

UNIVERSITÉ DU QUÉBEC À MONTRÉAL

VIOLENT PEDAGOGY:
THE DIALECTIC PRESENTATION OF VISUAL KNOWLEDGE IN THE
DE HUMANI CORPORIS FABRICA

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A PARTIAL REQUIREMENT OF
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BY
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LA VIOLENCE DE LA PÉDAGOGIE:
LA PRÉSENTATION DIALECTIQUE DE LA CONNAISSANCE VISUELLE DANS LE
DE HUMANI CORPORIS FABRICA

MÉMOIRE
PRÉSENTÉ
COMME EXIGENCE PARTIELLE
DE LA MAÎTRISE EN ÉTUDES DES ARTS

PAR
MAX KAARIO

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SUMMARY

The *De Humani Corporis Fabrica* is a 16th century anatomical textbook by Andrea Vesalius, combining text and images in a large seven book volume. This essay is a multifaceted analysis of the *Fabrica*'s frontispiece, which is an introductory image located at the front of the textbook. The image represents a dissection scene taking place in a wooden theatre filled with active spectators. The space represented in the frontispiece is framed by monumental and theatrical architecture, encapsulating the complex activities represented at the image's center. The image is made complex by the presence of this diverse space of permanent and impermanent architecture, but also by the dissection scene, and those figures which surround it: a large group of subjectively reacting spectators crowding around the central spectacle of Vesalius posed beside an open cadaver. This essay is an analysis of the frontispiece's composition, measuring the subtle balance between the major figurative forms of the image.

Several of the frontispiece's major compositional aspects are analyzed in this essay in separate chapters: the permanent architecture, the theatrical architecture, the spectators and the dissection.

The analysis of these four major aspects of the image encourages a reading that is shown to be part of the pedagogical purpose of the anatomical book itself: to frame and display human anatomy (as defined by Vesalius) in a way that is memorable. As an early example of the book, the *Fabrica* imagery contains elements of older forms of rhetorical presentation, including violence and the art of memory. These are shown to be compatible with a certain notion about pedagogy: to be memorable, images should contain violent devices, implicating the viewer in a cathartic remembrance.

When considered in relation to the *Fabrica* as a book, the frontispiece takes on properties relating to theatre, architecture and the depiction of violence which provide a tension that is palpable in the imagery itself.

RÉSUMÉ

De Humani Corporis Fabrica, produit par André Vésale au XVI^e siècle, est un ouvrage anatomique composé de sept livres incluant des textes et des images. Le présent mémoire est une analyse du frontispice de la *Fabrica*, où l'on voit une scène de dissection située dans un théâtre construit en bois où sont placés de nombreux spectateurs représentés dans des postures diverses. L'espace représenté est encadré par une architecture que l'on peut qualifier de monumentale et de théâtrale, englobant les activités complexes de personnages au centre de la composition. L'image apparaît comme complexe, à cause de la présence d'éléments architecturaux à la fois permanents et impermanents ; sa complexité tient aussi à la représentation de la dissection et aux personnages qui l'entourent : un imposant groupe de spectateurs se pressant autour du personnage central de Vésale en train de disséquer le cadavre.

L'objet de ce travail est d'analyser les différents aspects du frontispice comme un tout, en identifiant les outils mnémoniques dont nous soulignons la part de violence. Différents aspects du frontispice sont analysés dans les quatre chapitres (chapitres 2 à 5) suivant la présentation de la fortune critique sur le sujet : l'architecture permanente, l'architecture théâtrale, les spectateurs et la dissection. L'analyse de ces quatre aspects, essentiels dans l'image, permet de présenter une lecture complexe qui révèle la visée pédagogique de ce livre anatomique ; celle-ci consiste à donner à voir l'anatomie humaine - telle que définie par Vesalius - comme objet de mémorisation. Nous verrons aussi que l'imagerie de la *Fabrica* contient des éléments appartenant à des formes plus anciennes de représentations rhétoriques, mettant également en relation violence et art de la mémoire. Ces éléments sont en lien avec un concept pédagogique voulant que, pour être mémorisables, les images doivent contenir de la violence et impliquer l'observateur dans un processus de souvenir cathartique.

En prenant en considération son insertion dans la *Fabrica* en tant que livre, nous serons attentif aux associations du frontispice avec le théâtre, l'architecture et la violence, ces éléments contribuant à créer une tension palpable dans l'image elle-même.

INTRODUCTION

Andrea Vesalius was born at the end of 1514 in Brussels, where his father worked as a medical doctor. He was educated at several universities around Europe: Paris (1533-1536), Louvain (1536-1537), and Padua (1537-1542). Being educated at several universities was a norm in Europe for an individual from a wealthy family who wanted to receive a well-rounded education. This was perhaps especially beneficial for Vesalius because it allowed him to see different methods of approaching the study of human anatomy for which he would later become known as an expert.

