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MPhil, History of Art, University of Glasgow

The Body and Its Ideology in Three Medical Manuscripts by John of Arderne

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Contents

<i>Abstract</i>	ii
<i>Acknowledgements</i>	iii
<i>List of Illustrations</i>	iv
Chapter 1: Introduction	1
Chapter 2: The Clothed and Unclothed Body	18
Chapter 3: The Gendered Body	30
Chapter 4: The Body in Diagrams	45
Chapter 5: The Body of The Surgeon	58
Chapter 6: The Fragmented Body	68
Conclusions	84
<i>Bibliography</i>	91
<i>Appendix 1</i>	104
<i>Appendix 2</i>	105
<i>List of Figures</i>	106

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Abstract

This dissertation addresses the different ways in which the body is rendered in three medieval medical manuscripts by John of Arderne and how this imagery served contemporary ideological purposes. It discusses the clothed body as an indicator of social status but also of gender, which medieval biological views imply is a spectrum. Although the male side of this spectrum was considered superior, certain images subvert this notion by providing alternative views. Diagrams were used in different ways to situate the human body of viewer/reader or patient as a microcosm of the universe. Depictions of the body of the surgeon that bolster his status within the medical establishment were intensified through intervisual references to religious iconography. The body represented in fragments and through the tools that act on it also employ intervisual references to religious iconography that in turn elevate the status of both the surgeon and his procedures. Blood is given special treatment in the manuscript imagery to describe the body as integral and alive, even in images that only depict fragments.. These different findings demonstrate how medieval medical iconography responded to specific social, ideological and theological concerns, and show how Arderne's ostensibly practical treatise also promoted the social position of surgeons.

List of Illustrations

- Fig. 1, Wind Diagram, Hunter 112, f.3r
- Fig. 2, Tools, Hunter 339, ff.111v-112r
- Fig. 3, Tools, Hunter 112, f.44v
- Fig. 4, Tools, Hunter 251, f.43r
- Fig. 5, Procedure, Hunter 339, ff. 112v-113r
- Fig. 6, Procedure, Hunter 112, f.45r
- Fig. 7, Procedure, Hunter 251, f.43v
- Fig. 8, Zodiac Man, Hunter 339, f.123v
- Fig. 9, Zodiac Man, Hunter 112, f.47
- Fig. 10, Zodiac Man, Hunter 251, f.47v
- Fig. 11, Placement of Fistulae, Hunter 251, ff.52v-53r
- Fig. 12, Humoral Diagram, Hunter 339, f.188r
- Fig. 13, *Sequere Me* in Margin, Hunter 339, f.77r
- Fig. 14, *Clyster* in Margin, Hunter 112, f.45v
- Fig. 15, Cramping Man, Hunter 339, f.14v
- Fig. 16, Cramping Man, Hunter 112, f.7r
- Fig. 17, *Experimenta*, Hunter 112, f.49r, detail
- Fig. 18, Marginal illustrations: leg, female head and lions head, Hunter 112 f.60v
- Fig. 19, Man administered a clyster, Hunter 112 f. 26v
- Fig. 20, Man bleeding from the liver, Hunter 251 f.77r
- Fig. 21, Nude man, Hunter 251, f.46r
- Fig. 22, *Experimenta* man with wound on penis. Hunter 112, f.91r
- Fig. 23, *Experimenta*, man with wound on inner thigh, Hunter 112, f.88v

Fig. 24, Penis and catheter, Hunter 251, f.29v

Fig. 25, Author portrait, Hunter 112 f.1r

Fig. 26, Copy from Murdoch's *Album of Science*, Medical Almanac, Wellcome institute, reproduced in Murdoch's *Album of Science*, p. 318-319

Fig. 27, Marginal illustration, plant and leg, Hunter 112, f.16r

Fig. 28, Arm cut for phlebotomy, fragmented arm and leg, Hunter 251, f.15v

Fig. 29, Upright arm fragment in margin, Hunter 251, f.5v

Fig. 30, Arm and leg in margin, Hunter 339, f.217r

Fig. 31, Marginal illustration, leg bleeding from foot, Hunter 339, f.84v

Fig. 32, *Five wounds of Christ*, Flemish diptych, 1523, the Carthusian Abbot Willem van Bibaut. Reproduced in Paul Binski's *Medieval Death*, p.125

Fig. 33, *Arma Christi*, 1375, Master of Jean de Sy Bible, 1375, France Morgan Library, New York, M.90 fol.50r

Fig. 34, *Arma Christi*, 1375, Master of Jean de Sy Bible, 1375, France Morgan Library, New York, M.90 fol.224v

Fig. 35, Lower part of man, placement of two bleeding fistulas, Hunter 339, f.128r

Chapter 1: Introduction

It would be no more correct to say that medieval doctors, rabbis, alchemists, prostitutes, wet nurses, preachers, and theologians had “a” concept of “the body” than it would be to say that Charles Darwin, Beatrix Potter, a poacher, and the village butcher had “a” concept of “the rabbit.”¹

This dissertation aims to discern how contemporary discourses relating to the human body are represented, understood and constructed through the images in three late medieval medical manuscripts of an important treatise written by the English surgeon, John of Arderne (1307-1392), who is also thought to have designed the accompanying illustrations. It will discuss the medical view of the body and its representations, but also other functions of the illustrations. In particular, it will examine how artistic renderings of bodies served contemporary social purposes, such as promoting the profession of surgery as well as the surgeon and author of the text, and establishing the authority of the medical practitioner consulting the manuscript. This dissertation will consider medieval theories of fragmentation, gender difference and different levels of authority and how these issues are addressed in representations of clothed and unclothed bodies, the body represented through diagrams and tools as well as in marginal illustrations.

Biography of Arderne and the Treatment of Fistula-in-Ano

John of Arderne was an English surgeon who is believed to have turned seventy in the first year of the reign of Richard II and must therefore have been born in 1307. According to D'arcy Power, Arderne practised medicine in mainland Europe, serving under John of Gaunt.² Power also recounts several other scholars' belief that Arderne was educated at Montpellier and practised as a military surgeon on the English side during The

1 Caroline Walker Bynum, 'Why All the Fuss About the Body? A Medievalist's Perspective,' *Critical Inquiry* 22 (1995): p. 8.

2 D'arcy Power, Foreword to *Treatise of Fistula in Ano, Haemorrhoids, and Clysters by John of Arderne* (Philadelphia: Asher, 1910): p. x-xii.

Hundred Years War.³ Peter Murray Jones points out that there is no evidence to indicate that Arderne studied at university or practised as an army surgeon, but that some of the stories he tells shows at least second hand familiarity with battlefield surgery. Jones also believes that Arderne was a part of the entourage for Henry Plantagenet and that he might have served with him between the 1338 and 1347.⁴ We know that in 1370 Arderne moved to London from Newark, where he had previously lived, and according to J. Beynon this is when he took the title Magister and was admitted to the Guild of Surgeons, which established him within a medical hierarchy, higher than barber surgeons but lower than physicians.⁵ His most famous treatise *Treatment of Fistula in Ano, Haemorrhoids, and Clysters* is believed to have been written in 1376.⁶ The procedure the text describes is an elaboration of an earlier Arabic treatment, based on that of Albucasis (936–1013) who in turn based his treatment on Paul of Aegina (c.625–690). The ailment was previously believed to be incurable. Arderne's treatment utilised a setin, a thread or bit of string, to drain the wound of pus as well as a different technique which consisted of cutting the wound open. Arderne's procedure combined the two techniques and prescribed gradually cutting the fistula open over the course of several days.⁷ Much of Arderne's originality is apparent in the focus of gentle aftercare rather than more corrosive treatments favoured by previous surgeons.⁸

Fistula in ano is the Latin name for an abscess in the rectal region, referring primarily to a passage between the anal canal and the surface of the skin. There may be

3 Ibid, p .xii.

4 Peter Murray Jones, "Sicut hic depingitur... John of Arderne and English Medical Illustration in the 14th and 15th centuries", *Die Kunst und das Studium der Natur Vom 14* (1987): p. 107.

5 J. Beynon, "Master John of Arderne – Surgeon of Newark", *Journal of the Royal Society of Medicine* 81 (1988): p. 43.

6 Marvin L. Corman, "Classic Articles in Colonic and Rectal Surgery", *Diseases of the Colon and Rectum* 25 (1982): p. 832.

7 Nancy G. Siraisi, *Medieval & Early Renaissance Medicine: An Introduction to Knowledge and Practice* (Chicago: University of Chicago Press, 1990): p. 185.

8 Carole Rawcliffe, *Medicine & Society in Later Medieval England* (Stroud: Sutton, 1995): p. 74.

several openings in the perianal area that all originate from the same opening within the anal canal. The ailment is more prevalent in men than in women, it is caused by poor diet, cancer and other diseases of the bowel, other illnesses or trauma to the region. It is sometimes argued that this ailment was more prevalent among knights and those who spent extended period on horseback in heavy armour, as the weight and pressure could cause and aggravate a fistula. Nancy Siraisi has pointed out that this is probably not accurate as many other causes existed, in both genders and all social classes, and that 'the most probable reason that John of Arderne developed a special interest in the subject was that anal fistula occurred in a number of his patients, whatever their class and occupation, and that the complaint was part of the canon of ailments discussed in all the standard surgical texts.'⁹ Before John of Arderne the ailment was considered terminal, although with Arderne's new treatment the death rate was around fifty percent, which is the primary reason of the tremendous fame of Arderne and his text. The text also deals with other treatments, such as the administration of clysters, enemas, for healing purposes and phlebotomy, blood-letting, also for curative causes.

John of Arderne has been called the 'father of English surgery',¹⁰ his influence over the contemporary discipline was very large and some of his recipes were copied into seventeenth-century pharmacopoeias. Today there are fifty-one manuscripts identified as Arderne's and out of those thirty-six are illustrated.¹¹ Some only have one or two illustrations, but others have some 250 marginal and larger illustrations, the three manuscripts to be discussed here belong to the latter of the two categories, all three being very heavily illustrated. All three are housed in the University of Glasgow's Special

⁹ Siraisi (1990): p. 183-185.

¹⁰ Kathleen L. Scott, *Later Gothic Manuscripts 1390-1490, II: Catalogue and Indexes (A Survey of Manuscripts Illuminated in the British Isles)* (London: Harvey Miller, 1996): p. 197.

¹¹ Jones (1987): p. 108.

Collections.¹² The three manuscripts have been chosen as they represent a cross-section of the full corpus of Arderne's texts. Hunter 251, the largest of the three manuscripts, is also the one with the most elaborate image and colour scheme, and while the text has marginal comments from later hands it does not seem to have been used as extensively as Hunter 339, which represents the other side of the spectra, with its small size, heavily abbreviated text, sketchy drawings and many notes in the margins. Hunter 112 fits in between these two categories; it is not as elaborately designed as Hunter 251 nor is it as heavily abbreviated as Hunter 339. The colour palette for the different manuscripts differs. Hunter 112 and Hunter 251 both use several colours, including light and dark green, light and dark blue as well as yellow and red. Hunter 339 only utilises red and a brownish/yellow/umbra pigment. The manuscripts are all illustrated in tinted drawing style, rather than fully painted. All are of modest rather than luxury productions, but Hunter 251 and 112 are both larger than Hunter 339 and have been executed at a higher technical level by a more accomplished artist. Within the group of heavily illustrated John of Arderne manuscripts these three represent the top, middle and bottom position in terms of artistic quality and level of production.

In Hunter 251 illustrations of the procedure, and the tools used, each cover a page and no text is included. The zodiac man has the zodiac signs drawn as anthropomorphic figures on the body. Bodies, whole and fragmented, are often shown nude. The manuscript includes a wind diagram, but no humoral diagram. There are spaces left in the text for illustrations never completed, these include a space in the text for a humoral diagram as well as several case stories, *experimenta*, which were never completed. Hunter 112 opens with an elaborate wind diagram. The illustrations of the tools and the procedure both share the page with text and bodies are in this manuscript generally depicted wearing clothes.

¹² Glasgow University Library: MS Hunter 339 (U.8.7), MS Hunter 112 (T.5.14), MS Hunter 251 (U.4.9)

There are also several depictions of surgeons in Hunter 112. The manuscript does not contain a humoral diagram but a space is left for it. The manuscript concludes with several *experimenta* which are all illustrated with portraits of patients showing their wounds. In Hunter 339 the illustration of the tools, which cover two pages share the page with text, but the depiction of the procedure, which also cover two pages, do not. The figure of the zodiac man, which is also inserted into the main body of the text discussing astrology, is drawn with no discerning facial features. Bodies in the manuscript are depicted both clothed and nude, the cramping man for example is shown without clothes but depictions of lower parts of bodies, showing the placements of fistulas are often drawn wearing shoes or socks. Hunter 339 is the only manuscript out of these three that have both a wind diagram and a humoral diagram. A comparison between the visual elements of three manuscripts follow later in the introduction.

Arderne's texts in relationship to other medical books

Faye Getz has outlined the two distinct schools of medical writing in the English Middle Ages, the Roman/Anglo-Saxon school and the Greek/Arabic school, the latter to which John Arderne belonged.¹³ She labels Arderne an 'English medical Arabist,' and claims that writings of John of Arderne and John of Gaddesden, another influential English author who wrote the medical text *Rosa anglica practica medicina a capita ad pedes*, respectively, represent an attempt to establish a British canon of practical medicine and surgery.¹⁴ Arderne's text was originally written in Latin with sections in French and English, and was translated to middle English at a later date, although some sections remained in Latin.

¹³ Faye Getz, *Medicine in the English Middle Ages* (Princeton: Princeton University Press, 1998): p. 36.

¹⁴ Ibid. p. 43.

Jones has written extensively on the relationship between text and image in Arderne's manuscripts, as well as the relationships between the illustration programs in the different editions and copies. He claims that the text-image relationship is distinctive and different from all previous illustrated medical manuscripts by noting that while Arderne adheres to some of the contemporary standards of medical illumination by including an illustration of the Zodiac Man, he does not include some of the other very common medical illustrations such as a table of urine glasses, a medical volvelle or a Phlebotomy Man.¹⁵ The new and innovative ways in which Arderne's manuscripts relate images to text are accomplished primarily through the use of marginal illustrations to connect and explain the passages of text. This is also done the other way around, where text is used to explain the figures depicted. According to Jones, in the more heavily illustrated manuscripts, the text refers to twenty percent of the images with the words '*sicut hic depingitur*' ('as it is depicted here') or other phrases to that effect. The images thus function as 'a form of reference system for the text.'¹⁶ Jones goes on to describe how the illustration of the different stages of the surgical procedure are accompanied by a symbol which appears in the text where that stage of the procedure is discussed. He claims that the symbol, or *signa*, 'represent the diagnostic appearance of *fistulae* in different cases described at other points in the text,' and according to him this use of interrelating text and images shows Arderne's idea of the books intended function in contemporary surgery and medicine.¹⁷ He further argues that "there can be no doubt that Arderne intended from the beginning to provide both text and marginal illustration in all his writing, with the exception of *De aura oculonim*."¹⁸ There are different types of illuminations present in Arderne's manuscripts,

15 Jones (1987): p. 104-105.

16 Ibid. p. 108.

17 Ibid. p. 110.

18 Peter Murray Jones, "Staying with the Programme: Illustrated Manuscripts of John of Arderne, c.1380-1550", *English Manuscripts Studies 1100-1700*, vol. 10 *Decoration and Illustration in Medieval English Manuscripts*, A.S.G. Edwards ed. (London: British Library, 2002): p. 209.

figures that describe tools and visual symptoms of illness, but also images that are linked to the text not by illustrating what it demands, but by 'literal inspiration,' where, for example, the sensation of pain is illustrated with a picture of a gimlet.¹⁹ Jones speculates that these illustrations often became problematic for the copyists when images and sections of text were moved around in the manuscript and the illuminators were unaware what the thing they were depicting actually looked like.²⁰

Getz states that these kinds of books were written exclusively for 'other healers'²¹ and Siriasi also emphasises that Arderne's manuscripts were aimed at surgeons and other medical practitioners.²² Irma Taavitsainen and Paivi Phata claim that 'surgical books occupy the mid-position on the scale of academic writing to remedy books' and also that because surgery was a craft, the books themselves were primarily of 'practical use'.²³ This places the manuscripts in the same class as other practical tools, such as the *vade mecum* (handbook) or medical almanac, a small folded book carried by practising physicians, and the volvelle, a kind of wheel chart used for calculations.

Arderne's writings are examples of how an English surgeon with no university training could produce his own medical texts. Surgery had not been a topic of study at the English universities, as it had been in Palermo and Montpellier, nevertheless Jones argues that the Scholastic tradition came over from mainland Europe through texts and manuscripts and influenced the profession and study of surgery in England, as is seen in Arderne's Latin writings.²⁴ Arderne's text utilises some of the formal traits of Scholastic

19 Jones (1987): p. 112.

20 Ibid. p. 113-114.

21 Getz (1998): p. 45.

22 Siriasi (1990): p. 173.

23 Irma Taavitsainen, Paivi Pahta, "The Vernacularisation of Medical Writing in English: A Corpus-Based Study of Scholasticism", *Early Science and Medicine* 3 (1998): p. 159.

24 Peter Murray Jones, "John of Arderne and the Mediterranean Tradition of Scholastic Surgery", *Practical medicine from Salerno to the Black Death*, Luis Garcia-Ballester, ed. (Cambridge: Cambridge University Press, 1994): p. 292-295.

texts, such as referencing and 'reconciling authorities,' at the same time as he draws on his own practical experience.²⁵ According to Jones, Arderne's text is evidence of this in its 'emphasis on practical instruction rather than formal training.'²⁶

Alain Ségal has argued that one of the most innovative features of Arderne's illustrations is how the tools are drawn to scale and how the text and illustrations are 'intricately combined in the text.'²⁷ Similarly, Jones has claimed that:

The most striking feature of the illustrative tradition in Arderne's writings is that despite the complexity of the programme and the number of illustrations involved, and despite the chaotic textual tradition, the authorial programme of illustrations remained remarkably resistant to change.²⁸

Nevertheless, John Arderne's innovative way of relating text and images to each other was not generally adopted by other medical writers and the development of print and changes within book publishing was what prevented Arderne's texts from being influential for even longer.²⁹

Production of Books in the Middle Ages

In the early middle ages the main centres of literary production were monasteries, but as devotional practices changed around 1200 so did the production of books. The increased demands for books of private devotion meant that more Psalters and Books of Hours were produced, and that the production of some books was moved from monastic settings to secular workshops,³⁰ something which led to a plurality in book production.³¹

25 Ibid. p. 304.

26 Jones (1987): p. 109,

27 Alain Ségal, "New Reflections on the Instruments Represented in the Manuscripts of John Arderne's Treatise 'De Fistula in Ano'", *Vesalius* 12 (2006): p. 12.

28 Jones (2002): p. 205.

29 Jones (1987): p. 121.

30 Lucy Freeman Sandler and Nigel J. Morgan, "Manuscript Illumination in the Thirteenth and Fourteenth Centuries", *The Age of Chivalry, Art in Plantagenet England 1200-1400*, Jonathan Alexander and Paul Binski eds. (London: Royal Academy, 1987): p. 148.

31 Rowan Watson, *Illuminated Manuscripts and Their Makers, An Account Based on the Collections of the Victoria and Albert Museum* (London: V&A, 2003): p. 8.

Rowan Watson describes the production of an illuminated manuscript as a complicated procedure with a team of people complimenting each others' work, and 'whose contributions can be discerned like a series of archaeological layers'.³² A scribe would usually write the text and leave spaces for decorations to go in later and as the book, before binding, consisted of several gatherings it was possible for different specialists to be working on the same manuscript simultaneously.³³ There are some cities in medieval England which we know housed centres for book production, such as London and Salisbury, but according to Lucy Freeman Sandler and Nigel Morgan, it is unclear whether 'illuminators and scribes were working in organised workshops in the large cities, or whether two or three collaborators moved from place to place'.³⁴ These workshops or groups of travelling practitioners would have had model books from which to choose illustrations, or sometimes artists were hired to reproduce entire programmes.³⁵ This last is the category of manuscripts to which the three John of Arderne books to be discussed belongs.

Description

All three manuscripts contain the same texts by John of Arderne. Hunter 251 and Hunter 112 both open with *Speculum Phlebotomiae* (Mirror of Phlebotomy) and are followed by *Practica Chiruragiae* (Practice of Surgery) or *Treatise of Fistula in Ano, Haemorrhoids and Clysters*. The text in Hunter 339 is referred to as *Opera* (Works) and contain both *Speculum Phlebotomiae* and *Practica Chiruragiae* as well as other shorter texts and charms. The majority of the quotes from Arderne's text in this dissertation will be

32 Ibid. p. 12.

33 Achim Timmermann, "The Workshop Practice of Medieval Painters", *Making Medieval Art*, Phillip Lindley ed. (Donnington: Shaun Tyas, 2003): p. 43-47.

34 Sandler and Morgan (1987): p. 148-149.

35 Timmermann (2003): p. 51.

from The Early English Text Society's printed version of *Treatise of Fistula in Ano* which is a in Middle English and a transcription of Sloan 6. The text in Hunter 251 and Hunter 112 is very similar, Hunter 339 has some extra material but the main body of the text is the same as in the two former manuscripts, although more heavily abbreviated. The pictorial schemes and illustrations relating to specific words and passages of text remain largely the same in the entire group.

Hunter 339 is the physically smallest of the three, approximately 132 x104 mm, and with 232 folios, it is also the longest. The text is in single columns and with the exception of lists, there are approximately 20 lines on each page and each column is about 93 x 70 mm. The 105 folios in Hunter 251 measure approximately 256 x 172 mm. They written in single columns that are 171 x 108 mm and each page has approximately 38 lines. Hunter 112 retains 101 folios of its original 103.³⁶ They measure 230 x 151 mm and with text in single columns averaging 34 lines per page within a text block of approximately 185 x 100 mm. All three manuscripts contain marginal illustrations and images, or spaces left for images inserted into the main body of the text, as well as places where the text has been omitted and the page is instead dominated by larger illustrations.

Provenance and Palaeography

Based largely on the palaeographical evidence, Hunter 251 was produced between 1425 and 1450. The original patron is unknown, but the manuscript was subsequently owned by Richard Nix, Bishop of Norwich from 1501 to 1535. After that, notes in the manuscript show that it was owned by Thomas Moswell, a physician, and Richard Mead, also a physician and collector of books and art. Hunter 251 was acquired by William

³⁶ John Young and Henderson Aitken, *A Catalogue of the Manuscripts in the Library of the Hunterian Museum in the University of Glasgow* (Glasgow: MacLehose, 1908): p. 113.

Hunter at an auction after Mead's death in 1754 and was later bequeathed to the University of Glasgow.³⁷ The signatures, foliations and the catchwords are contemporary to the production of the text.³⁸

Hunter 112 was produced during the later fourteenth century and was first owned by the son of Sir Thomas Newmarch from around 1370. It was later acquired by Dr Mead who also owned Hunter 251, between 1673 and 1754, after which it was purchased by the surgeon, Charles Bernard.³⁹ The text is in an English hand and the catchwords in the margins are contemporary. The manuscript was cropped during rebinding and thus some marginal illustrations are damaged.⁴⁰

Hunter 339 was also produced in the second half of the fourteenth century. Its original owner is unknown, but it was acquired by James Thompson around 1625 and consequently by Thomas Langley from 1656.⁴¹ The text has been produced by various hands and the catchwords as well as foliation is contemporary as well as later additions to the text.⁴²

Mise-en-page

All three manuscripts have many common features. The pictorial programme and page layout is often almost identical, with many of the same images placed in the same order. There are various marginalia that often function as catchwords and illustrations of specific words or passages of text, although the size and relationship to the page they

37 University of Glasgow Special Collections Website,
<http://special.lib.gla.ac.uk/manuscripts/search/detaild.cfm?DID=33137>, accessed: May 21 2010.

38 Young and Aitken (1908): p. 201.

39 University of Glasgow Special Collections Website,
<http://special.lib.gla.ac.uk/manuscripts/search/detaild.cfm?DID=32705> , accessed: May 21 2010

40 Young and Aitken (1908): p. 113.

41 University of Glasgow Special Collections Website,
<http://special.lib.gla.ac.uk/manuscripts/search/detaild.cfm?DID=33318>, accessed: May 21 2010

42 Young and Aitken (1908): p. 274.

inhabit change depending on the size and layout of the manuscript page.

