John Bennett, The hope of peace. By laying open such doubts and manifest untruthes as are divulged by the Arch-priest... (London, 1601)

Robert Allen, The odoriferous garden of charitie... Truly disiphered and layde open in this excellent treatise... (London, 1603)

Robert Pricket, Unto the most high and mightie prince, his soveraigne lord King James. A poore subject sendeth, a soldiers resolution... In this little booke... the Pope and papists are in their colours set forth, their purposes laid open, and their hopes dissolved... (London, 1603)

Jean de Chassanion, The merchandises of popish priests. Laying open to the world, how cunningly they cheate and abuse poore people..., English trans. (London, 1604)

R.M., student in divinitie, A profitable dialogue for a perverted papist... tending to the profit of a perverted Papist: namely, by laying open to him his owne errour... (London, 1609)

Thomas Milles, The misterie of iniquitie. Plainely layd open by a lay-Christian... [?London, ?1611]

Thomas Dekker, O per se O. Or a new cryer of Lanthorne and candle-light... In which are discovered those villanies, which the bell-man (because hee went I' the dark) could not see: now laid open to the world (London, 1612)

Robert Parsons, A discussion of the answere of M. William Barlow... Wherunto... is annexed a generall preface, laying open the insufficiency, rayling, lying, and other misdemeanour of M. Barlow in his writing (Saint Omer, 1612)

Nicholas Breton, Conceyted letters, newly layde open: or, A most excellent bundle of new wit... (London, 1618)

Simon Goulart, A learned summary upon the famous poeme of William of Saluste... wherin nature is discovered, art disclosed, and history layd open... (London, 1621)

S.W., The apollogie of the illustrious Prince Ernestus, Earle of Manfield... Wherin... are layd open the occasions of his warres in Bohemia, Austria, and the Palatinate..., English trans. (London, 1622)

Edward Elton, The triumph of a true Christian described: or An explication of the eight chapter of the Epistle of Saint Paul to the Romans, wherein the sanctified sinners heaven upon earth is layed open... (London, 1623)

Robert Harris, Gods goodness and mercie. Layd open in a sermon, preached at Pauls Crosse on the last of June. 1622 (London, 1624)

Edward Weston, The repaire of honour... Wherein... the apostles disciple S. Ignatius Bishop & martyr, his religion, against Protestantisme, is layd open... (Saint Omer, 1624)

Thomas Taylor, A good husband and a good wife: layd open in a sermon... (London, 1625)

Thomas Smith, The complete soldier... Wherein is exactly layd open a great number of serviceable and practicall conclusions, belonging to militarie profession... (London, 1628)

John Andrewes, The converted mans new birth... Heere is also layd open the true estate of the regenerate man... (London, 1629)

Gervase Markham, Markhams faithfull farrier. Wherein the depth of his skill is layd open in all those... secrets of horsemanship... (London, 1630)

Nicolas Hunt, The new-born Christian... layd open and described to the life... (London, 1631)

Christian Loper, Laniena Paswalcensis... Wherein is layd open to the world, the... barbarous crueltie, and tirranie committed in that towne [Pasewalke] by the Emperours officers...

(?Holland, 1631)

John Wilson, Zacheus converted: or The rich publicans repentance... In which, the mysteries of the doctrine of conversion, are sweetly laid open and applied for the establishing of the weakest... (London, 1631)

B.C., Catholic priest, Adelphomachia, or The warrs of Protestancy being a treatise, wherin are layd open the wonderfull... dissentions of the Protestants... [St. Omer, 1637]

Anon., Saint Bernards Vision. Or, A briefe discourse... betweene the soule and body of a damned man newly deceased, laying open the faults of each other..., trans. of anon.

medieval poem, 'Noctis sub silencio...' (London [c.1640])

?Job Throckmorton, ?John Penry, A dialogue. Wherin is plainly layd open the tyrannicall dealing of lord bishops against Gods children... ([Amsterdam], 1640)

Anon., A nest of serpents discovered. Or, a knot of old heretiques revived... Wherein their... ridiculous tenets are plainly layd open ([London], 1641)

D.F. Minister, The equality of the ministry plainly described... Layd open to this present Parliament, to stop the mouthes of all gaynesayers whatsoever ([London], 1641)

Lewes Hughes, Certaine grieveances, or the errorrs of the service-booke; plainely layd open... ([London], 1641)

Michael Quintyne, A brief treatise containing a full discovery 1. Of cesars politique state, or civill government, 2. Of the divine politique state, or kingdome of jesus Christ... 3. Of the devilish politique state or kingdome of Antichrist. Laid open in the essentiall and main circumstantiall parts of each body or state... (London, 1641)

J.B., The poets knavery discovered, in all their lying pamphlets... laying open the names of every lying lybel that

was printed last yeare, and the authors who made them...

(London, [1642])

W.S., A new discovery of severall passages, performed by the malignant party, who is resident in the north, and here layd open and made manifest to the publick view... [London, 1642]

Anon., A fuller answer to the moderatour, wherein his argument of advantage and disadvantage is so opened, as that he is laid opened too, and made manifest to be an impostor...

[London, 1643]

Charles Herle, Ahab's fall by his prophets flatteries... laying open the grounds of all our present miseries... ([London], 1644)

Anon., A vindication of the London remonstrance... from... a seditious pamphlet intituled A moderate reply. Wherein are cleerly laid open and refuted the seditious insinuations and intentions of the author... (London, 1646)

John Lanseter, Lanseter's Lance, for Edwards'es gangrene: or, a ripping up, and laying open some rotten, putrified, corrupt, stinking matter in Mr. Thomas Edwards his... book intituled The second part of Gangrena... (London, 1646)

Anon., The Scots treacherous designes discovered... Wherein, their hypocrisie... [etc] is layd open to the view of the world... (London, 1647)

Elizabeth Warren, Spiritual thrift... Wherein is layd open many errors incident to these declining times... (London, 1647).

John Keltridge, Two godlie and learned sermons... preached before the Jesuites... in the Tower of London. In which... al such articles as they defend... were layed open and ripped up unto them. In Maye 7 and 21. Anno 1581 (London [1581])

Anon., A packe of Spanish lyes, sent abroad in the world... Now ripped up, unfolded, and... condemned, as conteyning false, corrupt and damnable wares... (London, 1588)

Gerardus Hyperius, The True Tryall and Examination of a Mans Owne Selfe. A Worke plainly ripping up each corner of a mans conscience (London, 1602)

Richard Johnson, Looke on me London: I am an honest Englishman, ripping up the bowels of mischief... (London, 1613).

### Titles using 'section' or 'sections'

Heinrich Bullinger, Fiftie godlie and learned sermons, divided into five decades, written in three severall tomes or sections... English trans. by H.I., student in divinitie (London, 1577)

Jean Calvin, The institution of Christian religion... [with] notes conteyning in briefe the substance of the matter handled in each section, English trans. (London, 1587)

Edmund Bunny, A briefe answer... Whereunto are prefixed the booke of Resolution, and the treatise of pacification... shewing in what section of this answer following, those places are handled (London, 1589)

William Fulbeck, A parallele or conference of the civill law, the canon law, and the common law... Wherein the agreement and disagreement of these three lawes... are opened and discussed. At the end of these dialogues is annexed a table of the sections or divisions of the principall points, matters, and questions, which are handled in every dialogue (London, 1601)

Thomas Oliver, A new handling of the planisphere, divided into three sections... (London, 1601)

?Matthew Sutcliffe, The supplication of certaine masse-priests falsely called Catholikes... Published with a marginall gloss... and by sections applied to the severall parts of the supplicatory declamation (London, 1604)

John Smyth, The differences of the churches of seperation...  
Divided into two parts... which hath two sections...  
 ([Middelburg], 1608)

Thomas Milles, Acroamta. Or serious observations... upon  
certain straines or sections, of a late Kintish-out-port-  
customers alphabet & primer... [London, 1609]

John Searle, An ephemeris for nine yeeres... Whereunto is  
annexed three succinct treatises... the third being divided  
into foure sections of astrologie (London, 1609)

William Vaughan, Approved directions for health... Divided into  
6 sections... (London, 1612)

Henry Wright, The first part of the disquisition of truth...  
Handled in two severall sections (London, 1616)

Stephen Jerome, Origens repentance... Divided into three  
sections... (London, 1619)

William Innes, A bundle of myrrhe: or Three meditations... The  
particulars whereof, are prefixed to each page, and principal  
section (London, 1620)

Richard Brathwait, Natures embassie: or, the wilde-mans  
measures: danced by twelve satyres, with sundry others  
contained in the next section (London, 1621)

Robert Jenison, The height of Israels heathenish idolatrie...  
divided into three sections... (London, 1621)

Francis Inman, A light unto the unlearned... Divided into eight  
sections (London, 1622)

Anthony Cade, A justification of the Church of England...  
Wherein is briefly shewed the pith and marrow of the  
principall bookes written by both sides... with marginall  
reference to the chapters and sections, where the points are  
handled more at large... (London, 1630)

Thomas Jackson, The knowledg of Christ Jesus... Divided into  
foure sections... (London, [1634])

N.C., The modern history of the world... Divided into three  
sections... (London, 1635)

Thomas Jackson, The humiliation of the sonne of God... Divided into foure sections (London, [1635])

Nemesius, bp. of Emesa, The nature of man. A learned and usefull tract... Englished, and divided into sections... by Geo. Wither (London, 1636)

William Pemble, An introduction to the worthy receiving the sacrament of the Lords Supper... The third edition, divided into sections, with... a table of the principall matters prefixed (London, 1639)

Richard Bernard, A short view of the praelaticall Church of England. Wherein is set forth the horrible abuses in discipline and government, layd open in ten sections... [London, 1641]

William Hakewill, The order and course of passing bills in Parliament. Divided into 8 sections... ([London], 1641)

Anon., The untrussing of above one hundred popish points... Divided into five briefe sections... (London, 1642)

Anon., Englands alarm to war against the Beast... In 3 sections... [London, 1643]

Ezekias Woodward, The Kings chronicle: in two sections... (London, 1643)

Ezekias Woodward, Inquiries into the causes of our miseris... In six sections... ([London], 1644)

Sir William Constantine, The second part of the interest of England... In three divisions... The contents of the severall sections are in the ensuing table (London, 1645)

James Howell, Epistolae Ho-Eliaanae. Familiar letters domestic and forren; divided into six sections... (London, 1645)

William Prynne, A fresh discovery of some prodigious new wandring-blasing-stars... Divided into ten sections... (London, 1645)

Samuel Richardson, Some briefe considerations on Dr. Featley his book, intituled, The dipper dipt... In seven sections... (London, 1645)

Thomas Collier, The marrow of Christianity: or A spirituall discoverie of some principles of truth... represented in ten sections... (London, 1647)

[?T. Underhill], Moro-mastix: Mr. John Goodwin whipt with his own rod. Or dis-secting of the sixteenth section of his book... Hagio-Mastix... (London, 1647)

Thomas More, The English Catholike Christian... A treatise consisting of four sections... (London, 1649)

Thomas Paget, A faithfull and conscientious account for subscribing the engagement. Discussed in four sections... (London, [1650]).

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**Notes to Chapter One**

<sup>1</sup> Michel Foucault, The Order of Things: An Archaeology of the Human Sciences, trans. anon. (London: Tavistock Publications) p.70).

<sup>2</sup> The Works of Francis Bacon, ed. by James Spedding, Robert Leslie Ellis and Douglas Denon Heath, 14 vols (London, 1858), IV, p.61.

<sup>3</sup> Ernst Cassirer, The Individual and the Cosmos in Renaissance Philosophy, trans. by Mario Domandi (Oxford: Basil Blackwell, 1963), p.156 [citing Galileo, Il saggiaiore in Le Opere di Galileo Galilei], ed. by Antonio Favaro, 20 vols (Florence: Edizione nazionale, 1890-1906) VI, p.232].

<sup>4</sup> Cassirer, pp.149-50 [citing Pico della Mirandola, 'Apologia', Opera, fol. 170f].

<sup>5</sup> Paracelsus, The Archidoxes of Magic, trans. by R. Turner (London: Askin Publishers, 1975), p.115 (italics mine).

<sup>6</sup> Cf. again, Paracelsus' belief that '...man's body receives the body of the world, as a son his father's blood, for these are one blood and one body' (Paracelsus: Essential Readings, trans. by Nicholas Goodrick-Clarke, ([No loc.]: Crucible, 1990), p.85).

<sup>7</sup> Cassirer cites, particularly, Pietro Pomponazzi's 'De immortalitate' of 1516 (ibid., p.136).

<sup>8</sup> M.M. Bakhtin, Rabelais and his World, trans. by Hélène Iswolsky (Camb., Mass.: M.I.T. Press, 1968); M.M. Bakhtin, The Dialogic Imagination, ed. by M. Holquist, trans. by Caryl Emerson and M. Holquist (London: University of Texas Press, 1981).

<sup>9</sup> No conclusive date for Petronius' work has been agreed on; for the debate on this question see Petronius, The Satyricon,

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trans. by J.P. Sullivan (Harmondsworth: Penguin, 1965; repr. 1986), pp.11-16.

<sup>10</sup> Parts I and II of Don Quixote were published in Spanish in 1605 and 1615 respectively; their English counterparts in 1612 and 1620 (though the first part of the English translation may have been prepared as early as 1608); (Don Quixote, trans. by Samuel Putnam, 2 vols (London: Cassell, 1953), I, xi.

<sup>11</sup> François Rabelais, The Histories of Gargantua and Pantagruel, trans. by J.M. Cohen (Harmondsworth: Penguin, 1955; repr. 1983), p.69.

<sup>12</sup> Berengario da Carpi, Commentaria... super anatomia Mundini (Bologna, 1521); Andreas Vesalius, Tabulae Sex (Basle, 1538). Da Carpi's work has been described as 'the beginnings of factual anatomical illustration' (K.B. Roberts and J.D.W. Tomlinson, The Fabric of the Body: European Traditions of Anatomical Illustration (Oxford: Clarendon Press, 1992), p.69.

<sup>13</sup> At least one translator of Petronius has noted the likeness of Trimalchio to Don Quixote (The Satyricon of Petronius, trans. by William Arrowsmith (Ann Arbor: University of Michigan Press, 1959), xi.

<sup>14</sup> Timothy J. Reiss, The Discourse of Modernism (Ithaca and London: Cornell University Press, 1982).

<sup>15</sup> See, for example, Arthur Koestler, The Sleepwalkers: A History of Man's Changing Vision of the Universe (Hutchinson, 1959; repr. Harmondsworth: Penguin, 1968), pp.317-384.

<sup>16</sup> Walter J. Ong remarks that, 'the genre... is far more developed in the Latin tradition than the scattered vernacular production would indicate' (Ramus, Method, and the Decay of Dialogue (Camb., Mass.: Harvard University Press, 1958; repr. 1983), p.315); it is worth noting however that

the only English works mentioned by Ong are those of Lyly, Nashe, and Burton (*ibid.*).

For English reissues see Lyly (18 further editions; STC - 17052-17067); Stubbes (4 editions; STC - 23377; 23377.5; 23379; 23380.5); Greene (4 editions; STC - 12218-12222); Donne (3 editions; STC - 7023-7025); and Burton (4 editions; STC - 4160-4163); Du Moulin, Anatomie of Arminianisme (2 editions: STC - 7309, 7310); Anon., Anathomie of Sinne (2 editions: STC - 12466, 12467).

<sup>17</sup> There were also at least 11 Latin analyses between 1587 and 1650.

<sup>18</sup> The Ramistic dimension of analysis had been apparent on the continent from the 1530s (see Ong, p.233). This, however, only suggests that the situation in England at least partly echoed an earlier continental link between anatomy and analysis, initiated during the more advanced resurgence of European dissection. Not only was the new emphasis on dissection well established in Europe by the 1530s, but the German educator Johannes Sturm (1507-1589), one of the first to apply analysis in a logical context, was himself influenced by Galen, according to Walter Ong (Ong, p.273). Again, it was in 1543 that both Vesalius' De Humani Corporis Fabrica and Ramus' Dialectic first appeared (Andreas Vesalius, De Humani Corporis Fabrica (Basle, 1543), Petrus Ramus, Dialecticae Instiutiones (Paris, 1543)).

<sup>19</sup> Edmund Spenser, The Shepheardes Calendar (London, 1579), sig.4v, Epistle by 'E.K.'.

<sup>20</sup> Edmund Spenser, The Shepheardes Calendar (London, 1581), sig.4v, Epistle by 'E.K.'.

<sup>21</sup> Preface to Greene's Arcadia, 'To the Gentlemen Students', III, p.318; cf. also, 'The Analasis of the whole is this...'  
(The Works of Thomas Nashe, ed. by Ronald B. McKerrow, 5 vols

(A.H. Bullen, 1904; repr. London: Sidgwick and Jackson, 1910), Strange News..., I, p.275).

<sup>22</sup> The Poems: Christopher Marlowe, ed. by Millar Maclure (London: Methuen, 1968), p.102.

<sup>23</sup> The Workes of Mr. William Cowper... (London, 1629), p.12.

<sup>24</sup> Quotations from Forrester and other writers are all from title pages unless otherwise stated.

<sup>25</sup> Nicholas Byfield, An Exposition upon the Epistle to the Colossians. Wherein... the text is methodically analysed... (London, 1615).

<sup>26</sup> A large number of 'openings' were also published in the sixteenth and seventeenth centuries, most of them from the 1580s on. Although 'opening' and its cognates often meant 'anatomy', the term, used rhetorically, clearly shaded into a more general spatial sense which was not necessarily corporeal. For this reason I list here only those works with more obviously anatomical associations. Relevant titles by certain authors are also included to emphasize the link between 'opening' and dissection.

John Mayo, The Popes Parliament... Whereunto is annexed an Anatomie of Pope Joane, more apparantly opening her whole life and storie... (London, 1591); Paul Baynes, The mirrour or miracle of Gods love unto the world of his elect... Wherein... the rich treasures of Gods grace in Christ are accurately opened... (London, 1619); Paul Baynes, The diocesans tryall. Wherein all the sinnews of D. Downams Defence are brought unto three heads, and orderly dissolved ([Amsterdam], 1621); Paul Baynes, A commentarie upon the first and second chapters of Saint Paul to the Colossians. Wherein, the text is cleerely opened... (London, 1634); Richard Sibbes, Bowels Opened, or, a discovery of the neere and deere love... betwixt Christ and the Church... (London, [1639]); John Stoughton, Baruch's sore gently opened: God's salve skilfully applied...

(London, 1640); Paul Baynes, An entire commentary upon the whole epistle of the Apostle Paul to the Ephesians wherein the text is learnedly and fruitfully opened, with a logicall analysis... (London, 1643); Simpson Sidrach, Reformation's preservation: opened in a sermon preached at Westminster before the honourable House of Commons, at the solemne fast, July 26. 1643... (London, 1643); Sidrach Simpson, The Anatomist Anatomis'd... (London, 1644).

Cf. Shakespeare, Twelfth Night: 'For Andrew, if he were opened, and you find so much blood in his liver as will clog the foot of a flea...' (III, ii, 60-62 (The Riverside Shakespeare ed. by G. Blakemore Evans et al (Boston & New York: Houghton Mifflin Company, 1997)).

See also: Pierre du Moulin the elder, The Anatomie of Arminianisme... the opening of the controversies lately handled in the Low-Countreys (London, 1620); and: The Annals of the College of Physicians for 30 May 1632 record, also, the imminent 'opening' of one Mr. Lane, a suspected victim of poisoning (Annals of the College of Physicians of London, trans. by J. Emberry, S. Heathcote, M. Hellings, 5 vols, in Wellcome library, RCP, London, III, ii, p.341; all further references to the College Annals are to this edition, and given by 'RCP' and volume and page number).