It was in Padua however, that he finished his formal education and was accepted as professor. He published *De Humani Corporis Fabrica* in 1543. The combination of typological and graphic perfection with the scandalous corrections the text and images provided to Roman writer Galen's widely accepted anatomy made Vesalius a controversial celebrity.

Published in Basel by Johannes Oporinus, the *Fabrica* combines text and image forming a comprehensive whole: seven books in one volume, comprising seven parts of the human body (1. bones, 2. muscles, 3. blood vessels, 4. nerves, 5. organs of nutrition and generation, 6. the heart and lungs, 7. the brain and organs of sense). There are over 300 plates contained within the 700 pages of the *Fabrica*. The vast majority of these plates illustrate specific parts of the human anatomy. Some of these are more global or complex than others. For example, in Book II, where the muscle anatomy is described and represented, there are 14 plates illustrating a cadaver standing in a landscape. Each plate shows a part of the muscle anatomy as it is being stripped from the cadaver (fig. 0.2). Simultaneously, in each of the 14 plates the landscape changes, and when lined up, the 14 plates can be seen to show a near continuous panorama. This is one of the more peculiar

aspects of the *Fabrica's* imagery.

Other images of note in the *Fabrica* are the frontispiece (fig. 0.1) and the portrait of Vesalius, which are presented at the beginning and act as introductions to the book. The frontispiece is perhaps the most complex image in the book. It represents Vesalius, performing a dissection on a female cadaver for a large crowd of spectators in an impermanent wooden theatre surrounded by quasi-monumental architecture.

This study is a focused analysis of the frontispiece's composition, aiming to show how the image contains aspects of mnemonic devices related to a pedagogical purpose: creating memorable anatomical images. These mnemonic devices present in the frontispiece open interrogations regarding the way knowledge is embodied and exchanged from one medium to another. I will argue there is a transfer from oral forms of pedagogy (theatre and oration) to a literary book based archiving and that this is made evident in the frontispiece. Indeed, the frontispiece's figurative references to architecture, theatre, and spectacle are ways of framing and inciting memory, and as will be shown in this essay, the violent aspects of those images contained within the *Fabrica* are a significant part of the way they have been composed to be memorable in an oratory-rhetorical sense.

That the frontispiece is a complex image is evident in multiple ways. The representation of the dissection reveals a cruel and violent eroticism based upon the dissection of a nude female figure. There is a large group of spectators whose reactions to the dissection scene are individualized and diverse. There is a marked contrast between permanent monumental architecture in the upper part of the image and impermanent theatrical architecture in the lower part. Beyond the figurative aspects of the image, there is its function: the image serves to introduce an anatomical textbook.

Yet the images of the *Fabrica* are not mere didactic diagrams of the human body; their pedagogical function is represented dialectically in order to be remembered. I have aimed to show how the pedagogical function of the imagery is essential for an understanding of the role of memory in the carnivalesque theatricality of the images. As examples of this carnivalesque representation, I have analyzed the muscular figures from the second book of the *Fabrica* (fig 0.2) as complex pedagogical representations of bodies which are neither

dead nor alive, but rather represent the rebirth of the anatomically extracted knowledge represented in the frontispiece.

Through the analyses of the frontispiece's composition, this study aims to show how the frontispiece contains a balanced spectrum of energies creating a dialectic that lends itself to mnemonic technique. The *Fabrica*, as an anatomical textbook, was made for readers to offer a comprehensive lesson on human anatomy. In this sense, the *Fabrica* by necessity contains a mnemonic agenda: helping readers remember the parts of the human body. The *Fabrica* imagery relies upon a cathartic element of epistemological representation. In 1543, the book was a relatively new medium which tended to absorb older oratory forms of pedagogical presentation. In the *Fabrica*, I will argue, these are seen in the representation of architecture, theatre, and spectacle, but also in those violent aspects of the imagery. This latter aspect will be related to the carnivalesque and catharsis.

My study is organized around five chapters. In the first chapter, I will focus on different analyses of the *Fabrica* that have already been made by historians and art historians. Each of the four following chapters will be built on a reflection that takes into account four major aspects of the frontispiece (permanent architecture, theatrical architecture, the spectators, and the spectacle), and their relation toward the mnemonic/pedagogical function of the image.

In Chapter 2, a major mnemonic aspect of the frontispiece is highlighted. Indeed, the permanent architecture is seen to function as a frame for the dissection scene. This frame, monumentally designated to memorialize the dissection, creates a sense of permanence and stability. Also, the seven pillars forming a semi-circle parameter around the dissection scene refer to mnemonic devices related to the art of memory. In this way, the permanent architecture governs the structure of the frontispiece, providing it with overall stability, which lends itself to a sense of memorial.