All three manuscripts have a wind diagram within the first three folios that covers approximately half of their respective pages accompanied by the same information (fig. 1).⁴³ Illustrations of the surgical tools followed by a page or two illustrating how the tools are applied to the patient, illustrating the surgical procedures, are also included in all three manuscripts. In Hunter 339, the image of the tools covers most of two pages. Some text exists on the page (four lines on f. 111v and eight short lines on f. 112r), which is otherwise dominated by the illustration (fig. 2). On f. 111v, four tools are presented vertically, each labelled. The *sequere me*, a sort of probe for locating the fistula, is positioned to the far left, stretching taller than the other tools and effectively trapping the text within the space of the tools. On f. 112r, the three labelled tools are presented vertically, stretching from top to bottom of the page, and the text, in eight short lines, is positioned next to them, perhaps to be presented and understood as another tool. On the following folios, the procedure is illustrated with four figures of the lower half of men's bodies presented during different moments of the surgery. The page does not contain any text and an illustration of a an instrument along the bottom of f. 112r draws attention to the limits and margins that ordinarily contain the text. Hunter 339 has a few examples of images interspersed within the text, for example on f. 34v an image of a clyster, a tool used to administer enemas, is inserted into the text as if replacing the third line from the bottom. The procedure is represented on the two folios immediately following the illustrations of the tools (fig.5). In Hunter 112, the tools used during surgery are contained within the text with seven lines of text above and two lines of text below the image, and none of the tools are labelled (fig. 3). Six out of the seven tools are presented vertically, next to each other, and the seventh tool is drawn horizontally below the others. On the following folio, the

⁴³ For a full list of illustrations with folio numbers, see Appendix 2.

illustration of the procedure covers half of the page and includes a tool (fig. 6). Finally, in Hunter 251, the largest of the three manuscripts, the illustration of the tools contain no text and no inscriptions (fig. 4). Six tools are drawn vertically, side by side, and two tools are drawn horizontally, one above and one below the other tools. The image is completely contained within the same space that is usually occupied by the text, possibly equating the importance of the image with that of the text. The folio containing the illustration of the procedure contains no text and the image is almost entirely enclosed within the same borders as the previous figure (fig.7).

All three manuscripts also include an illustration of a Zodiac Man (*homo signorum*) as well as an astrological diagram used for calculating the position of the moon and the auspicious times for surgery. In Hunter 339, the astrological diagram covers the full page and the illustration stretches beyond the space reserved for the text and into the margin. Three columns of the diagram are presented on f. 135r next to a narrower text column. The text within the diagram contains red highlights and is dispersed diagonally from the top left corner (to the bottom left) or the bottom left corner (to the top right) in every second box or division containing writing. The Zodiac Man illustration follows on the next page and is almost fully drawn within the main body of the text (Fig. 8). The Zodiac Man is depicted without hair, clothes or face and the body is labelled with the names of the corresponding zodiac signs. The moon diagram in Hunter 112 is contained on the page with seven lines of text above and the image does not extend into the margins. The diagram is highlighted with red pigment. . The Zodiac Man is posed in a tilted contraposto, hip to one side and arms up (fig. 9). The figure has much anatomical detailing, including a navel, an indication of stomach musculature, a contemporary hairstyle and with an impassive facial expression. The names of the zodiac are written onto the body of the

figure. In Hunter 251, the moon diagram does not share the page with any text. The Zodiac Man is situated within the text in the top right corner of the page (fig. 10). The figure is frontal and has a reserved facial expression and a contemporary hairstyle. The zodiac sign figures are drawn onto the body of the Zodiac Man, who stands on the pair of fish which are representative of Pisces. Aquarius, drawn on the ankles, is depicted as a man pouring water, Sagittarius, drawn over the knees, is a horse's body with a man's torso and head and finally Gemini, the twins, cling to the arms of the Zodiac Man. The Aquarius is the only masculine figure depicted as wearing clothes (a blue jacket) and they all have contemporary, fifteenth-century hairstyles with the hair cropped evenly above the ears. The only remaining human figure, this one female, represents Virgo. She is situated on the stomach of the Zodiac Man, clasping her hands upward and wearing a green jacket or dress which is belted below the bust. Her hair is drawn up in a hairnet or *crispine* and she is wearing a white hat. It is interesting to note that although the manuscripts are different in size, the size of the Zodiac Man illustrations remain almost the same. This might be a consequence of how these illustrations and the text surrounding the Zodiac Men were copied from a model, which might have dictated not only the words and the images but also the entire layout of the folio.

All three manuscripts have several illustrations of the locations of fistulas. These are all drawn in a similar way, featuring the lower half of a man's body from above the belly button to the feet, as if crawling into the text from inside of the margin, and they are all situated both in the margins of the page as well as within the text (fig. 11). The fistulas are all demarcated with red. Jones believes that this placement, both marginal and within the text, demonstrates the importance of the images as supplement to the text descriptions.⁴⁴ This analysis can reasonably be extended to all instances where images are

⁴⁴ Jones (1987): p. 114.

encroaching on the space of, or entirely replacing, the text.

All three manuscripts contain towards the end either a humoral diagram or a space for one. In Hunter 339, the diagram is shaped like a wheel and shares many similarities with the opening wind diagram (fig. 12). It has text both above and below it, anchoring the image to the page. Both Hunter 112 and Hunter 251 contain spaces left for insertion of this diagram, which in both cases was supposed to share the space with the text.

Hunter 339 does not contain any illustrations for Arderne's *experimenta* relaying his experiences with particular patients, and there are no spaces left for them. Hunter 112 has case stories in the manuscript, illustrated with portraits of women and men in contemporary clothing exposing a wounded or ailing part of their anatomy as described in the accompany text for the reader to observe. The six first illustrations of case stories in Hunter 112 were probably made by one artist, and the renaming possibly made by a different one, as the illustrations following on from the one at f. 91v (inclusive) are generally smaller than the previous ones, more often standing figures rather than simply heads, and different clothing details (women's hats and crespines as well as men's shoes). In Hunter 251 there are no illustrations for the case stories in the text, but there are spaces left for 12 illuminations, the spaces are roughly 30 to 40 mm wide and 50 to 60 mm tall.

The marginal illustrations also differ in size depending on the manuscript. In Hunter 339, marginal tools regularly extend the entire length of the page (fig. 13) in comparison with the tools in Hunter 112 and Hunter 251, which only cover half the length of the page (fig.14). This difference in representation is due to the difference in the size of the folios, but the effect it has on the layout of the page is quite drastic. In particular, the tools represented as the same size as the manuscript dominate the page in a way that the tools depicted following only half of the page does not, which in turn more forcefully

suggests their centrality to the procedures discussed in the text.

There are other marginal illustrations which are rendered differently in the three manuscripts. The arresting image of the back-bent, cramping man occurs in all three books. In Hunter 339, the figure is depicted nude in the bottom left margin (fig. 15). In Hunter 112, the figure in its current condition is only partial since the page has been cropped, and he is wearing clothes (fig.16). In Hunter 251, a similar figure is naked with contemporary bobbed hair below the ears. In this case, the figure is very small and is the only illustration on the page.

Other marginal figures exist in the manuscript that very consistently relate to specific words or passages of text. Case stories, which discuss individual patients, included within the main body of the text are often illustrated with either an image of the ailment, or an image of the person suffering from it. In the smallest manuscript, Hunter 339, these images are often just a head or a face, whereas in Hunter 112, a larger manuscript the figures can occasionally be represented by a full figure or a bust. In Hunter 251 the figures depicting faces and heads are occasionally faces incorporated into plants for reasons that are not directly related to the text.

All three of these manuscripts are in many ways best understood to be aspirational, and this dissertation aims to examine the reasons for the inclusion and appearance of the illustrations towards specific aspirational goals. It will identify and explore the contemporary ideologies that inform the renderings of the human body and the ways in which full figures and bodily fragments corroborate contemporary medical, cultural and theological notions. It will discuss how John of Arderne's self-promotional agenda became more nuanced through the inclusion of images that communicate messages about the status of the surgeons, the author and his patients. It will begin in the first chapter with a

discussion of images of clothed and unclothed bodies and the different moral and pious connotations associated with the body in states of undress in order to explore how these images respond to the author's and illustrator's idea of representative patients. This will help to establish a fuller context for Arderne's text and its reception not only by the practising surgeon, but also by those on whom the surgery was practised.

Chapter 2: The Clothed and the Unclothed Body

Representations of clothed and unclothed bodies in these three medical manuscripts allow us to study the social, moral and spiritual status of those rendered. The surgeon's status can be understood to reflect and be reflected in that of his patients, this chapter will therefore discuss the ways in which the clothed and the unclothed body of patients depicted functioned to augment the position of the surgeon in society. It is apparent that John of Arderne was very interested in the social status of his patients.⁴⁵ The text informs us that out of the nineteen he successfully treated for anal fistula, two belonged to the knightly or noble classes and eight are identified as members of the clergy, stressing the elevated status of his patients. In the three manuscripts, illustrations are also used to communicate the high social and moral status of the patients depicted. This is done in different ways and by rendering the figures in different states of dress or undress. This chapter aims to elucidate the reasons for these artistic choices and consider if and how different choices convey different social messages. It will demonstrate that the medical images studied here are closely related to a number of discourses controlling and shaping the understanding of both the dressed and the undressed body, and discuss what messages are communicated about the patient, and their status, through the use of clothes and nudity. It will explain how the figures, both dressed and unclothed, prescribe appropriate behaviour, arguing that the dressed figures do so by showing requisite levels of modesty and the nude ones by appropriating parts of a visual language to remind the viewer of the ideal behaviour of the saints. This chapter will also show that while the text describes the social class and position of Arderne's patients, the images produce and strengthen a positive statement about their character, and therefore that text and images are highly interdependent.

45 Jones (1994): p. 296.

Clothing in Arderne's manuscripts

Mario Perniola has sketched some of the changing attitudes towards the naked body in Europe, he explains that no notion associated with clothes or nudity is absolute, but always permeable depending on its context.⁴⁶ Michael Camille also describes in his analysis of the Luttrell Psalter the important role played by clothes within the manuscript. He writes that 'costume is part of the signifying system which is internal to a manuscript or a work of art and need have no bearing on the world outside it.'⁴⁷ Camille goes on to explain the system of signs apparent in the clothing within the Luttrell Psalter is one of duplicity, where clothes are used to enhance the connection between different social classes and states of piety.⁴⁸ Because it is a medical rather than devotional manuscript, this analysis cannot be readily duplicated to fit the problems presented with the depictions of clothes and dress in Arderne's manuscripts, but it is important to note that the patterns of dress, undress and nudity adhere to a logic that is, in many cases, internal to itself and the manuscript. Images of clothes in manuscripts does not present a detailed record of what clothing or fashion was like during this period, but should be understood as the way in which people wanted to be perceived.⁴⁹

The three manuscripts relate differently to images of bodies and and clothes. Hunter 251 show many men and female heads and faces in the margins, illustrating case stories within the main text. The manuscript also contains two illustrations of human head-plant hybrids, where a man or woman's face is emerging from a flower. Compared to Hunter 112 this manuscript has a lot fewer illustrations depicting bodies, the corresponding illustration of a man with a bellows stoking a fire is in Hunter 251 depicted

46 Mario Perinola, "Between Clothing and Nudity", *Fashion: Critical and Primary Sources Vol. 1 Late Medieval to Renaissance*, Peter McNeil ed. (Oxford: Berg, 2009): p. 97.

47 Michael Camille, *Mirror in Parchment: The Luttrell Psalter and the Making of Medieval England* (London: Reaktion Books, 1998): p. 107-110.

48 Ibid. p.109.

49 Margaret Scott, *Medieval Dress and Fashion* (London: British Library, 2007): p. 7.

solely as bellows and a fire. The headdresses in Hunter 251 are somewhat similar to those in Hunter 339, which are best described as reticulated headdresses. Mary Houston describes the construction of them as a metal frame in the front, with a wimple covering the head, but rather than the wimple being loose and following the contours of the head, it is attached to the wire net in the front.⁵⁰ Hunter 339 does not have any more full figures of human bodies than Hunter 251, but the manuscript show many more male and female heads than the latter. All three manuscript use images of the heads and faces of men and women to signal case stories and examples within the text. All three manuscripts also use these depictions to situate them within a contemporary context; as the men have contemporary bobbed hairstyles and, sometimes, beards, in the same way as the women's headdresses are contemporary.

The social significance of clothes

During the 1340's dress changed all over Europe. According to Stella Mary Newton the change, although different in different regions, had one important common feature, and that was that the clothes turned its wearers from a united and whole figure (with long tunics and mantles) into 'insectlike things' with bodies seemingly divided or fractured by shorter, more fitted garments.⁵¹ The change within fashion came about through innovations in the production of clothing, buttons and armholes allowed for garments to be tailored closer to the body.⁵² The new fashion was considered wasteful since by cutting armholes and producing more fitted clothes, bits of fabric left over from the textile sheets previously used in its entirety went to waste, something which was widely critiqued through the 14th

50 Mary G. Houston, *Medieval Costume in England & France The 13th, 14th and 15th Centuries* (London: A. & C. Black, 1939): p. 85-88.

51 Stella Mary Newton, *Fashion in the Age of the Black Prince: a Study of the Years 1340 -1365*, (Woodbridge: Boydell, 1980): p. 2.

52 Ibid. p. 3.

c.⁵³ The critique towards the new types of dress also came to reflect contemporary national tensions, as in England the new types of dress was blamed on French designers and in the rest of Europe other countries would also blame their neighbours.⁵⁴

E. Jane Burns outlines in her study of French courtly love narratives, the transgressive power that clothing and dress possess. She suggests that dress and clothing must be viewed together, as a body in its own right, that the performative role the garment has, is what gives social status and creates categories such as race or gender. She cites the story about Floris and Lyriope, a love story where Floris dressed as a woman to be allowed to be near his love interest, Lyriope, and then the narrative informs us that the young man is now a woman, and to be referred to as a she.⁵⁵ Burns further discusses how contemporary French preachers railed against the fashion which produced effeminate men.⁵⁶ Both examples illustrate the role clothes and appearances played in producing gender, both in courtly love narrative and in real life. Similarly, Anne Hollander also discusses the body as an idea, changing and permeable with cultural changes. Her study of the body within western art historical tradition highlights how the ideal body is constructed within an artistic context and how this related to changes in posture as well as other ways to relate to and understand the body. Changes in fashion, which alters the appearance of the body, consequently changes the understanding of it and demands a new body. Thus clothing is one of the reasons why at certain times we have certain culturally specific bodies.⁵⁷ This notion is important when it comes to the study of clothed, unclothed as well as semi-clothed bodies, both in the medieval manuscript tradition as well as in contemporary life. In Hunter 339, Hunter 112 and Hunter 251 the clothes, hair and

⁵³ Ibid. p. 3-4.

⁵⁴ Ibid. p. 9.

⁵⁵ Jane E. Burns, *Courtly Love Undressed: Reading Through Clothes in Medieval French Culture*, (Philadelphia: University of Pennsylvania Press, 2002): p. 126.

⁵⁶ Ibid. p. 133-135.

⁵⁷ Anne Hollander, *Seeing Through Clothes* (London: Penguin Books, 1988): p. 90.

headaddresses are the only means with which the figure can be culturally identified and gendered. Facial expressions are small and general, which means that the figure, his or her social as well as moral standing, is almost entirely created and enforced by small signs and visual cues situated within their clothes. For example, the images of a surgeon and a woman holding a child (fig.17), man being administered a clyster (fig.19) as well as two *experimenta* showing wounds situated on the penis and thigh respectively (fig. 22, 23), all in Hunter 112, illustrate that these figures are contemporary to the production of the manuscript and that the characters portrayed belong to the higher social strata. Similarly, in Hunter 339, the lower half of men's bodies, used to illustrate the placements of fistulas, are all wearing long socks and pointy shoes, as was custom, undoubtedly as another way to situate the figures and the body of the hypothetical patient within a specific cultural time and space. The same effect is achieved in Hunter 251, in the illustration of man bleeding from the liver (fig. 20), through the depiction of the figures contemporary hairstyle.

Sumptuary or clothing laws tried to control and narrate human interactions by illustrating strict social and political hierarchies. Claire Sponsler argues that the primary function of clothing laws was as a way to control social order and maintain privilege, that the laws were almost always formulated in response to new mobility within society.⁵⁸ Fernand Braudel has stated that fashion and styles of clothing has always changed in response to large scale social and political changes, and consequently that a society that is stable had a type of dress that was less likely to change.⁵⁹ Sumptuary laws are therefore best understood as a response to large scale social changes. Sponsler points out that the clothing laws in later medieval England were in essence a part of the construction of social reality.⁶⁰ She uses sumptuary laws and other cultural outlets, such as contemporary

58 Claire Sponsler, "Narrating the Social Order: Medieval Clothing Laws", *Clio* 21 (1992); p. 266-267.

59 Fernand Braudel, "Costume and Fashion", *Fashion: Critical and Primary Sources Late Medieval to Renaissance*, Peter McNeil, ed, (Oxford: Berg, 2009): p. 4.

60 Claire Sponsler, *Drama and Resistance: Bodies, Goods and Theatricality in Late Medieval England*

sermons, to support her claim that dress was understood to 'produce' status, not just passively reflect it.⁶¹ It is in much the same way that the dress is used to construct the social status of the patients in the manuscripts and by extension the status of the surgeon.

While sumptuary and clothing laws stipulate appropriate dress for appropriate social class, it does so primarily by controlling cost and quality of materials used for the dress, and as the images in Arderne's manuscripts are small, often sketchy, without much colour variation and executed with limited artistic expertise; drawing from sumptuary legislation to conclude which specific social class these figures are meant to belong to is almost impossible. That is not to say that the study of the clothes in these manuscripts is unimportant, it can indeed tell us about a lot of other aspects of Arderne's ideal patients. Dress was used to situate the figure within a contemporary context and to strengthen the claims made by text about the high social status of the patients, but it was also used to convey messages about sanctioned behaviours and moral stature.

Piety, moral standing and dress

As Camille has shown, the connection between different types of dress and states of piety was strong during the Middle Ages. The association existed between newer types of clothing, often more extravagant and perceived as foreign, with immorality and sins such as pride and vanity. Ruth Melinkoff has written about the appearance of non-Christians in medieval art. She has catalogued the many different ways evil and sin are portrayed through depictions of bodies, faces and clothes; the enemies of Christianity were singled out through bright and tight clothes, and according to her that depiction 'became a commonplace image of infamy.'⁶² St Thomas Aquinas wrote about the modesty of apparel,

(Minneapolis, Minnesota.: University of Minnesota Press, 1997): p. 6.

61 Ibid. p. 17.

62 Ruth Melinkoff, *Outcasts: Signs of Otherness in Northern European Art of the late Middle Ages*, (Berkeley; Los Angeles; Oxford: University of California Press, 2003): p. 38-41.

claiming that clothing in itself was not sinful, but how the clothing functioned in relationship to its wearer and cultural context which determined the sin. He condemned the practice of wearing 'costly apparel (such namely, as exceeds his estate)' as clothing was an indication of a man or woman's status in society.⁶³ The English 14th century preacher John Bromyard believed that the inhabitants of the Devil's castle could be recognised by their 'fashionable beards and "dagged" garments'.⁶⁴ At different times specific garments would be criticised for its immodesty; Bromyard criticised side-less dresses and Thomas Gascoigne (1403-1458) criticised the low-cut ones.⁶⁵ Gascoigne also believed that jewellery and ornaments on clothing had a practical purpose in that it allowed to easily distinguish between different social classes.⁶⁶ Two other 14th century preachers, John Waldeby and Robert Rypon, agree with this statement and complain about the social transgression which is possible as lower classes appropriate the signs of the higher classes.⁶⁷ It was not just preachers and members of the clergy who criticised the new fashions; according to John Scattergood, Chaucer uses dress 'as a way of talking about morality, social class and politics'.⁶⁸ He further writes that other poets, throughout the 15th century, 'adopt a tone of high moral outrage when speaking of contemporary fashion'.⁶⁹ One example of modest clothing is the marginal illustration on f. 16v in Hunter 112, showing a large full figure of a woman. She wears a blue, low cut dress (similar to the one shown in fig. 14) a hairnet into which her hair is tucked (as seen in fig. 15), and her hands are crossed at the wrist in front of her. The dress, or gown as the garment is called by Nevil

63 St Thomas Aquinas, *Summa Theologica Secunda Secundas*, translated by Fathers of the English Dominican Province (London: T. Baker, 1911-1925): p. 305.

64 Gerald Robert Owst, *Literature and Pulpit in Medieval England* (Oxford : Blackwell, 1966): p. 81-88.

65 Ibid. p. 397.

66 Ibid. p. 407.

67 Ibid. p. 364-366.

68 John Scattergood, "Fashion and Morality in the Late Middle Ages", *England in the Fifteenth Century: Proceedings of the 1986 Harlaxton Symposium*, Daniel Williams ed. (Woodbridge: Boydell, 1987): p. 265.

69 Ibid. p. 268.

Truman, is usually not worn on its own but often worn together with a mantle, a *cotehardie* or a belt.⁷⁰ The cut of the dress that accentuated and elongated the profile of the woman wearing it came into fashion in the 1340's; the neckline could be either rounded or square and trains on the gown was limited to the upper classes, due to cost and practicality.⁷¹ The clothing depicted in the Hunter 112 illustration is thus that of a contemporary woman, wearing contemporary fashions although not too extravagant. Women's gowns would often be covered by a top layer, such as a *super cotehardie*,⁷² which are not present on any of the depictions of full female figures. During the Middle Ages clothes were well understood as an outer representation of an inner state of being. In Christine de Pizan's (1365 – c. 1434) text *The Treasures of the City of Ladies* where proper etiquette and behaviour of all women is described, the dress worn by Christine and the other women both correspond to expectations of class and to the advice in the text, to dress modestly.⁷³ In Hunter 112 the figure rendered is one wearing clothes according to her social and moral status, she is shown wearing contemporary clothes, which establishes the story within a contemporary (and thus factual) context, at the same time as it is making a positive statement about the figure discussed, without drawing attention away from the medical issues addressed.

Nude and Pious Bodies

All three manuscripts have some recurring features, and figures describing the same ailments are rendered differently in the three manuscripts but the messages communicated are similar. The illustration of the man being administered a *clyster*, an

70 Nevil Truman, *Historic Costuming* (London: Sir Isaac Pitman, 1966): p. 25-29.

71 Marie Botkin, "Medieval Clothing", *The Greenwood Encyclopaedia of Clothing Through World History*, Jill Condra ed. (Westport, CT; London: Greenwood, 2008): p. 235-236.

72 Truman (1966): p. 30.

73 Laura Rinaldi Drufresne, "Christine de Pizan's 'Treasure of the City of Ladies': A Study of Dress and Social Hierarchy", *Women's Art Journal* 6 (1996): p. 30-33.

instrument used to administer an enema, is present in all three manuscripts but is rendered slightly differently in all of them. In Hunter 251 the composition is horizontal. the naked figure is stretched out, placed on his knees and elbows with his hands in front of him although not clasped. The same figure in Hunter 112 is depicted wearing clothes, as is the medic administering the clyster (fig.19). The patient is wearing tights and a jacket reaching to the top of the thighs, no clothes have been removed for the administration of the clyster, the surgeon is wearing tights and a jacket reaching to just above the knee. The composition of the figure is vertical along the margin, the patient has clasped hands and is gazing upwards beyond the page. In Hunter 339 the image has been damaged, the nude patient is on the bottom of the page, his hands are clasped in front of him and he seems to be gazing at the viewer. A rectangle has been cut out from the page, the missing section would have contained the clyster and the man's backside and thighs. Hunter 251 depicts both the images of the man bleeding from the liver (fig.20) and the cramping man in the beginning of the manuscript as nude male figures, the second one has clasped hands. Hunter 339 depicts the cramping man as a small nude male figure (fig.15), as is the image of the man bleeding from the liver, but this illustration has been vandalised, the red under the figure has been rubbed out. In the latter figure, the man is orientated vertically (seemingly crawling along the side of the margin) and his hands are clasped in front of him. Hunter 112 depicts the cramping man in a short red buttoned jacket, reaching to the middle of his thigh and yellow tights or socks and the the man bleeding from the liver is nude, he has contemporary bobbed hair and clasped hands (fig.16). Many of the figures, whether depicted nude or clothed are shown with clasped hands gazing upwards, as if praying, perhaps showing the reader how to endure the pain of surgery.