<sup>27</sup> For synonymy between forms of 'anatomy' and 'lay open' see: 'the body of man, and consequently health, is best understood, and best advanced by Dissections, and Anatomies, when the hand and knife of the Surgeon hath passed upon every part of the body, and laid it open' (Donne, Sermons, IX, p.256, penitential psalms, n.d.); and: Anon., The abuses of the Romish church anatomised... wicked Rome with her seven deadly sinnes... layd open to the view of the world... (London, 1624); Anon., The Wrens Nest Defiled, or Bishop Wren Anatomized, his life and actions dissected and layd open...

(London, 1641); Anon., The Frogges of Egypt or the Caterpillars of the Commonwealth truly dissected and laid open (London, 1641); Michael Sparke, Scintilla, or, A Light Broken into Darke Warehouses. With observations upon the monopolists of seaven severall patents... Anatomized and layd open in a breviat... (London, 1641); Anon., The Churches Complaint Against Sacriledge: or sacriledge truly dissected and layed open... (London, 1643); R[ichard]W[ard], The Character of the Warre or the Miseries Thereof Dissected and Laid Open From Scripture and Experience (London, 1643).

For overlap between authors using forms of 'anatomy' or 'lay open' see: Robert Greene, Mamillia... Anatomie of Lovers' Flatteries [London, 1583?]; Arbasto, the Anatomie of Fortune (London, 1584); Planetomachia [with] A marvelous anatomie of Saturnistes (1585); A notable discovery of coosenage... Plainely laying open those pernicious sleightes... (London, 1591); The blacke bookes messenger. Laying open the life and death of Ned Browne... (London, 1592).

Robert Pricket, Unto the most high and mightie prince, his soveraigne lord King James. A poore subject sendeth, a soldiers resolution... In this little booke... the Pope and papists are in their colours set forth, their purposes laid open, and their hopes dissolved... (London, 1603); Times anotomie (London, 1606).

John Andrewes, The Anatomye of Baseness or the four quarters of a knave (London, 1615); The converted mans new birth... Heere is also layd open the true estate of the regenerate man... (London, 1629).

<sup>28</sup> Both references are from title-pages of respective works.

<sup>29</sup> Jean Calvin, The institution of Christian religion... [with] notes conteyning in briefe the substance of the matter

handled in each section, English trans. (London, 1587), title-page, italics mine.

<sup>30</sup> All quotations are from relevant title-pages.

<sup>31</sup> Two reprints of the Latin edition appeared, also, in 1553.

<sup>32</sup> The 1548 edition is now lost. The date of Vicary's work is itself misleading, as the work relied heavily on the Surgery (1314) of Henri de Mondeville (c. 1270-1320) (see Singer, 1952, p.170 and pp.73-4).

<sup>33</sup> Jonathan Sawday, The Body Emblazoned: Dissection and the Human Body in Renaissance Culture (London and New York: Routledge, 1995), p.56.

<sup>34</sup> The Annals of the Barber-Surgeons of London, ed. by Sidney Young, 2 vols (London: Blades, East and Blades, 1890), I, p.315; all further references to the Barber-Surgeons' Annals are given as 'Barber-Surgeons' with volume and page number.

<sup>35</sup> Mark H. Curtis, Oxford and Cambridge in Transition 1558-1642 (Oxford: Clarendon Press, 1959), p.154; on Gilbert see Charles Webster, The Great Instauration: Science, Medicine and Reform 1626-1660 (London: Duckworth, 1975), p.120; on Crooke see R.W. Innes Smith, English-Speaking Students of Medicine at the University of Leyden (Edinburgh and London: Oliver and Boyd, 1932), p.58; ; on Winston see DNB; on Harvey see Geoffrey Keynes, The Life of William Harvey (Oxford: Clarendon Press, 1966), p.32, and p.120, and Webster, p.120.

<sup>36</sup> D'Arcy Power, 'Notes on Early Portraits of John Banister, of William Harvey, and the Barber-Surgeons' Visceral Lecture in 1581', in Proceedings of the Royal Society of Medicine, 6 (1912), (repr. London: John Bale, Sons, and Danielsson, 1912), pp.6-7; for the portrait see Roberts and Tomlinson, p.142.

<sup>37</sup> Thomas Rogers, A Philosophicall Discourse, entituled, The Anatomie of the Minde (London, 1576); John Woolton, Bishop of Exeter, A Newe Anatomie of Whole Man, as well of his body, as

of his soule... (London, 1576); John Lyly, Euphues, the Anatomie of Wit (London, 1578).

<sup>38</sup> Vicary's revised Anatomy was entered on the Stationer's Register on 13 January 1576/7; Euphues on 2 December 1578 (STC - 17051).

<sup>39</sup> The main failing of Banister's work, for example, is its relative paucity of illustrations; it has just four of the anatomised body (these all derive from De Fabrica, and are the first and third skeletal plates (opposite Banister's page i and on sig.38r), and the first and ninth plates of the muscles (sigs.43v and 63r)).

<sup>40</sup> William Harvey, Lectures on the Whole of Anatomy, trans. by C.D. O'Malley, F.N.L. Poynter, and K.F. Russell (Berkeley and Los Angeles: University of California Press, 1961), pp.3-5; Holinshed, Chronicles, 3 vols (London, 1586), II, p.1349, p.1369.

<sup>41</sup> O'Malley et al, pp.2-3 [Holinshed, II, p.1349, p.1369].

<sup>42</sup> Cf. John Stowe, The Annales of England (London, 1631), p.695, who gives the same date.

<sup>43</sup> Palmerin de Oliva, trans. by Anthony Munday (London, 1588).

<sup>44</sup> Thomas Dekker, 'Newes from Hell', in The Non-Dramatic Works of Thomas Dekker, ed. by A.B. Grosart, 5 vols (London, 1894), II, pp.135-6.

<sup>45</sup> Godly Prayers and Meditations paraphrastically made upon all the psalmes, trans. by Robert Filles (London, 1577); The Anatomie of the Soule containing godlie prayers upon al the psalmes, trans. by R[obert] F[illes] (London, 1590).

<sup>46</sup> A manuscript note before the title page of Godly Prayers... states that 'This book was reprinted by Richard Watkins in 1590, and entitled The anatomie of the soule'; the assumption of an unaltered text is based on the evidence of other, re-titled but otherwise identical, publications (see, for

example, the anonymous The Anathomy of Sinne (London, 1603); and Roger Gostwyke, The Anatomie of Ananias (London, 1616), discussed below).

<sup>47</sup> Alexander Read, Somatographia anthropine: or, a Description of the Body of Man (London, 1616); hereafter all references to this work are given by short title and page number.

<sup>48</sup> See C.D. O'Malley, 'Helkiah Crooke, M.D., F.R.C.P., 1576-1648' in Bulletin of the History of Medicine, 42 (1968), 1-18, p.6.

The title-page in fact reads 'by W.J. Printer' rather than giving Read's name, which appears only after the prefatory 'To the Courteous Reader'.

<sup>49</sup> Caspar Hofmann, 'Digressio, in circulationem sanguinis, nuper in Anglia natam', in J. Riolan, Opuscula Anatomica Varia et Nova (Paris, 1652), p.359; quoted and trans. by: William Schupbach, The Paradox of Rembrandt's "Anatomy of Dr. Tulp" (London: Wellcome Institute, 1982), p.26. Although Hofmann's remark falls after Donne's death, the presence of the law student Simonds D'Ewes at Harvey's demonstration in March 1622/3 is roughly consistent with the parties objected to by Hofmann (Sir Simonds D'Ewes, Autobiography, ed. by J.O. Halliwell, 2 vols (London, 1845), I, p.230).

<sup>50</sup> Helkiah Crooke, Microcosmographia (London, 1615), Book 4, Book 5.

<sup>51</sup> Bald, p.93, p.227, p.282, p.539.

<sup>52</sup> The arguments of O'Malley, Poynter and Russell against this date (O'Malley et al, pp.7-11) have been convincingly refuted by Gweneth Whitteridge, most notably in regard of the supposed 'j, d, f' on the title page of the Lectures, which the former allege to refer to January, December and February of 1616, 1617, and 1618. As Whitteridge points out, the symbols are in fact the male sign, the abbreviation for the

Latin 'et', and 'f', and therefore almost certainly indicate that the lectures were on male and female anatomy (The Anatomical Lectures of William Harvey, ed. and trans. by Gweneth Whitteridge (Edinburgh and London: E&S Livingstone, 1964), xxvii). The seeming oddity of Harvey's using a male sign and a letter for 'female' is no more inconsistent than his frequent and apparently random switches between Latin and English in the lectures themselves.

<sup>53</sup> Cf., again, Simonds D'Ewes' attendance at Harvey's three-day dissection in March 1622/3 (D'Ewes, I, p.230).

<sup>54</sup> Phyllis Allen, 'Medical Education in the Seventeenth Century', Journal of the History of Medicine, 1 (1946), 115-143, p.134.

<sup>55</sup> Thomas Winston, Anatomy Lectures at Gresham Colledge (London, 1659), F.P., 'Epistle to the Reader'.

<sup>56</sup> On the bequest see also Allen, pp.119-120.

<sup>57</sup> On mirror titles see Herbert Grabes, The Mutable Glass: Mirror-Imagery in Titles and Texts of the Middle Ages and English Renaissance (1973), trans. by Gordon Collier (Cambridge: Cambridge University Press, 1982). For further recent discussion of mirror imagery see also Carol Banks, 'The Purpose of Playing': Further Reflections on the Mirror Metaphor in Shakespeare's Plays' in Signatures 2 (2000), 15-26.

<sup>58</sup> Palmerin de Oliva, trans. by Anthony Munday (London, 1588), title-page.

<sup>59</sup> Walter Raleigh, The Discoverie of the Large, Rich and Bewtiful Empyre of Guiana (London, 1596), Epistle Dedicatorie.

<sup>60</sup> Lauder's book was a translation of selections from Lelius Capilupus' Latin anti-Catholic work, The Order of the Friars.

<sup>61</sup> Cf. John G. Norman: '...the coherence of literary anatomy comes not from similarities among the works, but from their

references to the pre-existing institution of medical anatomy' (John G. Norman, 'Literature After Dissection in Early Modern England' (unpublished m.s.), p.2; my thanks are due to the author for permission to read and quote from this work.)

<sup>62</sup> 'Euphues: The Anatomy of Wit', The Complete Works of John Lyly, ed. by R.W. Bond, 2 vols (Oxford: Clarendon Press, 1942), II, p.180.

<sup>63</sup> 'Astrophil and Stella', The Poems of Sir Philip Sidney, ed. by William A. Ringler, Jr. (Oxford: Clarendon Press, 1962), p.194, no.38, ll.9-10, italics mine; on date see Ringler, xliv.

<sup>64</sup> The Riverside Shakespeare (p.400) dates the play as 'probably 1599'. For a similar usage see also 2 Henry IV, where the figure of 'Rumour' asks, 'But what need I thus/My well-known body to anatomize/Among my household?' ('Induction', 21); the play has a probable date of 1598 (Riverside Shakespeare, p.885).

<sup>65</sup> The 'tackes' and 'sheats' relate to Robinson's career of 'Sea-man' (sig.A2r).

<sup>66</sup> Cf., for example, John Andrewes, The Anatomye of Baseness or the four quarters of a knave (London, 1615); and [?T. Underhill], Moro-Mastix: Mr. J. Goodwin Whipt with his own Rod. Or, the Dissecting of the... his Book... Hagio-Mastix (London, 1647).

<sup>67</sup> The Records of the Virginia Company of London, ed. Susan Myra Kingsbury, 4 vols (Washington, 1906-1935), II, p.257.

<sup>68</sup> Cf. especially [?T. Underhill], Moro-Mastix: Mr. J. Goodwin Whipt with his own Rod. Or, the Dissecting of the... his Book... Hagio-Mastix (London, 1647); and Mercurius Melancholicus, The Second Part of Crafty Crumwell... A trage commedie wherein is presented, the late treasonable

undertakings... of the rebels... But ile their plots dissect I  
vow, and whip their treacherie (London, 1648) (italics mine).

<sup>69</sup> John Lyly, Euphues: the Anatomy of Wit (London, 1578);  
Robert Greene, Arbasto: the Anatomie of Fortune (London,  
1584); Thomas Nashe, The Anatomie of Absurditie (London,  
1589).

<sup>70</sup> The latter date, of 1594, is given in Sermons, II, p.1,  
by Potter and Simpson, and is qualified by 'seemingly left'  
(italics mine).

<sup>71</sup> Donne's date of birth is given as 'between 24 January and  
19 June' (Bald, p.537).

Reprints of Euphues appeared in 1587, 1590, 1593, 1597, 1606,  
1607, 1613, and 1617 (STC numbers: 17057-17064; the dates of  
1590 and 1593 are given as uncertain by the STC).

<sup>72</sup> STC numbers for the first part are, consecutively: 23376;  
23377; 23377.5; 23379; for the second, 23380.

<sup>73</sup> See for example, Lorna Hutson: 'Nashe's more sensitive  
and even brilliant readers - Shakespeare, Jonson, and Donne,  
for example - did not find the tonal and thematic  
discontinuity of his style enough to thwart them from  
developing its very considerable creative potential' (Thomas  
Nashe in Context (Oxford: Clarendon Press, 1989), p.7); cf.  
also: G.R. Hibbard, Thomas Nashe: A Critical Introduction  
(London: Routledge and Kegan Paul, 1962), p.250.

<sup>74</sup> Baird D. Whitlock, 'John Syminges, a Poet's Stepfather',  
in NQ, 199 (1954), p.466.

<sup>75</sup> A few years later, from at least October 1620 to October  
1622, Brooke was in close contact with Harvey regarding a  
legal case brought by the latter against a patient, Sir  
William Smith (Keynes, pp.114-121).

<sup>76</sup> George Gascoigne, The Posies, ed. by John W. Cunliffe  
(London: Cambridge University Press, 1907), pp.37-8.

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<sup>77</sup> Joseph Hall, 'The Great Impostor', Feb. 2 1623/4, in The Works of Joseph Hall, 12 vols, (Oxford: Talboys, 1837), V, p.136.

<sup>78</sup> The DNB gives Hart as 'fl. 1633', and as probably born between 1580 and 1590.

<sup>79</sup> See for example, Microcosmographia, p.529, p.866; and Harvey (O'Malley et al, p.136, p.183).

<sup>80</sup> See Andreas Vesalius' First Public Anatomy at Bologna - an eyewitness account by Baldasar Heseler, together with his notes on Matthaeus Curtius' Lectures on Anatomia Mundini, ed. and trans. by Ruben Eriksson (Lychnos Bibliotek, 18, Almqvist & Wiksells, 1959); and my own Chapter 2.3.

<sup>81</sup> Fig. 1: R Emmelin's 'Visio Tertia', in Roberts and Tomlinson, Pl.14.

<sup>82</sup> Thomas Geminus, Compendiosa Totius Anatomie Delineatio... (London, 1559), British Library copy.

<sup>83</sup> Burton refers to 'Remelins' as seemingly the latest in a highly élite selection of anatomists, including Galen, Vesalius, and Fallopius, implying that he may have seen R Emmelin's work himself, and that it was sufficiently well-known for the author's name alone to stand without further gloss (Burton, Anatomy, I, p.140).

<sup>84</sup> Elizabeth L. Eisenstein, The Printing Press as an Agent of Change: Communications and Cultural Transformation in Early Modern Europe, 2 vols (Cambridge: Cambridge University Press, 1979), II, p.567, p.569.

<sup>85</sup> Cf. A.R. Hall, The Scientific Revolution 1500-1800: The Formation of the Modern Scientific Attitude (London: Longmans Green, 1954), p.42.

<sup>86</sup> The impressive repeatability of the process Vesalius used is attested by the fact that the specially-treated blocks involved would 'remain unspoiled even after running off 3,000 to 4,000 copies' (Eisenstein, I, p.53).

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<sup>87</sup> Lorenz Fries, Spiegel der Artzny (Strasbourg, 1519); Berengario da Carpi, Commentaria... super anatomia Mundini (Bologna, 1521); Charles Estienne, De Dissectione partium corporis humani (Paris, 1545).

<sup>88</sup> Jesse Lander, "'Foxe's" Book of Martyrs: *printing and popularizing the Acts and Monuments*', Religion and Culture in Renaissance England, ed. by Debora Shuger and Claire McEachern (Cambridge: Cambridge University Press, 1997), 69-93, pp.81-2.

<sup>89</sup> Roberts and Tomlinson, pp.144-5; cf. pp.146-7, 148-9, 154-5, 158-9.

<sup>90</sup> Bert S. Hall, 'The Didactic and the Elegant: Some thoughts on scientific and technological illustrations in the Middle Ages and Renaissance', and Martin Kemp, 'Temples of the Body and Temples of the Cosmos: Vision and visualisation in the Vesalian and Copernican Revolutions', both in Picturing Knowledge: Historical and Philosophical Problems Concerning the Use of Art in Science, ed. by Brian S. Baigrie (London: University of Toronto Press, 1996), pp.12-16, p.49.

<sup>91</sup> Cf., also, William M. Ivins on similar innovations in the field of botany (William M. Ivins, Prints and Visual Communication (Harvard University Press, 1953; repr. Camb., Mass.: M.I.T. Press, 1978), pp.42-43, p.45).

<sup>92</sup> Quotations from Andreas Vesalius, Prefatory letter to Joannes Oporinus, De Humani Corporis Fabrica (1543), in The Illustrations from the Works of Andreas Vesalius of Brussels, trans. by J.B. deC.M. Saunders and Charles D. O'Malley (1950; New York: Dover Publications, 1973), pp.46-47; reference to cost from Roberts and Tomlinson, p.209.

<sup>93</sup> Fig. 2: image from Lorenz Fries, Spiegel der Artzny (Strasburg, 1518), woodcut of 1517.

<sup>94</sup> On the Vesalian use of perspective see Hall in Baigrie, p.16.

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<sup>95</sup> Andreas Vesalius, Prefatory letter to Joannes Oporinus, De Humani Corporis Fabrica (Basle, 1543), in Illustrations, p.47.

<sup>96</sup> Martin Kemp, The Science of Art: Optical Themes in Western Art from Brunelleschi to Seurat (New Haven and London: Yale University Press, 1990), p.7; all further references to this work are given as 'Kemp, 1990' and page number.

<sup>97</sup> Erwin Panofsky, Perspective as Symbolic Form (1924-5), trans. by Christopher S. Wood (New York: Zone Books, 1991), pp.30-31. See also, more recently, Samuel Y. Edgerton, Jr., The Renaissance Rediscovery of Linear Perspective (New York, Evanston, San Francisco, London: Harper and Row, 1975), pp.153-67 for a revision and defence of Panofsky's arguments.

<sup>98</sup> Quoted in Cassirer, p.167 (source not cited); cf. also p.170 on 'distance' between subject and object.

<sup>99</sup> Ernst Cassirer, 'Language and Art II' in Symbol, Myth, and Culture (New Haven and London: Yale University Press, 1979), p.185.

<sup>100</sup> Roberts and Tomlinson, p.189; Eustachio's artist was Giulio de Musi.

<sup>101</sup> Fig. 3: Ketham from Sawday, Pl. 3; Fig. 4: Vesalius from Illustrations, Pl. 3.

<sup>102</sup> Fig 5: title-page from Lancisi, Tabulae anatomicae (1714) (Roberts and Tomlinson, p.188).

<sup>103</sup> Fig. 6: Vesalius, De Fabrica, Bk. VII, Pl.1, Figs. 2-3 (Illustrations, Pl. 67); Fig. 7: Lancisi, Tabulae Anatomicae, Tab. XVII (scan from British Library copy).

<sup>104</sup> On Fries see Roberts and Tomlinson, p.45; on Vesalius see Illustrations, p.186.

<sup>105</sup> Fig. 8: Andreas Vesalius, De Fabrica, Bk.VII, xiv, in Illustrations, Plate 73, and: Lancisi, Tabulae anatomicae (Rome, 1714), (in Charles Singer, The Evolution of Anatomy (London: Kegan Paul, 1925), p.139); I have chosen the two

plates for their similar degree of fragmentation, in the absence of a more exact parallel.