In Chapter 3, I focus on the theatrical architecture, represented in the frontispiece in the form of wooden seating and a central space organized for the dissection spectacle. The theatrical architecture is seen to function as a second frame for the dissection scene. Different from the permanent architecture above, the theatre is impermanent, and

consequently I have associated it with a more instable energy.

In Chapter 4, the spectators represented in the frontispiece are analyzed for their groupings and overall schematic, as well as for individual traits. Each spectator reveals his own subjective perspective in a highly individualized reaction. Yet, because each spectator's reaction is caused by the central dissection, the subjectivity of their perspectives is seen to relate to the complexity of the dissection spectacle itself.

In Chapter 5, I focus on the spectacle at the center of the image. The spectacle is made up of the dissected cadaver and Vesalius' figure. He is represented to the left of the dissected cadaver holding a scalpel and looking outwards toward the image's reader. The significance of his solid gaze and fixed position seem to align his figure with a similar energy to be found in the permanent architecture. This positioning is analyzed as revealing Vesalius' aim to inscribe himself and his project as a permanent memorial. Furthermore, the chapter shows how the relationship between the spectators and the frontispiece is reciprocal.

By building an argument over the course of these five chapters, my interpretation will be that the violent aspects of the *Fabrica* imagery have a pedagogical function related to epistemology and mnemonics. The contrasts between permanent monumental architecture and impermanent theatrical architecture along with the dissection spectacle and the spectators enforce a reading of the frontispiece which balance opposing energies and enforce a dialectical reading impregnated with the nuance of carnivalesque pedagogy and violent memorial. As will be shown in this essay, Vesalius was a humanist in the broader sense of the term, and he imbued the *Fabrica* imagery and texts with concepts contemporary with humanist circles of Northern Italy in the mid-16th century.¹

¹ Vesalius' humanist connections will be expanded upon in Chapter 2.



Fig 0.1 Frontispiece, *De Humani Corporis Fabrica*, 1543



Fig 0.2 Muscle Cadaver, *De Humani Corporis Fabrica*, 1543

CHAPTER I

METHODOLOGY AND HISTORIOGRAPHY

1.1 Introduction

The *Fabrica* has been commented upon by authors in various fields. This first chapter chronologically exposes a part of the large amount of books and essays which have been written about the *Fabrica*. By presenting the main themes and theses of these books and articles, an idea of the way this subject has been treated will become evident. The articles and books presented in this chapter have been arranged chronologically. This way of presenting them allows me to show the different receptions the *Fabrica* has had depending on the period it was commented upon.

The first section presents pre-20th century texts. These texts are concerned with the canonical history of medicine. They consider Vesalius and the *Fabrica*'s place within the history of medicine, either as part of the history of anatomical illustration or as part of the history of medical doctors originating from Flanders. These texts were respectively written by Ludwig Choulant² and Alexandre Joseph Faidherbe.³

The second section takes into account texts from the early 20th century. Some of these texts are about the biographical aspects of Vesalius' life, as seen in texts by Emile Bain⁴

² Ludwig Choulant, *History and Bibliography of Anatomical Illustration*. Trans. and ed. Mortimer Frank. Leipzig: Rudolph Weigel, 1852, p. 435.

³ Alexandre Joseph Faidherbe, *Les médecins et les chirurgiens de Flandre avant 1789*, Lille: Impr. L. Danel, 1892, p. 347.

⁴ Émile Bain, *Un anatomiste au XVI^e siècle André Vésale*, Montpellier: Imprimerie coopérative ouvrière, 1908, p. 104.

and Morris Keeton.⁵ This period also witnesses the publication of texts concerned with analysis of *Fabrica* and its formal traits. For example Max H. Fisch's⁶ article considers the importance of the book medium for understanding Vesalius' anatomical project. Another writer, H.W. Janson⁷, considers the relation between the *Fabrica* and Titian's Laocoon Caricature (Fig. 1.1).

The third section presents texts from the later 20th century, written during the 1950s and 60s. These books and articles consist of a commented presentation of the *Fabrica*'s imagery by J.B Saunders and C.M. O'Malley⁸, an intensive study of Vesalius' life and historical context again by C.M O'Malley⁹, and an examination of Vesalius' often conflicted relationship with those medical doctors of his own time who adhered to the tradition of classical anatomical texts by M.F. Ashley Montagu.¹⁰

The fourth section looks at texts from the 1970s and 1980s. These books and articles are about a wide variety of subjects surrounding the publication, meaning and ideological nature of the *Fabrica*. Articles about the *Fabrica*'s publishing process are by Martin Kemp¹¹, G.S.T. Cavanagh¹², and Harry Clark.¹³ Other articles, by James Elkins¹⁴ and Philip C. Ritterbush¹⁵, consider the illustration of biological and human form. Still another group of authors considers the presence of ideology in the *Fabrica* imagery. Authors who take this

⁵ Morris Keeton, "Andreas Vesalius: his Times, his Life, his Work", *Bios*, Vol. 7, No. 2 (May 1936), p. 97-109.