The most perplexing image in Hunter 251 is the figure of a nude man depicted

underneath the text (fig.21). The figure is in the bottom margin of the page and it has no corresponding design in Hunter 339 and Hunter 112. The man has long hair and a forked beard, a fashion associated with the period. He covers his genitals with his hands and the text above him describes how to take appropriate payment for the procedure. Margaret R. Miles has written about the roles of the naked women and nude men in the Middle Ages, and according to her women were rarely depicted undressed for other purposes than those of 'religious pornography.' Men, on the other hand, were often depicted nude and their lack of clothes did not signify sin or anything negative, but was to be understood as a heroic nude. Miles writes that:

Male nakedness represented spiritual discipline and physical control and order – the body as a perfect vehicle and expression of the difficult and committed work of the creation and cultivation of religious subjectivity.⁷⁴

The possible association between the nude figures described here, the naked figures in Hunter 251 and Hunter 339, shown in states of undress and with clasped hands, and the heroic male nudes of saints and other holy people provides the same incentive and encouragement proper behaviour as the images of men and women dressed in a fashion appropriate to their stature. The first artist of Hunter 112 rendered women and men with morally correct clothes and pious expressions, perhaps as a guide to proper behaviour for the readers in much the same way as the artists in Hunter 251 and Hunter 339 drew on depictions of saints and pious behaviours to describe proper behaviours.

Production and damage to some aspects of the manuscripts

It is possible to see where the illustrations has swapped hands half way through till illustrations of case stories in Hunter 112. The drawing style changes slightly, the lines are broader and the composition generally smaller within the space given for them. That is not

⁷⁴ Margaret R. Miles, *Carnal Knowing: Female Nakedness and Religious Meaning in the Christian West* (Boston: Beacon Press, 1989): p. 142.

the biggest hint as to the change in hand, which comes in the artist's choice in depicting clothing. The first artist shows his male figures with bobbed hair, in jackets with buttons, socks or tights (fig.23), the women were depicted with jewelled hairnets. The men drawn by the second artist are depicted with many different types of hats and hairstyles and their clothes also differ. The illustration on f. 91r, a man showing a wound on his penis, depicts a man with a turban style headdress and the exaggerated, pointed shoes Truman referred to as cracowes (fig.22).⁷⁵ The two men are depicted radically different from each other, illustrating how two artists, contemporary with each other, could display radically different values and discourses through their choices when depicting clothes.

Another such instance can possibly be traced in the two damaged figures in Hunter 339. According to Madeline Caviness "prudishness was on the increase during the later Middle Ages" and it was a time that saw the removal of genitalia from manuscripts.⁷⁶ Camille has written about the private iconoclasm of the later Middle Ages, which saw owners damaging their own books in order to rid them of obscene imagery. He argues that while it is impossible to know the exact dates of these acts, he believes that it was while they were still functioning objects.⁷⁷ Camille's discussion focuses on religious texts, and perhaps the vandalism that has befallen the medical images in Hunter 339 is of a later date. It is still worth to consider the possibility that this obfuscation happened when Camille believed that the acts of iconoclasm in the religious texts that his argument concerns, and that Hunter 339 may have been in the possession of someone who did not have enough literacy to comprehend the meaning of the images or simply found them to explicit.

This chapter has shown how clothing and the lack of it was used to communicate

⁷⁵ Truman (1966): p. 30-31.

⁷⁶ Madeline H. Caviness, "Reception of Images by Medieval Viewers" *A Companion to Medieval Art: Romanesque and Gothic in Northern Europe*, Conrad Rudolph ed. (Oxford: Blackwell, 2006): p. 69.

⁷⁷ Michael Camille, "Obscenity under Erasure: Censorship in Medieval Illuminated Manuscripts" *Obscenity: Social Control and Artistic Creation in the European Middle Ages*, Jan M. Ziolkowski ed. (Leiden: Brill, 1998): p. 147.

messages about social and spiritual status of the ideal patient both in contemporary society and in relation to manuscript illumination traditions. In these three manuscripts, the clothed and unclothed bodies of patients and surgeons all serve to illustrate that the figures are contemporaneous with the production of the manuscripts. The text emphasises the high social status of many of the patients, a claim that is underlined by depictions which stress their high social as well as moral and pious standing. The clothes describe and create the social position of the person wearing them and through illustrating the ideal patient, the profession of surgery is situated advantageously within a medical hierarchy. The next chapter will show how clothes also functioned to gender the figures male or female, it will discuss how contemporary scientific discourses were created and represented in the illustrations of bodies and how these renderings helped promote gender difference.

Chapter 3: The Gendered Body

As demonstrated in the last chapter, clothes serve different purposes in John of Arderne's illustrations. Nudity and states of dress all function to describe the figure's moral and social status, but they are also the primary means by which the body is gendered. There are many depictions in all three manuscripts where the bodies are gendered although this is not called for by the text, this is achieved both through clothes and representations of physical attributes. This chapter will discuss medieval medical understandings of sex and gender, how the images in Arderne's manuscripts responded to these notions, and how the books themselves functioned as gendered objects helping to construct understandings of gender and gender difference.

Gendered Body Parts

There are many marginal illustrations of body parts which are not overtly gendered, they are possibly implied male as the default representation of the human body or perhaps their fragmentation allows the parts to transcend the limits of gender. Caviness writes about saints' bodies represented in fragments within relics and through reliquaries, that 'pieces of the saints body ultimately invoked the absence of the body,⁷⁸ and according to her, this fragmentation, the part's capacity to act as synecdoche, grants it more power and agency, that even transcends gender.⁷⁹ Perhaps this same power is granted to the images represented in the margins of Arderne's manuscripts. There are also representations of bodies, fragmented as well as whole that are overtly gendered, these include the illustrations of the placements of fistulae (fig. 11), man bleeding from the liver (fig. 20), and cramping man (fig. 15). In the three manuscripts, this gendering is achieved in slightly

⁷⁸ Madeline H. Caviness, *Visualizing Women in the Middle Ages: Sight, Spectacle, and Scopic Economy* (Philadelphia: University of Pennsylvania Press, 2001): p. 139.

⁷⁹ *Ibid.* p. 157.

different ways. In both Hunter 251 and Hunter 339 the figure of the cramping man is nude, both figures are twisted away from the viewer, hiding their genitals and their contemporary bobbed hairstyles effectively showcase them as male. In Hunter 112 the figure is wearing clothes, that and his hair effectively signals his gender to the viewer (fig. 16).

Further, all three manuscripts use male genitalia to gender depictions of bodies as masculine, in cases where it is impossible to use hair or clothes for this purpose. In the illustration of the procedure for the treatment of fistula in ano, the lower half of bodies all include a penis and testicles (figs. 5-7). In some of these figures there are fistulas placed on the testicles which would provide a practical explanation for their inclusion. Within the next few pages, in all three manuscripts, the first illustration of the placement of fistulas include male genitals, even though none of the fistulas are situated on the testicles or penis (fig. 35). The inclusion of this detail further establish that this figure, and those following, which are drawn without genitals, are male. However, in Hunter 251 the full figure of a nude man (fig. 21), drawn on the bottom of the page, is shown covering his genitals with his hand. He has a contemporary hair, a long beard and a flat chest, his masculinity is signalled by his other attributes and characteristic, and does not need to be verified by the genitals. The same can be said man being administered a clyster (fig. 19), as well as the man bleeding from the liver (fig. 20), their genitals are not shown when there are other means of showing the gender of the character. It is only in cases where clothes, hair or the build of the body cannot be used that genitals become a means to establish the sex of the figure.

The 'one-sex' model and menstruation

The reason for these choices in representation can be found in contemporary pseudo-scientific views on sex and the gendered body. The 'one-sex' model was the prevalent model for understanding sex and gender for over a thousand years. It allowed cultural, political and social ideas, drawing negative and positive characteristics from both genders, to be applied to any human body at the same time as it established one social group as superior to the other. Ancient Greek philosophers as well as later scholars, such as Galen, speculated that the make up of the female body was one almost identical to the male, but where the penis protruded on the male body it was, on the female, situated on the inside.⁸⁰ According to Laqueur gender difference was best understood as differences in shade rather than colour; the distinctions between the genders understood through humoral theory as fluid, largely based on the liquids controlling and flowing from the body. A woman's menstruation was one way the body purged itself of its excess fluids, and according to Laqueur, Aristotle believed that men in turn had haemorrhoids and nosebleeds more often than women, as it provided another means for (masculine) bodies to purge themselves of surplus fluids.⁸¹ The reasons given for woman's lack of perfection, the production and varying strength of their seed, was primarily understood to be the female body's colder nature.⁸² It is by the fluids produced by the body that it is defined. Laqueur writes that:

For Aristotle, therefore, and for the long tradition founded in his thought, the generative substances are inconvertible elements in the economy of a single-sex body whose higher form is male. As physiological fluids they are not distinctive and different in kind, but the lighter shades of biological chiaroscuro drawn in blood.⁸³

Aristotle also believed that males of any species were naturally superior, a theory which he

⁸⁰ Thomas Laqueur, *Making Sex: Body and Gender from the Greeks to Freud* (Harvard University Press: Massachusetts, 1990): p. 25.

⁸¹ *Ibid.* p. 37.

⁸² *Ibid.* p. 40-41.

⁸³ *Ibid.* p. 42.

proved by citing examples from the natural world where he believed the male of every species was larger, faster and stronger.⁸⁴ St Thomas Aquinas agreed with this assertion. He believed that women were also created by God, but did not have the same capacities for reason as men did. This biological explanation of the division between the genders was strengthened by the theories of Galen who put body heat at the very core of his argument, arguing that women's colder nature accounted for their physical and mental inferiority.⁸⁵ He writes that 'it is this that hibernating animals are frequently found to have a greater amount of fat, and women to have more than men; female-kind is by nature colder than male-kind, and for the most part stays at home.'⁸⁶ In one sentence Galen uses pseudo-scientific ideas regarding body heat and gender and applies them as justification to a social situation. Since the one-sex model is flexible and adaptable, many political and philosophical views and understandings could be applied to it. The political applications position women as inferior to men due to their lack of heat and strong seed, but the one-sex model also places the individual body within a larger context, using its characteristics, its fluids and heat, to situate it as a microcosm, at a place within the universe or macrocosm.⁸⁷

Similar medieval understandings of gender, the more fluid concepts of masculinity and femininity, has been discussed by Joan Cadden. According to her, menstruation was not understood as a sin, but a particularly womanly mark of the fall,⁸⁸ and women were generally understood as incomplete or defective men, a medical and scientific point which highlighted the differences between the genders that further helped to justify women's

84 Ibid. p. 31.

85 Ibid. p. 32.

86 Galen, *Selected Works*, P.N. Singer Trans. (Oxford, New York: Oxford University Press, 1997): p. 247.

87 Laquere (1990): p. 54.

88 Joan Cadden, *Meanings of Sex Difference in the Middle Ages* (Cambridge: Press Syndicate for the University of Cambridge, 1993): p. 174.

subordinated position in society.⁸⁹ When discussing the proper way to dress a wound John of Arderne mentions that 'þe breþ of a *menstrous* women noyep vnto woundez if sche nezen nere ; or of þe lech if he haue ligen *with* his wife or *with* anoþer woman menstruate, or if he haue eten garleke or onyons.'⁹⁰ A statement which illustrate how Arderne was very much a part of the medical tradition which emphasised women as faulty and sometimes dangerous. Albertus Magnus (d.1280) a Dominican friar who was very influential, wrote about women, menstruation and the negative effects it was believed to have on both women and those in contact with her.⁹¹ Cadden further describes how he, and those studying him, believed that women's 'moral, intellectual, and sexual characteristics are inextricably linked as correlative effects of their collective constitution.'⁹² The very nature of the female, and consequently her correct place within society, was made up out of the balance of her bodily fluids. In these three manuscripts the choices to gender the figures as male, even when the ailments depicted do not demand this, reflect these values and represents a wish to show the perfect masculine body rather than a faulty feminine one, and women are therefore only rendered when the ailment is a specifically womanly one.

Moral values associated with gender

There were notions of morality associated with gender, Cadden discusses how, although the roles of women and men were sometimes distinct, nevertheless, ideas of femininity and masculinity were fluid, and best understood as a spectrum. Women who cast aside their sinful behaviours and habits would become 'male in spirit' and sometimes in the flesh (as is the case of the St. Wilgefortis who was being forced into marriage but

89 Ibid. p. 181.

90 John of Arderne (1910): p. 88.

91 Rawcliffe (1995): p. 174-175.

92 Cadden (1993): p. 185.

through divine grace grew a beard and was able to avoid that fate).⁹³ By that same logic, men could behave and become feminine,⁹⁴ which was always understood as something negative. Notions of different levels of maleness was also explained with the idea of regeneration, how a human child was created through a mix of the male and female seed. The sex of the child was dependant on a multitude of factors, but the strength of the male sperm was a very important influence. The stronger the man's seed the more likely the child was to be male and resemble the father, and consequently, if the child was a girl resembling the mother, the 'the female sperm was considered to have vanquished the male sperm.'⁹⁵ This way of understanding human reproduction illustrate ideas of femininity and masculinity as fluid, where both genders can posses both female and male characteristics. Similarly, Vern Bullough discusses the limitations of masculinity as well as femininity in the middle ages. He agrees with Cadden, and states that women were allowed to transgress the boundaries of gender somewhat, without being understood as a threat to society, as:

society in fact encourages women to assume male roles as a sign of their superiority to other women, and only rarely regards such women as abnormal. Only when women threatened the male establishment by taking to overt a masculine role have they been ostracized in the past.⁹⁶

Men were not allowed to transcend or transgress the limits of their genders as masculine 'superiority' has to be continually performed and reinforced.⁹⁷ It has already been discussed, in the previous chapter, how Arderne's preoccupation with the moral status of his patients affected the illustrations in these manuscripts, these ideas and notions can then reasonably be assumed to effect these choices to depict the male body as the norm.

93 Ibid. p. 203-204.

94 Ibid. p. 205-206.

95 Vern L. Bullough, "On Being Male in the Middle Ages", *Medieval Masculinities: Regarding Men in the Middle Ages*, Clare Lees ed. (London: University of Minnesota Press, 1994): p. 40.

96 Vern L. Bullough, "Transvestites in the Middle Ages", *The American Journal of Sociology* 79 (1974): p. 1393.

97 Bullough (1994): p. 34.

Penises and Representations of Masculinity

As already discussed, the one-sex model created an understanding of gender which is well understood as a spectra. Bullough argues that because women's roles in medieval society were limited and of a lower status, the adaptation of masculine attributes to facilitate the transgression of gendered boundaries was necessary. Men, who had a higher status, were also limited, as they needed to be constantly watchful to maintain their status, and of not possessing or displaying any feminine qualities. He writes that 'the male was defined in terms of sexual performance, measured rather simply as his ability to get an erection.'⁹⁸

There are many depictions of penises in all three manuscripts, some are, as previously discussed attached to bodies and used to signal the gender of the patient, but there are also disembodied penises, drawn on their own, usually in the margins. Hunter 251 has more images of free-floating male genitalia than the other two manuscripts, this might be because of mistakes that has been made in the transmission and copying of these images (for example see fig. 24). Jones discusses this issue of transmission of illustrations between different John Arderne manuscripts, and according to him images of *clysters* and of penises sometimes get confused. This is due to the similar shapes of the two design between the penis and testicles and the *clyster* which is made from a pig's bladder and a wooden pipe, and there are many instances where the wrong illustration is inserted.⁹⁹

The genitals, both male and female, were in the middle ages believed to carry the same physiognomical information as any other body part. Joseph Ziegler has written about the the ideas associated with different shapes and sizes of genitalia in the middle ages. It was believed that the shape, size and placement of the testes could reveal information

⁹⁸ Bullough (1994): p. 42-43.

⁹⁹ Peter Murray Jones, "Staying with the Programme: Illustrated Manuscripts of John of Arderne c.1380 – c.1550", *English Manuscript Studies 1100-1700, Vol.10 Decoration and Illustration in Medieval English Manuscripts*, A.S.G. Edwards ed. (London: The British Library Board, 2002): p. 219.

about the rest of the body, as well as the mind, of the person they belonged to.¹⁰⁰ Since the illustrations of male genitals in these three John of Arderne manuscripts are often very stylised, and designed specifically to show diseases as or as part of illustrations of the insertion of a catheter in a penis, as is shown in Hunter 251 (fig.24), the figures are often so stylised it is hard to determine what, if indeed anything, the physiognomy of the organ is communicating. Ziegler also pointed out that the fifteenth century Florentine Dominican priest Savonarola thought that 'the testicles are the most faithful witness to masculinity.'¹⁰¹ The recurring images of penises in these manuscripts serve several different purposes, illustrating procedures and symptoms, as well as perhaps serving as continuous reminders of masculinity and socially mandated behaviour. The inclusion of many images of male genitalia, and the complete exclusion of female genitalia is in line with the other choices made to exclude figures of women when possible.

Zodiac Men

James Donaldson describes the difference between a modern and a medieval and ancient understanding of gender, in a modern definition a man and a woman is understood to be 'a male human being and woman to be a female human being...what the early Christians did was strike the male part of the definition of man and the human being out of the definition of woman.'¹⁰² This understanding of the man as universal and the woman as a strange deviation is clear in most standard representations of the zodiac men. The figure in Hunter 251 (fig.10) and Hunter 112 (fig. 9) are both quite typical renditions. Neither of the figures are wearing clothes, and neither of them are displaying their genitals, but they

¹⁰⁰Joseph Ziegler, "Sexuality and the Sexual Organs in Latin Physiognomy 1200 -1500", *Studies in Medieval and Renaissance History, Sexuality and Culture in Medieval and Renaissance Europe, Series 3, vol.2*, Philip M. Soergel ed. (New York: AMS Press, 2005): p. 90-91.

¹⁰¹Ibid. p. 89.

¹⁰²James Donaldson, *Woman: Her Position and Influence in Ancient Greece and Rome, and among the Early Christians* (London: Longmans, Green, 1907): p. 181-182.

are both identifiably male, by their flat chests and masculine hairstyles. It was not understood to be excluding of women, but rather as a celebration of the perfect human form. They are both good illustrations of the issue described by Donaldson, as the male body becomes synonymous with the universal human body. The zodiac figure in Hunter 339 is drawn differently (fig.8), the figure is not gendered either male or female and none of the regular markers denoting gender, such as clothes, hair or any discerning physical features are present. This rendition is stepping away from the idea of the man/male as the norm by offering a non gendered figure in its place.

Jacqueline Murray claims that these models for understanding sex and gender, the one-sex model and its fluid ideas of masculinity and femininity allowed gender identification to be placed on a spectrum. She also believes that other loaded binary oppositions, such as natural and cultural, warm and cold, could be placed on this continuum, stretching from masculine to feminine, and that while it was possible for men and women to both move along the spectrum and get some of the characteristics of the other gender, some people were also able to transgress this binary system and form a 'third' gender.¹⁰³ One of the monstrous races was a form of hermaphrodite, the *Androgini* ('man-woman') who according to Pliny have both male and female genitals and Isodore of Seville claimed that they 'both inseminate and bear.'¹⁰⁴ Madeline Caviness has also written about the medieval understanding of gender as a spectrum and how this is expressed in the Bayeux embroidery. She claims that the 'third sex' was a term that could be interchanged for hermaphrodite, but that in the case of the Bayeux embroidery the connotations are not monstrous, as the third sex simply replaces places effeminate men in the place of

103Jacqueline Murray, "One Flesh, Two Sexes, Three Genders", *Gender and Christianity in Medieval Europe*, Lisa M, Bitel and Felice Lifshitz eds. (University of Pennsylvania Press: Philadelphia, 2008): p. 39.

104John Block Friedman, *The Monstrous Races in Medieval Art and Thought* (Syracuse, N.Y.: Syracuse University Press, 2000): p. 10.

women.¹⁰⁵ All connotations connected with the third gender are not to be understood as monstrous or negative, according to Murray, the action of shaving a tonsure when entering a monastery was symbol of this, as less hair was a sign of less virility and libido, a characteristic originating from the lack of heat, a humoral state most often associated with women. To avoid describing the clergy as effeminate, as they were sliding along the gender continuum towards the female side, they were better understood as a third gender.¹⁰⁶

Perhaps the Zodiac Man in Hunter 339 is most accurately described as what Murray referred to as the third gender. Not a monstrous and negative figure, like the hermaphrodite or *androgini*, sitting in the middle of gender continuum and straddling gender definitions effectively describing a negative blend of the two sexes, but rather as someone who has managed to move away from the negative aspects associated with either sex.

The Book as a Gendered Object

The provenance of these manuscripts is very sketchy and there is no way to know who read them, nor what their reaction were towards the imagery. However, we do know that John of Arderne, and possibly subsequent copyists, intended the texts to be read and studied by practising surgeons.¹⁰⁷ In his treatise of the treatment of fistula in ano he outlines the appropriate behaviour of a surgeon or medical practitioner towards female patient, he writes:

Considerere he noȝt ouer openly the lady or the douȝters or oȝer fair
wymmen in gret mennes [houses] ne profre tham noȝt to kisse, ne

105 Madeline H. Caviness, "Anglo-Saxon Women, Norman Knights and a 'Third Sex' in the Bayeux Embroidery", *The Bayeux Tapestry: New Interpretations*, Martin Foys ed. (Woodbridge: Boydell, 2009): p. 113.

106 Ibid. p. 44.

107 Siraisi (1990): p. 173.

touche not priuely ne apertely thair pappes, ne thair handes, ne thair sharem that he renne nozt into the indignacion of the lord ne noon of his.¹⁰⁸

They are instructed to not touch female patients, especially not in the presence of their fathers or husbands. According to Bullough cautions like these were not uncommon in contemporary surgical texts.¹⁰⁹

Whether his audience might have included women is debatable. Monica Green has written extensively on medieval women's access to medical literature and the literate medicine tradition. She discusses this literary tradition in gynaecological texts and how the study of midwifery became increasingly more masculine. According to her, the different medical communities had differing relationships to literate medicine, and while literacy was on the rise in the later middle ages, women were still largely excluded from this community. She states that there is very little “positive evidence for female practitioners engagement in literate medicine in Latin or any other language.”¹¹⁰ She also argues that there is very little evidence to show how many female medical practitioners there were, as they were rarely recorded on their own, and further, that their levels of literacy might be underrated as women inherited whatever status their male relatives possessed. Green claims that most often it is almost impossible to judge the levels of literacy 'one way or the other.'¹¹¹ Women were by virtue of their genders excluded from literate communities, and there is no indication that women practising medicine actively joined together to create or maintain a training in Latin. Nevertheless, Green also states that it is unclear how often women's personal ties to literate men overrode their gendered exclusion.¹¹²

Green compares the use of medical books and images in them to the function of

¹⁰⁸John of Arderne (1910): p.5.

¹⁰⁹Vern L. Bullough, “Medieval Medical and Scientific Views of Women” *Viator* 4 (1973): p. 501.

¹¹⁰Monica Green, *Making Women's Medicine Masculine: The Rise of Male Authority in Pre-Modern Gynaecology* (Oxford University Press: Oxford, 2008): p. 130.

¹¹¹Ibid. p. 131-132.

¹¹²Ibid. p. 134.

book of hours and other religious literature, where the images functioned as an intercessor between the male reading the text and the women listening and viewing the images. Green does not believe that medical books was used in the same way, because most gynaecological texts had few or no images, assuming a fully literate audience.¹¹³ Nevertheless, this does not mean that there is no possibility for other medical texts, which did include images, such as Arderne's, to have been used in this way, for a cross gender audience. In fact, Green points out that gynaecological images could have been seen by midwives, if they were shown them by professional male practitioners.¹¹⁴ Similarly, Rawcliffe speculates that maybe barbers and surgeons in London used the manuscripts owned by their guilds as teaching aids, in the same way as they sometimes used dissections.¹¹⁵

There were also secondary, non-practising medical audiences for these texts.

Sandra Penketh argues that women book owners, in the elite section of medieval society who could afford to commission the production of a manuscript, did in all probability have some grasp of Latin, 'certainly enough to use and read the text of a book of hours, in only partially.'¹¹⁶ Michael Clanchy has also argued, in his article on illustrations of women reading books, that literacy shifted during the fourteenth and the fifteenth century from a monastic to a domestic setting and that the symbol of female domestic piety as expressed through the study of words and text was very influential on book publishing.¹¹⁷ Similarly, Green also speculates that there might have been textual communities of laywomen

113Ibid. p. 158.