<sup>106</sup> Fig. 9: Berengario da Carpi, Commentaria... super Anatomia Mundini (Bologna, 1521); Fig. 10: Andreas Vesalius, De Humani Corporis Fabrica (Basle, 1543), Bk. II, Pl.9, in Illustrations, Pl.32; Fig. 11: Lancisi, Tabulae anatomicae... (Rome, 1714), Tab. XXIX (British Library scan).

<sup>107</sup> Cf. Singer, p.135: '[Eustachio's plates] present dead and not living anatomy'.

<sup>108</sup> See Roberts and Tomlinson, p.326, for comparative figures; also, A.R. Hall, p.46: 'Eustachio's figures... first printed in the early eighteenth century, were thereafter frequently republished as having *contemporary value*' (italics mine).

<sup>109</sup> Fig. 12: F. Ruysch, Thesaurus Anatomicus Quartus... (Amsterdam, 1704), Tab. IV, in Roberts and Tomlinson, Pl.68; Fig. 13: Lancisi, Tabulae Anatomicae... (Rome, 1714), Tab. XXVI (British Library scan).

<sup>110</sup> See for example Andreas Vesali... Opera omnia anatomica et chirurgica, ed. by Herman Boerhaave and Bernard Albinus (1725), cited in Roberts and Tomlinson, p.328.

<sup>111</sup> Second skeletal figure (after Vesalius, De Fabrica (1543)), from Geminus, Compendiosa Totius Anatomie Delineatio... (London, 1545).

<sup>112</sup> On the distinction between accuracy and attractiveness see Roberts and Tomlinson, pp.189-90, and Singer, p.138.

<sup>113</sup> Helkiah Crooke, Microcosmographia (London, 1615); for example, Bk. 10, Tab. XVIII, Fig. II (p.778) is from De Fabrica, Bk II, Pl.I (Illustrations, Pl. 24), Fig. III from Bk. II, Pl. V (Illustrations, Pl. 28), and Fig. IV from Bk. II, pl. II (Illustrations, Pl. 25); the dismembered torso of Tab. XV (p.774) is from De Fabrica, Bk. II, Pl. 9 (Illustrations, Pl.32).

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<sup>114</sup> Cf., notably, Helkiah Crooke, Microcosmographia (London, 1615), Bk. 10, Tab. XVI (p.775), with De Fabrica, Bk. II, Pl. X (Illustrations, Pl.33); (see Roberts and Tomlinson, Pl. 55).

<sup>115</sup> Andreas Vesalius, Prefatory letter to Joannes Oporinus, De Humani Corporis Fabrica (1543), in Illustrations, p.47.

<sup>116</sup> Randle Cotgrave, A French-English Dictionary (London, 1611).

<sup>117</sup> Lucien Fébvre, The Problem of Unbelief in the Sixteenth Century: The Religion of Rabelais (1942), trans. by Beatrice Gottlieb (Camb., Mass., and London: Harvard University Press, 1982), p.437.

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**Notes to Chapter Two**

<sup>1</sup> See OED: 'Wind, breath, spirit... that which is blown or breathed.'

<sup>2</sup> Iliad, trans. by A.T. Murray, 2 vols (London: William Heinemann, 1925), II, p.127, p.15.

<sup>3</sup> Cf. also, 'his spirit left his bones' (Iliad, I, p.573).

<sup>4</sup> My thanks are due to Paolo Crivelli, of the Philosophy department, Edinburgh University, for his help in stressing this, as well as in clarifying other aspects of pre-Christian pneumatology.

<sup>5</sup> Timaeus, trans. by Francis M. Cornford (Indianapolis: Bobbs Merrill, 1959), 73b-d.

<sup>6</sup> Plato counts the brain as a type of 'marrow' (73c).

<sup>7</sup> See for example, Richard Sorabji, 'Body and Soul in Aristotle', in Aristotle's De Anima in Focus, ed. by Michael Durrant (London and New York: Routledge, 1993), 162-196, p.162: "'Interpretations of Aristotle's account of the relation between body and soul have been widely divergent. At one extreme Thomas Slakey has said that in the De Anima "Aristotle tries to explain sense-perception simply as an event in the sense-organs"... At the opposite extreme, Friedrich Solmsen has said of Aristotle's theory: "it is doubtful whether the movement or the actualisation occurring when the eyes sees... has any physical aspect"'.

<sup>8</sup> De Motu Animalium, trans. by Martha Nussbaum (Princeton University Press, 1985), 703a, 20. It is worth noting that other translations of De Motu Animalium give *pneuma* as 'spirit' (see, for example, 'De Motu Animalium', trans. J.A. Smith, The Works of Aristotle, ed. by W.D. Ross, 12 vols (Oxford: Clarendon Press, 1912), V, 703A, 10-11.)

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<sup>9</sup> 'De Anima', trans. by J.A. Smith, The Works of Aristotle, ed. by W.D. Ross, 12 vols (Oxford: Clarendon Press, 1931) III, 407b.

<sup>10</sup> Donne himself, in a Christmas sermon, recognises that 'We are not sure that stones have not life; stones may have life' (Sermons, IX, p.147, [?1629]).

<sup>11</sup> Cf. the translation of W.S. Hett: 'Presumably the mind is something more divine, and is unaffected.' (Aristotle, On the Soul, Parva Naturalia, On Breath, trans. by W.S. Hett (London: Heinemann, 1957), 408b).

<sup>12</sup> S. Sambursky, Physics of the Stoics (London: Routledge and Kegan Paul, 1987), p.45, citing Alexander Aphrodisias, 'De Mixtione', in Scripta minora, ed. by I. Bruns, 2 vols (Berlin: Reimer, 1887-1892), p.217, p.36.

<sup>13</sup> Cf. also, regarding the 'animating' role of *pneuma*: '...the mixture of *pneuma* with inert matter imbues the latter with physical properties...' (Sambursky, p.11).

<sup>14</sup> P. Masson-Oursel and Louise Morin, 'Indian Mythology' in Felix Guirand (ed.), New Larousse Encyclopaedia of Mythology, trans. by Richard Aldington and Delano Ames (London: Hamlyn, 1972), p.344.

<sup>15</sup> S. Sambursky, The Physical World of the Greeks, trans. by Merton Dagut (London: Routledge and Kegan Paul, 1956), p.134.

<sup>16</sup> See Daniel C. Dennett, Consciousness Explained (London: Little, Brown & Co., 1991), pp.171-226 esp.

<sup>17</sup> Sambursky, p.22, citing Stobaeus, in J. Arnim, Stoicorum veterum fragmenta, 4 vols (Leipzig: Teubner, 1880), I, p.371, p.22.

<sup>18</sup> Douglas Guthrie, A History of Medicine (London: Thomas Nelson, 1945) pp.77-78.

<sup>19</sup> Galen, On the Natural Faculties, trans. by Arthur John Brock (London: William Heinemann, 1916) p.3.

<sup>20</sup> On Argenterius see Andrew Wear, 'Galen in the Renaissance' in Galen: Problems and Prospects, ed. by V. Nutton (London: Wellcome Institute for the History of Medicine, 1981), p.234. On Descartes, see letter to Regius, May 1641, (Philosophical Letters, trans. by Anthony Kenny (Oxford: Basil Blackwell, 1981), p.102); and 'The Passions of the Soul', in The Philosophical Writings of Descartes, trans. by John Cottingham, Robert Stoothoff, Dugald Murdoch, Anthony Kenny, 3 vols (Cambridge: Cambridge University Press, 1984-1991) I, p.346.

<sup>21</sup> Lynn Thorndike, A History of Magic and Experimental Science, 8 vols (New York: Columbia University Press, 1938-54), I, p.151.

<sup>22</sup> Galen on Respiration and the Arteries, trans. by David J. Furley and D.S. Wilkie (Princeton: Princeton University Press, 1984), p.125.

<sup>23</sup> The Works of Francis Bacon, ed. by James Spedding, Robert Leslie Ellis, Douglas Denon Heath, 14 vols (London, 1858), IV, pp.92-3.

<sup>24</sup> Saint Augustine, The City of God, trans. by John Healey (1610), 2 vols (London: Dent, 1945: repr. 1962), I, p.230, p.228.

I have concentrated on The City of God because it represents Augustine's mature thought, and because of its influence on the Middle Ages and Renaissance.

<sup>25</sup> '...nor must we believe at all what Apuleius would have us... that the *daemones* are so placed between god and men, that they bear up men's prayers... but that they are spirits most thirsty of mischief...' (City of God, I, p.245).

<sup>26</sup> Quoted by Aquinas in Summa Theologica, trans. by the Fathers of the English Dominican Republic, 22 vols (London: R&T Washbourne, 1912), IV, p.48, Qu.76, Art.7, Obj.1.

<sup>27</sup> Other possible glosses for Augustine's Latin term, such as 'to take charge of, to manage, guide', are all similarly lacking in immediate and precise physical connotations (Charlton T. Lewis, Charles Short, A Latin Dictionary (Oxford: Clarendon Press, 1951), under 'administro, II'); for Augustine's Latin see Summa Theologica, Latin and English, trans. by Timothy Suttor, 60 vols (London: Blackfriars, Eyre & Spottiswoode, 1970), XI, p.78: 'et aerem, quae sunt similia spiritui, corpus administrat'; all references to Aquinas' original are given hereafter by translator and volume and page number.

<sup>28</sup> '... the soul administers the body by light," that is, by fire...' (Summa Theologica, IV, p.48, Qu.76, Art.7, Obj.1).

<sup>29</sup> Benjamin Lee Gordon, Medieval and Renaissance Medicine (London: Peter Owen, 1960), p.642; italics mine.

<sup>30</sup> City of God, II, p.23, [Isaiah 57.16.].

<sup>31</sup> 'et primum virtutis motivae est spiritus, ut dicit Philosophus' (Suttor, XI, p.82).

<sup>32</sup> Summa Contra Gentiles trans. by the Fathers of the English Dominican Republic, 5 vols (London: Burns Oates and Washbourne, 1923), II, p.179.

<sup>33</sup> In the Sermons Augustine is the most heavily-cited authority after the bible.

<sup>34</sup> G. Verbéke, La Doctrine du Pneuma du Stoicisme a St. Augustin (Paris: Desclée de Brouwer, 1945), p.535.

<sup>35</sup> Da Vinci quoted from: K.B. Roberts and J.D.W. Tomlinson, The Fabric of the Body: European Traditions of Anatomical Illustration (Oxford: Clarendon Press, 1992), p.101.

<sup>36</sup> On the transitional nature of the Tabulae see The Illustrations from the Works of Andreas Vesalius of Brussels notes and translation J.B. de C.M. Saunders and Charles D. O'Malley (World Publishing, 1950; repr. New York: Dover

Publications, 1973), p.234. Fig. 1: Tabulae Sex, Pl. 3 (in Illustrations, Pl. 89).

<sup>37</sup> Quoted and translated in Charles Singer, Vesalius on the Human Brain (Oxford: Oxford University Press, 1952), p.116; citing De Humani Corporis Fabrica (Basle, 1543), Bk VII. Fig.2: from De Fabrica, Bk. VII, Figs. 14-18 (Illustrations, Pl. 72).

<sup>38</sup> See Andrew Cunningham, The Anatomical Renaissance: The Resurrection of the Anatomical Projects of the Ancients (Aldershot: Scolar Press, 1997), p.120.

<sup>39</sup> Andreas Vesalius' First Public Anatomy at Bologna - an eyewitness account by Baldasar Heseler, together with his notes on Matthaeus Curtius' Lectures on Anatomia Mundini, ed. and trans. by Ruben Eriksson (Lychnos Bibliotek, 18, Almqvist & Wiksells, 1959); hereafter, 'Eriksson' and page and demonstration numbers.

<sup>40</sup> Cf. the total of 16 candles used in the anatomy theatre at Padua (William Brockbank, 'Old Anatomical Theatres and What Took Place Therein', Medical History, 12 (1968), 371-384, pp.374-375).

<sup>41</sup> On the quite literal 'carnivalization' of Bolognan public anatomies in the sixteenth and seventeenth centuries see Giovanni Ferrari, 'Public Anatomy Lessons and the Carnival: The Anatomy Theatre of Bologna', Past and Present, 117 (1987), 50-106, p.104 esp.

<sup>42</sup> For an illustration and discussion of Willis' 'circle' see Roberts and Tomlinson, pp.402-404.

<sup>43</sup> De Fabrica, Bk III, in Singer, 1952, p.57.

<sup>44</sup> John Hoskins, Directions for Speech and Style, (1599), ed. by H.H. Hudson (Princeton: Princeton University Press, 1935), p.29.

<sup>45</sup> See for example, Gary Tomlinson, Music in Renaissance Magic (Chicago: University of Chicago Press, 1993), p.50.

<sup>46</sup> Fig. 3: Keith L. Moore, Clinically Oriented Anatomy, illust. Dorothy Chubb et al, 3<sup>rd</sup> ed. (Baltimore: William & Wilkins, 1992), p.668.

My thanks are due to Dr. James Shaw of Edinburgh University medical faculty, for his patient help in identifying the drawings of the Vesalian rete as the cavernous sinus.

<sup>47</sup> Although Heseler talks about 'arteries' rather than veins, it has been noted that, 'venous and arterial vessels are intermingled' here, in such a way that 'an error is quite possible' (Rudolph E. Siegel, M.D., Galen's System of Physiology and Medicine (Basel and New York: S. Karger, 1968), p.112, note 33.

Harvey from: Lectures on the Whole of Anatomy, trans. by C.D. O'Malley, F.N.L. Poynter, K.F. Russell (Berkeley and Los Angeles: University of California Press, 1961), pp.228-229.

<sup>48</sup> See Martin Kemp, "'Il Concetto dell'Anima" in Leonardo's Early Skull Studies', in Journal of the Warburg and Courtauld Institutes, 34 (1971), 115-134, esp. pp.127-30.

<sup>49</sup> Compendiosa Totius Anatomie Delineatio... (London, 1553), sig.J6v.

<sup>50</sup> Thomas Geminus, Compendiosa Totius Anatomie Delineatio... (London, 1553), sig.J6v.

<sup>51</sup> Theatrum Anatomicum (Frankfurt, 1605), p.609, trans. by Helkiah Crooke; cited by Andrew Wear, in Nutton, p.258.

It is worth pointing out that Harvey takes Bauhin very seriously: "'a rare industrious man"' (O'Malley et al, p.12).

<sup>52</sup> 'In Artem Medicinalum Galen', I, p.429, cited by Owsei Temkin, in Galenism: Rise and Decline of a Medical Philosophy (Ithaca: Cornell University Press, 1973), p.142.

<sup>53</sup> John Banister, The Historie of Man, sucked from the sappe of the most approved anathomistes, in this present age (London, 1578), 96r.

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<sup>54</sup> On Banister's mediation between surgeons and physicians see D'Arcy Power, 'Notes on Early Portraits of John Banister, of William Harvey, and the Barber-Surgeons' Visceral Lecture in 1581', in Proceedings of the Royal Society of Medicine, 6 (1912), (repr. London: John Bale, Sons, and Danielsson, 1912), pp.6-7.

<sup>55</sup> Andreas Laurentius, L'Histoire Anatomique (Paris, 1621), p.1326, citing Joannes Argenterius (my translation); second quotation Laurentius, *ibid.*, p.1300.

<sup>56</sup> Randle Cotgrave, A Dictionarie of the French and English Tongues (London, 1611).

<sup>57</sup> C.D. O'Malley, 'Helkiah Crooke, M.D., F.R.C.P., 1576-1648', Bulletin of the History of Medicine, 17:1 (1968), pp.13-14 especially.

<sup>58</sup> Crooke seems even to have attracted a smaller degree of the imitation which Vesalius' work suffered: in 1660 a translation of Berengario Da Carpi was published under the title Microcosmographia; while an edition of Ambroise Paré's works, in 1634, was at pains to stress that, 'The figures in the Anatomy are not the same used by my Author (whose were according to those of Vesalius) but according to those of Bauhine, which were used in the work of Dr. Crook; and these indeed are the better and more compleat' (Microcosmographia, trans. by Henry Jackson (London, 1660); Ambroise Paré, The Works of that Famous Chirurgion, trans. by Thomas Johnson (London, 1634), 'To the Reader'); references from K.F. Russell, British Anatomy: A Bibliography of Works Published in Britain, America and on the Continent (Melbourne University Press, 1963; repr. Winchester: St. Paul's Bibliographies, 1987), pp.18-19; quotation from Paré, *ibid.*, p.153.

<sup>59</sup> Helkiah Crooke, Microcosmographia, (London, 1615), p.470.

<sup>60</sup> A fragmentary echo of Crooke's rendering of Bauhin is evident in the quotation from Harvey (cf. his 'surround the pituitary gland everywhere' with 'compasseth the glandule'); Laurentius' opinion runs, in the French, 'Car il est si petit en l'homme, qu'il est presque impossible de le voit' (Laurentius, p.1326.)

<sup>61</sup> Fig. 4: Alexander Read, Somatographia anthropine, or, A Description of the Body of Man (London, 1616) [Table 2], 'Of Veines, Arteries and Sinewes', sigsG8v-Hr.

<sup>62</sup> See, also, O' Malley, 1968, pp.11-12, on Crooke's ultimately conservative decisions in anatomical controversies.

<sup>63</sup> Thomas Vicary, The Anatomie of the Bodie of Man (London, 1577), ed. by Fredrik J. Furnivall and Percy Furnivall (London: Trubner, 1888), p.31.

Thomas Winston, Anatomy Lectures at Gresham Colledge (London, 1659), pp.245-6.

<sup>64</sup> Robert Fludd, Anatomiae Ampitheatrum Effigie Triplici, illust. Johannis Theodori de Bry (Frankfurt, 1623), p.168; on Fludd's general mysticism see Thorndike, VII, p.435, p.439.

<sup>65</sup> On Fludd's anatomical activities see Annals of the College of Physicians of London, trans. by J. Emberry, S. Heathcote, M. Hellings, 5 vols, in Wellcome library, RCP, London, III, i, p.188, 30 October 1624.

<sup>66</sup> D.P. Walker, 'The Astral Body in Renaissance Medicine', in Journal of the Warburg and Courtauld Institutes, 21 (1958), 119-134, p.130 [citing De Generatione Animalium (London, 1651)], italics mine.

<sup>67</sup> William Harvey, Anatomical Excertations, Concerning the Generation of Living Creatures (London, 1653), p.447.

<sup>68</sup> Kenny, p.9, 15 April 1630, italics mine.

<sup>69</sup> Lazare Meysonnier (1602-72) was a medical doctor, astrologer, and a professor at Lyons.

On the question of the *conarion's* appropriate singularity, see also, 'The Passions of the Soul' Cottingham *et al*, I, pp.340-41; and pp.340-42, on the pineal generally.

<sup>70</sup> Cf. Galen, in Thorndike, I, p.151.

<sup>71</sup> See also, notably, a letter to Mersenne of November or December 1633: 'I am now dissecting the heads of various animals, so that I can explain what *imagination, memory, etc. consist in*. I have seen the book De Motu Cordis, which you previously spoke to me about' (Cottingham *et al*, III, p.40, italics mine).

<sup>72</sup> See John Cottingham, Descartes (Oxford: Blackwell, 1992), Chapter V, and especially p.108 on Descartes' subsequent notoriety among animal liberationists; all further references to this work are given as 'Cottingham, 1992' and page number.

<sup>73</sup> See also, 'Passions', Cottingham *et al*, I, p.340.

<sup>74</sup> See for example the references to 'tubules' (Treatise on Man, trans. by Thomas Steele Hall (Cambridge: Harvard University Press, 1972), pp.91-2). For anatomical depictions see my Chapter 1.3, Fig.12 esp.

<sup>75</sup> For Descartes' diagrams see Treatise on Man, pp.91-92 esp.

<sup>76</sup> Kenny, pp.63-64, to Mersenne, 20 February 1639.

<sup>77</sup> Descartes is indeed at pains to deny the allegations, of one Buitendijck, that he has said motion to be the soul of brutes (Cottingham *et al*, III, p.62).

<sup>78</sup> Kenny, p.75, to Mersenne, 30 July 1640, italics mine. Descartes is answering, through Mersenne, the objection of one Christopher Villiers, 'a [medical?] doctor of Sens, 1595-1661', that the pineal is unsuitable because of its liability to qualitative change (Kenny, p.75).

<sup>79</sup> Cf. Descartes' 'dual-memory' system: '...in addition to the bodily memory whose impressions can be explained by these folds in the brain, I believe that there is also in our intellect another sort of memory, which is altogether

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*spiritual*, and is not found in animals.' (Kenny, p.76, letter to Regius, May 1641).

<sup>80</sup> See the third and fourth Meditations, where Descartes, having first promised to 'regard all such images [of bodily things] as vacuous, false and worthless', at last decides: '...from the mere fact that there is such an idea [of a Being infinite, immutable, omnipotent, etc.] within me, or that I who possess this idea exist, I clearly infer that God also exists...' (Cottingham *et al*, II, p.24, p.37).

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### Notes to Chapter Three

<sup>1</sup> I have referred to the recent Clarendon Press edition of the Anatomy, which uses the 1632 edition as copy text, and incorporates material added to later editions up to and including 1651 (see: The Anatomy of Melancholy, I, liv).

<sup>2</sup> It is thought that manuscript copies circulated in Holland, Poland, Transylvania and Hungary after 1553 - not reaching Britain, however, until the eighteenth century; see A. Gordon Kinder, Michael Servetus, Bibliotheca Dissidentium, ed. by Andre Segueny, Book X (Baden-Baden: Editions Valentin Koerner, 1989), p.12.

<sup>3</sup> Marian Hillar, The Case of Michael Servetus (1511-1553): The Turning Point in the Struggle for Freedom of Conscience Texts and Studies in Religion, Vol 74 (Lewiston, Queenston and Lampeter: Edwin Mellen Press, 1997), p.226, citing Jean Guinther, Institutiones Anatomicae (Basle, 1539).

<sup>4</sup> John F. Fulton, Michael Servetus: Humanist and Martyr (New York: Herbert Reichner, 1953), Ch. 2; Kinder, p.12; all further references to Fulton are to this work and edition, and given by author and title.

<sup>5</sup> Thomas Geminus, Compendiosa Totius Anatome Delineatio (London, 1545) (this contained 40 Vesalian plates).

<sup>6</sup> See especially Lorenz Fries, Spiegel der Artzney (Strasburg, 1518), and Berengario da Carpi, Commentaria... super Anatomia Mundini (Bologna, 1521).

<sup>7</sup> Michael Servetus: a Translation of his Geographical, Medical, and Astrological Writings, Charles Donald O'Malley (Philadelphia: American Philosophical society, 1953), p. 202; all quotations from Servetus are from this work and edition unless otherwise stated, and given hereafter by 'Servetus' and page number.

<sup>8</sup> Servetus cites 'Genesis 9, Leviticus 7, Deuteronomy 12' (p.204), which appear to refer to, respectively: Genesis 9.4: 'But flesh with the life thereof, which is the blood thereof, shall ye not eat'; Leviticus 7.26: '...ye shall eat no manner of blood...'; Deuteronomy 12.23: 'Only be sure that thou eat not the blood: for the blood is the life; and thou mayest not eat the life with the flesh' (Holy Bible (London: Eyre & Spottiswoode, 1878)).

<sup>9</sup> Alexander Aphrodisaeus, De Mixtione, trans. and ed. by Robert B. Todd (Leiden: E.J. Brill, 1976), p.92.

<sup>10</sup> A Melanchthon Reader, ed. by Ralph Keen (New York, Bern, Frankfurt am Main, Paris: Peter Lang, 1988), p.288.

<sup>11</sup> On Stoic pantheism see especially Aphrodisaeus, p. 139, citing Scripta minora, ed. by I. Bruns, 2 vols (Berlin: Reimer, 1887-1892), 224.32: 'God is mixed with matter and pervades the whole of it'; cf. also, *ibid.*, p.143 (Bruns, 226.24).

<sup>12</sup> Servetus, Christianismi Restitutio (1790), p.125, quoted in D.P. Walker, 'Medical Spirits in Philosophy and Theology from Ficino to Newton', in Music, Spirit and Language in the Renaissance, ed. by Penelope Gouk (London: Variorum Reprints, 1985), Study X, p.292.

<sup>13</sup> Michael Lapidge, 'Stoic Cosmology' in The Stoics, ed. by John M. Rist (Berkeley, Los Angeles, London: University of California Press, 1978), 161-185, p.163; see also Aphrodisaeus, p.143, citing 226. 16.

<sup>14</sup> See D.P. Walker, 'The Astral Body in Renaissance Medicine', in Journal of Warburg and Courtauld Institutes, 21 (1958), 119-133.

<sup>15</sup> Jerome Friedman, Michael Servetus: A Case Study in Total Heresy (Geneva: Librairie Droz, 1978), p.65; see also Servetus, Dialogues on the Trinity (1532), in Harvard Theological Studies, XVI, trans. by Earl Morse Wilbur, ed. by

James H. Ropes and Kirsopp Lake (London: Oxford University Press, 1932), p.187: 'Christians lack true knowledge of Christ, thinking him altogether different from man... In Christ the Substance of God also shared the Substance of flesh in the incarnation, making one being; thus he really came down from heaven'.

<sup>16</sup> See also Calvin's interrogation of Servetus in Benjamin Hodges, An Impartial History of Michael Servetus, Burnt Alive at Geneva for Heresy (London, 1724), p.153.

<sup>17</sup> See for example, Robert B. Todd, 'Monism and Immanence', in Rist, 1978, 137-160, p.157.

<sup>18</sup> 'De Anima', trans. by J.A. Smith, The Works of Aristotle, ed. by W.D. Ross, 12 vols (Oxford: Clarendon Press, 1912) V, 410b, 1.28.

<sup>19</sup> See Ann R. Jones, 'Inside the Outsider: Nashe's Unfortunate Traveller and Bakhtin's Polyphonic Novel', in English Literary History, 50 (1983), 61-81, p.64.

<sup>20</sup> See, for example, the (literally) 'frozen words', and Panurge's grotesque materialising of 'cheap maidenheads' (The Histories of Gargantua and Pantagruel, trans. by J.M. Cohen (Harmondsworth: Penguin, 1955; repr. 1983), pp.566-569, p.219).

<sup>21</sup> Hodges, p.43; cf. also, John Hoskins' positive definition of 'hyperbole', above (John Hoskins, Directions for Speech and Style, (1599), ed. by H.H. Hudson (Princeton: Princeton University Press, 1935), p.29).

<sup>22</sup> Cf. Cassirer on the idea that, in its early, Plotinian stage, neoplatonism represented an (unsuccessful) attempt to unite the abstractions of platonism with the comparatively worldly cosmos of Aristotle (Ernst Cassirer, The Individual and the Cosmos in Renaissance Philosophy, trans. by Mario Domandi (Oxford: Basil Blackwell, 1963), p.16.

<sup>23</sup> M.M. Bakhtin, Rabelais and His World, trans. by Hélène Iswolsky (Camb., Mass.: M.I.T. Press, 1968), p.457.

<sup>24</sup> See also Vivian Nutton, 'The Rise of Medical Humanism: Ferrara, 1464-1555', in Renaissance Studies, 11 (1997), 2-20, p.2, on the prolonged importance of medical humanism into the sixteenth century.

<sup>25</sup> See Jonathan Sawday, The Body Emblazoned: Dissection and the Human Body in Renaissance Culture (London and New York: Routledge, 1995), p.23.

<sup>26</sup> See Peter Mack, Encyclopaedia of Philosophy, ed. by Edward Craig, 10 vols (London: Routledge, 1998), VI, pp.288-92, esp. pp.288-89.

<sup>27</sup> Sermons, VII, pp.207-08 (21 June, 1626, St Pauls); IV, p.315 (Candlemas Day). See also Sermons, III, p.94 (Lincolns Inn, n.d.); III, p.118 (Lincolns Inn, n.d.); VII, 131 (18 April 1626, Whitehall); VII, pp.206-7.

<sup>28</sup> On astronomy see: Robert S. Westman, 'The Melanchthon Circle, Rheticus, and the Wittenberg Interpretation of Copernican Philosophy', ISIS, 66 (1975), 165-93; Charlotte Methuen, 'The Role of the Heavens in the Thought of Philip Melanchthon', JHI, 57 (1996), 385-403.

Noted as an early example of careful (and relatively 'scientific') standardisation in its illustrations, Fuchs' work appeared just a year before Vesalius' De Fabrica, and was even more monumental (as a folio of almost 900 pages) than its anatomical peer (see William M. Ivins, Prints and Visual Communication (1953; repr. Camb., Mass., and London: M.I.T. Press, 1978), p.44, especially on prominence of woodcutter and artist).

<sup>29</sup> See Roger French, Dissection and Vivisection in the European Renaissance (Aldershot: Ashgate, 1999), p.217.

<sup>30</sup> Andreas Vesalius' First Public Anatomy at Bologna - an eyewitness account by Baldasar Heseler, together with his

notes on Matthaeus Curtius' Lectures on Anatomia Mundini, ed. and trans. by Ruben Eriksson (Lychnos Bibliotek, 18, Almqvist & Wiksells, 1959); K.B. Roberts and J.D.W. Tomlinson, The Fabric of the Body: European Traditions of Anatomical Illustration (Oxford: Clarendon Press, 1992), p.130; all further references to these works are to the above editions, and given hereafter as 'Eriksson' and dem. and page numbers; and 'Roberts and Tomlinson' and plate or page numbers.

<sup>31</sup> Sachiko Kusukawa, The Transformation of Natural Philosophy: The case of Philip Melanchthon (Cambridge: Cambridge University Press, 1995), p.101; Sachiko Kusukawa, A Wittenberg University Library Catalogue of 1536 (Cambridge: LP Publications, 1995), Hippocrates: 85, 86a, 446b, 801, 803, 816b, 827e, 836e, 839, 875; Galen: 61, 80-84, 790-793a, 794-799; Dryander, Anatomia Capitis Humani (Marburg, 1536), 827b; Guinther, Anathomia Jo: Guinterii And: secundum, 814c (numbers refer to catalogue entries).

All further references to the catalogue are given as 'Wittenberg Library' and entry number.

<sup>32</sup> Kusukawa, p.101; Leonhard Fuchs, Epidemiorum liber sextus (Basle, 1537).

<sup>33</sup> 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. by Dorothy M. Schullian (1945), (Los Angeles: Ward Ritchie Press, 1949); Kusukawa, p.114. All further references to Melanchthon's poem are given hereafter as 'Schullian' and line number.

<sup>34</sup> '...the booklet of Alexander Benedictus [(c.1455-1525), Anatomice Sive Historia Corporis Humani... (Paris, 1514)] is very slender and childish...' (Melanchthon, letter to Leonhard Fuchs, 30 April 1534, Philip Melanchthon, Corpus reformatorum..., ed. by C.B. Breitschneider and H.E. Bindseil,

28 vols (Halle, 1834-52, Brunswick, 1853-60) II, p.718), cited in Kusukawa, p.84; see Charles Singer, The Evolution of Anatomy (London: Kegan, Trench, Trubner, 1925), p.104, for vindication of Melanchthon's opinion.

All further references to Corpus reformatorum... as 'CR'.

<sup>35</sup> 'Videbam enim Vesalii de fabrica humani corporis libros esse prolixiores, & exquisitiores, quam ut ab omnibus intelligi...' (De Humani Corporis Fabrica Epitomes pars prima (Lugduni, 1551), pp.7-8; the further books of 'pars altera' are 'De instrumentis nutritioni famulantibus', 'De Instrumentis propagandae speciei servientibus', and on the heart, and brain.

<sup>36</sup> On the work's pedagogical role, see Walker, 1985, p.289.

<sup>37</sup> The 1540 edition, 247 folios of around 100 words each, is roughly 25,000 words; the 1552 edition, 169 folios of around 200 words each, nearer 34,000; for Melanchthon's Vesalian stance on the rete see De Anima Liber Unus (Wittenberg, 1553), 65v.

<sup>38</sup> Kusukawa, p.84; see also, *ibid.*, ' "The work of Vesalius was not yet published when I was collecting those elements from Galen and Carpi. And the teaching of Carpi is more confused"', p.115, citing, Letter to Johann Stigelius, CR, VII, p.1015.

<sup>39</sup> On the book's wide and prolonged influence (fifteen printings between 1540 and 1560) see Kusukawa, p.83; see also, *ibid.*, p.1, on the 'companion volume' Initia Doctrinae Physicae (Wittenberg, 1549).

<sup>40</sup> Kusukawa, p.42, 'Address to the Christian Nobility of Germany' (1520), trans. by C.M. Jacobs, revised by J. Atkinson, in Luther's Works (English trans.), ed. by J. Pelikan & H.T. Lohmann (St. Louis, 1955-76), XLIV, p.200f (hereafter all references to the Works are given as 'LW', and volume and page number, plus Kusukawa's page number); *ibid.*,

p.40, Letter of Luther to Spalatin, 13 March 1519, trans. by G.G. Krodel, LW, XLVIII, pp.111-15; *ibid.*, p.40, Letter of Melanchthon to Spalatin, 13 March 1519.

<sup>41</sup> See, notably, Novum Organon, in The Works of Francis Bacon, ed. by James Spedding, Robert Leslie Ellis, Douglas Denon Heath, 14 vols (London: 1858), IV, pp.92-3: 'reasoners resemble spiders, who make cobwebs out of their own substance'.

<sup>42</sup> Kusukawa, p.83, Letter to Leonhard Fuchs, 30 April 1534, in CR, II, pp.718ff.

<sup>43</sup> Kusukawa, p.150 (CR, XIII, p.189); *ibid.*, p.139 (CR, III, p.114); *ibid.*, pp.115-19 ('De Anima' (1553), CR, XIII, p.57).

<sup>44</sup> Kusukawa, p.4; see also Melanchthon's 'Oration in praise of anatomy' (1550) (CR, XI, pp.945ff).

<sup>45</sup> Kusukawa, p.52; *ibid.*, p.52, citing Melanchthon's letter to Elector, 27 Dec. 1521, Melanchthon's Briefwechsel (Stuttgart, 1977-[in progress]) no.192, T-I, pp.416ff.

<sup>46</sup> Walker, 1985, p.290, citing De Anima Liber Unus (Lugduni, 1555), p.111.

<sup>47</sup> George Benson, A Brief Account of Calvin's Burning Servetus for an Heretic (London, 1743), p.9, citing Melanchthon, Epist. Lib. I, Ep. III; see also, *ibid.*, p.8.

<sup>48</sup> Walker, 1985, p.291 (italics mine), citing De Anima Liber Unus (Lugduni, 1555), p.94.

<sup>49</sup> Walker, 1985, p.291, citing Michael Servetus, Christianismi Restitutio... (1553; reprint of 1790), p.671.

<sup>50</sup> On 'sensuous particularity' see Rosemond Tuve, Elizabethan and Metaphysical Imagery, (Chicago: University of Chicago Press, 1947), p.77.

Melanchthon quoted from Keen, p.254.

<sup>51</sup> Psalm 42.1: 'As the hart panteth after the water-brooks, so panteth my soul after thee, O God'.

<sup>52</sup> See, notably, Philosophical Letters, trans. by Anthony Kenny (Oxford: Basil Blackwell, 1981), pp.63-4, letter of Descartes to Mersenne, 20 Feb. 1639; 'Description of the Human Body', in The Philosophical Writings of Descartes, trans. by John Cottingham, Robert Stoothoff, Dugald Murdoch, 3 vols (Cambridge and London: Cambridge University Press, 1985), I, p.315.

<sup>53</sup> Thomas Dekker, 'Newes from Hell', in The Non-Dramatic Works of Thomas Dekker, ed. by A.B. Grosart, 5 vols (London, 1894), II, pp.135-6; cf. also If This Be Not a Good Play..., I, iii, 57-60 (The Dramatic Works of Thomas Dekker, ed. by Fredson Bowers, 4 vols (Cambridge: Cambridge University Press, 1955), III).

<sup>54</sup> John Webster, The Duchess of Malfi (1612), in The Complete Works of John Webster, ed. by F.L. Lucas, 4 vols (London: Chatto & Windus, 1927), II (II, i 27-31).

<sup>55</sup> For a description rivalling the 'hedgehog', see The White Devil, in Works, I: 'He lookes like the claw of a blacke-bird, first salted and then broyled in a candle' (III, i, 78-79).

<sup>56</sup> The play is dated around 1595 (The Riverside Shakespeare, ed. by G. Blakemore Evans et al (Boston & New York: Houghton Mifflin Company, 1997), p.1101).

<sup>57</sup> King Lear was entered on the Stationers' Register 26 November 1607 (Arber, III, 161v); The Riverside Shakespeare gives 1604/5 as a probable date of composition (pp.1297-98); Harvey is quoted from Lectures on the Whole of Anatomy, trans. by C.D. O'Malley, F.N.L. Poynter, and K.F. Russell (Berkeley and Los Angeles: University of California Press, 1961), p.175; Harvey could have been lecturing on this notion from as early as 1616; cf. also, the brain, 'very soft in children, in whom the reason is imperfect...' (ibid., p.217).

<sup>58</sup> The quarto variant, 'this hardnes' instead of 'these hard hearts' does not conspicuously alter my argument. 'Hardnes', again, wavers between the figurative ('flinty', 'stony') and the physiological (coronary sclerosis); the most important phrase, moreover, remains 'cause in nature' (King Lear, ed. by Horace Howard Furness, The Variorum Shakespeare, 11<sup>th</sup> ed. (Philadelphia: J.B. Lipincott, 1908), p.213).

<sup>59</sup> Volpone, in The Complete Works of Ben Jonson, ed. by C.H. Herford and Percy and Evelyn Simpson, 11 vols (Oxford: Clarendon Press, 1925-52), II, ii, 153-54.

<sup>60</sup> Thomas Nashe, 'The Unfortunate Traveller', in The Works of Thomas Nashe, ed. by Ronald B. McKerrow, 5 vols (A.H. Bullen, 1904; repr. London: Sidgwick and Jackson, 1910), II, p.231.

<sup>61</sup> Michel Foucault, Discipline and Punish, trans. by Alan Sheridan (London: Penguin, 1977), pp.3-10 esp.

<sup>62</sup> Theodor Adorno's identification of this mode of behaviour with the nadir of Nazi 'experimentation' on humans appears to capture the spirit of this; (quoted in Timothy J. Reiss, The Discourse of Modernism (Ithaca and London: Cornell University Press, 1982), p.377).

More recently, Stephen Hawking's protest against the (implied) hypocrisy of carnivores - 'I think the fuss over the use of animals in medical research is ridiculous. Why is it worse to use animal experiments to save lives than to eat them, which the majority of the population are happy to do?' ("Hawking Defends Animal Testing", Steve Connor, The Independent, 7 September 1998, p.1) - points to a continued feeling that there is something worse in a calculating, 'scientific' cruelty than in other varieties.

<sup>63</sup> Michel Foucault, The Order of Things: An Archaeology of the Human Sciences, trans. anon. (London: Tavistock Press, 1970), p.55, p.40.

<sup>64</sup> The Anatomie of Absurditie, I, p.25; see also Pierce Penillesse, I, p.194.

<sup>65</sup> Charles Nicholl, A Cup of News: The Life of Thomas Nashe (London: Routledge and Kegan Paul, 1984), p.37.

<sup>66</sup> For the former view see G.R. Hibbard, Thomas Nashe: A Critical Introduction (London: Routledge and Kegan Paul, 1962), p.12; for the latter, McKerrow in The Complete Works of Thomas Nashe, IV, p.3.