114Ibid. p. 152.

115Rawcliffe (1995): p. 129.

116Sandra Penketh, "Woman and Books of Hours", *Women and the Book: Assessing the Visual Evidence*, Lesley Smith and Jane H.M. Taylor, eds. (Toronto: University of Toronto Press, 1997): p. 270.

117Michael Clanchy, "Images of Ladies with Prayer Books: What do They Signify?" *The Church and the Book*, papers read at the 2000 Summer Meeting and the 2001 Winter Meeting of the Ecclesiastical History Society, R.N. Swanson ed. (Woodbridge, Suffolk: Published for the Ecclesiastical History Society by the Boydell Press, 2004): p. 121.

focusing on medical texts in the same way as those communities existed around books of hours and other religious texts.¹¹⁸ She has also discussed the access to medical literature for women not practising medicine, and claims that women might not have had ownership of many medical manuscripts but that they could still have had access to them.¹¹⁹ One example of this is the Paston family where some of the women were accomplished healers, and yet when John Paston ordered a “littil booke of pheesyk”, containing a collection of remedies in both English and Latin, it is unclear if his mother would have been able to read and understand it.¹²⁰ To what extent women had access to, and ability to fully comprehend, Latin medical texts is unclear, but we cannot assume that they had none and thus exclude them as a possible viewing community. It is impossible to be sure of the full readership for Arderne's text. We know it was intended for practising surgeons, but it would also have been accessed by secondary audiences which would have likely included both lay-men and women. The majority would in both cases have been men, but a minority would have been women, and they would have approached the manuscript, the text and the images in different way than the intended primary audience. These three manuscripts could have been a part of a social activity as well as solitary reading, as part of an apprentice surgeons training.

While Green believes that one of the key differences between the religious texts studied by women and men and the gynaecological medical texts that her study primarily focuses on, is the overt moral messages levelled at the reader in the former. She writes that:

There is no evidence, in other words, that medical books played the same social function in constructing 'proper' feminine roles as did Books of Hours and psalters, which were frequently exchanged among women and which would be

¹¹⁸Green (2008): p. 161-162.

¹¹⁹Monica Green, “The Possibilities of Literacy and the Limits of Reading: Women and the Gendering of Medical Literature”, *Women's Healthcare in the Medieval West* (Ashgate: Aldershot, 2000): p. 5.

¹²⁰Ibid. p. 38.

used in elementary tutoring to inculcate proper gender roles in female and male children, as well as for their more obvious function as handbooks for daily prayer.¹²¹

It is important to remember, that although the messages in religious manuscripts might be more overtly moralising and more clearly directed at constructing appropriate behaviour in terms of gender and social status, medical manuscripts were a part of the same discourse, as well as a part of the creation of that very discourse. In the meeting between the viewer and the images in Arderne's manuscript a response to gender is shaped. Both young male and female surgeons and surgeons apprentices encountering this material would have received the message that the male body was to be understood as universal and perfect and that the female was faulty. While female genitalia was taboo,¹²² and is not depicted in any of the manuscripts discussed, male genitalia could be shown without a problem, and while male bodies could be drawn nude in order to establish the gender of the person, female bodies could only be shown clothed, indicated a hierarchy between the genders and re-established patriarchal dominance using a particular medical discourse. The messages communicated by the text are not as overt and clear as the moral teachings in other contemporary material, but it nevertheless communicates subtle messages on appropriate gender behaviour.

These two last chapters have discussed the body as it is represented and rendered in relation to John of Arderne's descriptive text. It has shown how choosing to represent men as the norm relates closely to contemporary moral and pseudo-scientific ideas about the role and status of both men and women, elevating the masculine position. This chapter has also considered the possible viewing audiences and how these representations functioned to emphasise proper behaviour for both men and women. The Zodiac Men, which in two of the manuscripts are rendered as male figures, the most

¹²¹Green (2008): p. 141.

¹²²Ibid. p. 258-259.

traditional appearance, is in Hunter 339 shown with no gendered characteristic and is perhaps best understood as a positive representation of the third gender. These figures will be further discussed in the next chapter, as a representation of the body in diagrams.

Chapter 4: The Body in Diagram

In John of Arderne's manuscripts, the body is not only rendered through faithful representations of whole and fragmented bodies, it is also understood, theoretically, through the drawings of diagrams. In all three manuscripts there are four different kinds of diagrams drawn or planned. They all open with a wind diagram which describe the interrelationship between the winds, the parts of the world as well as the stars and the humors. All three books also have a diagram pair: a table used to calculate the position of the moon and a Zodiac Man, both used to illustrate and calculate the most opportune times for treatments. Hunter 339 is the only manuscript to contain a humoral diagram (fig.12), which describes the interrelation between the parts of the day and the human body, but the other two manuscripts have spaces left for an illustration never inserted.

This chapter will study the relationship between these different kinds of diagrams and contemporary conceptions of cosmography and health, specifically noting the different ways the diagrams situate the viewer/reader or patient as a bodily microcosm within the macrocosm of the universe. This chapter will also consider the role these images played in situating this medical text within an academic cannon, to elevate its status.

Anthropomorphic Diagrams

It is important to note that these anthropomorphic diagrams of the Zodiac Men in Hunter 251, Hunter 339 and Hunter 112 are both representational and conceptual.¹²³ They are representational in the manner that the human body is rendered and conceptual due to the way it is to be understood. All three zodiac men are situated on the recto sides of the folios and are surrounded by text explaining the importance of understanding the stars and

¹²³Linda Ehram Voigts, "Scientific and Medical Books", *Book Production and Publishing in Britain 1375-1475*, Jeremy Griffiths ed. (Cambridge: Cambridge University Press, 1989): p. 357.

heavens when practising surgery. All three images are also prefigured by a diagram used to calculate the placement of the moon, and thus they need to be understood in this context.

The zodiac man in Hunter 112 is depicted as a naked male (fig.9), in a strained contraposto position, perched on his toes, hip to one side and arms out. His genitals are not depicted and he has a 15th century English hairstyle. The names of the zodiac have been written on his body or next to his head or face. By comparison, the zodiac man in Hunter 251 has a forward facing position (fig.10), with his arms spread, thus allowing the twin anthropomorphic figures of the zodiac sign, Gemini, to cling to his limbs. On this figure the zodiac signs are not written, they are drawn, and it is not only the zodiac man, but also the anthropomorphic signs or figures of Sagittarius, Gemini and Aquarius that are all sporting 15th century hairstyles. Even the female figure Virgo, on the belly of the zodiac man, has been drawn with appropriate headgear, she seems to be wearing her hair up at the sides in a hairnet with a hat or a hard metal band, called a crespine, over the head. Finally, the zodiac man in Hunter 339 carries few of these similarities (fig.8). The pose is reminiscent of the zodiac man in Hunter 112, with its slight profile of the legs and arms held up, but as opposed to the other two images, this one does not have any of the characteristics that would allow the viewer to recognise the figure as contemporary, as it has neither hair nor face. The names of the zodiac has again been written on the body or next to the head of the figure. It's lack of physical and facial features radically differentiates this image from most other contemporary images of the same subject matter.

In the illustrations in Hunter 251 and Hunter 112, the viewer is asked to consider themselves as the centre of the cosmos, the ones whose humors, bodies and minds, are being influenced and changed from the movements of the stars and the signs. Both the images give the reader tools to place themselves at the centre of the diagram, primarily

through the contemporary hairstyle, and the idealised cultural bodies. In Hunter 251 the identification process is twofold, in that both the zodiac man and the signs have contemporary hair and dress, placing the entire image in a time contemporaneous to the medieval viewer, and creating a two way relationship between the astrological powers of the universe and the patient, where it is implied that the two influence each other. In Hunter 339 the viewer is not given such tools to place him/herself within this equation, the intellectual involvement demanded from the viewer is greater. Partly because the viewer has to read the Latin writing on top of the body to comprehend the interrelationship between the microcosm of the person and the macrocosm of the universe, this is true for both Hunter 339 and Hunter 112. Hunter 339 further demands more of its readers as the relationship between the faceless figure depicted and the viewer is not made obvious, by the use of contemporary hair or culturally specific bodies, as it is in Hunter 251 and Hunter 112. The Zodiac Man in Hunter 339 could consequently be understood to depict an eternal, timeless, relationship between all bodies and the stars controlling them.

The study and use of Iatromathematics and theories of micro/macrocosm inherited from antiquity

These images fit into a larger academic tradition and to fully understand them, this tradition need to be briefly explained. Melothesia, where body parts are assigned a zodiac sign believed to control it, was among the most common forms of practical astrology. The theory was not new in the Middle Ages, but already established by the time Ptolemy (c. 90–c.168) wrote *Tetrabiblos*, where the star signs are associated with both body parts and its ailments.¹²⁴ Tamsyn Barton has written extensively about the study and practice of

¹²⁴ John F. Murdoch, *Album of Science: Antiquity and the Middle Ages* (New York: Charles Scribner's Sons, 1984): p. 315.

Iatromathematics, or astrological medicine, during the time of the Roman Empire. The same ideas, astrological medicine and physiognomics, permeated European thought and belief regarding the body and its make up. Barton's text also highlights the important social and political consequences that emerge from this way of thinking. Physiognomics was established through the use of rhetoric, and with it, and the use of astrology, undesirable nations as well as people were condemned for (and by) their appearance and the character that it was understood to portray.¹²⁵

Sophie Page describes how the pre-Christian ideas were reconciled with Christian values through modifying the explicit power of the stars and planets, they were still believed to control tempers and humors, but not the free will of individuals. She claims that 'the bodies, passions and mobs of men [were placed] under the rule of the stars, while safeguarding their souls and reasons, and the free will of the individual.'¹²⁶ Similarly, Friedrich Saxl describes in one of his lectures how Hildegard of Bingen's (1098–1179) use of ancient pagan cosmology and astrology in *Scivias*, is appropriated into a Christian context, by using Christian terms to describe a Christian notion of the relationship between microcosm of the human body and macrocosm of the universe.¹²⁷ Otto Pächt has discussed her image of the universe, where:

The large oval with its fiery outer border is supposed to express God's strength 'which vengefully attacks non-believers'. One star in this zone stands for Christ and his burning love; the three stars above, for the Trinity.¹²⁸

He further argues that the this image, this depiction of the universe, is so full of 'non-visual and purely symbolic elements and that their allegorical-didactic character would be foremost.'¹²⁹ This view of the world where the divine order is implicit in every aspect of its

¹²⁵Tamsyn S. Barton, *Power and Knowledge: Astrology, Physiognomics, and Medicine under the Roman Empire* (Ann Arbor, MI: University of Michigan Press, 2002, c1994): p. 129-130.

¹²⁶Sophie Page, *Astrology in Medieval Manuscripts* (Toronto: University of Toronto Press, 2002): p. 37.

¹²⁷Friedrich Saxl, *Lectures I* (London: Nelson, 1957): p. 63-64.

¹²⁸Otto Pächt, *Book Illuminations in the Middle Ages* (New York: Oxford University Press, 1986): p. 160.

¹²⁹*Ibid.* p. 160.

appearance is related to the theory represented in the images of the zodiac men.

Iatromathematics was a part of the doctrine of micro and macrocosm, and the zodiac man or the *Homo Signorum* was a visualisation of that school of thought. Charles Clark has outlined the conceptual development of the Zodiac Man from antiquity to the Middle Ages, and its uses as a tool for predicting the appropriate time for treatments. He cites the main influence for the medieval understanding of melothesia to be *Timaeus* (c.360 BC) by Plato whose theories can be traced back to the Assyro-Babylonians.¹³⁰ During the Middle Ages it was by consulting these anthropomorphic diagrams that the medical practitioner would know when to collect herbs and perform phlebotomy or other treatments.¹³¹ For the surgeon or physician to be able to utilise the zodiac man, to see when the moon passes through a specific sign, he or she needs to consult a volvelle or a table.¹³² There is such a table preceding each of the zodiac men in each of these three Arderne manuscripts and the text dictates for the surgeon how he should utilise his tools. The text reads:

Nam sequendum est quod 12 signa zodiaci regnut 12 partes humani corporis prout patet in imagine predicta, ubi aries quod est sungum igneum temperate siccum caput regit cum suis contentis. Luna vero in ariete existente cave ab incisione in capite et facie et [ne] incidias venam capitalem.

For the 12 signs of the zodiac rule the twelve parts of the human body, as is clear from the aforementioned drawing, where Aries, which is a fiery sign moderately dry, governs the head with its contents. But when the moon is in Aries beware of operating upon the head or face and do not open one of the head veins.¹³³

The purpose of the Zodiac Man is not identical to that of the Vein or Phlebotomy Man, but it is similar as the figures all use an anthropomorphic diagram to guide the medical practitioner in their practice of phlebotomy and other healing.

¹³⁰Charles Clark, "The Zodiac Man in Medieval Astrology", *Journal of Rocky Mountain Association* 3 (1982): p. 14-15.

¹³¹Rawcliffe (1995): p. 86-87.

¹³²Jones (1984): p. 69-70.

¹³³Arderne (1910): p. 16-17.

The zodiac man align the star signs with the body parts that they control, but the simple diagram also serves a different function. It also references the entire academic tradition and by including these images in the manuscript the academic credentials of this surgical text, its author and audience is emphasised.

Iconographic tradition of zodiac men

Saxl traces the iconography of the zodiac man and situate it as a part of tradition visualising the relationship between microcosm of the human body and macrocosm of the universe.¹³⁴ Similarly Harry Bober compares the zodiac man in the *Très Riches Heures* (c.1410) to the iconography of the Microcosmic Man, claiming that it is possible to 'without unwarranted presumption, interpret in the overtones of the whole configuration an implied allusion to the cosmic diagrams, for therein were contained the underlying philosophy and science of this scheme.'¹³⁵ The zodiac men in Arderne's manuscripts all fit into this iconographic tradition, they are contemporary representations of the cosmic influences on the human body.

Clark claims that the figure of the Zodiac Man is the same as the Micro-Macrocosm Man, an illustration of the interrelationship between the universe and the individual, and Anatomy Man, a generic anthropomorphic diagram of the human body.¹³⁶ Michael Camille compares the figure to the Micro-Macrocosm Man and believes that while they sometimes represents the same relationship between the individual and the universe, the duplication of these images in several manuscripts implies that they are indeed best understood as representations of different aspects of this relationship.¹³⁷ Linda

¹³⁴Saxl (1957): p. 67.

¹³⁵Harry Bober, "The Zodiacal Miniature of the Très Riches Heures of the Duke of Berry: Its Sources and Meaning", *Journal of the Warburg and Courtauld Institutes* 11 (1958): p. 31-32.

¹³⁶Clark (1982): p. 13.

¹³⁷Michael Camille, "The image and the self: unwriting late medieval bodies", *Framing Medieval Bodies*, Sarah Kay and Miri Rubin ed. (Manchester: Manchester University Press, 1994): p. 66-67.

Ehrsam Voigts refers to instances where the two figures of the Zodiac Man and the Phlebotomy Man having been merged and served the same purpose, as a guide for blood-letting, cupping and administration of other treatments.¹³⁸ The two figures are both based on the human body, the Zodiac Man's body is overlaid with star signs, and the Vein Man is usually a human (male) body where the veins appropriate for phlebotomy are illustrated.

Larger Medical Context of Zodiac Men

The zodiac man was one often recurring medical image, related to what Karl Sudhoff referred to as the *Fünfbilderserie* (five-picture-series). The *Fünfbilderserie* was a group of images representing the 'osseous, nervous, muscular, venous, and arterial system, to which was sometimes added a sixth, the pregnant woman, or a view of either the male or female generative organs.'¹³⁹ This theory has later been amended and is now often described as the nine-picture-series, encompassing a larger number of recurring and complimenting illustrations depicting a large spectra of human illness and health.¹⁴⁰ Bober argues in regards to the Zodiac Man in *Trés Riches Heures*, that the figure implicitly mirrors a medical context. He believes that an audience contemporary to the images would have been aware of the other contexts in which it often appeared, as for example Johannes de Ketham's (late 15th c.) *Fasciculus Medicinae* which featured a zodiac man among many other medical illustrations.¹⁴¹ Perhaps, by including the images of Zodiac Men in Arderne's manuscripts, these other medical traditions are being emphasised, as these images function as reminders of the other visual contexts that they are a part of. In the three Glasgow

138Voigts (1989): p. 373.

139Mortimer Frank, "Manuscript Anatomic Illustration of the Pre-Vesalian Period: A Drawings Showing Influence of Tradition upon Early Anatomic Illustration", *History and Bibliography of Anatomic Illustration*, Ludwig Chouland ed. (London: Hafner Publishing Company, 1962 reprint): p. 49-50.

140Ynez Violé O'Neill, "The Fünfbilderserie: A Bridge to the Unknown", *Bulletin of the History of Medicine* 51 (1977): p. 549.

141Bober (1948): p. 21.

manuscripts the zodiac men double as illustrations of Microcosm Man and Phlebotomy Man, thus drawing attention to the a multitude of separate traditions. The image is connected to long visual tradition, because it is a part of the nine-picture-series, this solitary image inexplicably emphasises and references that medical context, even though it is not overtly described. The figure also recalls an even older intellectual tradition which connects the Zodiac Man with the Micro-Macrocosm Man, which in turn emphasises an intellectual heritage leading back to Ptolemy and further.

Wind Diagrams

The wind diagrams, that open all three manuscripts, are typical for all longer John Arderne works (fig.1). All three manuscripts have wind diagrams which are perfectly circular, divided into four different equal sections, the base is a tripartite noakind world map with other information superimposed on top of it. Hunter 339 and Hunter 251 both have rectangular boxes at the top, bottom and both sides containing writing which indicate cardinal direction and the element controlling it, the boxes drawn effectively surrounding some of the words. The diagram in Hunter 112 is different from the other two in appearance, although not in content. The diagram is round and it and the dividing cross in the middle (from top to bottom and side to side) is patterned. It has no other shapes or geometrical figures outside of the circle. Although the appearance of the three images differ, the information contained within them is nevertheless, the same. All three wind diagrams contain the same description of the world: the three continents, Asia, Europe and Africa are drawn; the cardinal points and the elements which are connected to them; the qualities associated with the elements and the cardinal directions are also mentioned; the winds are all named as are the planets which they are controlled by. All three of these

diagrams have text written horizontally, vertically and up-side-down, forcing the reader to start at the bottom left corner and turn the book anticlockwise, in an action that mirror that of a wheel, to be able to read and fully understand diagram.

Wind Diagrams and other cosmographic depictions can, according to Murdoch, be both didactic tools used to facilitate the understanding of complex theories, as well as a way to represent or prove specific ideas.¹⁴² Murdoch describes Isodore of Seville's image *Mundus-Annus-Homo*, a circular diagram illustrating the interrelationship between the world (*Mundus*), year (*Annus*, represented by the names of the seasons) and Man (*Homo* represented by the names of the humors), as a description of a micro/macrocosmic relationship.¹⁴³ It is on these theoretical images that the opening diagrams in Arderne's manuscripts are based. Suzanne Conklin Akbari compares medieval wind diagrams to contemporary world maps, claiming that they are similar in that they are both constructed around a quadripartite world view.¹⁴⁴ This is not the only similarity with *mappae mundi*, they are conceptual maps depicting past and future biblical events, situating the viewer/reader in eschatological history as well as the world. According to Freidman they were 'far more a visual work of art and an expression of contemporary cosmology and theology than it was an object of utility.'¹⁴⁵ Similarly, the wind diagrams function as maps of cosmos, depicting the intricate interrelationship between the winds, the planets, the humors and the seasons of the year, situating the viewer, reader or patient within this world and these different influences.

In Hunter 339 and Hunter 251, the wind diagram is the first illustration and situated within the first 2 folios, but in Hunter 112 it is the second illustration following an author

142Murdoch (1984): p. 31, 314.

143Ibid. p. 356.

144Suzanne Conklin Akbari, "From Due East to True North", *The Postcolonial Middle Ages*, Jeffrey Jerome Cohen ed. (Basingstoke; New York: Palgrave, 2000): p. 21-22.

145Freidman (2000): p. 38.

portrait of Arderne sitting in a garden (fig.25). (The image is more fully discussed in the chapter on the Body of the Surgeon.) The inclusion of the wind diagram so early on in the text establishes it within a scientific and intellectual context, as well as within a larger macrocosmic scheme. In Hunter112, where it is the second image in the manuscript, a comparison can be drawn to the previous image of Arderne, where the surgeon is seated in an enclosed garden. The surgeon and the garden can both be understood as two microcosms, dependant on the world outside, as well as representation of the interrelationship of the two, where the garden represents a small contained macrocosm influencing the body within it.

The reason it is interesting to take into account which parts of the universe the image represents and how the components within it are depicted, is the relationship wind diagrams have with theological and cosmographic concerns. Barbara Obrist has traced the development of medieval wind diagrams and their relationship to cosmology and theology. One of the themes she notes is the changing perception of winds, from being natural phenomena among others; an idea that changed during the twelfth century in which the winds were more often understood as being extensions of God's will. This association is strengthened, according to Obrists, by the closeness of the cardinal winds and the head and limbs of Christ in depictions, where Christ is holding the world within his body; his head, feet and hands aligned with east, west, north and south respectively.¹⁴⁶ In Arderne's wind diagrams there is no portrayal of God and thus no association between the cardinal winds and body of Christ, but the ordered depiction of the winds implies a divine presence, they are not chaotic, or depicted as outside of the world, but included within it. Murdoch claims that the 'visualization of terrestrial features, such as zones of the earth/.../or its winds/.../

¹⁴⁶Barbara Orbist, "Wind Diagrams and Medieval Cosmology", *Speculum* 72 (1997): p. 76-79.

did not require depiction of the divine element in the world system.¹⁴⁷ Nevertheless, there is a seminal difference in the understanding of the macro-cosmic world in whether the 'winds threaten the stable cosmic order of contribute to maintaining it.'¹⁴⁸ In the wind diagrams concerned here, the complicated and intricate connections between stars, winds, humors and elements imply a divinely ordered macrocosm controlling and effecting the personal microcosm.

This diagram, while effectively situating a sick or healthy body within a theoretical framework stretching far outside of the patients immediate surroundings, does not, as opposed to two of the other diagrams, the zodiac and the table accompanying it, have a practical function, it is a purely didactic instrument. In essence expressing the power of the world and of God over the individual being, establishing a relationship of authority, and by including this image the knowledge of the surgeon is emphasised. The inclusion of this figure also serve to emphasise the intellectual and learned status of the surgeon as someone who can decode and fully understand these complex images.

Humoral Diagram

Humoral medicine, based primarily on the writings of Hippocrates (ca.460–370 BC) and Galen (129-199/216), was based on the notion that the body was controlled by the four humors, yellow bile, phlegm, black bile and blood, and that a healthy body was one in which these four elements were in balance. Exposure to, and the balance maintained within, these elements or the qualities associated with them, was what controlled the physical and mental disposition of a person.¹⁴⁹ The qualities that control the humors were believed to change depending on place and different elements would be differently

147Murdoch (1984): p. 328.

148Ibid. p. 66.

149Rawcliffe (1995): p. 33.

pronounced at different times of the day.

Hunter 339 is the only manuscript that includes the humoral diagram (fig. 12). Hunter 112 and Hunter 251 have both left spaces on the middle of the page for an image never added. In Hunter 339 it is the last large illustration and in the other two, it would have been situated at the end of the text proper, but before the beginning of the experimenta. The diagram in Hunter 339 is describing the changing relationship between the humors and the different times of the day. It is drawn as a wheel with 4 spokes going through the circle, the different divisions of the wheel symbolises different parts of the day, and the writing on the outer circle explains which humour 'rules' (*regnat*) that section of the day. The writing in the wheel of the diagram is facing inwards and the text in the spokes is horizontal, vertical as well as upside down.

The two diagrams, the wind diagram, which opens all three manuscripts, and the humoral diagram share many of the same features and are best understood in relationship to each other. They are included on a page with text both above and below it, anchoring the figure to the page. All the diagrams are circular and the text within them is written horizontally, vertically and even upside down, forcing the viewer to turn the book to properly read and understand the diagram. The wind diagram first emphasises the placement of the individual being within the universe, the power of the cosmos over the human body over the time of a year. The second humoral diagram reiterates this dogmatic relationship although on a smaller scale, focusing on how the humors and the elements affect the body during the span of a day and night. Thus the diagrams, read in relationship to each other, signal the opening and the closing of the text: firstly by situating the individual body within the universe when starting the text and closing it by emphasising the humoral balance within the body.