<sup>67</sup> Robert Greene, Mamillia... anatomie of lovers' flatteries [London, 1583?]; Arbasto, the Anatomie of Fortune (London, 1584); Planetomachia [with] A marvelous anatomie of Saturnistes (1585); A notable discovery of coosenage... Plainely laying open those pernicious sleights... (London, 1591); The blacke bookes messenger. Laying open the life and death of Ned Browne... (London, 1592).

<sup>68</sup> See: 'Certain Sonnets', no.22, and 'Astrophil and Stella', in The Poems of Sir Philip Sidney, ed. by William A. Ringler, Jr. (Oxford: Clarendon Press, 1962), p.150; p.194, ll.9-10. An Apology for Poetry, ed. by Geoffrey Shepherd (London: Thomas Nelson, 1965), p.97, p.101 ('a more ordinary opening'), p.104, p.120, p.133 ('poetical sinews').

<sup>69</sup> Although the word appears in Spenser's The Shepheardes Calendar in 1581, it is arguably fair to see Nashe's usage as the first vernacular instance. In the 1579 edition, the word had appeared in Ancient Greek, and appears to have been rendered in English only in accordance with a general translation of all Greek words (see Edmund Spenser, The Shepheardes Calendar (London, 1579), sig.4v; Edmund Spenser, The Shepheardes Calendar (London, 1581), sig.4v).

<sup>70</sup> Preface to Greene's Arcadia 'To the Gentlemen Students', III, p.318.

<sup>71</sup> 'Foure Letters', in The Workes of Gabriel Harvey ed. by A.B. Grosart (1884) (repr. New York: AMS Press, 1966), 3 vols, I; Nashe, Strange News..., I, p.268, p.265.

<sup>72</sup> See also Pierce Penilesse, I, p.243, l.19.

<sup>73</sup> The anatomised fly appears in Strange News..., 'The Epistle to the Reader', I, p.260.

<sup>74</sup> See also John More, Preacher, A Lively Anatomie of Death (London, 1596); and Isaac Causaubon, [doubtful or suppositious works], The Originall of Idolatries... with the true source and lively anatomy of the sacrifice of the masse (London, 1624).

<sup>75</sup> Cf. too the snake-devoured, arguably visual and tactile brain in Christ's Teares over Jersuaem, II, p.140.

<sup>76</sup> Cf. Neil Rhodes, Elizabethan Grotesque (London: Routledge and Kegan Paul, 1980), p.35: 'The mind is seen as a purely physical object'.

<sup>77</sup> On its vices see Wilton's English companion, The Unfortunate Traveller, II, p.301.

<sup>78</sup> On the Martinist controversy see Nicholl, Chapter 6, p.68 esp.; and Rhodes, Chapter 3, esp. pp.37-39, and Chapter 5, esp. pp.66-67.

<sup>79</sup> Appius and Virginia is dated by Lucas as 1625-27 (III, p.130), and The Duchess of Malfi as shortly after 1613-14 (II, p.4).

<sup>80</sup> Approximate figures are 560 for Edward VI's reign, 280 for Mary's, 140 for Elizabeth's, and 140 for James' (Sawday, p.56).

<sup>81</sup> Timothy J. Reiss, The Discourse of Modernism (Ithaca and London: Cornell University Press, 1982), p.382.

<sup>82</sup> John Stowe, The Annals of England (London, 1594), p.1261, cited in Sawday, pp.60-61; see also Sidney Young, The Annals of the Barber-Surgeons of London, 2 vols (London: Blades, East and Blades, 1890), II, p.321: 'This body would be what

is often referred to in the Books as a "private anatomy", in opposition to the four "public" bodies of felons...'; all further references to the Barber-Surgeon's Annals are given hereafter as 'Barber-Surgeons' and volume and page number.

<sup>83</sup> Sawday, p.61; see also Charles Nicholl's early date of composition (summer 1587) for The Anatomie of Abuses (Nicholl, p.283).

<sup>84</sup> See Strange News..., I, p.318, where Nashe paraphrases Holinshed (Chronicles (London, 1586), p.1357); the entry is just 8 pages on from that recording the institution of the Lumleian Lectures (p.1349).

<sup>85</sup> The Works of Thomas Nashe, V, p.128.

<sup>86</sup> 'Foure Letters', in The Workes of Gabriel Harvey I, p.218; see also Rhodes, pp. 26-36, for convincing evidence, both direct and indirect, of Aretino's influence on Nashe.

<sup>87</sup> Mikhail Bakhtin, The Dialogic Imagination, ed. by Michael Holquist, trans. by Caryl Emerson and Michael Holquist, (Austin: University of Texas Press, 1981), p.23, italics mine.

<sup>88</sup> Cf., for example, Bakhtin on Gargantua's 'invention of an arsewipe' (Rabelais and His World, citing Rabelais, p.66).

<sup>89</sup> For Rabelaisian defecation see also p.349; for sexual instances see pp.218-19, pp.219-21; p.122; see also Rabelais and His World, p.335 on the curative properties of Pantagrue's urine.

<sup>90</sup> See also Rabelais, p.497, where the cartload bulks as large as five hundred thousand million.

<sup>91</sup> Cf. Rhodes, p.30, on Nashe's 'ridiculous specificity.'

<sup>92</sup> Cf. also the 'great levelling' of the sweating sickness (The Unfortunate Traveller, II, pp.228-231), and the source materials of Zacharie's magical potions, 'His snot and spittle...' (The Unfortunate Traveller, II, p.306).

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<sup>93</sup> On a similar artistic device, in the clothing of a figure on the title page of Vesalius' De Fabrica, see Luke Wilson, 'William Harvey's Prelectiones: The Performance of the Body in the Renaissance Theatre of Anatomy', Representations, 17 (1987), 62-95, p.71.

<sup>94</sup> See Harvey, in O'Malley *et al*, p.40, p.104, p.106, p.219.

<sup>95</sup> The Unfortunate Traveller, II, p.265; see also Strange News..., I, p.285, and Pierce Penilesse, I, p.242.

<sup>96</sup> Cf. Gabriel Harvey, who derides Nashe for having 'the fantastical mould of Aretine' (Strange News..., I, p.218); for further praise of Aretine by Nashe see Strange News..., I, pp.259-60.

<sup>97</sup> In addition to Bakhtin see Ann R. Jones, p.78.

<sup>98</sup> Erwin Panofsky, Perspective as Symbolic Form, (1924-5), trans. by Christopher S. Wood (New York: Zone Books, 1991), p.71.

<sup>99</sup> The Unfortunate Traveller, II, p.310; Strange News..., I, p.293; Pierce Penilesse, I, p.240; The Unfortunate Traveller, II, p.241.

<sup>100</sup> Cf. Jonathan V. Crewe: '...in this extreme case [of Nashe's prose], style becomes not merely the antithesis of content, but that which fully discloses itself in the absence of content (Unredeemed Rhetoric: Nashe and the Scandal of Authorship (Baltimore and London: Johns Hopkins University Press, 1982), p.13).

<sup>101</sup> See D.P. Walker, 1985, p.288.

<sup>102</sup> See S. Sambursky: '...difference between soul and organic life [was] merely the result of the variations in the composition of the *pneuma*' (S. Sambursky, The Physical World of the Greeks, trans. by Merton Dagut (London: Routledge and Kegan Paul, 1956), p.134).

<sup>103</sup> On the arguable 'off-guardedness' of Christ's Teares in its entirety see Charles Nicholl's theory of the work reflecting a form of nervous breakdown (Nicholl, p.169).

<sup>104</sup> Cf. Devotions upon Emergent Occasions, ed. by Anthony Raspa (Montreal and London: McGill-Queen's University Press, 1975), p.80: 'since the whole sicknesse is thy *Physicke*, shall any accident in it, bee my Poison, by my own murmuring?'

<sup>105</sup> Paraphrase of Foucault, p.55.

<sup>106</sup> Cited in: Alberto Manguel, A History of Reading (London: Harper Collins, 1996), p.137.

<sup>107</sup> Anatomy, I, pp.195-99, p.204; III, p.277; I, p.202; I, p.195; II, p.34; I, pp.194-95; cf., also, the case of 'one that waked... two yeares' (Anatomy, I, p.383).

<sup>108</sup> Cf. Anatomy, III, p.297: 'Of all passions, as I have already proved, Love is most violent'.

<sup>109</sup> Cf. J.B. Bamborough: 'Recent critics have suggested that the citing of different opinions and contradictory theories is a deliberate attempt to undermine the reader's confidence and to reduce him to a bemused agreement with the view explicit in "Democritus to the Reader" that the world is mad' (Anatomy, I, xxv).

<sup>110</sup> Ruth A. Fox, The Tangled Chain: The Structure of Disorder in the Anatomy of Melancholy (London: University of California Press, 1976), pp.6-7.

<sup>111</sup> J.B. Bamborough, 'Introduction', Anatomy, I, xxi.

<sup>112</sup> Laurentius' work was, indeed, one of the two chief sources for Crooke's Microcosmographia (see Chapter 2.3).

<sup>113</sup> '...the *Rete Mirabile* ...in a man is so small that a good eye can scarcely discern it. I like rather, sayth my author [Laurentius] to call the *Plexus Choroides* (which is manifest and obvious to every eye in the upper ventricles of the braine) *Rete mirabile*... as also some of the new writers have

done: for in it the vitall spirit is attenuated and the Animall getteth a certaine rudiment' (Helkiah Crooke, Microcosmographia (London, 1615), p.529.

<sup>114</sup> On October 30 1624, it was recorded in the College annals that junior members were reluctant to volunteer as anatomists for the proposed new 'Goulstonian' lecture; Fludd and certain others, however, 'were not going to be stubborn' (Annals of the College of Physicians of London, trans. by J. Emberry, S. Heathcote, M. Hellings, 5 vols, in Wellcome library, RCP, London, III, i, p.188. Being senior enough to take on this task, Fludd must then have been fairly well practised in anatomy in previous months, if not years.

See also Anatomy, II, p.220, where Fludd is grouped with Bodin, Paracelsus, Ficino and Croll, among others, as a supporter of magical cures.

<sup>115</sup> Preface to Greene's Arcadia 'To the Gentlemen Students', III, p.318.

<sup>116</sup> Quotation from title-page, appearing in both 1611 and 1613.

<sup>117</sup> Cf. Harvey's Lectures on the Whole of Anatomy, O'Malley et al, p.22: 'Anatomy [is] philosophical, medical, mechanical'.

<sup>118</sup> These totals include verbal forms of 'anatomy' or 'dissection', but exclude Burton's own title.

Although Bamborough does cite Devon L. Hodges' book, Renaissance Fictions of Anatomy, Hodges himself shows awareness of only a few of the titles printed between 1576 and 1650 (Devon L. Hodges, Renaissance Fictions of Anatomy (Amherst: University of Massachusetts Press, 1985)).

<sup>119</sup> Antonius Zara, Bp., Anatomia Ingeniorum et Scientia (Venice, 1615). T.J. Arthur notes that in fact Zara's work has only sections and members, not - as Burton states - subsections (see T.J. Arthur, 'Anatomies and the Anatomy

Metaphor in Renaissance England' (University of Wisconsin-Madison, PhD. diss., 1978), p.298).

Burton also owned a copy of Harington's An Anatomie of the Metamorphosed Ajax (1596) (Nicolas K. Kiessling, The Library of Robert Burton (Oxford: Oxford Bibliographical Society, 1988), no. 750).

<sup>120</sup> See Harvey in O'Malley et al, p.22, p.35.

<sup>121</sup> Anatomy, I, p.162, p.169, p.110, p.112, p.113, p.115.

<sup>122</sup> See Macbeth, V, viii, 16: 'Macduffe was from his Mothers wombe Untimely ript'; Donne: 'When I had ripp'd me, and search'd where Hearts did lye' ('The Legacy', Poems, p.64); and Stowe, on a horse 'which died suddenly, and ...[was] ripped, to see the cause of his death' (Annales, 17 March, 1586, p.719).

<sup>123</sup> Fig. 1: Anatomy, I, p.117.

<sup>124</sup> Walter J. Ong, Ramus, Method, and the Decay of Dialogue (Camb., Mass.,: Harvard University Press, 1958; repr. 1983), p.315.

<sup>125</sup> See: Shakespeare, Twelfth Night: 'For Andrew, if he were opened, and you find so much blood in his liver as will clog the foot of a flea...' (III, ii, 60-62); Pierre du Moulin the elder, The Anatomie of Arminianisme... the opening of the controversies lately handled in the Low-Countreyes (London, 1620). The Annals of the College of Physicians for 30 May 1632 record, also, the imminent 'opening' of one Mr. Lane, a suspected victim of poisoning (RCP, III, ii, p.341).

<sup>126</sup> The mirrour or miracle of Gods love unto the world of his elect... Wherein... the rich treasures of Gods grace in Christ are accurately opened... (London, 1619); A commentarie upon the first and second chapters of Saint Paul to the Colossians. Wherein, the text is cleerely opened... (London, 1634).

<sup>127</sup> For Ramus' original see: Dialecticae Instiutiones (Paris, 1543).

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<sup>128</sup> Image scanned from British Library copy, bound with 'A True... Petition'.

<sup>129</sup> This work has no single named author, but may have been collectively written; the 'Epistle Dedicatory' is signed by 'The Humble Petitioners, the Ministers and Preachers that desire reformation according to the Word of God'. The British Library catalogue describes Sprint's tables as an 'Appendix' to the larger work.

<sup>130</sup> Eriksson, p.285, 24<sup>th</sup> dem., debate between Curtius and Vesalius, italics mine.

<sup>131</sup> John G. Norman, 'Literature After Dissection in Early Modern England' (unpublished m.s.), p.2.

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### Notes to Chapter Four

<sup>1</sup> John Carey, John Donne: Life, Mind and Art (London: Faber and Faber, 1981), p.16.

See also Bald, p.37.

<sup>2</sup> Thomas Vicary, The Anatomie of the Bodie of Man (London, 1577). This was reissued again in 1586.

Baird D. Whitlock, 'John Syminges, A Poet's Step-Father', Notes and Queries, 199 (1954), pp.421-24 and 465-467; see also Whitlock's 'The Heredity and Childhood of John Donne', NQ, 204 (1959), pp.257-262 & 348-353.

<sup>3</sup> Gosse, II, p.30, 23 December [1613].

<sup>4</sup> Devotions Upon Emergent Occasions, ed. by Anthony Raspa (Montreal and London: McGill-Queen's University Press, 1975), p.35. The occasion of composition was Donne's illness of 1623; the work was entered on the Stationers' Register 9 January 1623/4, and published early in 1624 ('by 1 February' (Bald, p.451)).

<sup>5</sup> An Anatomy of the World, 55-60, in John Donne: The Anniversaries, ed. by Frank Manley (Baltimore: Johns Hopkins Press, 1963); all further references to the Anniversaries are given by title ('Anatomy', 'Progresse') and line numbers; cf., also, 'the Physicians Rule, that the best state of Mans body is but a *Neutrality*..' (Sermons, II, p.80, Lincolns Inn, n.d.), and Sermons, V, p.352, n.d.

<sup>6</sup> In 1593 Donne's brother, Henry, died of disease in Newgate Prison, following his arrest for harbouring a Catholic fugitive; by 1617, when Donne's wife, Ann, died, the couple had lost three of ten children, in addition to two further still-births; in 1627 Donne's daughter, Lucy, died, aged 18. The percentage of deaths for all children conceived in these cases is 50%; for those children under fifteen the figure is

41.6%. Thomas R. Forbes records that 'In Shakespeare's day, of every 100 babies born in St. Botolph's parish [in London] about 70 survived to their first birthday, 48 to their fifth, and 27-30 to their fifteenth' (Thomas R. Forbes, 'By what disease or casualty: the changing face of death in London', in Health, Medicine and Mortality in the Sixteenth Century, ed. by Charles Webster (Cambridge: Cambridge University Press, 1979), 117-139, p.139); Donne's situation compares relatively favourably with the St. Botolph's figures, but these of course include all social classes.

<sup>7</sup> Gosse, I, p.189, 'Probably to Sir Henry Goodyer', 10 August [1608?].

<sup>8</sup> Gosse, II, p.45, 'To the Honourable Knight Sir Robert Ker', [May 1614].

<sup>9</sup> Sermons, VIII, p.170, St. Pauls, 27 January 1627/8.

<sup>10</sup> Gosse attributes this letter to 'probably... 1603 or 1604' (Gosse, I, p.122).

<sup>11</sup> Sermons, II, no.2, preached at Lincolns Inn, n.d.: p.75, p.76, pp.76-7, p.77, p.79, p.80, p.80, p.80, p.81, p.82, p.83, p.84, p.85, p.88, p.89, pp.93-4, p.94.

<sup>12</sup> Essayes in Divinity, ed. by Evelyn M. Simpson (Oxford: Clarendon Press, 1952), pp.50-1. 'The exact date of their composition is uncertain, but from the address "'To the Reader"' prefixed by Donne's son to the edition of 1651 it has generally been deduced that they were written at the end of 1614 or the beginning of 1615' (Essayes, Intr., ix).

<sup>13</sup> Sermons, V, p.353, n.d.; in the second edition of Microcosmographia, in 1631, Helkiah Crooke numbers a total of 234 bones (pp.935-6); with the 24 additional 'seed-bones' of the hands, the final sum is 258 (p.995); it is worth adding that he recognises the seed-bones as being small and difficult to dissect (p.995), so that some margin of error in this area might account for Donne's slightly smaller tally.

<sup>14</sup> Second quotation: Sermons, III, p.238 & p.227, Whitehall, 8 April 1621.

On dating for first reference see Potter and Simpson: 'It is unlikely to have been earlier than 1618, and in 1619 Donne was with Doncaster's embassy on the Continent. It may therefore have been preached in 1618, 1620, or 1621' (Sermons, V, Intr., p.5); the place of preaching is not certain either, but Lincoln's Inn is given conjecturally by Potter and Simpson (*ibid.*).

<sup>15</sup> Gosse, I, p.231, 'To Sir H[enry] G[oodyer], [July 1609]. On the brain see Harvey: '...sutures act as breathing devices of the skull...' (Lectures on the Whole of Anatomy, O'Malley et al, p.210).

<sup>16</sup> Gosse, II, p.169, 'To Sir H[enry] G[oodyer?], 4 October 1622, 'almost at midnight'); cf. also, '...the ill affections of the spleene, complicate and mingle themselves with every infirmitie of the body...' (Devotions, p.29.)

<sup>17</sup> Donne of course owned, and had evidently read, one of Paracelsus' works (see Geoffrey Keynes, A Bibliography of Dr. John Donne, 4<sup>th</sup> ed. (Oxford: Clarendon Press, 1973), p.273. See also: Thomas Willard, 'Donne's Anatomy Lesson: Vesalian or Paracelsian?', John Donne Journal, 3 (1984), 35-61). Lynn Thorndike notes that 'Paracelsus had been prohibited or discouraged from printing many of his writings' (A History of Magic and Experimental Science, 8 vols (New York: Columbia University Press, 1934-58), V, p.629; Debus states that 'Although Paracelsian thought spread rapidly on the continent after 1550, it went almost without mention in England until the mid-1570s...' (Allen G. Debus, The English Paracelsians (London: Oldbourne, 1965), p.49).

See also: Leo Suavius (d. 1576), Compendium of Paracelsian Medicine and Philosophy (Paris, 1567); Petrus Severinus

(1542-1602), Idea of Philosophic Medicine According to Paracelsus, Hippocrates and Galen (Basle, 1571; repr. 1616). For literary references see also: George Gascoigne, The Posies, (London, 1575), ed. by John W. Cunliffe (London: Cambridge University Press, 1907), p.16, 'To the Readers'; and Webster, The Duchess of Malfi, V, ii, 26 (The Complete Works of John Webster, ed. by F.L. Lucas, 4 vols (London: Chatto & Windus, 1927), II; (Lucas dates the play 1613-14 (ibid., p.4)).

<sup>18</sup> Walter Pagel, Paracelsus: An Introduction to Philosophical Medicine in the Era of the Renaissance (New York and Basle: S. Karger, 1958), p.101.

See also Paracelsus himself: '...the spirit is in very truth the life and balsam of all corporeal things' (Paracelsus: Essential Readings, trans. by Nicholas Goodrick-Clarke ([n.p.], Crucible, 1990), p.179.

For an allusion to the (fraudulent) contemporary trade in mummy as a curative see also Mosca, in Volpone, to Corvino, of the moribund Corbaccio: 'Why, we'll think; Sell him for mummia: he's half dust already' (The Complete Works of Ben Jonson, ed. by C.H. Herford & Percy and Evelyn Simpson, 11 vols (Oxford: Clarendon Press, 1937), V, Volpone, IV, vi, 14.

<sup>19</sup> Gosse, I, p.178 'To Sir H[enry] G[oodyer], n.d.; Gosse thinks possibly 1607/8.

<sup>20</sup> Sermons, III, p.105, Lincolns Inn, [?Easter Term 1620].

<sup>21</sup> Donne did not begin preaching until the late Spring of 1615 (Bald, p.311).

<sup>22</sup> See Andreas Vesalius, De Humani Corporis Fabrica (Basle, 1543), Bk. I, plates 21 & 22.

Symbolic figurations of death had evidently been affected by the rise in anatomy from as early as 1550. See Philippe Ariés, The Hour of our Death, trans. by Helen Weaver (Alfred

A. Knopf, 1981; repr. New York and Oxford: Oxford University Press, 1991), p.367.

<sup>23</sup> The Illustrations from the Works of Andreas Vesalius, ed. by J.B. deC.M. Saunders and Charles D. O'Malley (New York: Dover Publications, 1950; repr. New York, 1973), pp.25-28. There is strong evidence that Donne at one point possessed a painting by Titian; although this was bequeathed to him only in 1628, such works had, by then, been available to collectors for some years (see W. Milgate, 'Dr. Donne's Art Gallery', NQ, 194 (1949), 318-19).

<sup>24</sup> Easter in 1620 fell on 16 April, so that the sermon must have been given some time after that date (Potter and Simpson, Sermons, III, pp.6-7); on the Lumleian see Annals of the College of Physicians of London, trans. by J. Emberry, S. Heathcote, M. Hellings, 5 vols, in Wellcome library, RCP, London, III, i, p.121; and Sir Simonds D'Ewes, Autobiography, 2 vols, ed. by J.O. Halliwell (London, 1845), I, p.230.

<sup>25</sup> Paradoxes and Problems, ed. by Helen Peters (Oxford: Clarendon Press, 1980), p.23, Problem I.

<sup>26</sup> 'Upon Mr. Thomas Coryats Crudities', ll.53-54, Poems, p.174.

<sup>27</sup> Christ's Teares over Jerusalem, in The Works of Thomas Nashe, ed. by Ronald B. McKerrow, 5 vols (A.H. Bullen, 1904; repr. London: Sidgwick and Jackson, 1910), II, p.73.

<sup>28</sup> Match me in London, III, ii, 143-4, in The Dramatic Works of Thomas Dekker, ed. by Fredson Bowers, 4 vols (Cambridge University Press, 1955); the play has been dated between 1611-12 (Mary Leland Hunt, Thomas Dekker: A Study (New York: Columbia University Press, 1911), p.160).

<sup>29</sup> See especially Arthur F. Marotti: 'Donne seems to have composed his first poetry at the Inns of Court between 1592 and 1596. Both the institution of which he was a part and his audience within it affected his choice of literary forms and

modes, the development of his style, and the subject matter of his verse...' (John Donne, Coterie Poet (Wisconsin: University of Wisconsin Press, 1986), p.25).

<sup>30</sup> John Lyly, Euphues, the Anatomie of Wit (London, 1578); Robert Greene, Arbasto, the Anatomie of Fortune (London, 1584); Robert Greene, A marvelous Anatomie of Lovers' Flatteries (1584); Thomas Nashe, The Anatomie of Absurditie (London, 1589).

<sup>31</sup> On the social position of Nashe see Charles Nicholl, A Cup of News: The Life of Thomas Nashe (London: Routledge and Kegan Paul, 1984), pp.44-46 esp.; for Greene see *ibid.*, pp.49-51, p.122.

<sup>32</sup> Berengario da Carpi, Commentaria... (Bologna, 1521), sig.80v; see also Juan de Valverde, Historia de la Composición del Cuerpo Humano (Rome, 1556), Bk. 3, Tab. 6, Fig. 30; and, *ibid.*, Bk. 2, Tab. 1.

That Donne's apparently non-technical word 'ripp'd' was relatively common in anatomical contexts is suggested by Stowe's account of a horse 'which died suddenly, and ...[was] ripped, to see the cause of his death' (Annales, 17 March, 1586, p.719).

<sup>33</sup> 'Certain Sonnets', no.22, in The Poems of Sir Philip Sidney, ed. by William A. Ringler, Jr. (Oxford: Clarendon Press, 1962), p.150.

For other direct and indirect anatomical illusions see An Apology for Poetry, ed. by Geoffrey Shepherd (London: Thomas Nelson, 1965), p.97, p.101 ('a more ordinary opening'), p.104, p.120, p.133 ('poetical sinews'). As Shepherd notes, the Apology, 'if read as an integral composition' must post-date Spenser's Shepherd's Calendar (see Apology, p.2, p.133) of 1579, and therefore also succeed Banister's anatomy textbook, and the literary anatomies of Rogers, Woolton, and

Lyly. Shepherd argues that it was probably written between 1581 and 1583 (*ibid.*, p.4).

<sup>34</sup> On dating see Ringler, in Poems, xlii.

<sup>35</sup> 'The Underwood', Works, VIII, p.38, ll.109-112.

<sup>36</sup> See Randle Cotgrave, whose definition of 'esprit' includes: 'life, courage, metall, stomacke, vivacitie, liveliness' (A Dictionarie of the French and English Tongues (London, 1611)).

<sup>37</sup> As Gascoigne was dead by 1577, the poem must at the very least predate both the Lumleian Lectures, and Banister's The Historie of Man... (1578).

<sup>38</sup> George Gascoigne, The Posies, p.37.

<sup>39</sup> 'A Holy Panegyric', sermon preached at Pauls Cross, 24 March 1613, in The Works of Joseph Hall, 12 vols (Oxford: Talboys, 1837), V, pp.87-88.

<sup>40</sup> Cf. 'opening' with Shakespeare, Twelfth Night: 'For Andrew, if he were opened, and you find so much blood in his liver as will clog the foot of a flea...' III, ii, 60-62 (The Riverside Shakespeare ed. by G. Blakemore Evans et al (Boston & New York: Houghton Mifflin Company, 1997)).

<sup>41</sup> William Harvey performed autopsies on his own sister and father, a fact which suggests that the procedure was not always limited solely to especially sudden deaths (O'Malley, et al, p.13); the Annals of the College of Physicians for May 30 1632 record, also, the imminent 'opening' of one Mr. Lane, a suspected victim of poisoning (RCP, III, ii, p.341). See also Sidney Young, The Annals of the Barber-Surgeons of London, 2 vols (London: Blades, East and Blades, 1890), II, p.331 (15 March, 1614)): 'This day it is ordered that Thomas Gillam shall... bring in his fine of v [pounds] for dissecting of an Anothomy out of this hall'.

As noted above, post-mortems now extended even to animals (Stowe, Annales, 17 March, 1586, p.719).

<sup>42</sup> Roger Schofield and E.A. Wrigley, 'Infant and Child Mortality in England in the late Tudor and early Stuart Period', (in Webster, 1979, p.95).

<sup>43</sup> On the 'ignorant rabble' present at such events see again Caspar Hofmann, 'Digressio, in circulationem sanguinis, nuper in Anglia natam', in J. Riolan, Opuscula Anatomica Varia et Nova (Paris, 1652), p.359; quoted and trans. by: William Schupbach, The Paradox of Rembrandt's "Anatomy of Dr. Tulp" (London: Wellcome Institute, 1982), p.26.

<sup>44</sup> W.H. [?William Haydone], The true picture and relation of Prince Henry... With the true relation of the sicknesse and death of the same most illustrious prince, with the opening of his body. Written by a famous doctor of physick in French, and newly translated into English (Leiden, 1634), pp.43-46. I have not been able to trace the original French account. Théodore Mayerne is thought to have been the royal physician sent by James I to Donne during the sickness commemorated in the Devotions (Bald, p.452).

<sup>45</sup> John Nichols, Progresses of King James I (London: Burt Franklin, 1828), 4 vols, IV, p.1037 (citing letter of William Neve to Sir Thomas Holland, 5 April 1625 [Harl. MSS. 683]).

<sup>46</sup> 'Characters: The Roaring Boy', in Works, IV, p.32; the 'Characters' first appeared in 1615, and were probably written 1614-15 (Lucas, *ibid.*, p.5).

<sup>47</sup> For the reputation of tobacco, see for example: R. West, Wits ABC, or a Centurie of Epigrams (London [1608]), No.73, 'Tobacco', sigsE2v-E3r.

<sup>48</sup> 'Euphues His England' (1580), The Complete Works of John Lyly, ed. by R.W. Bond, 2 vols (Oxford: Clarendon Press, 1942), II, p.7.

<sup>49</sup> Cf.: 'After such a scattering, no power, but of God onely can recollect those grains of dust, and recompact them into a

body, and re-inanimate them into a man' (Sermons, VII, p.114, St. Pauls, evening, Easter Day, 1626).

<sup>50</sup> See Cotgrave: 'Anatomie... an Anatomie, or carkasse cut up'.

<sup>51</sup> This sense is not explicitly glossed in the editions of Patrides, Shawcross, Carey, Smith or Grierson.

(John Donne - The Complete English Poems, ed. by A.J. Smith (Harmondsworth: Penguin, 1975); The Complete Poetry of John Donne, ed. by John T. Shawcross (New York: Doubleday, 1967); The Oxford Authors: John Donne, ed. by John Carey (Oxford: OUP, 1970); The Poems of John Donne, ed. by H.J.C. Grierson, 2 vols (Oxford: Clarendon Press, 1912); The Complete English Poems of John Donne, ed. by C.A. Patrides (London: Everyman, 1985).

<sup>52</sup> Cf. Donne: 'A Tortoyse, a Creature that had no heart, capable of no understanding' (Sermons, IX, p.386, penitential psalms, n.d.). See also Stephen Bateman, Batman Upon Bartholome, his booke De Proprietatibus Rerum (London, 1582), Bk. 3, Ch. 3, sig.C6v: 'the soule, abiding in the middle of the heart... giveth lyfe to all the bodie'; and Joseph Hall, 'The Great Impostor', Gray's Inn, 2 February 1623/4, in Works, V, pp.137-38.

<sup>53</sup> 'Obsequies to the Lord Harrington', Poems, p.257, ll.45-46; Metempsychosis, Poems, pp.178-79, ll.48-49; ibid., p.183-84, ll.208-9.).

<sup>54</sup> On the generally accepted belief in each sexual act as shortening one's life, see Shakespeare: 'The expense of spirit in a waste of shame/Is lust in action' (Shakespeare's Sonnets, ed. by Katherine Duncan-Jones (London: Thomas Nelson, 1997), p.373.

<sup>55</sup> Cf., for example, Harvey on how '...the spirited [are affected] by playfulness; do not know how to remain still', which follows: '...the nutritive spirits [arise] from the

ventricles of the brain. All things are moved by a spirit, both brain and heat...' (O'Malley, et al, p.224).

<sup>56</sup> 'Obsequies to the Lord Harrington', Poems, p.258, 63-66.

<sup>57</sup> See also Sermons, II, p.263, 16 June 1619.

<sup>58</sup> Cf. also: 'Transgressors... that put Gods Organ out of tune, that discompose, and teare the body of man with violence...' (Sermons, VI, p.266, St. Pauls, Easter Day 1625).

<sup>59</sup> The musical sense of 'Organ' is also supported by the question: '...what harshnesse is not a cleare Organ, if thou bee pleased to set thy voice to it?' (Devotions, p.88).

<sup>60</sup> For 'Organ' as meaning body see: 'Transgressors... that put Gods Organ out of tune, that discompose, and teare the body of man with violence...' (Sermons, VI, p.266, St. Pauls, Easter Day 1625).

<sup>61</sup> For the further poles of animistic and pantheistic belief in the Renaissance see, notably, Paracelsus (c.1493-1543): '...man's body receives the body of the world, as a son his father's blood, for these are one blood and one body, separated only by the soul...' (Goodrick-Clarke, p.85); and Robert Fludd (1574-1637): 'there is not an animall, vegetable, or minerall, but hath and receiveth immediately his curative action from this Spirit...' and that 'it is only God that operateth all and in all, and that *immediately*...' (Robert Fludd, Mosaicall Philosophy, trans. from Latin (London, 1659), p.20, italics mine).

<sup>62</sup> Sermons, III, p.372, St Pauls, Christmas day 1621, Sermons, IX, p.147, Christmas Day [?1629].

Cf. also, 'this *soul of the world* is the Holy Ghost' (Sermons, VIII, p.260, S. Pauls, Whitsunday 1628, italics mine); and: 'Th'Ayre doth not *motherly* sit on the earth', (An Anatomy of the World, (1.383), my italics).

<sup>63</sup> For a relatively clear explication see D.P. Walker, 'The Astral Body in Renaissance Medicine', Journal of Warburg and Courtauld Institutes, 21 (1958), 119-134, pp.120-121.

<sup>64</sup> See D.P. Walker, 'Medical Spirits in Philosophy and Theology from Ficino to Newton', in Music, Spirit and Language in the Renaissance, ed. by Penelope Gouk (London: Variorum Reprints, 1985), p.290, citing Philip Melanchthon, De Anima Liber Unus (Lugduni, 1555), p.111.

<sup>65</sup> Donne: Sermons, IX, p.177, a Lent sermon to the King, White-Hall, 12 February 1629, italics mine.

Hall: Sermon, 'The Great Impostor', Gray's Inn, 2 February 1623/4, in Works, V, p.137.

On spiritual vapour see Burton: 'to discern which [spirits] the better, they say that Vesalius the anatomist was wont to cut men up alive' (Anatomy of Melancholy I, p.142).

<sup>66</sup> See RCP, III, i, p.188, 30 October 1624.

<sup>67</sup> Sermons, III, pp.235-36, White-hall, 8 April 1621.

<sup>68</sup> Geoffrey Keynes, The Life of William Harvey (Oxford: Clarendon Press, 1966), pp.121-22.

<sup>69</sup> Thanks are again due to Dr. James Shaw, of Edinburgh Medical School, on this point.

<sup>70</sup> Sermons, VIII, p.117 (Potter and Simpson attribute this to November or December 1627).

<sup>71</sup> Fig. 1 from De Fabrica, Bk 4, Pl. 10; in Illustrations, Pl. 50: 'A naked delineation of the thirty pairs of nerves which take origin from the dorsal medulla contained in the backbone...' (Vesalius, *ibid.*)

<sup>72</sup> Cf. Melanchthon, as quoted in Chapter 3.1b: 'And the muscle is vibrated by the spirit that is moved in the nerves. The nerves are impelled by the brain, which expands or contracts them. The brain however is moved by perception. And there are no further causes to be sought' (A Melanchthon

Reader, trans. by Ralph Keen (New York, Bern, Frankfurt am Main, Paris: Peter Lang, 1988), p.254.

<sup>73</sup> Although 'pith' is recorded in botanical contexts from as early as c.888, the first recorded instance of its application to the human body is that of La Primaudaye in 1594 (OED: Fr Acad II, 357).

<sup>74</sup> Cf. Donne's wish, in his Elegy, 'The Bracelet', for 'Poyson' to 'rot thy moist braine' - allegedly a reference to the Renaissance belief in spinal fluid as a form of *pneuma* (Poems, p.110; idea paraphrasing David H.M. Woollam, 'Donne, Disease and the Doctors', Medical History, 5 (1961), 144-153, pp.150-151).

<sup>75</sup> The Poems of John Donne, II, xlvii.

<sup>76</sup> Cf.: 'Every thing hath in it, as Physitians use to call it, *Naturale Balsamum*, A *naturall Balsamum*, which, if any wound or hurt which that hath received, be kept clean from extrinsique putrefaction, will heale of it selfe' (Sermons, VI, p.116, Whitsunday, n.d.); Potter and Simpson also note the similarity to Paracelsus: 'The spirit is in very truth the life and balsam of all corporeal things' (Potter and Simpson, Sermons, VI, p.22 [Paracelsus, Opera Omnia (Geneva, 1658), II, p.91]).

Cf. also Sermons, X, pp.170-1, White-hall, n.d.; and Anatomy of the World, (11.12-13, 11.56-57).

<sup>77</sup> 'According to the view developed mainly by the Greek atomists, vision was effected... by "images"... continually thrown off objects as replicas of their shape and colour and passed through the air into the eye...' For Aristotle and the Stoics, however, 'vision was primarily an active process by which in the presence of external light the soul perceived objects by means of the eye... the soul effected vision by means of a specific "visual pneuma" sent from the brain along the optic nerve to the eye, where in the presence of light it

"stressed" the adjoining air and so contacted the objects in the visual field' (A.C. Crombie, Science, Optics and Music in Medieval and Early Modern Thought (London and Ronceverte: Hambledon Press, 1990), pp.177-78.

<sup>78</sup> Trans. by Robert Burton, in The Anatomy of Melancholy, III, p.89.

<sup>79</sup> Reginald Hyatte, 'The "Visual Spirits" and Body-Soul Mediation: Socratic Love in Marsilio Ficino's De Amore', Rinascimento, 33 (1993), 213-222; quoting De Amore, speech 7, chapter 8.

<sup>80</sup> See, again, Crombie, pp.177-78.

<sup>81</sup> The OED gives occurrences from 1477, 1546, and 1603, the last being: 'HOLLAND Plutarch's Mor. 807 Epicurus saith: That the principles of all things be certaine Atomes'. For Melanchthon on 'senseless atoms' see Philip Melancthon'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. by Dorothy M. Schullian (1945), (Los Angeles: Ward Ritchie Press, 1949); see also Henry More, 'The Immortality of the Soul', in The Philosophical Writings of Henry More, ed. by Flora Isabel Mackinnon (New York: Oxford University Press, 1925), pp.146-7.

<sup>82</sup> David A. Hedric Hirsch, referring to Donne's use of this word in An Anatomy of the World (this world 'Is crumbled out againe to'his Atomis' (l.212)) suggests that it may in this case have connoted two particular Renaissance definitions: "an anatomical preparation, especially a skeleton" or, more loosely, "an emaciated or withered living body" (David A. Hedric Hirsch, 'Donne's Atomies and Anatomies: Deconstructed Bodies and the Resurrection of Atomic Theory', SEL (1991), 31, 68-94.

<sup>83</sup> Sermons, VI, p.57. Potter and Simpson attribute this to April, May, or June 1623.

<sup>84</sup> Quoted by Joan Bennett, 'The Love Poetry of John Donne: A Reply to C.S. Lewis', in Seventeenth Century Studies Presented to Sir Herbert Grierson (Oxford: Clarendon Press, 1938), p.95, p.94.

<sup>85</sup> See also, for example: '...some men are stricken by the Planet, and blasted; others are troubled and diseased at certaine times ordinarily, in their bellie, sinewes, head, and mind' (Pliny, The Historie of the World, trans. by Philemon Holland, 2 vols (London, 1601), II, Ch. xli).

<sup>86</sup> Cf. also: '...the Sunne which... does cast downe beames and influences into this world..' (Sermons, IX, p.126, 22 November 1629).

<sup>87</sup> Cf. also, God's ability to suspend bodily torments by 'imprinting a holy stupefaction... in the person that suffers' (Sermons, IX, p.341, penitential psalms, n.d.).