All four kinds of diagrams discussed in this chapter describe a relationship between the individual body (of the patient), or microcosm; and the influences exerted on it by the universe, or macrocosm. They also describe relationships of authority: God over the Universe and the cosmos over the individual. This chapter has also shown how all three types of images reference academic and scientific traditions with which the surgeon wished to align himself. The next chapter will discuss how these books could have been used in the interaction between the surgeon and the patient to establish another relationship of authority. The discussion will also touch on how artists used intervisuality to emphasise the social role of the surgeon and his superiority over some other medical practitioners.

Chapter 5: The Body of the Surgeon

Language can be understood as a tool in the practice of any type of medicine.

Peregrine Horden has discussed how the use of scholastic language and the appropriation of Arabic words and terms were used by all different levels of medical professionals. He claims that Empirics¹⁵⁰ would use the terminology even though they did not have any grasp of the school of thought from which it originated. This practice stemmed from the need of non-educated medical practitioners to establish themselves within a medical tradition which relied on authority.¹⁵¹ This is an issue which concerned all medieval medical practitioners.

There are different levels of authority at play in these three John of Arderne manuscripts. The authority of the scholastic tradition is emphasised, as is the role and position of the surgeon: both Arderne, the author-surgeon, master surgeons and other secondary audiences, reading about and practising the procedure. This chapter will discuss how the body of the surgeon is represented in relation to several different visual traditions, thus referencing authority from other contexts. It will discuss how in their portraits of the surgeon, artists communicated late medieval ideas about authority as a necessary sign of medical competence. Finally, it will suggest how the manuscripts themselves might have functioned as a tool of authority in the meeting between a medical practitioner and a patient.

150An empirics is by the Oxford English dictionary defined as 'a person who, in medicine or other sciences, relies solely on observation and experiment' or as a 'quack doctor'. During the middle ages the term referred to lowest ranking medical practitioners such as for example wise women. Carole Rawcliffe discusses the tension between higher ranking medical practitioners, such as university educated physicians and master surgeons, barber-surgeons and apothecarys who often had some Latin literacy, and who bound together to protect their privileges and other practitioners, such as empirics, with less or no education or literacy in her book *Medicine & Society in Later Medieval England* (p.166-168) (1995)

151Peregrine Horden, "What is Wrong with Medieval Medicine?" <http://backdoorbroadcasting.net/2009/10/peregrine-horden-whats-wrong-with-medieval-medicine/>, accessed on 24/08/2010

Author portrait

The visual presence of the surgeon is greater throughout Hunter 112 than the two other manuscripts. For example, while the other books depict the patient alone with a clyster, Hunter 112 shows both patient and surgeon (fig. 16). Hunter 112 is also the only manuscript which opens with an author portrait (fig. 25). The image shows Arderne himself seated within an enclosed herb garden. He is in the process of writing in a book, dressed in long robes which are very reminiscent of those worn by contemporary university scholars. This type of imagery draws on many different visual sources to communicate its messages. As this image was constructed by someone who wanted to emphasise the status of the author, there are other medical practitioners and scholars who are being referenced with this iconography. Dag Nikolaus Hasse has written about the iconographical tradition of associating the Arabic medical writer Avicenna (c. 980 – 1037) with a crown, partly illustrating that the author was the first among physicians, but also illustrating a belief that he might actually have been the ruler of a country. This type of author portrait would generally open illustrated copies of Avicenna's *The Canon of Medicine* during the Middle Ages and through the Renaissance.¹⁵² He discusses an earlier tradition where Avicenna, when depicted together with other medical writers and practitioners, is separated from Galen and Hippocrates who are both wearing Hellenistic headdresses, by showing him with both a crown and a turban. One such illustration can be found in the fifteenth century printed copy of Avicenna's *Canon of Medicine* now in the Hunterian Collection, where Avicenna is wearing the long robes of an academic as well as a crown.¹⁵³ This practice provides the author with a shorthand for identification as well as evocation of his (exotic) cultural origins while still stressing the academic and educated

¹⁵²Dag Nikolaus Hasse, "King Avicenna: The Iconographic consequences of mistranslation", *Journal of Warburg and Courtauld Institutes* 60 (1997): p. 235-237.

¹⁵³Hunterian Collection, Bw 3.,24, Bk.II, fol 1 *Cat. no. 105*

status of the author.¹⁵⁴ In the author portrait depicting Arderne it is not his ethnicity that is illustrated, and as he is depicted on his own there is no need to separate him from a larger group. What is communicated more forcefully is his learned status, as he is wearing the long robes of a university scholar. That he is a scholar, author and practitioner contemporary with the text itself is emphasised through such a depiction. Arderne cites the authors who were considered to be medical authorities of his time, such as Hippocrates and Galen,¹⁵⁵ and by doing so aligns himself with an academic tradition and these messages of the text mirror the depictions of Arderne as an academic figure.

Clothing was very important to Arderne, as can be seen in how he explains the appropriate clothes for the surgeon to wear, to dress himself as a serious practitioner:

Also dispose a leche him, that in clothes and other apparalyngis he be honeste no3t likkenyng him self in apparalyng or beryng to mynstrallez; but in clothing and beryng sewe he the maner of clerkes; ffor why it seemeth any discrete man yeladde with clerkes clothing for to occupie gentil menez bordes. Haue the leche also clene handes, and well shapend nailez *and* clenched fro all blaknes and filthe.¹⁵⁶

His pointed shoes, high collar and hair style are all largely contemporary to both Arderne and the production of this manuscript, perhaps emphasis the nature of Arderne's text as a new or contemporary theory. The cap or hat worn by Arderne in the image does not seem to carry any specific connotations in regards to the profession or status of the surgeon. W.J. Bishop claims that the costume of medieval surgeons was not as elaborate as that of the medieval physician.¹⁵⁷ Nevertheless Bullough argues that the clothing worn by surgeons was very important, the permitted length of the robe set surgeons and barber-surgeons apart, as the latter were allowed to wear longer robes made in an imitation of those worn

154Hasse (1997): p. 231.

155Power (1910) notes to John of Arderne's *Treatment of Fistula in Ano* p.110.

156John of Arderne quoted in: *Memorials of the Craft of Surgery in England*, John Flint South, (London: Cassell, 1886): p. 40.

157W. J. Bishop, "Notes on the History of Medical Costume", *Annals of Medical History* 6 (1934): p. 196.

by university trained physicians and the second only allowed to wear shorter ones.¹⁵⁸ By depicting Arderne in long robes in the author portrait his status as a highly educated master-surgeon is emphasised and perhaps his singular position is further stressed by this difference in appearance between the author portrait and the clothes worn by the surgeon in the text, where the surgeon is wearing shorter robes (fig.19).

There are several instances where Arderne describes the poor judgements of other medical practitioners. One story he recounts regards a fisherman who had suffered a bad cut:

Wherefore he was almost dede, what of akyng, bolnyng, and
brynnynng, and what of þe vncouenable cure of a barbour þat
putte in þe diaquilon. His cure, forsoþ, remoued away, I putte to
abou euensang-tyme of þeforseid valencewith anyntung of oile
of roses.¹⁵⁹

The very first action of the surgeon is to remove the treatment the previous practitioner. It is first when the man meets the surgeon that he is cured.¹⁶⁰ Similarly Siraisi retells a story by the surgeon Lanfranco where a boy suffers an injury but rather than treating him the way recommended by the surgeon the family chooses the advice of an empiric and it is not until the child comes back into the care of Lanfranco that he recovered. According to Siraisi this story

manages to combine an *exemplum* of Lanfranco's success with a technical description of one of his preferred methods of treatment, while simultaneously placing him squarely in professional and intellectual solidarity with the *medicus* against the irrationality of the mother and the ignorance of the empiric.¹⁶¹

The clothes worn by the surgeon in these depictions emphasises the educational and authoritative position of him, in a way mirrors the stories told about Arderne and others of the same medical class.

158 Vern L. Bullough, "Training of Nonuniversity-Educated Medical Practitioners in the Later Middle Ages", *Journal of the History of Medicine and the Allied Sciences* 10 (1959): p. 447.

159 Arderne (1910): p. 100.

160 Jones (1994): p. 298-199.

161 Ibid. p. 172.

The Surgeon and Christ the Physician

There are many examples in medieval theological writing that characterise Christ as a loving physician. The notion of *Christus Medicus* (Christ the Physician) 'drew heavily upon contemporary medical theory, and bestowed implicit approval upon the work of mortal practitioners.'¹⁶² It was a very long lived Christian simile, Tertullian (ca.160 – ca. 220) compares the pain caused by the physician to cure an illness of the body, to martyrdom which cures the soul, and in the way physicians were believed to cure ailments with things similar to what had caused it, for instance 'checking heat by a greater heat', by that same logic Christ 'destroys death by death.'¹⁶³ Similarly, St Cyprian (d.258) described Christ's time on earth as that of the Divine Physician, 'who healed the wounds inflicted on mankind by Adam's fall, neutralized the old poison of the serpent, and gave to the sound man wholesome prescription how to avoid a relapse into the disease.'¹⁶⁴ The comparison was also used greatly by St Augustine of Hippo (354-430) who described *Christus Medicus* as the physician who prescribes his humility as cure. He preached that 'Himself, Physician and Medicine both in one/.../Therefore, because man has fallen through pride, He has applied humility to cure him.'¹⁶⁵ St. Augustine also made use of a comparison where Christ himself drank from the cup of humility, like a physician drinking the medicine before his patient.¹⁶⁶ John Henderson believes that the many notions of *Christus Medicus*, in particular those described by St Augustine, could help explain some of the images of Christ physically touching or poking as well as displaying his wounds in mural decorations in Renaissance hospitals in Italy. Henderson discusses two figures in particular, both depictions of Christ holding his side wound open with his fingers, as

¹⁶²Rawcliffe (1995): p. 17-18.

¹⁶³Rudolph Arbersmann, "The Concept of *Christus Medicus* in St Augustine", *Traditio* 10 (1954): p. 6.

¹⁶⁴Ibid. p. 7.

¹⁶⁵Ibid. p. 11-15.

¹⁶⁶Ibid. p. 14.

images which served to make the suffering of Christ more visceral and also to justify the role of the hospital. Domenico Cavalca, a Dominican friar 'likens the corporeal suffering of Christ to a "bitter medicine" which He took to cure us of the "sickness of sin...thus Christ acted as our midwife and took the medicine to heal us"¹⁶⁷

The notion of *Christus Medicus* also affected other medical professions. Marie Christine Pouchelle discusses how the French medieval surgeon and author Henri de Mondeville (c1260 – 1316), with the observation 'as regards illiterate and arrogant surgeons... our present study cannot aid them in their needs, just as God himself does not come to the aid of those who scorn Him'¹⁶⁸ offhandedly compares the good literate surgeon, a category to which both Mondeville and Arderne belonged, to Christ. Paul Binski also discusses Mondeville's use of this comparison to emphasise the way the work of the surgeon relates to the work of Christ.¹⁶⁹ Some surgeons understood themselves to be closer to the work of God than physicians, because while physicians adopted a rather theoretical view of the body, surgeons could cut and shape the body, not unlike the way God shaped and formed the first man and woman. As proof Pouchelle quotes Mondeville as writing 'God himself practised as a surgeon when He made the first man out of clay, and from his ribs made Eve; and again when from the dust He made a plaster with which He rubbed the eyes of the blind man and so restored his sight.'¹⁷⁰ While Arderne does not have any overt messages regarding the divine status of the surgeon, the manuscripts do reference Christian theological art in a way that implies a connection to these notions; it can be argued that by drawing on the illustrations of relics and the tools of the passion (see chapter *The Body in Fragments*) the artists drew attention to the connections between

¹⁶⁷John Henderson, *The Renaissance Hospital Healing the Body and Healing the Soul* (London: Yale University Press, 2006): p. 114-115.

¹⁶⁸Marie Christine Pouchelle, *The Body and Surgery in the Middle Ages* (New Brunswick: Rutgers University Press, 1990): p. 42.

¹⁶⁹Binski (1996): p. 65.

¹⁷⁰Pouchelle (1990): p. 43.

secular and religious imagery and implicitly ascribe some of the theological values, prestige and authority to the surgeon and author.

Book as object

Images of the surgeon in these manuscripts function to establish the surgeon as an authoritative figure, something which was stressed by the images as well as the text.

Arderne recounts a story of how he had to treat a patient after the patient had been treated by someone less educated:

As somtyme it bifell of oon þat was vnder þe cure of a lady by halfe a 3erem after þat þe vppermore iuncture of þe bone of þe fynger was drawen out. ffor why ; þat lady entended for to haue heled hym al-oonly wiþ drynk of Antioche and oper pillules; and for cause þat the naiff of þe place of þe fynger in whiche þe bone þat was drawen oute stode bifore; whiche, forsope, miȝt noȝt be, for þe flessch and þe skynne wiþ þe naile þat went aboute þe bone bifore war infecte and putreface of þe bone ; wherfore of necessite al mortified and corupte bihoud to be drawen out of þe flessch and þe skyn or þat it shulde come to helpe. Þerfore a long tyme ouerpassed, when he come to me,¹⁷¹

and once Arderne could treat the patient he was able to restore his health. According to Power's this is an example of how Arderne prescribed to the same classification of medical practitioners as Guy de Chauliac who ranked 'women and many idiots' amongst the fifth class, much lower than that which Arderne wanted to be associated with.¹⁷² By including this story the academic status and high rank of the surgeon writing and using this book is emphasised, but the book itself might also have had a similar role in the interaction between a patient and a surgeon. The section of text concerning choosing the correct time for treatment, that accompanies the images of zodiac men in Arderne's treatise was not originally written by the author but rather was borrowed from other sources, as were the images of zodiac men and moon diagrams.¹⁷³ Most copies of Arderne's manuscripts

171Arderne (1910): p. 44-45.

172Power in notes to John of Arderne's *Fistula in Ano* (1910): p. 191 -120.

173Jones (1986): p. 106.

contained text in Latin as well as the vernacular and the manuscripts which pre-date the Middle English translations are best understood as polyglot, although the majority of the text is in Latin.¹⁷⁴ In Power's and the Middle English Text Society's printed copy of Arderne's treatise there are a few sections which has not been translated, these include various charms but also the section of text immediately surrounding the zodiac man and moon diagram, which all remained in Latin.

In John Murdoch's *Album of Science* there is an image of a zodiac man and a diagram which is very similar to the ones included in Arderne's texts (fig. 26). This image is taken from what Murdoch calls a girdle book, made out of six pieces of folded vellum which the medieval physician would have carried from his belt. The almanac contained a zodiac man, other diagrams and common images, such as an illustration of *jordans*, also known as urine glasses.¹⁷⁵ According to Murdoch this object is best understood as portable diagnostic tool.¹⁷⁶ Hilary Carey has explained how the appropriate term for these items is folded or folding almanacs, which sets these scientific items apart from the 'older, liturgical calendar.'¹⁷⁷ He also stresses that while the majority of the patrons and owners of these manuscripts may have been medical practitioners, we cannot be sure that all of them were,¹⁷⁸ much in the same way that cannot know if all the patrons and owners of any medical books or tools were also medical practitioners. Jones has suggested that these folded almanacs functioned as diagnostic tool which could be brought along by visiting a physician.¹⁷⁹ He has also argued that '[p]erhaps the calendars were badges of authority and

¹⁷⁴Peter Murray Jones, "Four Middle English Translations of John of Arderne", *Latin and Vernacular, Studies in Late-Medieval Texts and Manuscripts*, A.J. Minnis ed. (Bury St Edmunds: St Edmundsbury Press, 1989): p. 62.

¹⁷⁵Murdoch (1984): p. 318-319.

¹⁷⁶According to Rawcliffe the *Jordans* take their name from the river in which Jesus was baptised. (1995) p. 49.

¹⁷⁷Hilary M. Carey, "What is the Folded Almanac? The Form and Function of a Key Manuscript Source for Astro-Medical Practice in Later Medieval England", *Social History of Medicine* 16 (2003): p. 484.

¹⁷⁸*Ibid.* p. 491.

¹⁷⁹Jones (1984): p. 67-68.

opening the leaves was an impressive part of the ritual of medical consultation.¹⁸⁰

Such props presumably helped to convince the patient of the attending physician's knowledge and authority in addition to performing a specialized medical function. It is possible that Arderne's book functioned in a similar way, as a part of the ritual of meeting a surgeon, where the image would be used to explain and validate the opinion of the surgeon; by keeping the original Latin text surrounding the image of the zodiac man, the learned status of the surgeon was emphasised, and the authoritarian relationship between the patient and the medic was re-established. This idea allows us to consider how the images in the manuscript could have been interpreted by patients. Thus the Zodiac Men functions to situate both patient and surgeon within the universe (figs.5,6,7), a microcosms within a macrocosm, and consequently subordinates both of them to God. At the same time as it further establishes the medical practitioner's authority, as the one possessing the intellectual and linguistic tools to decode and explain both images and the text. This is in accordance with the text itself, in which Arderne explains to the reader how to interact with his patients. For example, he describes how the surgeon should double the time he thinks that the recovery will take when talking to the patient, and if the patient recovers before the projected time and questions it, the surgeon should then answer that the shorter recovery time is due to the patients strong heart. He also explains how the surgeon must know many comforting and wise things to say to his patients.¹⁸¹ Thus Arderne offers advice to the medical practitioner that will help in different ways to establishes a relationship which emphasise the superior knowledge of the surgeon, lending him further authority.

This chapter has examined the role the Arderne manuscripts might have played in

¹⁸⁰Peter Murray Jones, "Image, Word, and Medicine in the Middle Ages", *Visualizing Medieval Medicine and Natural History: 1200-1500*, Jean A. Givens, Karen M. Reeds, Alain Touwaide eds. (Aldershot: Ashgate, 2006): p. 11.

¹⁸¹Arderne (1910) p. 6-8.

the ritual of seeing a surgeon, and how the authority of the surgeon was established through referencing other images and illustrations of academic authority figures. In its descriptions of artistic details, it has also touched on some of the implicit intervisual codes which reference Christian iconography. In the final chapter, representations of the body represented in parts and through tools will be examined in relation to medieval tensions regarding the integrity of the body, its fragmentation and the ambiguous position of the surgeon, which was something the artists tried to resolve through drawing on representations of authority as well as religious iconography, which will be discussed in the next chapter.

Chapter 6: Fragments as Body

This dissertation has so far discussed the ways whole bodies, theoretical, as represented through diagrams and naturalistically drawn, clothed and naked, are depicted in the three John of Arderne manuscripts. It has shown that only occasionally are patients and surgeons represented as complete, integral bodies and that the majority of images present the body in parts and in fragments. It has sometimes also touched on the images of fragmented body parts that fill the margins of these texts: the side and lower margins of the folios are filled with unframed images of body parts, wounds and surgical tools. The text is interspersed with images of the lower half of patients bodies, with red wounds indicating fistula (fig.11). The marginal illustrations also contain images of plants and herbs which will not be discussed in this chapter as they do not relate or describe the body directly. It is worth noting that these body parts drawn and displayed as fragments contribute to the *mise-en-page* and answer to the demands made by the text, but they also respond to, and encourage, contemporary debate about the body and its integrity. Jones discusses how in John of Arderne's manuscripts the images of tools and the surgical practices refer back and forth in time to different stages of the procedure,¹⁸² and through this process, image and text work together to construct a body through fragments. He further describes how the images are meticulously detailed and related to the text, although not always in a strictly literal way. Sometimes they express the sensory experience of the procedure or illness described in the text. For example, the pain of *iliaca passio* is illustrated with an image of a corkscrew-like tool for 'the guts are twisted as if by a gimlet.'¹⁸³ The images are used both to describe the tools and the real impact they have when used on the body, but also as symbols of sensory experiences, in both cases the body is described by the tools, albeit in

182 Jones (2006): p. 14.

183 Ibid. p. 14.

different ways. This chapter will examine how these images of fragmented bodies address some of the issues raised above at the same time as they function as illustrations relevant to the text and its descriptions of ailments and remedies. It will show that although these look at first to be straightforward illustrations of the latter, that artists have employed varying strategies to move them out of the realm of strictly descriptive or 'naturalistic'. This chapter will therefore discuss the different ways in which these fragments function and how they can be understood to respond to contemporary discourse on the integrity of the human body. Although the word 'fragmentation' carries many connotations for modern readers,¹⁸⁴ rather than focusing on these modern theories, it will discuss contemporary medieval tensions and ambivalence relating to the practice of surgery, including how this is expressed in the Arderne manuscript imagery, and how the issue of protecting the integrity of the body can be understood in relation to contemporary ideas and depictions of saint's relics, which also consist of human fragments. It will conclude with a discussion of representations of blood as a surrogate for life, and thus as a synecdoche for the entire body.

It will be argued that the imagery in the Arderne manuscripts can thus be understood to do two things. Firstly, the trauma and taboo of real fragmentation is resolved through reference to Christ and the saints and secondly, that aspects of the fragment imagery served to elevate the profession of surgery higher than that of other medics,

184 From a psychoanalytical perspective, it can denote the mirror stage of a child's psychological development as theorised by Jaques Lacan and Melanie Klein. However, the extent to which this theory can be applied to the medieval context has been questioned. For example, Margaret E. Owens writes about medieval theatre that:

When we imagine the Mirror Stage, we should remember that medieval Christians culture the spectacle of the dismantled body was framed by a theology that specifically resolved the contradiction between unity and fragmentation through the trope of the Eucharist. In the breaking of the bread, as in the braking of Christ's body, the church was made whole. In the drama of martyrdom as in the drama of the Eucharist, fragmentation and wholeness reconciled.

(Margaret E. Owens, *Stages of Dismemberment – The Fragmented Body in Late Medieval and Early Modern Drama*, 2005, p.53)

consistent with John of Arderne's self-promotional agenda that is expressed in the text itself and that prompted him to write and disseminate his famous treatises.

Responding to Religious Iconography - Relics

Throughout Hunter 112, Hunter 251 and Hunter 339, there are many illustrations of body parts shown as fragments, the marginal illustrations have a practical function in that it allowed the reader to navigate the manuscript with more ease as well as depicting the ailment described in the text, but the illustrations also serve a different function in that they reference the visual language and the discourse associated with the veneration of relics. The images of hands, arms, wounded legs and feet draw heavily on the displays and depictions of relics. This is done partly through their upright orientation on the page, which is similar to that of body or shaped reliquaries (figs. 27, 28, 29, 30). As earlier discussed, in relation to the gender of the marginal body part fragments, Caviness argues that it was the relics capacity to act as a representation of the whole, that allowed to object to contain meanings not limited to gender.¹⁸⁵ Cynthia Hahn describes how shaped reliquaries do not have to look like what they are supposed to contain but can in fact contain a multitude of bodily remnants, unrelated to the body part portrayed. She also states that it is *because* they are fragments that they become powerful, pointing to the larger whole of which it is a part, which grants the object signifying power beyond the immediate confines of the church.¹⁸⁶ The body parts of saints have power by virtue of the understanding that the saints themselves exist equally in every relic, in a similar way that God exists within every part of the Eucharist.¹⁸⁷ The divided bodies of saints are thus understood to be whole and un-fragmented, and it was via this understanding of the whole

¹⁸⁵Caviness (2001): p. 157.

¹⁸⁶ Cynthia Hahn, "The Voices of Saints: Speaking Reliquaries", *Gesta* 36 (1997): p. 20-21.

¹⁸⁷ Bynum (1992): p. 285.

through the parts that the issue of fragmentation was dealt with.