<sup>88</sup> Cf.: '...it is good to purify the ayre... especially with Fireworkes: or rather with discharging of peeces: for Gunpowder is exceeding drying... and by the Crackes it gives, the Ayre is forcibly shaken and attenuated, and so opened to let in that purification, which is immediately made by the fire..' (Stephen Bredwell, Physick for the Sicknesse Commonly Called the Plague (London, 1636), p.14).

<sup>89</sup> Paracelsus, Paramirum, I, viii, Der Bucher und Schrifften (Basle, 1589-90), I, 15; quoted by Gardner in The Songs and Sonnets, ed. by Helen Gardner (Oxford: Clarendon Press, 1978), p.186.

Paracelsus remarks elsewhere: 'The life, then, is... a certain astral balsam, a balsamic impression, a celestial and invisible fire, an included air..' (Goodrick-Clark, p.179.)

<sup>90</sup> Although Donne's source for 'Coeli Sudor' is Pliny, he notably adds his own variation on the theme - 'phlegm' -

which has the same organic and animistic connotations as 'smoke' or 'sweat', as well as a viscosity that strongly arrests the senses. 'Phlegm' is not found in the original Historia Naturalis or in Holland's translation of 1601. Pliny has 'caeli sudor sive quaedam siderum saliva sive purgantis se aeris sucus', rendered in modern translation as 'the perspiration of the sky or a sort of saliva of the stars or the moisture of the air purging itself' (Pliny, Natural History, trans. by Arthur Rackham, 10 vols (London: William Heinemann, 1911), Bk XI, vol III, pp.450-51); Holland's version is 'a certaine sweat of the skie, or some unctuous gellie proceeding from the starres, or rather a liquor purged from the aire when it purifieth it selfe' (Holland, I, p.315); Donne's 'fleame' appears to have the same sense as our modern day 'phlegm', Cotgrave's entry for 'Flegme' giving only 'Fleame', and no other synonyms.

<sup>91</sup> Helkiah Crooke, Microcosmographia (London, 1615), p.516; Alexander Read, A Manuall of the Anatomy of the Body of Man (London, 1634), p.161.

(Although Microcosmographia was not published until 1615, Laurentius' Historia Anatomica, the source which Crooke was translating, had appeared in Paris in 1595.)

<sup>92</sup> See, again, Crombie, p.178.

Fig. 2 from Roberts and Tomlinson, p.85, showing Dryander, Anatomiae (1537), and Magnus Hundt, Antropologium (1501).

<sup>93</sup> Lines 21-28, 37-40, 56, 57-60.

<sup>94</sup> 'It was a fundamental Paracelsian doctrine that the influence of the stars was mediated by the air...' (Gardner, p.186); '...in hermetic medicine the air mediates the influences of the stars' (Poems, p.371).

<sup>95</sup> See especially Victor Harris, All Coherence Gone (Chicago: University of Chicago Press, 1949).

<sup>96</sup> George Gascoigne, The Drum of Doomsday (London, 1576), in The Complete Works of George Gascoigne, ed. by J. W. Cunliffe, 2 vols (Cambridge: Cambridge University Press, 1907-10).

La Primaudaye published the first of four volumes of his 'encyclopaedia' in 1577; it filtered into England in various translations: The French Academie, trans. by Thomas Bowes (London, 1586); The Second Part of the French Academie (London, 1594); The French Academie: Finished in Foure Books, trans. by T. Adams (1618).

See also Sheltco Geveren, Of the End of this World, and second coming of Christ, trans. by Thomas Rogers (London, 1577) (Rogers' English version appeared again in 1582, 1583, and 1589; Geveren's original appears to date from around 1576; he states, regarding 'that Starre' of 1573 that it appeared 'within these three years' (p.9); on the prominence of Geveren in England, see Holinshed, Chronicles (London, 1586), II, p.1357); Lambert Daneau, The Wonderfull Woorkmanship of the World, trans. by T[homas] T[wyne] (London, 1578); Antonio de Torquemada, The Spanish Mandevile of Miracles, trans. by Ferdinando Walker (London, 1600); Henri Estienne, A World of Wonders... trans. by R. Carew (London, 1607); Richard Barckley, The Felicities of Man, or, His Summum Bonum, 3<sup>rd</sup> ed. (London, 1631); L. Brinckmair, The Warnings of Germany. By Wonderfull Signes, and Strange Prodigies Seen in Divers Parts of that Countrie Betweene the Yeere 1618 and 1638 (London, 1638).

See also the prefatory letter to Holland's translation of Pliny: '...how it came to pass that nature lost her excellence in all creatures' (Holland, 'The copie of the said letter', 'Your loving friendship in the Lord, H.F.').

<sup>97</sup> On Hall's authorship see Bald, p.243, and Poems, p.595; quotation from Bald, p.243.

<sup>98</sup> John Hull, Saint Peter's Prophecie of These Last Daies... Proving the Burning of the World.. (London, 1610), title-page.

<sup>99</sup> George Gascoigne, Works, II, p.222; Edwin Sandys, Sermons, (London, 1585), p.172, IX, preached 1574; Shakelton, sigsA3v-A5; cf. also John Banister: 'Who is so ignorant, to whom the Scriptures have not ere now testified, how much longer then in those days, the age of man hath bene in times past?' ('The Proeme', sig.B2r).

<sup>100</sup> Torquemada, 1600, fol. 23v; Simon Goulart, A Learned Summary upon the Famous Poeme of William of Saluste Lord of Bartas (London, 1583), 'To the Reader', sig. [\*3v]; Banister, 'The Proeme,', sig.B2r; Shakelton, A Blazyng Starre, sigsA3v-A4v.

<sup>101</sup> Sheltco Geveren, Of the End of this World, and second coming of Christ, trans. by Thomas Rogers (London, 1589), p.11; Donne was certainly familiar with the translator of this work, if not its author; he possessed a copy of Rogers' The Faith, Doctrine, and religion professed and protected in the Realme of England: Expressed in 39 Articles (Cambridge, 1607) (A Bibliography of Dr. John Donne, p.275).

<sup>102</sup> Louis Leroy, Of the Interchangeable Course, or Variety of Things trans. by Robert Ashley (London, 1594), sig. B3; Shakelton, A Blazyng Starre, (London, 1580), sig.B3.

<sup>103</sup> See, Frank Manley, John Donne: The Anniversaries, p.150.

<sup>104</sup> Ignatius His Conclave, ed. by T.S. Healy, S.J. (Oxford: Clarendon Press, 1969), p.7.

<sup>105</sup> The recent problematising of a world 'out there' being 'discovered' by science can reasonably be omitted for present purposes, given the force of the contrast between the crumbling medieval world view and that of the coming Enlightenment.

<sup>106</sup> 'Novum Organon', in The Works of Francis Bacon, ed. by James Spedding, Robert Leslie Ellis, Douglas Denon Heath, 14 vols (London: 1858), IV, p.52.

<sup>107</sup> To the Countess of Huntingdon, ('Man to God's image'), Poems, p.236, ll.5-8.

<sup>108</sup> For Donne's preoccupation with the changing heavens see also: Gosse, II, p.174; 'A Funerall Elegy', (Anniversaries, ll. 67-68); and Sermons, IX, p.73, April 1629.

<sup>109</sup> Regarding Paracelsus, see also Ignatius His Conclave, pp.19-25.

Verses by Theodore Beza on the star of 1572 and 1573 appear at the beginning of the 1589 edition of Geveren's Of the End of this World, above a quotation from 'Apocalips. 6: 'How long tariest thou Lorde...' (Geveren, trans. by Thomas Rogers, sig.A2v.)

<sup>110</sup> Cf. I.A. Shapiro, who points out that 'Donne apparently adopted Tycho Brahe's planetary sequence in this section since he placed Venus before Mercury and not in reversed order, as they are in the normal Ptolemaic arrangement' TLS, 3 July, 1937, (quotation paraphrased from Frank Manley, John Donne: The Anniversaries, pp.185-6).

<sup>111</sup> See also Ignatius His Conclave on Galileo's familiarity with 'all the hills, woods, and Cities in the new world, the Moone' (p.81); this work was entered, in its Latin version on the Stationer's Register on 24 January 1610/11 (Arber, III, 204r).

<sup>112</sup> The sermon, No. 2 in volume IX, is undated. It is, however, the 'second Sermon on GEN. 1. 26 "AND GOD SAID, LET US MAKE MAN, IN OUR IMAGE, AFTER OUR LIKENESSE". The first of these, No. 1, is dated April 1629.

<sup>113</sup> On Donne's openness to Copernicanism see also Ignatius His Conclave, p.17.

<sup>114</sup> Among the more merely opportunistic titles are: Robert Fill[e]s, The Anatomie of the Soule (London, 1590); Henrie Hutton, Follies Anatomy (London, 1619); The Anatomie of the Romane Clergy, written in Latin by sundry authors of their own profession, trans. by G[eorge] L[ander] (London, 1623); 'O.A.', The Uncasing of Heresie; or, the Anatomie of Protestancie ([St. Omer] 1624).

<sup>115</sup> Louis Martz, The Poetry of Meditation: A Study of English Religious Literature of the Seventeenth Century (London: Oxford University Press, 1954), p.221.

<sup>116</sup> Cf. also: 'Solomon shakes the world in peeces, he dissects it, and cuts it up before thee, that so *thou mayest the better see...*' (Sermons, III, p.48, Whitehall, 2 April 1620, italics mine).

<sup>117</sup> Hirsch, pp.74-5, citing OED; cf., for example, 2 Henry IV, V, iv, 18-30, where the Beadle is addressed as 'you thin man in a censer', 'Thou atomy, thou!' and 'you thin thing'.

<sup>118</sup> 'An Honest Whore, pt. 2', V, ii, 72-5, Works, II.

On dating see George R. Price, Thomas Dekker (New York: Twayne, 1969), p.26; Price allows a possibly later date, but no further than 1608 at most (*ibid.*); see also the Royal College Annals for Helkiah Crooke's claim that the college itself 'in public dissections exhibited the human body of either sex to be seen and touched and that they cut up indecent parts and explained each separately in the vernacular' (RCP, III, i, p.111, 21 April 1618).

<sup>119</sup> Although the Purification fell on 2 February (Cheney, Dates, p.40), the earlier phrase, 'about the time' indicates the customary date of late February.

<sup>120</sup> Quoted in Barber-Surgeons, II, p.365.

<sup>121</sup> See, for example, the 'Sun-parch'd quarters on the citie gate' ('Elegie: The Comparison', Poems, p.151, l.31); in his sermons Donne more than once assumes such familiarity on the

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part of his audience; see X, p.181 (n.d.), and VIII, p.170 (27 January 1627).

<sup>122</sup> See Rosemond Tuve, Elizabethan and Metaphysical Imagery, (Chicago: University of Chicago Press), p.203, p.26.

<sup>123</sup> See: Chapter 3.2 (above), especially on Volpone, II, v, 69-72; and Nashe's A Countercuffe given to Martin Junior, I, p.59.

<sup>124</sup> 'Discourse on Method', no. 5, in The Philosophical Writings of Descartes, trans. by John Cottingham, Robert Stoothoff, Dugald Murdoch, Anthony Kenny, 3 vols (Cambridge: Cambridge University Press, 1984-1991), I, p.139.

<sup>125</sup> Descartes, Philosophical Letters, trans. by Anthony Kenny (Oxford: Basil Blackwell, 1981), p.244, letter to Henry More, 5 February 1649.

<sup>126</sup> Notes of Ben Jonson's Conversations with William Drummond of Hawthornden, January MDCXIX (London: Shakespeare Society, 1842), p.3; Anatomy of the World, p.10.

<sup>127</sup> There is no further indication as to which of the poems Jonson is referring.

<sup>128</sup> Gosse, I, p.302, 14 April 14 1612.

<sup>129</sup> Gosse, I, p.302, 14 April 14 1612.

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## Notes to Chapter Five

<sup>1</sup> The Autobiography of Sir Simonds D'Ewes, ed. by J.O. Halliwell, 2 vols (London: 1845) I, p.230).

<sup>2</sup> Annals of the College of Physicians of London, trans. by J. Emberry, S. Heathcote, M. Hellings, 5 vols, in Wellcome library, RCP, London II, i, p.159.

'This year' means 1622/3, Harvey's actual lecture having fallen (inadvertently, it seems) just after the end of the old seventeenth century year.

<sup>3</sup> Cf. for example, RCP, III, p.331, where, under the date '17 February 1631' it states that 'On 9 March... the President called together the Fellows...'.  
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<sup>4</sup> This sum adds up, slightly less arbitrarily, to 'four marks' (two-thirds of a pound) in the currency of the period.  
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<sup>5</sup> See, for example, John Lyly, Euphues, The Anatomie of Wit (London, 1587) (STC 17057); and the 1589 editions of both Robert Greene's Arbusto, The Anatomie of Fortune (STC 12219), and Thomas Nashe's The Anatomie of Abuses (STC 18364).  
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On the problem of crowd violence as experienced by the Barber-Surgeons see The Annals of the Barber-Surgeons of London, ed. by Sidney Young, 2 vols (London: Blades, East and Blades, 1890), II, p.330.  
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<sup>6</sup> J.S. Cockburn, A History of English Assizes 1558-1714 (London: Cambridge University Press, 1972), p.23.  
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<sup>7</sup> 16-18 April 1616 (see The Anatomical Lectures of William Harvey, ed. and trans. by Gweneth Whitteridge (Edinburgh and London: E&S Livingstone, 1964), xxvii).  
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<sup>8</sup> On the association between Lent and anatomy see also Nashe, 'Have With You to Saffron Walden', in The Works of Thomas Nashe, ed. by Ronald B. McKerrow, 5 vols (A.H. Bullen, 1904; repr. London: Sidgwick and Jackson, 1910), III, p.9.  
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<sup>9</sup> See Barber-Surgeons, II, p.321, p.331, 'for private anatomies' in Lent, and p.337 for one occurring in summer. An entry already discussed in Chapter 1.2 indicates that the company would have recorded the cessation or suspension of anatomies, although it did not habitually note their occurrence (see II, p.327); on the proliferation of private anatomies by the end of Donne's lifetime see also Hugh Lett, 'Anatomy at the Barber-Surgeons' Hall', British Journal of Surgery, 31 (1943), 101-111, p.104, p.107.

<sup>10</sup> See, respectively: Geoffrey Keynes, The Life of William Harvey (Oxford: Clarendon Press, 1966), p.86; RCP, III, i, p.121; D'Ewes, I, p.230; RCP, III, ii, p.275; III, ii, p.331. The first of these dates is less certain than the other four, and is discussed at further length below.

<sup>11</sup> Easter dates all refer to the latest year shown in the top column. In the second date column of the second table, '1615/16' refers not to Easter, but to the Lumleian, which should technically have occurred before 24 March.

<sup>12</sup> Cf. also the Barber-Surgeons' Annals for 28 March 1610: 'This day wee had the bodie of one... [blank] to desect for an Anotomy and Mr. Doctor Gwyn did reede upon the same' (Barber-Surgeons, II, p.365). In 1610 Easter Sunday fell on 8 April.

<sup>13</sup> References for both tables, in order seen, are: III, p.48, p.51; III, p.236; VIII, p.146; VIII, p.231; VIII, p.255; I, p.192; I, p.308; IV, p.351 (as noted, Potter and Simpson erroneously give Easter 1623 as 28 March); VIII, p.199.

<sup>14</sup> Quoted in O'Malley *et al*, p.4.

'Holerius', or Jacobus Holler, was a sixteenth-century French physician. In his lectures Harvey occasionally refers to Holler's De Morborum Curatione (Paris, 1565) (O'Malley *et al*, pp.133-4, p.210).

<sup>15</sup> Sermons, IX, No. 11-18, pp.250-411.

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<sup>16</sup> In addition to the above points, there is further evidence on Donne's seasonal preaching habits from a series of sermons on the penitential psalms in volume V (numbers 16-19).

Although these four sermons are also undated, they appear to be linked to the first sermon in volume VI. This itself has been dated convincingly, via a close parallel with a letter of Donne's to Robert Ker (Potter and Simpson, Sermons, VI, pp.1-2). Ker was in Spain with Prince Charles's entourage, while the proposed Spanish Match with the Infanta was negotiated. The widest range of dates for the letter seems to be March to September 1623, but other evidence in it leads Potter and Simpson to settle on April, May or June 1623 as possible months of composition (Sermons, VI, p.2). The sermon of volume V on Psalm 6.8,9,10, is linked to those preceding on 6.4,5 (Sermons, V, numbers 16-19), not only by the psalm, but by an internal reference to its different stages (Potter and Simpson, Sermons, VI, p.2). Although Potter and Simpson conclude that VI, no.1 'may have been preached at some considerable interval after' the other penitential sermons (ibid.), it yet seems probable that some continuity would have been maintained. Their outside date of June for VI, no.1, is arguably itself rather late, if the penitential theme is assumed to have been tied to the Church calendar (as it clearly was in the 5 April 1628 sermon). Even if June was accepted, however, sermons 16-19 could belong to late March/early April, and therefore fall just within the dissecting season; if instead the earlier boundary of April is taken for VI, no.1, then 16-19 may have been Lenten. (In 1623 Easter fell on 13 April (Cheney, Dates, p.159), so that Lent would have run from early March). In either case, there is strong, albeit not conclusive evidence to support the winter or early spring dating of penitential sermons as a seasonal genre.

<sup>17</sup> For dissective imagery see Wigmore, p.2, pp.8-10, and p.17. The assize in question may have been a summer rather than Lent affair (see Cockburn, p.23).

<sup>18</sup> Following references are from the original 1606 edition.

<sup>19</sup> Although Hall evidently refers to surgery performed on Richard Greenham (?1535-?1594) I have not been able to find out more about the incident he describes. 'S.' may mean 'Socius, (i.e., 'fellow'), as Greenham was himself a minister. Hall wrote two sonnets in commemoration of Greenham in 1599 (see The Collected Poems of Joseph Hall, ed. by A. Davenport (Liverpool University Press, 1949), pp.102-3.

<sup>20</sup> All these totals include noun- and verb-based titles.

<sup>21</sup> St. Paul, Acts 28.26, quoted in Sermons, IV, p.212, Saint Pauls, 13 October 1622.

<sup>22</sup> Devotions upon Emergent Occasions, ed. by Anthony Raspa (Montreal and London: McGill-Queen's University Press, 1975), p.48.

<sup>23</sup> Cf.: 'Outward and visible means of knowing God, God hath given to all Nations, in the book of Creatures, from the first leaf of that book, the firmament above, to the last leaf, the Mines under our feet...' (Sermons, II, p.253, first of two sermons to the prince and Princess Palatine, the Lady Elizabeth at Heydelberg, 16 June 1619).

<sup>24</sup> Cf.: '...there should lie [no] Appeal, from Gods Judgements to any mans reason' (Sermons, I, p.169, Whitehall, 21 April 1616).

<sup>25</sup> Sermons, III, p.210, 16 February 1620 [1620/1], Whitehall, before the King.

Cf. '...for there no new things are...' ('Verse Letter to Countess of Huntingdon, c. 1614, Satires, Epigrams and Verse Letters ed. by W. Milgate, (Oxford: Clarendon Press, 1967), p.86).

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<sup>26</sup> As the editors of Biathanatos note, he indeed cites chapter 26 of Kepler's De Stella Nova in order to reinforce this criticism (*ibid.*) (both references to Biathanatos, ed. by Michael Ruddick & M. Pabst Battin (London: Garland Publishing, 1982), p.140).

<sup>27</sup> George Huppert, 'Divinatio et Eruditio: Thoughts on Foucault', in History and Theory, 13 (1974), 191-207, pp.198-99.

<sup>28</sup> References to, respectively: Devotions, p.62, p.51; Sermons, III, p.233, April 1621; Sermons, IX, p.96, S. Pauls, Whitsunday 1629. For a further probable allusion to celestial influence see Sermons, IX, p.400, penitential psalms, n.d..