The veneration of relics was one of the ways in which the trauma of fragmentation was resolved. The fragments of saints bodies were considered equivalent to the whole of the saint, they are objects which represent and sometimes stand in for saints. Clothes worn or objects handled by the holy person, as well as entire bodies and body parts came to be venerated as if it were the whole saint. According to Patrick Geary relics were understood as the physical object through which the saint interacted with the world, after his or her death, and before the eschaton. Popular conception understood relics to be the saint 'continuing to live among men.'¹⁸⁸ Relics served many different social functions in society, for example the possession of a relic could glorify a community or bring economic benefit to a church.¹⁸⁹ Geary argues that the role of the relic was not static but changing and while it always served a spiritual function, it could also function as a symbol of authority and stand as a symbol for other powerful institutions.¹⁹⁰ Relics also served as a way to direct and focus piety. One of the most popular destinations for pilgrimages within England was to the tomb of St. Thomas Beckett in Canterbury, a saint whose fragmented body was worshipped all over Europe. His arm and pieces of his brain were kept as relics in churches in Rome. In England *Our Lady of Walshingham*, a Marian shrine with relics including the Virgins milk, was second in popularity only to Canterbury.¹⁹¹ In 1432 many relics could be found at Glasgow Cathedral, among them a part of the Virgin's girdle and other garments associated with saints.¹⁹² In many cases relics were believed to help heal

188 Patrick Geary, "Sacred Commodities; the Circulation of Medieval Relics", *The Social Life of Things: Commodities in Cultural Perspective*, Arjun Appadurai, ed. (Cambridge; New York: Cambridge University Press, 1986): p. 176.

189 Ronald C. Finuance, *Miracles and Pilgrims Popular: Belief in Medieval England* (London: Dent, 1977): p. 28.

190 Geary (1986): p. 179.

191 Wilfrid Bosner, "The Cult of Relics in the Middle Ages", *Folklore* 73 (1962): p. 254-255,

192 John Dillon, *Inventory of the Ornaments, Reliques, Jewels, Vestments, Books, &c: Belonging to the Cathedral Church of Glasgow. 1432, 1880*, p2-3.

Translated from Latin by Andrew Gourlay in personal correspondence, April 14 2010

living bodies from disease and illness. One such relic was the fragment of the Holy Cross which was believed to exist in Norfolk at the priory of Bromholm.¹⁹³ These examples show the hugely important and multifaceted role relics played in contemporary social life, they were objects associated with power, simultaneously they also function in a spiritual context to emphasise the integrity of the body.

Paul Binski discusses a correlation between how bodies are described and understood through relics and how actual real bodies are treated in death. He discusses how bodies of the nobility, in England as well as the rest of Europe, were fragmented and buried in different places. The *body politic* was understood in terms of real bodies through the donation of body parts (a hierarchy could be established among places and regions gifted body parts of different value) and the discourse surrounding these practices was fraught with tension and ambivalence.¹⁹⁴ The papacy complained about this custom as it could be interpreted to break canon law through its perceived mutilation of bodies, and according to Hallam the similarities to the adoration of relics affected this position. While this practice had developed as early as the twelfth century in Germany and Italy, in France and England it developed later, and mostly as a response to the demands of hygiene rather than ceremony.¹⁹⁵ Binski further states that by the thirteenth century it had become commonplace for members of the higher social classes to have their bodies divided and displayed in ways making use of the same 'visual economy' as relics.¹⁹⁶ The same discourse that informed burial practices also informed manuscript illumination depicting bodies. Some of the same fears and anxieties are implied in images of body parts in these three medical manuscripts, which are to some degree based on Christian ideas about relics

193 Rawcliffe (1995): p. 21-22.

194. Paul Binski, *Medieval Death: Ritual and Representation* (London: British Museum Press, 1996): p. 63-64.

195 Elizabeth M. Hallam, "Royal Burial and the Cult of Kingship in France and England, 1060 – 1330", *Journal of Medieval History* 8 (1982): p. 208-210

196 Binski (1996): p. 69.

and the disembodied wounds of Christ, and somewhat modelled on images of the latter found in other artistic contexts. According to Binski, Europe saw a rise of cults devoted to veneration of the wounds and heart of Christ, as well as the instruments of the passion (*arma Christi*)(see below), at the same time that bodily division by the nobility was becoming more common.¹⁹⁷

Many of the rendered body parts in Arderne's manuscripts share similarities with the wounds of Christ and representations of relics in that they are drawn as isolated, connected to a larger body by narrative and semiotic signs. Binski points out the 'amputee-like section across the ankles' in an image of the wounds of Christ (fig.32),¹⁹⁸ a characteristic that is shared to a varied extent by images in all the three Arderne manuscripts (figs.11, 16, 18, 27, 30, 31). Through this detail, the visceral aspect of the fragment is emphasised, what it represented is how it is supposed to be connected to the remaining body, and the isolated limb is understood to be a part of a larger body through the narrative of the text.

By drawing on the visual economy of relics and depictions of the wounds of Christ the illustrations in Arderne's manuscripts draw attention to the discourses surrounding these depictions, the synedochial power of the relics that allow the object to be both whole and fragmented at once is linked to the illustrations of fragmented bodies in the medical manuscripts in an attempt to resolve the trauma of fragmentation.

Responding to Religious Iconography - *Arma Christi*

All three of the Arderne manuscripts contain a page where the tools used for surgery are depicted. In Hunter 251 the surgeon's tools are illustrated in a full-page

¹⁹⁷Ibid. p. 66.

¹⁹⁸ Ibid. p. 133.

miniature (fig. 4), the image contains no text and an illustration of the tools being used on bodies are on the recto side of the page (fig.7). In Hunter 339 the image of the tools cover two pages (fig. 2), both containing a small amount of text and the surgery being performed covers the two following folios (fig.5). In Hunter 112 the image of tools (fig. 3) and the tools being used (fig.6) are facing each other, both interspersed with text, all different layouts allowing the reader different experiences when interacting with the text which explains how the procedure is performed.¹⁹⁹ The reader must constantly shift his or her study between the text and the different images, while visualizing the tools at work on a imaginary body, in the same way that the the *arma Christi* describes the body of Christ.

Depending on the size of the manuscripts the size of representations of instruments differ. In Hunter 339, the smallest one of this group, the depictions of instruments form the focus of the page. For example, the image of a *sequere me*, a type of probe used to determine the location of the *fistula*, extends the entire length of the right margin (fig.13), promoting a different response from the viewer than Hunter 251 where an instrument is drawn in the same absolute size, (representing the entire length of the legs of a man,) and yet does not extend more than one third of the length of the page or in Hunter 112 where the stretches less than half the margin of the page (fig. 14). Allusions to the body thus appear throughout the text not only through depictions of whole and fragmented bodies and body-parts, but also through the images of tools that are to act on the body.

The tools represented in these manuscripts can also be understood to respond and relate to religious iconography. The *Arma Christi*, or the Weapons of the Passion, was another devotional genre of illumination relevant to the reader-viewer's perception of Arderne's imagery. The *arma Christi*, like displays and images of relics and body part

¹⁹⁹This text will discuss the ways in which the tools represent the body that they are meant to act on. For a study on the practical application of the instruments, their part in the procedure and the innovation the tools and the depictions of them see Alain Ségal's "New Reflections on the Instruments Represented in the Manuscripts of John Arderne's Treatise 'De Fistula in Ano'" in *Vesalius* 12, 2006.

reliquaries, was a form of imagery that described a holy body to a worshipping audience (Fig. 33, 34). The iconography was widespread, very popular and influential during the fifteenth century.²⁰⁰ The *arma Christi* is a schematic representation of the tools used in the Passion which serves a different purpose than many other devotional images.²⁰¹ It functioned as a visual diagram, a conceptual map of the sufferings of Christ, allowing and encouraging the viewer to study and meditate on the tools and the suffering that they represent.²⁰² Drawing on Bynum, David Areford explains that the body parts of Christ that are depicted on the 'Washington woodcut'²⁰³ are to be understood in a similar way to the Eucharist,²⁰⁴ as the *arma Christi* was a part of a devotional trend that 'emphasised the *parts* in order to comprehend the *whole* of the Passion narrative and the body of Christ.'²⁰⁵ It is, however, important to remember that the meanings of the *arma Christi* imagery were fluid, that over time they changed from denoting triumph to, by the later middle ages, 'signs of pain and injury, visual triggers to remind Christians of what God had suffered for them.'²⁰⁶ The scattered images are non-narrational and their story is allowed to unfold for the reader in the pace and order that they choose. Anthony Bale has also studied the ways in which the *arma Christi* functioned in practices of piety, how the viewer is implicated in the narrative, through his or her identification with Christ's pain and suffering through the contemplation of images that all ultimately refer to Christ's body.²⁰⁷

200 Binski (1996): p. 125.

201 Michael Camille, "Mimetic Identification and Passion Devotion in the Later Middle Ages: A Double-sided Panel by Meister Francke", *The Broken Body: Passion Devotion in Late-Medieval Culture*, A.A. MacDonad, H.N.B.Ridderbos, R.M. Schulsemann eds. (Egbert Forsten Groningen, 1998): p. 194-195.

202 Peter Parshall, "The Art of Memory and the Passion", *The Art Bulletin* 81 (1999): p. 464-467.

203 *The Wounds of Christ with the Symbols of the Passion*, woodcut, c.1490, Washington D.C., National Gallery of Art

204 David S. Areford, "The Passion Measured: A Late-Medieval Diagram of the Body of Christ", *The Broken Body: Passion Devotion in Late-Medieval Culture*, A.A. MacDonad, H.N.B.Ridderbos, R.M. Schulsemann eds. (Egbert Forsten Groningen, 1998): p. 227.

205 Ibid. p. 217.

206 Caroline Walker Bynum, "Violent Imagery in Late Medieval Piety Fifteenth Annual Lecture of GHI", 8 November 2001 *GHI Bulletin* 30 (2002): p. 18.

207 Anthony Bale, *The Jew in the Medieval Book: English Anti-Semitism 1350-1500* (Cambridge: Cambridge University Press, 2006): p. 157-158.

The image of the tools in Arderne's medical manuscripts asks of the reader-viewer to apply them to the unseen, hypothetical body of the patient and to the written narrative of surgery, in a way analogous to the *arma Christi* imagery, which constructs the narrative of the Passion around the wounded body of Christ. Although the surgery was not as well known as the story of the Passion, and thus not as simple to decode by visual cues alone, nevertheless the relationship between the images and the text makes such a decoding possible. This visual parallel between the *arma Christi* and depictions of surgical tools is drawn by Michael Barilan with regards to Andreas Vesalius' (1514 -1564) anatomical text *De Humani Corporis Fabrica* (On the Fabric of the Human Body). He states that the instruments mirror depictions of *arma Christi*, a characteristic shared with other pre-modern anatomical and medical illustrations and that this is due to shared qualities of the illustrations: the *Arma Christi* and the surgical instruments were 'a means to cleave the divinity.'²⁰⁸

In the same way that the images of body parts share some of the semiotic functions of relics, these orderly representations of tools function by drawing upon the religious iconography of the *arma Christi*, thus allowing the reader to navigate the text through the imagined body of the patient. The use of religious iconography, both the stylistic repetitions and the theoretical means by which the body is described, references a visual reconciliation of the trauma of fragmentation.

Integrity of the Body

Arderne's choice of illustrations must be understood in relationship to contemporary ideas and discourses regarding the human body, whole and divided. Mary

²⁰⁸ Michael Y. Barilan, "Medicine Through the Artist's Eyes Before, During and After the Holocaust", *Perspectives in Biology and Medicine* 47 (2004): p. 115.

Douglas outlines in *Purity and Danger* the ways in which cultures often define and understand themselves in terms of the rules they create, as a means for both societies and individuals to comprehend and understand their limits and borders. Douglas claims that taboos and rituals function to illustrate and prohibit transgressive behaviour on an individual level and that the rules which dictate and control the limits of the body can only be traced back and understood in relationship to the rules dictating the limits of groups or societies.²⁰⁹ The body can, according to Douglas be understood as,

standing for any bounded system. It's boundaries can represent any boundaries which are threatened or precarious. The body is a complex structure. We cannot possibly interpret rituals concerning excreta, breast milk, saliva and the rest unless we are prepared to see in the body a symbol of society, and to see the powers and dangers credited to social structure reproduced in small on the human body.²¹⁰

A notion that is perhaps apparent in Arderne's medical images. If cultural codes and practices are written onto the collective body of real people as well as those individual bodies represented, then images of bodies in fragments can be a constant reference, throughout the text, to the dubious privilege of the surgeon who is allowed to cut open and divide the human body. Throughout the Middle Ages, fragmentation, however, raised other and more pressing cultural issues. Caroline Walker Bynum discusses the many different, contradicting and overlapping, practices and responses to fragmentation, for example how some people would have their bodies divided and sent to different places after death and how some others would instruct that their bodies not be divided. She writes that 'artistic or actual, the practice of bodily partition was fraught with ambivalence, controversy and profound inconsistency.'²¹¹ Bodily division and separate burial of body parts was a practice that spread to the nobility, from the royal families, in the twelfth and thirteenth centuries. It

209 Mary Douglas, *Purity and Danger An Analysis of the Concepts of Pollution and Taboo* (London: Routledge, 1966): p. 43-46.

210 Douglas (1966): p. 116.

211 Caroline Walker Bynum, *Fragmentation and Redemption, Essays on Gender and the Human Body in Medieval Religion* (New York, London: Zone Books, 1992): p. 272.

was the 'enthusiasm for royal saints' that made these fragmented burials so popular in France and England.²¹²

The medical division of bodies was also a matter of theological concern. Siriasi states that it was in the eleventh century that the two disciplines of surgery and medicine became separate,²¹³ and with the Fourth Lateran Council (1215), the decree forbidding subdeacons or higher clergymen to perform any form of medicine that might break the skin, the division was further established within the monastic community.²¹⁴ The complex rules regarding clerics practising medicine is discussed by Darrel W. Amundsen, who claims that while the vast majority of clerics were not prohibited from practising medicine or surgery,²¹⁵ measures were simply taken to limit money being earned from it, thus drawing attention away from the spiritual to the commercial aspect of monastic life.²¹⁶ Further, Pouchelle outlines in *The Body & Surgery in the Middle Ages* the ambivalent discourses surrounding the body: the closed and the opened, the unharmed and the cut, and how these especially effect surgeons. She states that the classifications which places surgeons alongside professions such as barbers, butchers, castrators of animals and dentists respond to this discourse and worry.²¹⁷ Bynum also stresses how 'Highly charged/.../bodily partition [was] that torturers were forbidden to effect it; they were permitted to squeeze and twist and stretch in excruciating ways, but no to sever or divide.'²¹⁸ According to Pouchelle, the same attitude places surgeons lower down on the social strata than physicians and connects them to others who shed blood and break the integrity of the

212 Hallam (1982): p 361.

For further information on the division of bodies in burial practice see *Heart Burial* by Charles Angell Bradford, which studies the tradition of separate burial of heart and bodies in the middle ages.

213 Siriasi (1990): p. 161.

214 Carole Rawcliffe, *Sources for the History of Medicine in Late Medieval England* (Kalamazoo, Mich.: Medieval Institute Publications, Western Michigan University, 1995): p. 45.

215 Darrel W. Amundsen, "Medieval Canon Law on Medical and Surgical Practice by the Clergy", *Bulletin on the History of Medicine* 52 (1978): p. 36.

216 Ibid. p. 28-29.

217 Pouchelle (1990): p. 70-71.

218 Bynum (1992): p. 272.

body.²¹⁹ It is also important to note that the professional conflict that Rawcliffe has outlined between surgeons and physicians, as well as surgeons and barbers,²²⁰ would have influenced the production of medical literature. She writes that, as opposed to on the continent, where by the fifteenth century surgeons could study and learn their trade at universities, in England, due to the the perceived differences between the disciplines, training of surgeons happened through guilds and by apprenticeships.²²¹

Although his study concerns Paris, comparisons can be drawn to other parts of Europe where the scholastic tradition influenced surgeons greatly. Cornelius O'Boyle has shown how university trained physicians and master surgeons only treated a small fraction of the population, and to protect their privileges they later banded together to form 'a fraternity or guild of practitioners.'²²² Surgeons in England did not have access to university training but Jones shows how surgical texts crossed the channel and influenced Arderne's own writing. He claims that the work of Arderne show 'how it was possible for a craft-trained surgeon with no university background to study the scholastic surgeries.'²²³ Rawcliffe also writes that John of Arderne's text stresses the difference between surgeons and barbers, elevating surgeons to learned students, while barbers were portrayed as lacking education, as a way to emphasis the superiority of the guild of the surgeons.²²⁴ Arderne stressed that the surgeon should not allow a medical practitioner of lower standing to see the procedure performed as 'ffor if barboours knowe Dis doyng þai wold vsurpe Dis cure, appropriand it to þamself vnto vnworschip and noʒt litle harme of maystreʒ.'²²⁵ This

219 Pouchelle (1990): p. 70.

220 Rawcliffe (1995): p. 133.

221 Ibid. p. 126.

222 Cornelius O'Boyle, "Surgical Texts and Social Contexts: Physicians and Surgeons in Paris, c.1270 to 1430", *Practical Medicine from Salerno to the Black Death*, Luis García-Ballester ed. (Cambridge: Cambridge University Press, 1994): p. 170.

223 Jones (1994): p. 321.

224 Rawcliffe (1995): p. 133.

225 Arderne (1910): p. 71.

relates closely to issues discussed in the previous chapter, as it is another representation of the surgeon as figure of authority. Siriasi emphasises that Arderne's text was written by a surgeon, for other surgeons and medical practitioners,²²⁶ although only those of appropriate standing within a medical hierarchy. The position of the master surgeon within this medical hierarchy was fraught with tension, it was closely connected to that of the barber surgeons and others who divided the body, from whom the profession wanted to be separate; to resolve this issue these three medical manuscripts draw on the visual tradition representing relics and the *arma Christi*, on a discourse which allowed the trauma of fragmentation to be resolved, something which not only addressed the issue of fragmentation in surgery but resolved it and implied divine sanction for the profession.

Blood

Blood is a prevalent theme in Arderne's manuscript, the text includes many uses of phlebotomy and blood is often present in the illustrations where the context does not demand it. Red pigment used to indicate blood, as well as heat and fire, is also used to demarcate important sections of the text and words. During the Middle Ages blood was among other things a symbol of life, living flesh and unbroken bodies, an understanding that came to influence the illustrations in medical manuscripts greatly.

Binski notes in regards to the an image of the disembodied wounds of Christ, 'the amputee like section' of the part of the hands and feet which are supposed to be connected to the main body (fig. 32).²²⁷ This same section of the isolated body parts in Arderne's medical manuscripts are often highlighted with the use of red. Hunter 339 has a very sparse colour scheme, only utilising a light brown/yellow and red. Hunter 112 and Hunter

²²⁶ Siriasi (1990): p. 173.

²²⁷ Binski (1996): p. 133.

251 both have more colours, the first manuscript uses two different nuances of blue, light yellow, purple and red, whilst the latter utilises light and dark green, light and dark blue, brown and yellow as well as red. Although they have such different colour schemes, the colour red functions in similar ways in all three manuscripts: as illustrations of pain, fire, demarcating fistulas and other wounds as well as important sections and words of the text. All three manuscripts have at least one figure where the amputee-like section of the fragment has been coloured red (figs. 11, 27, 31). Red also functions in other ways, in the illustrations where the colour scheme is sparse, red is used to indicate details of plants and tools as well as a having more naturalistic uses of the pigment. But in the other two manuscripts red is used primarily to indicate blood, wounds and other things which *are* red.

In all three manuscripts there are images of a foot being stabbed by a knife. Blood is flowing from the wound, illustrating the dramatic action taking place. In his discussion of the *Flaying of Sisamnes*²²⁸ Robert Mills highlights how the lack of blood suspends the drama for the viewer. Mills also hypothesises that the lack of flowing blood could be due to nature of the wounded man, and the artist not wanting to draw the any parallels between the holy blood of Christ and the blood of Sisamnes.²²⁹ A similar observation may be made of Arderne's illustrations. The body presented in Arderne's texts are neutral bodies, therefore a visual connection between that blood and the Eucharistic blood is less problematic. The flowing blood can also be understood as a sign of life, as hypothesised by Bynum in *Wonderful Blood*, where she describes it as a miracle that blood was flowing

²²⁸'Flaying of Sisamnes', right panel of *Judgement of Cambyses* by Geraard David, 1498. The narrative portrayed is that of Sisamnes who is a corrupt judge under Cambyses II. He is punished by being flayed alive and then Sisamnes son is ordered to take his fathers office sitting on a throne draped in his skin, as a reminder of his fathers crime.

²²⁹ Robert Mills, *Suspended Animation: Pain, Pleasure and Punishment in Medieval Culture* (London: Reaktion Books, 2005): p. 74.

from Christ's side as living blood can only flow from a living body.²³⁰ The blood flowing from the disembodied leg/foot therefore implies an invisible living body, even though only a part is depicted, and the blood shown flowing or spurting forth also emphasises the drama of the event depicted.

Pouchelle argues that blood different symbolic functions, that it was both something to be guarded against, through the taboos regarding shedding and consumption of blood, as well as something to be venerated through celebrations of sacred blood.²³¹ Bettina Bildhauer also discusses the many different functions blood had in medieval art and thought. She analyses the functions of taboos against bloodshed. She argues that the function of those taboos are not solely to limit or prohibit physical violence and bodily harm, but that 'blood is given the enormous value of confirming that the body is an inseparable whole,'²³² and that rules against shedding blood also serve to re-establish the body as a single bounded entity. A theory which was also expressed by Bynum who writes that ' what blood means /.../ is the power of life within it,'²³³ stressing the synecdochical power of blood, uniting the body. All of Arderne's manuscripts have at least one, but often several, images of fragmented bodies where the 'amputee-like section' of the body part, the part where the fragment should have been attached to the rest of the body, is coloured red. This inclusion of red can be understood to implicitly reference blood in the living body of the patient who is represented in fragments but to be understood as whole.

This chapter has examined how the body represented in fragments draw on theological representations, relics and the *arma Christi* to resolve the trauma of fragmentation that affected surgeons greatly, and by doing so stressed the singular position

230 Caroline Walker Bynum, *Wonderful Blood: Theology and Practice in Late Medieval Northern Germany and Beyond* (Philadelphia: University of Pennsylvania Press, 2007): p. 167-169.

231 Pouchelle (1990): p. 72-73.

232 Bettina Bildhauer, *Medieval Blood* (Cardiff: University of Wales Press, 2006): p. 57.

233 Bynum (2007): p. 172.

and dubious privilege of surgeons who were allowed to cut and divide the body. This chapter has shown that through drawing on Christian imagery, such as representations of relics and the *arma Christi*, the author and artists tried to resolve the issue of fragmentation which limited the social mobility of master surgeons as they were closely connected to the lower classes of medical practitioners, such as barbers and barber-surgeons. It has also explored how the colour red and renderings of blood was used to underscore the visceral and fragmented status of the parts depicted, emphasising the unity of the body.

Conclusion

This text has discussed the many different ways in which bodies are represented and understood in the images in these three medical manuscripts. Clothes represented in medieval art and other images cannot be understood as accurate representations of what people actually wore, but must be interpreted as signs of something else, as a representation of a logic that is internal to the manuscript. For example, clothes in manuscripts are best interpreted as a representation of how people wanted to be perceived, communicating messages about moral and social status rather than how dress actually looked. Arderne expresses great interest in the status of his patients, listing nobles and clergy men among those he has successfully treated. The patterns of dress and undress in the three manuscripts communicate the high status of the patients, as well as more nuanced messages about their moral state. For example, all manuscripts show some figures with clasped hands, as if praying. In Hunter 112 the patients are all wearing modest contemporary clothing, situating them firmly within a contemporary context at the same time as making positive statements about moral and modest character. In Hunter 339 and Hunter 251, many of the male figures are nude but their hairstyles positions them within a contemporary context. Thus, by intervisual reference to heroic nudes, such as saints martyrdoms, the images further provide positive statements about the good moral character of the ideal patients.

Clothing is also used to gender the bodies depicted. The 'one-sex' model, which described women as faulty version of the male was the most prevalent way of understanding gender is communicated in these representations. According to Galen, women were similar to men but with the genitalia inverted and also differing through the humoral balances of the body. Behavioural gender, as well as biological sex, was

understood to be fluid, with both men and women able to take on characteristics of both genders, although men were not encouraged to adopt the characteristics of women. When a person or notion transgressed the binary system of masculine-feminine, he, she or it would become the third gender which could be considered monstrous or negative, but it could also carry positive connotations. The depictions of zodiac men in the three manuscripts mirror these notions. In Hunter 112 and Hunter 251, the figures are both clearly gendered male through their musculature and hairstyles, in line with the customary understanding of the generic human as male. However, in Hunter 339 the zodiac man is not gendered at all, with no defining musculature, facial features, or hairstyle to visually suggest either male or female. But rather than reading the figure as negative, perhaps we are best to understand it as positive representation of the third gender, someone or something which has managed to transcend gender to something more virtuous from a Christian perspective that saw the performance of gender and the attendant desires and passions as things to be cast off in favour of more spiritual concerns. Other representations of human bodies are gendered, usually male, through some combination of clothing, musculature and hairstyle, and in cases where only the lower half of a body is represented, the figures are gendered through the representation of male genitals. The majority of bodies are male, and all nude bodies are masculine, perhaps to avoid taboos associated with secular representations of nude female bodies.

There are also representations of fragmented body parts in the margin, that can either be understood to transcend the boundaries of gender through the power lent to them through being fragments, but also be understood to be implicitly male. All three manuscripts contain representations of free-floating male genitalia possibly functioning as constant reminders of socially sanctioned masculinity. We do not know to what extent, if at

all, these manuscripts were studied by women, but it should be noted that female surgeons and possibly female surgeons' apprentices could have encountered these manuscripts during their training and that women often inherited the literary status of the men which whom they were associated. For those apprentice surgeons, as well as any secondary audiences, these representations thoroughly established one gender as superior and perfect and the other as faulty and riddled with taboos.

The body is also represented in diagrams. This form of representation is a lot more theoretical. The zodiac men are all examples of iatromathematics and melothesia, both long intellectual traditions emphasising the connection between the microcosm of the individual and the macrocosm of the universe. The zodiac men in Hunter 112 and Hunter 251 both have contemporary hairstyles implying a direct connection between the contemporary bodies and the universe beyond them. The zodiac man in Hunter 112 and Hunter 339 demand that their reader-viewers be able to read the Latin writing on the bodies. The Hunter 339 image is even more demanding, as the figure provided is completely blank, without anything to anchor the image in time to provide links between the viewer and the universe beyond.

The wind diagram, which opens all three manuscripts situate the viewer within a conceptual world, within a macrocosm. The diagrams all differ in their details but contain the same information about the tripartite division of the world, the cardinal directions and the elements corresponding to them as well as the four humors to which they are related to. The four winds are marked out as are the stars which assert influence over the whole. The system expressed is in essence one of strict order. The humoral diagram, which is only included in Hunter 339 (although spaces are left in the other two manuscripts), expresses how the elements and humors change and effect the body over the course of one day and

night. It is in essence describing the same relationship as the wind diagram although on a smaller scale, in relation to the microcosm of the human body. Both diagrams have writing which is horizontal, vertical as well as upside down, so for the reader to properly interact with the text she or he needs to physically turn it anticlockwise, first when opening the book and then when approaching the end.

The surgeon is represented in several different ways in the different manuscripts. Hunter 112 is the manuscripts which contains most illustration of the figure. The text opens with an author portrait which references other images of authority, emphasising the authority of the surgeon, both as a medical practitioners and as part of an academic tradition.

John of Arderne's special position is further emphasised through the clothes he is depicted wearing in the author portrait in Hunter 112, where the long robes which makes him reminiscent of a university trained physician sets him apart from the other surgeons depicted in the manuscript, which all wear shorter robes. Perhaps to emphasise the singular position of Arderne, as scholar and author of the text. The clothes worn by Arderne further emphasises his status as a contemporary figure, and thus his current fame and contribution to his progressive treatment of the ailments described in the text.

The images in these texts serve in different ways to emphasise the authoritative role of the surgeon, as a learned scholar able to negotiate complicated texts, images and diagrams, someone who can comprehend their and others role within a larger macrocosm; and possibly even as agents of Gods will. The manuscripts can also rightly be understood as propaganda not only for the surgical excellence of Arderne, but for other master surgeons and physicians with who he identified, and whom he described through images and text as superior practitioners. He thus establishes a medical hierarchy in which he

enjoys and advantageous position.

The books in itself could also have this function, that is, as a tool for establishing the authority of the surgeon, in a way similar to medieval medical almanacs which formed a usual part of physicians' equipment.. Perhaps these manuscripts were used by surgeons, and other medical practitioners, ultimately to justify to patients their medical decisions.

The images of fragmentation have been viewed in relation to the many different and contradicting medieval discourses and beliefs regarding the integrity of the human body. The dubious surgical privilege of cutting and dividing the body was one that placed surgeons lower than physicians on the social strata and theoretically separated them from the upper levels of society. It was primarily through the doctrines of the Eucharist and the veneration of saints that this trauma of fragmentation was resolved in contemporary religious discourse. When trying to resolve this issue through the images in these medical texts, the intervisual language of relics is employed. For example, the images of disembodied arms that recall the enshrining of the arms of saints in sumptuous 'body part' reliquaries on display in churches for veneration by the faithful.

The full page miniature representations of tools also borrow from and refer to religious iconography, more precisely from images of the *arma Christi*. The tools point beyond themselves to the body on which they are employed in the same way as the Weapons of Christ point to the narrative of the Passion. Representations of tools throughout the manuscripts thus function as continuous reminders of the body, the whole body which is being referenced implicitly through the tools acting on it.

Blood is also used in some images in the manuscript, always functioning to highlight the synedochial power of the fragment. Sometimes, blood is rendered as flowing as sign that the body part is alive even though only one part of it is depicted for scrutiny,

reflecting contemporary beliefs that blood was intricately connected with, and representing life. In other cases, the colour red is used to demarcate the section of the fragment where it should have been attached to the body, emphasising the visceral and disembodied aspect, and through that absence, the whole to which it in theory belongs.

From the broadest social perspective, the three manuscripts are best understood as active agents John of Arderne's self-promotional agenda and in the hands of subsequent practitioners, as an aid in establishing their authority and credibility, as well as the status of their profession. Every aspect of them show the master surgeon as one of the highest ranking within a medical hierarchy within which the profession of surgery wanted to establish itself, and from the patient's perspective, the trauma and fear of fragmentation is resolved through reference to religious iconography. The texts and images consistently described patients of high social position and good moral quality, and several of the images imply not only medical competence but even divine sanction for the activities of the surgeon. The text further establishes the intellectual qualities of the author and reader by referencing several ancient and well-accepted (pseudo-)scientific theories and notions. While it has not been possible to address directly the issue of patronage of these three manuscripts, which is not known, it is reasonable to assume that the practitioners may have consulted them in the presence of patients to whom these various messages would have been accessible.

This study lends itself to considerable expansion from several directions. Among these is a broad comparative analysis of the Arderne illustrations with those in other types of manuscripts, surgical as well as other medical texts. It will also be important to investigate how the 'medical body' was represented outside of a medical context (for a non-elite audience), for example, how the healthy and the unhealthy body was represented

and understood in public sculpture and contemporary theatre, and how ideas about health and disease change when represented for different types of viewers across the social spectrum. This study has attempted to clarify the relationship between a contemporary medical practitioner's complex social agenda and the illustrated texts that they consulted. The interpretive questions raised by the renderings of the human body reassert its centrality in both secular and religious medieval art, and is an issue which deserves more extensive exploration.

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Appendix 1

Comments on the collation on Hunter 251, Hunter 112 and Hunter 339 quoted from the Catalogue of Manuscripts in the Hunterian Museum at the University of Glasgow.

Hunter 251: “ Six paper fly-leaves (i⁶.), i, I. 2, attached, i, 3. made. Two marbled-paper fly leaves (ii².), ii, I. attached (over i, I. and 2.), ii, 2. made (with i, 3.). || I⁴, 2⁸-13⁸, 14⁵⁽⁶⁾. || Six paper fly-leaves (iii⁶.), iii, 4. made, iii, 5. 6. attached. Two marbled-paper fly-leaves (iv².), iv, I. made (with iii, 4.), iv, 2. attached (over iii, 5. and 6.). 5, 5 v^o. Is blank, as also 14, 5. and 6. (cut out) was also blank.”²³⁴

Hunter 112: “Three paper fly-leaves (i³⁽⁴⁾.), originally four, i, I. lost, i, 2. folded and pasted together. || I⁹, 2⁸, 3⁹-6⁹, 7⁹⁽¹⁰⁾, 8⁹, 9⁹, 10¹²⁽¹³⁾, I I¹⁹. || Three paper fly-leaves (ii³⁽⁴⁾.), originally four, ii, 3. folded and pasted together, ii, 4. lost. The following folios are half-sheets : 1, I ; 3, I ; 4, I ; 5, I ; 6, I 7, 6 ; 8, I ; 9, I. 5. 9; 10, I. 3; 11, 9. 1, I r^o. Is blank; 11, 9v^o. is blank. Loose vellum leaves (containing the *lacunae*), in an XVIII. Cent. hand, are inserted in the place of the mission folios 7,5. (f. '57') and 10, 13. (f. '93').”²³⁵

Hunter 339: “Two paper fly-leaves (i².), i, I. attached, i, 2. made. Two marbled-paper fly-leaves (ii².), ii, I. attached (over i, I.), ii, 2. made (with i, 2.). Two vellum fly-leaves (iii².), not original. || 1¹⁰-1¹¹-, 12⁸, 13¹⁰-23¹⁰, 24⁴. || Two vellum fly-leaves (iv².), not original. Two paper fly-leaves (v².), v, I. made, v, 2. attached. Two marbled-paper fly-leaves (vi².), vi, I. made (with v, I.), vi, 2. attached (over v, 2.). 12, 8 v^o. and 16, 10. were originally left blank.”²³⁶

²³⁴Young (1908) p. 202.

²³⁵Ibid. p. 113.

²³⁶Ibid. p. 275.

Appendix 2

Folio index:

Figure	Hunter 251	Hunter 112	Hunter 339
Wind Diagram	f.2r	f.3r	f.1r
Cramping Man	f.6v	f.7r	f.14v
Man with clyster	f.24r	f.26v	f.59v
Tools	f.43r	f.43r	ff.123v,124r
Procedure	f.45v	f. 44r	ff.124v,125r
Astrological Diagram	f.49r	f.47v	ff.134v,135r
Zodiac Man	f.49v	f. 47r	f.135v
Placements of Fistulas	ff.51r,54,55r 56v,59v,60v	ff.49r,52v, 53r 55r,56r	ff.132v,133r, 134r,135r,142v, 144v,145v
Bleeding from the liver	f.72r	f.76v	
Humoral Diagram	f.75v	f.70r	f. 195r

Appendix 3 – Figures

fig.1 Wind Diagram, Hunter 112, f.3r:

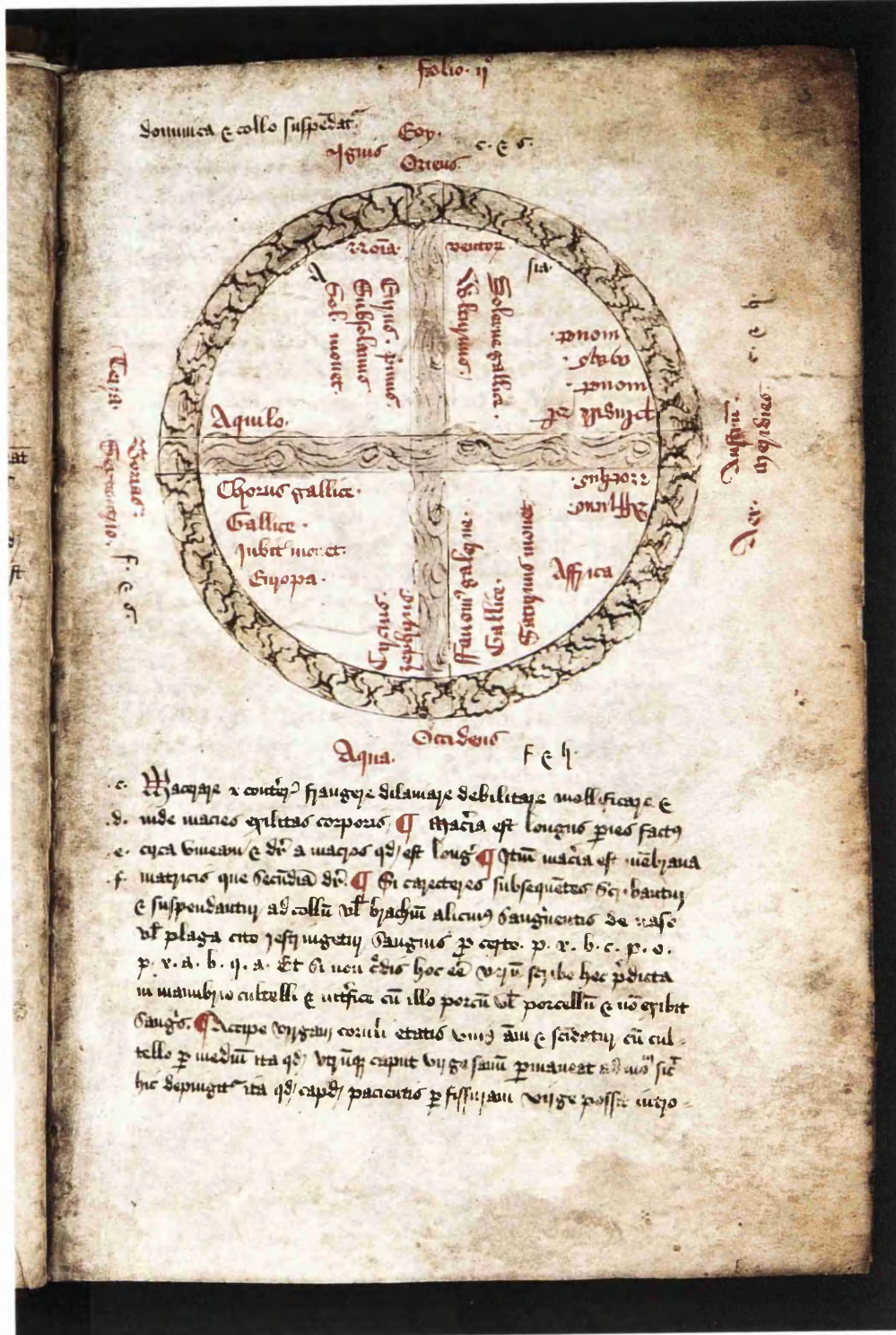
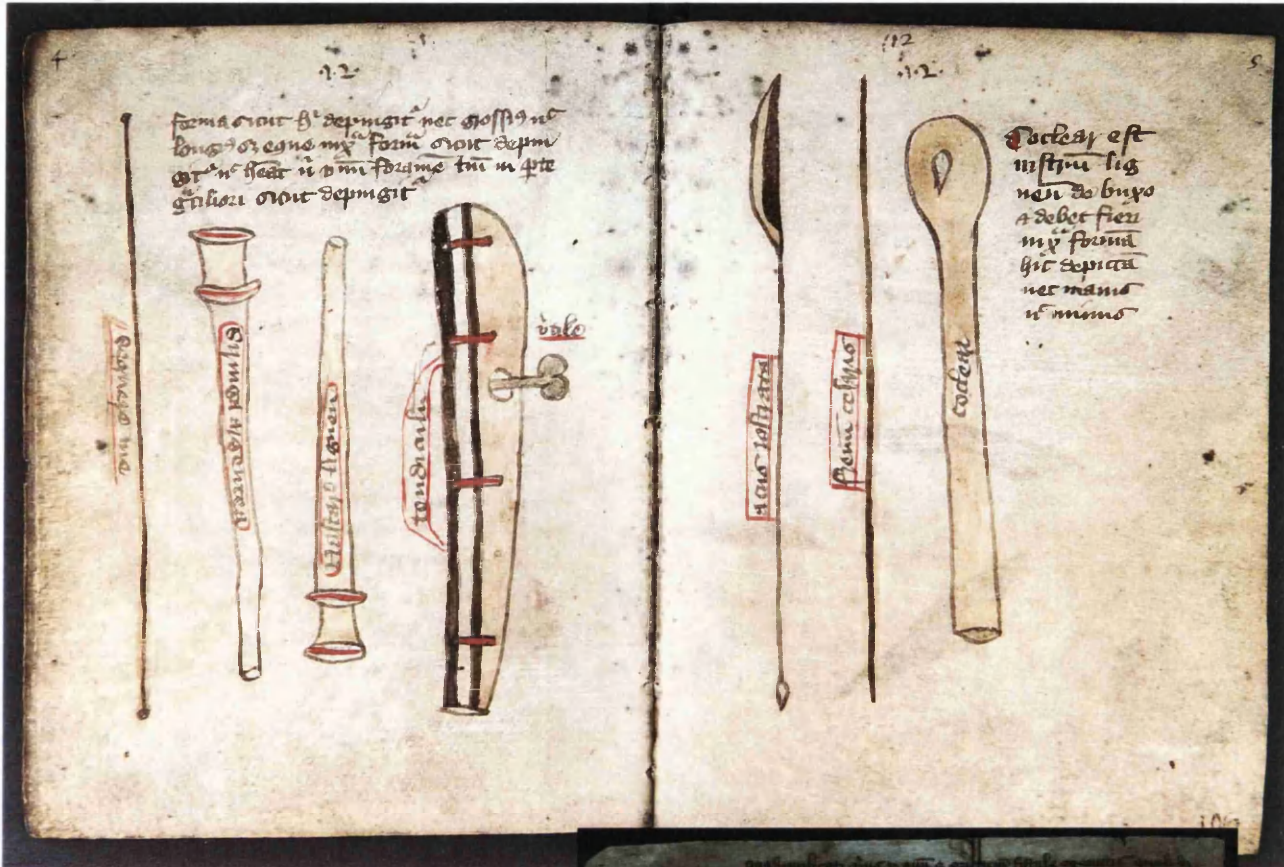


fig. 2 Tools, Hunter 339, ff.111v-112r



Above, from left to right: *sequere me* (probe for locating fistulas), syringe, syringe, *tendiculum*, (tool through which the *franeum caesaris* was threaded and tightened once inserted), *acus rostrata*, (needle eye at one end used to pass the 'braid', seton or *franeum caesaris* through fistula) *franeum caesaris* (strong braid made of horsehair, silk or flax), pierced cochlear (used to collect the sharp end of the *acus rostrata*, to prevent further damage to the patient).

fig. 3 Tools, Hunter 112, 44v
Right, from left to right:
sequere me, syringe, syringe, *acus rostrata*, *tendiculum*, *franeum caesaris*, underneath other tools, pierced cochlear.



fig. 4 Tools, Hunter 251, 43r
Right, above other tools:
Pierced cochelear,
left to right: *sequere me*, syringe,
acus rostrata, *fraenum caesaris*,
tendiculum, syringe,
below other tools: *acus rostrata*