<sup>29</sup> John Hoskins, Directions for Speech and Style, ed. by H. H. Hudson (Princeton: Princeton University Press, 1935), p.29.

<sup>30</sup> Michel Foucault, The Order of Things: An Archaeology of the Human Sciences, trans. anon. (London: Tavistock Publications, 1970), p.40.

<sup>31</sup> Cf. also, 'the speech of... Balaams Asse...' (Devotions, p.89).

<sup>32</sup> Mikhail Bakhtin, The Dialogic Imagination, ed. by Michael Holquist, trans. by Caryl Emerson and Michael Holquist (London: University of Texas Press, 1981), p.273.

<sup>33</sup> Francis Bacon, 'Sylva Sylvarum' (1627), in The Works of Francis Bacon, ed. by James Spedding, Robert Leslie Ellis, Douglas Denon Heath, 14 vols (London, 1859), II, p.453.

<sup>34</sup> See, notably, Francis Shakelton, A Blazyng Starre or Burning Beacon, seene the 10. of October laste (and yet continewying) set on fire by Gods providence, to call all sinners to earnest and speedie repentance (London, 1580); and, D'Ewes, I, pp.122-23.

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<sup>35</sup> The sermon is undated; it has been tentatively placed by Potter and Simpson in the winter of 1624/5 (Sermons, IX, pp.34-7).

<sup>36</sup> See, 'De Anima', trans. by J.A. Smith, The Works of Aristotle, ed. by W.D. Ross, 12 vols (Oxford: Clarendon Press, 1931) V, 412a.

<sup>37</sup> Paradoxes and Problems, ed. by Helen Peters (Oxford: Clarendon Press, 1980), p.23, Problem I. See also, Sermons, III, p.289; and, 'The True Character of a Dunce' in Paradoxes and Problems, p.59.

<sup>38</sup> Devotions Upon Emergent Occasions, intr. and comm. by Sister Elizabeth Savage S.S.J., (Salzburg: Institut fur Englische Sprache and Literatur, 1975), xxiii.

<sup>39</sup> Rosemond Tuve, Elizabethan and Metaphysical Imagery (Chicago: University of Chicago Press, 1947), p.77.

<sup>40</sup> See also: 'the wording takes us in through the folded layers of muscle, and lets us feel their depth' (Carey, p.137).

<sup>41</sup> Andreas Vesalius, De Fabrica Humani Corporis (Basle, 1543), Bk II.

<sup>42</sup> For this effect see also Illustrations, Pl. 33, Pl.34.

<sup>43</sup> Fig. 10 (Chapter 1): De Fabrica, Bk. 2, in The Illustrations from the Works of Andreas Vesalius of Brussels, trans. by J.B. de C.M. Saunders and Charles Donald O'Malley (World Publishing, 1950; repr. New York: Dover Publications, 1973), Pl. 32; Fig. 2: De Fabrica, Bk. 2, Illustrations, Pl. 37.

<sup>44</sup> For a contemporary response see, The Letters of John Chamberlain, ed. by Norman Egbert McClure, 2 vols (Philadelphia, 1939), II, p.545, To Sir Dudley Carleton, London, 21 February 1624.

<sup>45</sup> Rosemond Tuve indeed appears to recognise such a tendency: '...Donne needed the violence of a catechresis' rather than the

simpler form of metaphor' (Tuve, p.131); cf. also, *ibid.*, pp.132-33 on the overuse and abuse of catechresis.

<sup>46</sup> 'I have used this leisure to put the Meditations, had in my sickness, into some such order as may minister some holy delight' (Gosse, II, p.189, 'To Sir Robert Ker'); on the earlier, more 'feverish' composition, see Bald, p.450.

<sup>47</sup> A relatively simple example from 1559 is found inserted in the British Library copy of Thomas Geminus, Compendiosa totius anatomie delineatio (London, 1559); R Emmelin's vastly superior plates of 1613 were reproduced in England, along with a translation of the text, in 1639: Johann R Emmelin, An Exact Survey of the Microcosmus or Little World, trans. by John Ireton (London, 1639) (translation of Johann R Emmelin, Catoptrum microcosmicum (Ulm, 1619).

<sup>48</sup> William Harvey, Anatomical Exercitationes, Concerning the Generation of Living Creatures (London, 1653), p.447.

<sup>49</sup> See, for example, inserted 'flap anatomy' in Thomas Geminus, Compendiosa Totius Anatomie Delineatio... (London, 1559), British Library copy.

<sup>50</sup> Sermons, IV, p.227, St. Pauls, 13 October 1622.

<sup>51</sup> See Sermons, X, p.79; Devotions, p.121, p.126; and Sermons, VIII, p.214, p.216.

<sup>52</sup> Robert Fludd, Medicina Catholica, Seu Mysticum Artis Medicandi Sacrarium, In Tomos divisum duos (Frankfurt, 1629), I, b, t.p. (quoted and pictured in Joscelyn Godwin, Robert Fludd: Hermetic philosopher and surveyor of two worlds (London: Thames and Hudson, 1979), p.65).

<sup>53</sup> Cf. also, Sermons, VIII, pp.214-15; preached to the King at White-Hall, occasion of the fast, 5 April 1628.

<sup>54</sup> Foucault, pp.47-48. Parts I and II of Don Quixote were published in Spanish in 1605 and 1615 respectively; their English counterparts in 1612 and 1620 (though the first part of the English translation may have been prepared as early as

1608; (Don Quixote, trans. by Samuel Putnam, 2 vols (London: Cassell, 1953), I, xi)).

<sup>55</sup> Quoted by Donne, Sermons, I, p.186, 21 April 1616.

<sup>56</sup> Ernst Cassirer, The Individual and the Cosmos in Renaissance Philosophy trans. by Mario Domandi (Oxford: Basil Blackwell, 1963), p.143).

<sup>57</sup> First quotation from Sermons, IX, p.177, Lent, to the King, White-Hall, 12 February 1629; second from Sermons, I, p.234, White-Hall, 2 November 1617.

<sup>58</sup> Sermons, VIII, p.214, p.216, To the King at White-hall, 5 April 1628.

<sup>59</sup> Sermons, III, p.371, St. Pauls, Christmas 1621.

<sup>60</sup> There is no firm date for this sermon; Potter and Simpson's attribution is April, May, or June, 1623 (VI, pp.1-2).

<sup>61</sup> Cf. Sermons, II, p.125, Lincolns Inn, n.d.

<sup>62</sup> On the female wound see Francois Rabelais, The Histories of Gargantua and Pantagruel, trans. by J.M. Cohen (Harmondsworth: Penguin Books, 1953; repr. 1957), pp.220-221. On surgery see Aretino's account of an amputation in winter 1526 (letter of 10 December 1526, The Letters of Pietro Aretino, ed. by Thomas Caldecot Chubb (Archon Books, 1967), p.24).

<sup>63</sup> Jonathan Sawday, 'Self and Selfhood in the Seventeenth Century' in Rewriting the Self: Histories from the Renaissance to the Present, ed. by Roy Porter (London: Routledge, 1997), 29-49, p.31.

<sup>64</sup> Sermons, III, p.166, Lincolns Inn, [?late November 1620], I Colossians 24; on dating see Potter and Simpson, Sermons, III, pp.10-11.

<sup>65</sup> Cf. also Sermons, X, p.248, White-Hall, before King, beginning of Lent, 1630.

<sup>66</sup> I will be referring here only to the nineteen poems following 'La Corona'; given the notorious problem of establishing a definitive sequence for the sonnets (see Poems, p.624), I will not make a reading based on assumptions of narrative or biographical progress; the numbers used are merely for purposes of reference.

<sup>67</sup> Louis L. Martz, The Poetry of Meditation: A Study of English Religious Literature of the Seventeenth Century (London: Oxford University Press, 1954), pp.43-53 especially.

<sup>68</sup> Cf. Crashaw's more pronounced 'Come wounds! come darts!.../Nore grudge a younger-Brother/ Of greifes his portion...' ('The Mother of Sorrows', The Complete Poetry of Richard Crashaw, ed. by George Walton Williams (New York: New York University Press, 1970; repr. 1972), p.169).

<sup>69</sup> Sermons, II, p.211, Easter-day 1617, italics mine.

<sup>70</sup> George Parfitt, John Donne: A Literary Life (London: Macmillan, 1989), p.92, quoted by Martin Coyle, 'The Subject and the Sonnet', English, 43 (1994), 139-150, p.146.

<sup>71</sup> 'Masochism' derives from the works of the Austrian-born novelist, Leopold Sacher-Masoch (1835-1895); see Venus in Furs (n.p., 1869). It was referred to in clinical terms by Freud in 1905 (see Sigmund Freud, 'On Sexuality: Three Essays on the Theory of Sexuality and Other Works', ed. by Angela Richards, The Pelican Freud Library, trans. and ed. by James Strachey, 19 vols (Harmondsworth: Penguin, 1977; repr. 1986), p.70.

<sup>72</sup> On Ann Donne's death (15 August 1617) see Bald, pp.324-6.

<sup>73</sup> Deborah Shuger, Habits of Thought in the English Renaissance (Oxford: University of California Press, 1990), p.254.

<sup>74</sup> See above, Sermons, II, p.300, III, p.166.

<sup>75</sup> Cf. also '...even in this inordinate dejection thou exaltest thy self above God, and makest thy worst better then

his best, thy sins larger than his mercy' (Sermons, III, p.303).

<sup>76</sup> Quotation from Hooker: Richard Hooker, The Folger Edition of the Works of Richard Hooker, 4 vols, general ed. W. Speed Hill (Camb., Mass., 1977-81), II, p.361.

<sup>77</sup> VIII, pp.214-15, to King at White-Hall, 5 April 1628.

<sup>78</sup> Sermons, IV, p.357, S. Pauls, Easter-day 1623; Donne is here referring to the resurrection of the body ('what necessity of bodies in heaven?' (ibid.)).

<sup>79</sup> Sermons, IV, p.47, White-hall, 8 March 1621/2.

See also Sermons, II, p.270, 'to the Prince and Princess Palatine, the Lady Elizabeth at Heydelberg, when I was commanded by the King to wait upon my L. of Doncaster in his Embassy to Germany. June 16. 1619'; IV, pp.69-70, Easter day [1622]; IV, pp.357-8, S. Pauls, Easter-day 1623.

<sup>80</sup> Cf., also, Donne's insistence that, 'God does work in every Organ, and in every particular action' (Sermons, IV, p.252, St. Pauls, Gunpowder sermon, 5 November 1622).

<sup>81</sup> Sermons, VIII, p.98, 19 November 1627, 'preached at the Earl of Bridgewater's house in London at the marriage of his daughter, the Lady Mary, to the eldest son of the Lord Herbert of Castle-iland'.

<sup>82</sup> Cf. both 'Obsequies to the Lord Harrington': 'As if man feed on mans flesh, and so/Part of his body to another owe,/Yet at the last two perfect bodies rise,/Because God knows where every Atome lyes' (ll.53-56, Poems, p.258); and Montaigne on the imprisoned warrior who warns his captors that his own body is composed of their ancestors' flesh ('Of the Cannibals', Essays, trans. by John Florio (London and New York: Routledge, 1885), pp.97-98.

<sup>83</sup> Potter and Simpson's conjectural date for this sermon is 20 April 1630 (Sermons, IX, p.26).

<sup>84</sup> 'Obsequies to the Lord Harrington', ll.131-35, Poems, p.260.

<sup>85</sup> See Andrew Cunningham, The Anatomical Renaissance: The Resurrection of the Anatomical Projects of the Ancients (Aldershot: Scolar Press, 1997), p.38: 'anatomy was taken to be part of a larger study known as "Natural Philosophy"... Natural Philosophy... was about God'.

<sup>86</sup> Gosse argues for the relatively unprepared nature of Donne's sermons: 'It seems certain... that he took no MS. to church with him, and left none at home, but when he determined to write out a sermon, he did it afterwards... when Sir Henry Goodyer asked him for a copy of one of his sermons... Donne replied, "I will pretermit no time to write it, although in good faith I have half forgot it"' (Gosse, II, p.313). This procedure might well encourage slightly extempore inventions, either in speech or as later, written insertions.

<sup>87</sup> Sermons, X, pp.183-4, n.d.; III, p.357, St. Pauls, Christmas Day 1621; IV, p.351, ll.228-231, S. Pauls, Easter day [13 April], 1623; II, p.377, Candlemas day (on possible years see Potter and Simpson, *ibid.*, pp.41-42).

<sup>88</sup> Sermons, III, p.55, Whitehall, 2 April 1620.

<sup>89</sup> Essayes in Divinity, ed. by Evelyn M. Simpson (Oxford: Clarendon Press, 1952), p.48.

<sup>90</sup> See for example, 'A Nocturnall upon S. Lucies Day', ll.12-18, and 28-29; 'Loves Growth', ll. 7-8; and 'The Ecstasy', ll. 21-28 (Poems, pp.72-73, p.69, pp.53-56), (Sermons, IX, p.408, l.636).

<sup>91</sup> Cf., again, Lyly's contrast between the butcher and the anatomist: 'Euphues: The Anatomy of Wit', The Complete Works of John Lyly, ed. by R.W. Bond, 2 vols (Oxford: Clarendon Press, 1942), II, p.180.

<sup>92</sup> First quotation: Sermons, I, p.192, Pauls Crosse, 24 March 1616/17, italics mine.

<sup>93</sup> See, notably, Nashe's nonchalant materialising of perhaps the most abstracted mind in Western history, that of Aristotle: 'the round compendiate bladder of thy brayne' (Christ's Teares over Jerusalem, II, p.118).

<sup>94</sup> Cf., also, the ability of God to 'dissolve and powr out [sic], attenuate and annihilate the very marrow of thy soul' (Sermons, II, p.86, n.d.).

<sup>95</sup> The Goulstonian seems to have been running by December 1625; on 30 October 1624, Robert Fludd, among others, volunteered for the task of dissector in this new foundation (RCP, III, p.188), and in 1629 the lecture was given on the 11, 12, and 14 of December. In 1628, on 10 December, an entry in the College annals states that 'During the days of the the special public anatomy lecture, the President thought that the College should meet' (RCP, III, p.260).

<sup>96</sup> D.A. Kidd, Collins Gem Latin Dictionary (Glasgow: William Collins, 1957; repr., 1992).

<sup>97</sup> Cf. '...those Angels... when they look down hither... see the same Christ in thee... see him scourged again, wounded, torn and mangled again, in thy blasphemings... crucified again in they irreligious conversation...' (Sermons, III, p.218, Lent, to the King at White-hall, 16 February 1620/21).

<sup>98</sup> Cf., again, Aretino, Letters, p.24.

<sup>99</sup> Cf. 'Berengarius old Oath in the Roman Church, that he must sweare to the *Frangitur & teritur*, that he broke the flesh of Christ with his teeth, and ground it with his jawes' (Sermons, III, p.211, Lent, to the King at White-hall, 16 February 1620/21).

<sup>100</sup> Donne's text is Psalms 32.5: 'I acknowledged my sin unto thee, and mine iniquity have I not hid. I said, I will confesse my transgressions unto the Lord, and thou forgavest

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the iniquity of my sin'; the 'and' he refers to is the second.

<sup>101</sup> Richard Waswo, Language and Meaning in the Renaissance (Princeton: Princeton University Press, 1987), p.125.

<sup>102</sup> William J. Bouwsma, 'Hooker in the Context of European cultural history', Religion and Culture in Renaissance England, ed. by Debora Shuger and Claire McEachern (Cambridge: Cambridge University Press, 1997), 142-158, p.146.

<sup>103</sup> Sermons, IV, p.351, S. Pauls, evening, Easter-day [i.e., 13 April] 1623 (date from Cheney, Dates, p.159).

<sup>104</sup> Cf. Janel M. Mueller, on 'Donne's and Herbert's unconditional commitment to the embodiedness of human identity, even and especially where what is at issue are one's being and value and mode of relation vis-à-vis God'; and on both men's need for 'compensations for rejecting a Catholic ontology of presence' (Janel M. Mueller, 'Pain, Persecution, and the Construction of Selfhood', in Shuger and McEachern, 161-187, p.182).

<sup>105</sup> Cf. Kusukawa, on the more general basis of Melanchthon and Luther's educational reforms: 'In... [criticizing Aristotle] Luther was criticizing the very foundation of medieval learning, that human reason could and should contribute towards the knowledge of God' (Sachiko Kusukawa, The Transformation of Natural Philosophy: The Case of Philip Melanchthon (Cambridge: Cambridge University Press, 1995), p.44).

<sup>106</sup> Cf. '...*Peccatum complicatum*, sinne wrapped up in sinne, a body of sin' (Sermons, II, p.89, Lincolns Inn, n.d.).

<sup>107</sup> Sermons, IX, p.172, the Conversion of St. Paul [25 January] 1629/30.

<sup>108</sup> Sermons, VIII, p.231, St Pauls, Easter Day [13 April] 1628.

<sup>109</sup> Image of crucified Christ occurs in Sermons, VIII, p.146, St. Pauls, Christmas day 1627.

<sup>110</sup> The supposedly deceased Falstaff, at the close of 1 Henry IV, is (despite his own opposition to the idea) being favoured with *honourable* ceremonies by Hal, when the latter states, 'Embowell'd will I see thee by and by' (1 Henry IV, V, iv, 109).

<sup>111</sup> See for example: Michael Sparke, Scintilla, or, A Light Broken into Darke Warehouses. With observations upon the monopolists of seaven severall patents... Anatomized and layd open in a breviat... (London, 1641); Anon., The Frogges of Egypt or the Caterpillars of the Commonwealth truly dissected and laid open (London, 1641); Anon., The Times Dissected... (London, 1641); Anon., The Wrens Nest Defiled, or Bishop Wren Anatomized, his life and actions dissected and layd open... (London, 1641); Anon., The Churches Complaint Against Sacriledge: or sacriledge truly dissected and layed open... (London, 1643).

<sup>112</sup> For Donne's seemingly extemporary corporeality, see also 'those that are... stung in their Consciencs, fretted, galled, exulcerated viscerally, even in the Bowels of their Spirit...' (Sermons, IX, p.124, St. Pauls Crosse, 22 November 1629).

<sup>113</sup> On date see Sermons, IX, p.22.

<sup>114</sup> See O' Malley *et al*, p.9, and RCP, III, ii, p.251, p.275, pp.331-2.

<sup>115</sup> The date of 25 February comes from the RCP annals for 1618 (III, p.121); that of 29 March from D'Ewes, I, p.230; D'Ewes' date of 1623 means that, by English seventeenth-century dating, the old year (1622) had just ended (on 24 March); Harvey's dissection was therefore strictly, if not empirically, that intended for 1622).

<sup>116</sup> Sermons, I, p.192, Pauls Crosse, 24 March 1616/17.

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<sup>117</sup> Cf., again, the dissection of 27-29 March 1623, when Easter fell on 13 April.

<sup>118</sup> The Progresse of the Soul, ll.211-13; see also my Chapter 4.4a.

<sup>119</sup> Marcus Rutimeier, The Methodical Idea (Bern, 1617), cited in: Walter J. Ong, Ramus, Method, and the Decay of Dialogue (Camb., Mass., and London: Harvard University Press, 1958; repr. 1983), pp.316-18.

<sup>120</sup> 'A Priest to the Temple, or The Country Parson', Ch. XXIII, The Works of George Herbert, ed. by F.E. Hutchinson (Oxford: Clarendon Press, 1953), p.261.

<sup>121</sup> Amy M. Charles, A Life of George Herbert (London: Cornell University Press, 1977), p.136.

<sup>122</sup> 'Mr. George Herbert is here at the receipt of your letter, and with his service to you tells you that all of Uvedale House are well' ('To Sir Henry Goodyer' [21 December 1625], Gosse, II, p.227); Donne was staying, at this point, with Herbert's mother (now Lady Danvers) and her second husband, Sir John Danvers (Gosse, II, p.228).

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All others are listed in the Appendix.

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