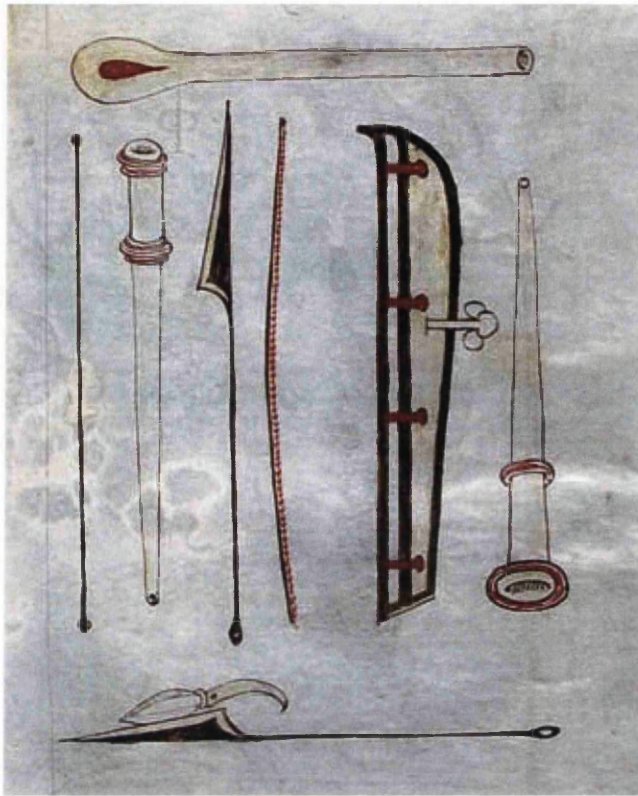


fig. 5 Procedure – Hunter 339, ff.112v-113r



fig. 6 Procedure ,
Hunter 112 f.45r

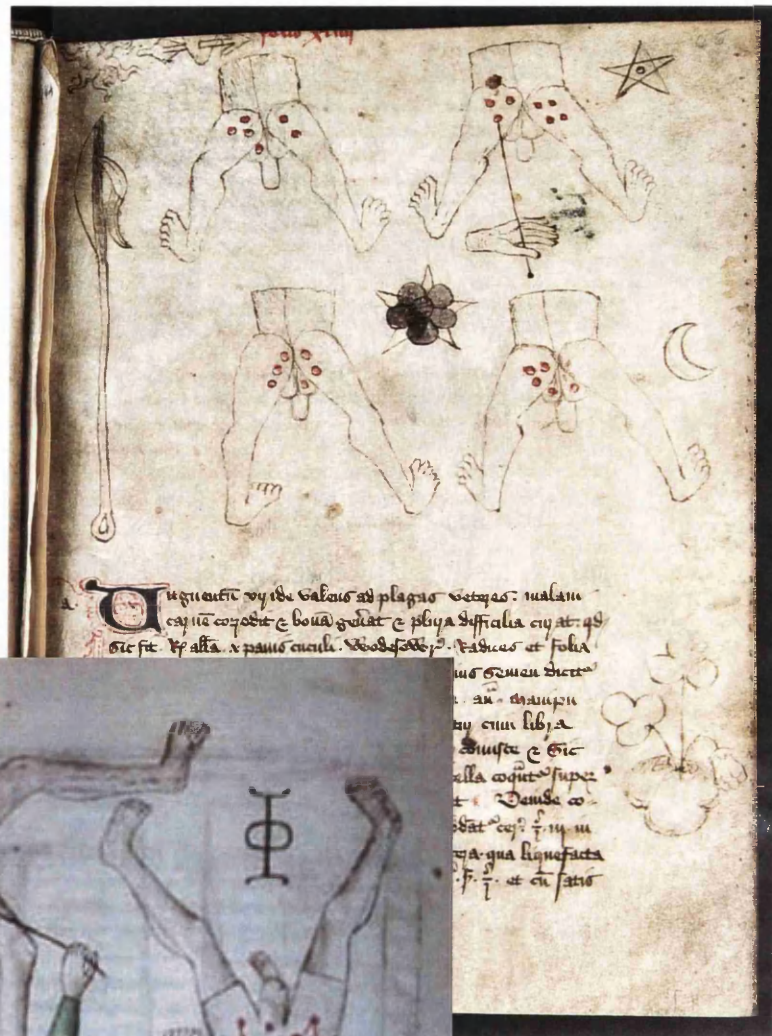


fig. 7 Procedure,
Hunter 251, f.43v

fig. 8 Zodiac Man,
Hunter 339, f.123v



fig. 9 Zodiac Man,
Hunter 112, f.47

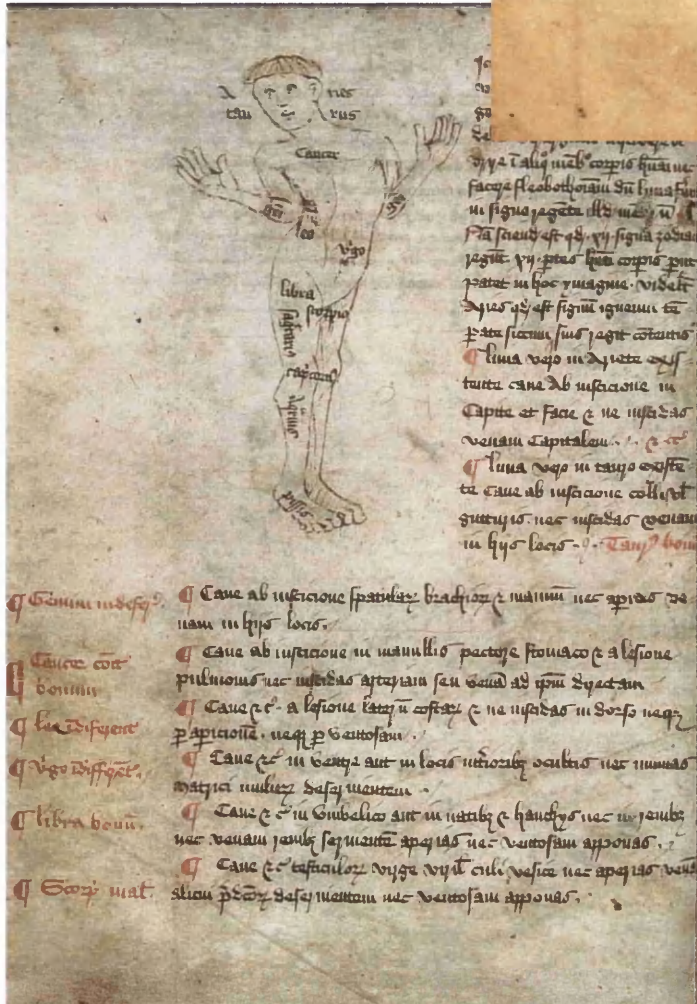


fig. 10 Zodiac Man,
Hunter 251, f.47v



fig. 11 Placement of Fistulae,
Hunter 251, ff.52v-53r

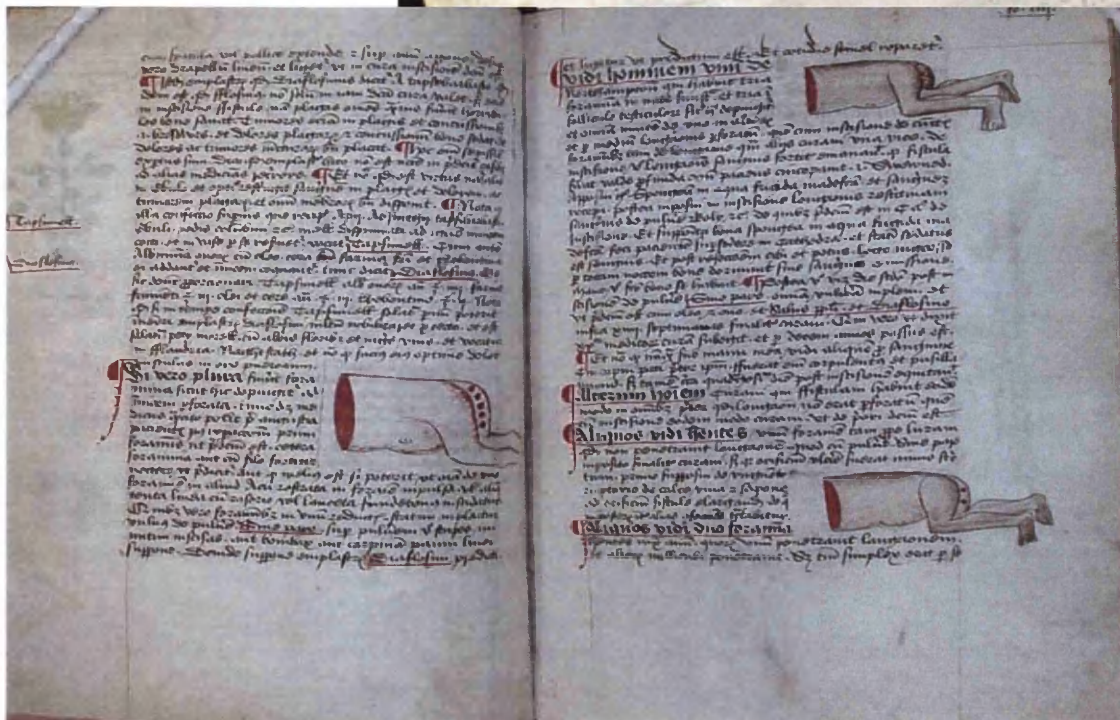
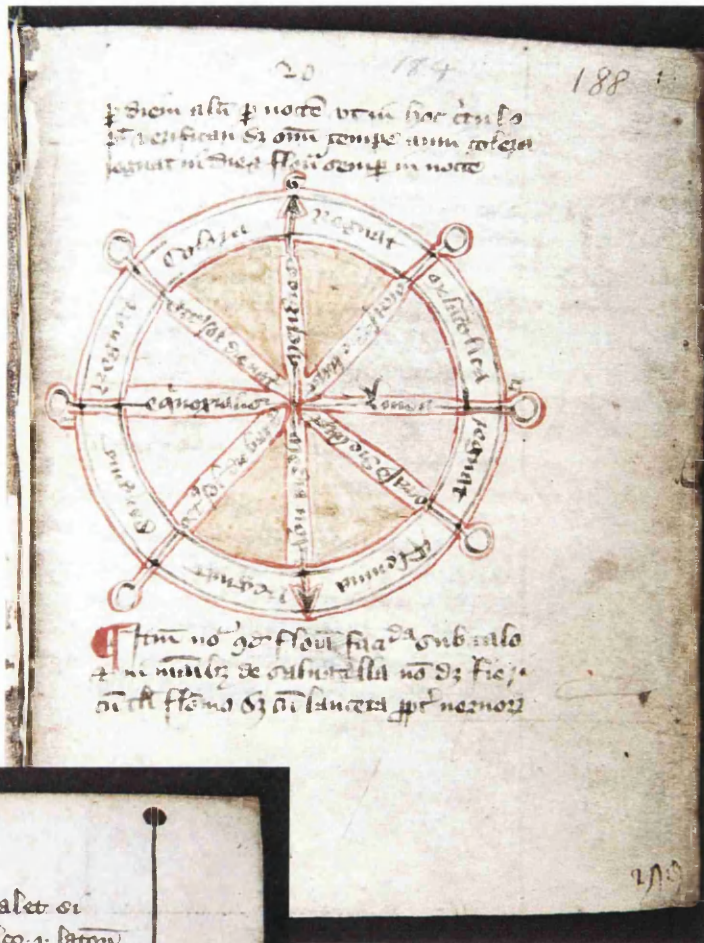


fig. 12 Humoral Diagram, Hunter 339, f.188r



77 8

tolleabili ad quod omnia valet et
 purga de argento vel auricalco et laton
 uno conficiat. ad modum autem hoc de
 purgat. Et hoc potest super facere in quibus
 bet bona valla apud artifices qui fa-
 ciunt quinas ad capita mulierum vel apud
 artifices. et oportet esse longior quam
 hic depingit. et non grossior. **¶** In
 hoc vero instrumento potest repellere
 se lapidem in vesica et statim cessabit
 et omnia exeat multos omnia sic fuerit
 admodum. **¶** Item quod super prius in lac-
 te resoluatur calido et potat lapidum
 vesica frangat et exibat

¶ Item tunc aliquos tunc vides qui in
 annos in quibus lapides ad fati-
 grossior in vena complentur intus
 iant. qui nec per orem vixit exire
 potant nec per vasa potant sed

per lendum
 exibat
 in vasa
 vixit.

no

18

Fig. 13 Sequere Me in Margin, Hunter 339 f.77r

fig. 14 Clyster in Margin, Hunter 112, f.45v

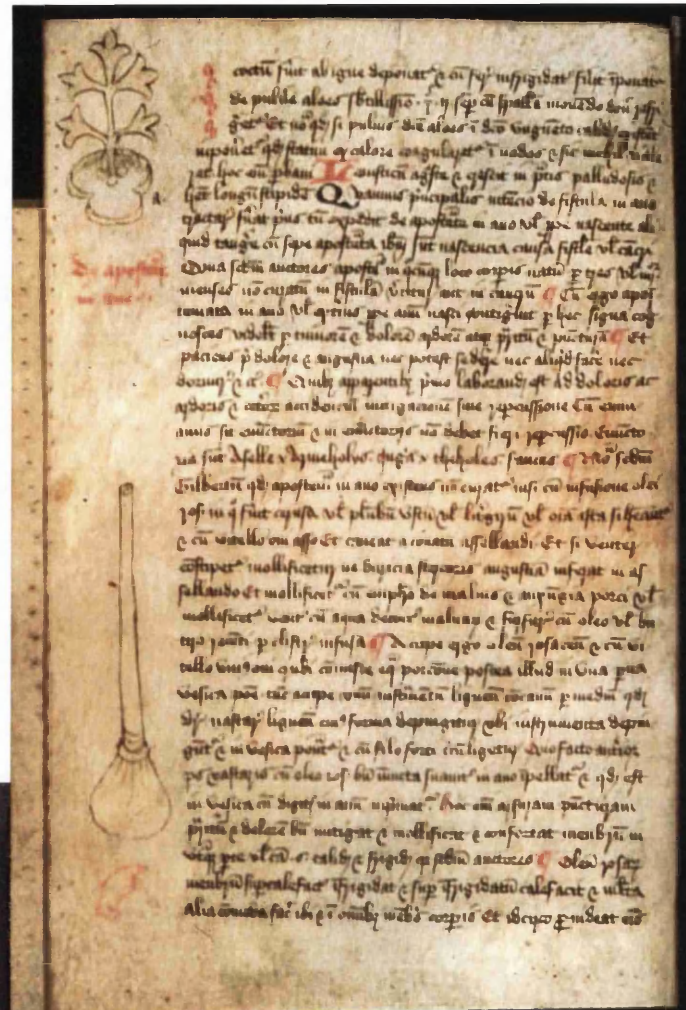


fig. 15 Cramping Man, Hunter 339 f.14v

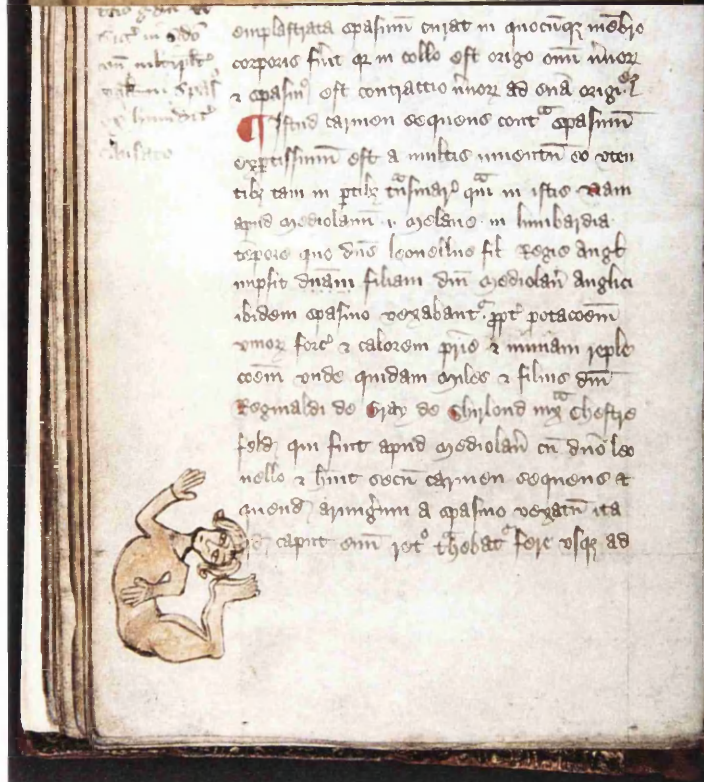


fig. 16 Cramping Man, Hunter 112 f.7r



fig. 17 *Experimenta*, Hunter 112, f.49r, detail



fig. 20 Man bleeding from the liver, Hunter 251 f.77r

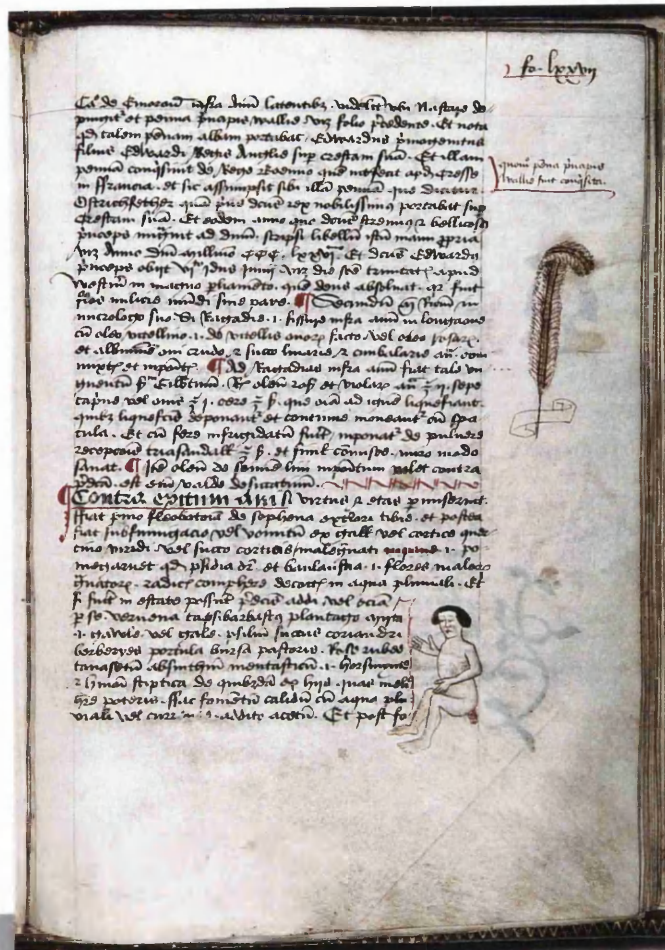


fig. 21 Nude man, Hunter 251 ff.45v, 46r

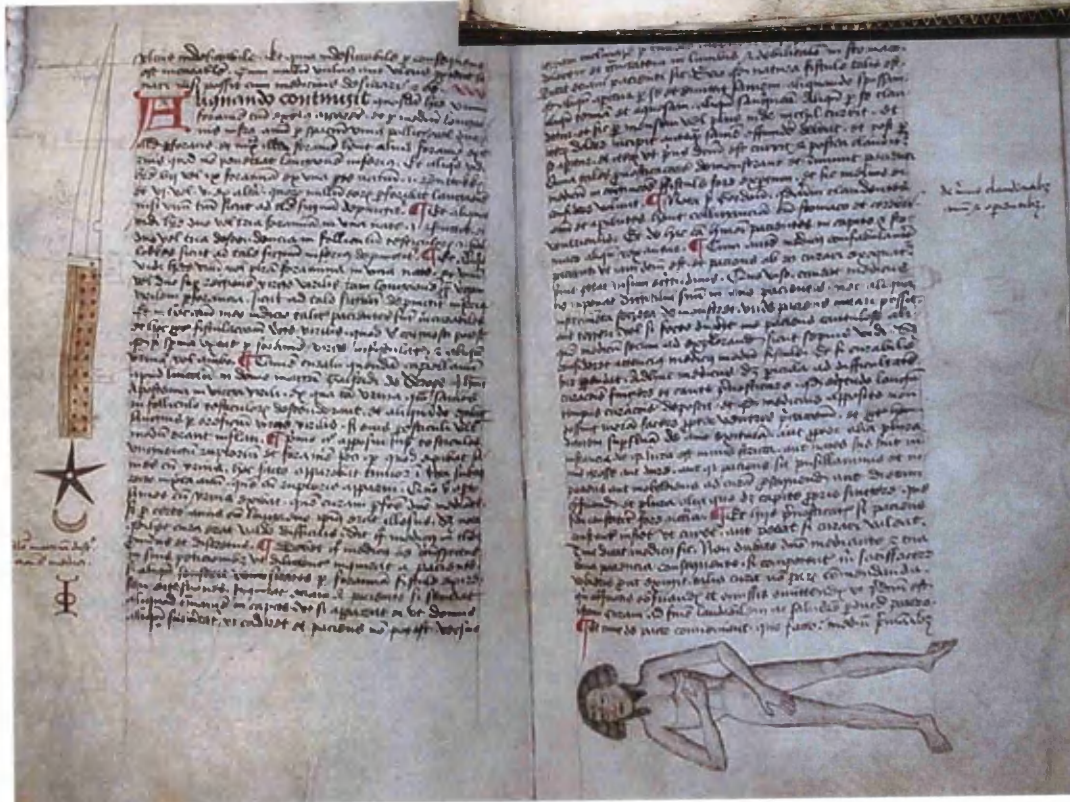


fig. 24 Penis and catheter, Hunter 251, f.29v



fig. 25 Author portrait, Hunter 112 f.1r



fig. 26 Medical Almanac, Wellcome institute, reproduced in Murdoch's *Album of Science*, p. 318-319

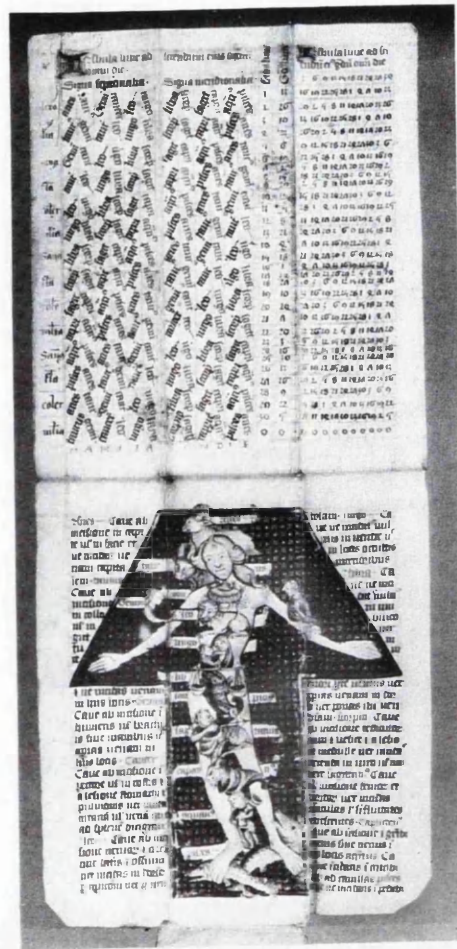
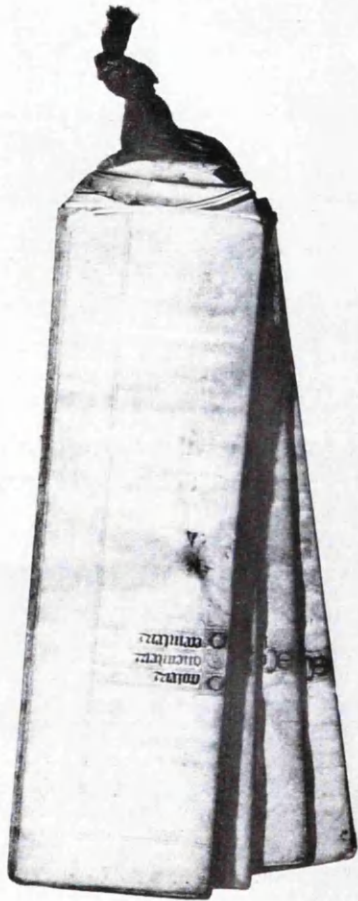


fig. 27, Marginal illustration, plant and leg, Hunter 112, f.16r

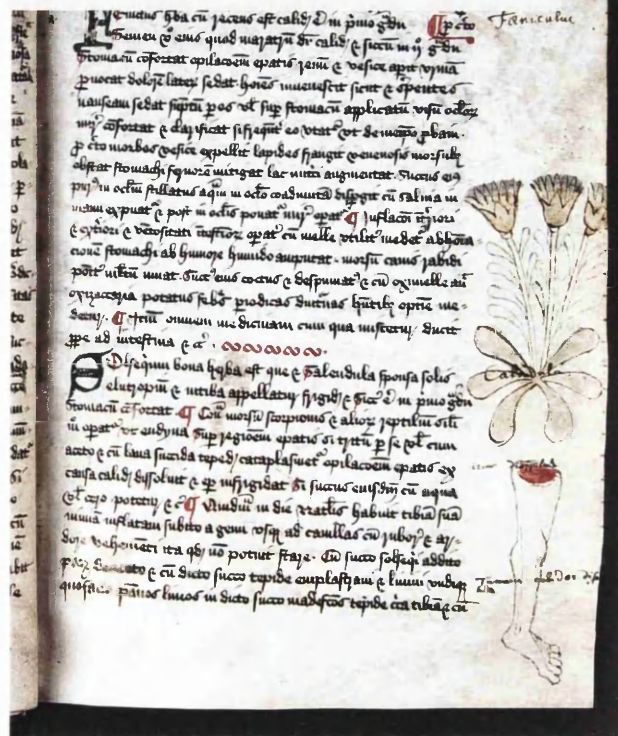


Fig. 32, *Five wounds of Christ*, Flemish diptych, 1532, for the Carthusian Abbot Willem van Babaut. Reproduced in Paul Binski, *Medieval Death*, p.125

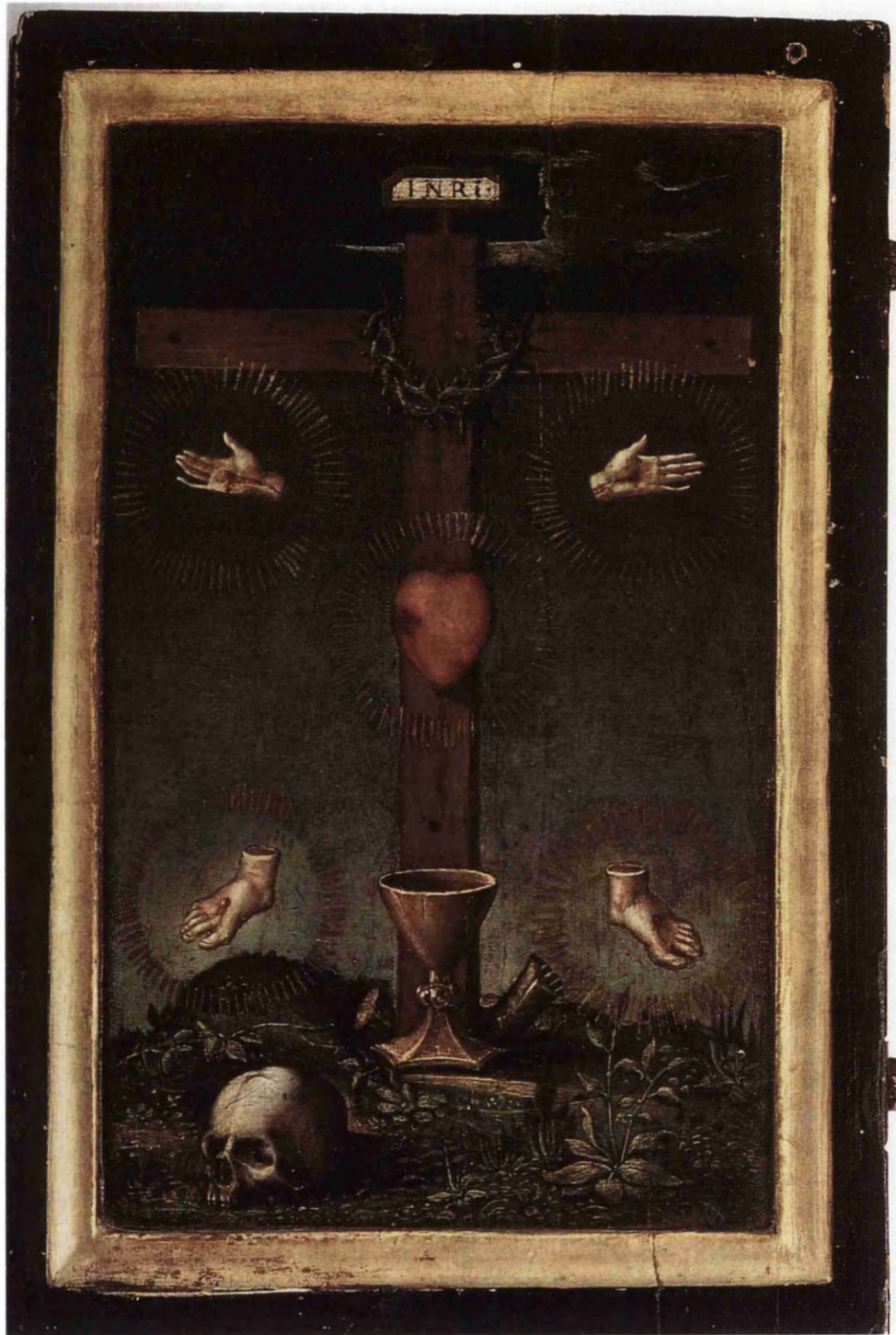


Fig. 33 *Arma Christi*, 1375, Master of Jean de Sy Bible, France Morgan Library, New York, M90 fol.50r

Left to right: Robe, Three dice, tormentor, Hand holding coins, napkin, Ladder, Lantern, Hand holding rope, Hand holding bucket, Column with ropes, two scrouges



© Morgan Library, New York

Fig. 34, *Arma Christi*, 1375, Master of de Sy Bible, France, Morgan Library, New York, M.90 fol.224v

Left to right: Three nails, 1 cup, Crown of Thorns, Money Bag, Sponge with staff and spear, Cross flanked by two swords, Pincers and hammers



© Morgan Library, New York

Fig. 35, Hunter 339, f.128r, Lower part of man, bleeding from fistulae.