⁶ Max H. Fisch, "Vesalius and his Book", *Bulletin of the Medical Library Association*, Vol. 31, No. 3 (1943), p. 208-221.

⁷ H.W. Janson, "Titian's Laocoon Caricature and the Vesalian-Galenist Controversy", *The Art Bulletin*, Vol. 28, No. 1 (March 1946), p. 49-53.

⁸ J.B. Saunders, and Charles D. O'Malley, *The Illustrations from the Works of Andreas Vesalius*, Cleveland: The World Publishing Company, 1950, p. 248.

⁹ Charles D. O'Malley, *Andreas Vesalius of Brussels, 1514-1564*, Berkeley: University of California Press, 1964, p. 480.

¹⁰ M.F. Ashley Montagu, "Vesalius and the Galenists", *The Scientific Monthly*, Vol. 80, No. 4 (April 1955), p. 230-239.

¹¹ Martin Kemp, "A Drawing for the *Fabrica*; and Some Thoughts upon the Vesalius Muscle-Men". *Medical History*. Vol. 14 (1970), p. 277-288.

¹² G.S.T. Cavanagh, "A New View of the Vesalian Landscape", *Medical History*, Vol 27 (1983), p. 77-79.

¹³ Harry Clark, "Foiling the Pirates: The Preparation and Publication of Andrea Vesalius's *De Humani Corporis Fabrica*", *The Library Quarterly*, Vol. 51, No. 3 (July 1981), p. 301-311.

¹⁴ James Elkins, "Two Conceptions of the Human Form: Bernard Siegfried Albinus and Andreas Vesalius", *Artibus et Historiae*, Vol. 7, No. 14 (1986), p. 91-106.

subject into account are Wendy Wall¹⁶, Glen Harcourt¹⁷, Giovanna Ferrari¹⁸, and Luke Wilson.¹⁹

The fifth section presents articles and books written during the 1990s. Once again the subjects covered during this period are concerned with a wide array of themes related to Vesalius and the *Fabrica*. Several articles take into account the significance of Vesalius' method: Nancy Siraisi²⁰ analyzes Vesalius' recognition of diversity in human anatomy, Katherine Park²¹ looks at violent aspects of Vesalius' method of finding bodies for dissection, and Hugh T. Crawford²² analyzes the use of theatre for creating scientific truth for anatomical study.

The sixth section presents articles and books written during the first decade the 21st century. These include texts about the *Fabrica*'s place in the history of science and medicine, by Pascal Briost²³ and Alain Charles Masquelet.²⁴ Another theme appearing in this period is the importance of understanding the relation between humanism and rhetoric for the study of Vesalius and the *Fabrica*, to be found in articles by Nancy Siraisi²⁵ and Andrea Carlino.²⁶

¹⁵ Philip C. Ritterbush, "The Shape of Things Seen: The Interpretation of Form in Biology", *Leonardo*, Vol. 3, No. 3 (July 1970), p. 305-317.

¹⁶ Wendy Wall, "Disclosures in Print: The 'Violent Enlargement' of the Renaissance Voyeuristic Text", *Studies in English Literature, 1500-1900*, Vol. 29, No. 1, The English Renaissance (Winter 1989), p. 35-59.

¹⁷ Glen Harcourt, "Andreas Vesalius and the Anatomy of Antique Sculpture", *Representations*, No. 17, Special Issue: The Cultural Display of the Body (Winter 1987), p. 28-61.

¹⁸ Giovanna Ferrari, "Public Anatomy Lessons and the Carnival: The Anatomy Theatre of Bologna", *Past and Present*, No. 117 (November 1987), p. 50-106.

¹⁹ Luke Wilson, "William Harvey's Prelectiones: the Performance of the Body in the Renaissance Theater of Anatomy", *Representations*, 17 (1987), p. 62-95.

²⁰ Nancy Siraisi, "Vesalius and Human Diversity in *De Humani Corporis Fabrica*", *Journal of the History of Ideas*, Journal of the Warburg and Courtauld Institutes, Vol. 57 (1994), p. 60-88.

²¹ Katherine Park, "The Criminal and the Saintly Body: Autopsy and Dissection in Renaissance Italy", *Renaissance Quarterly*, Vol. 47, No. 1 (Spring 1994), p. 1-33.

²² Hugh T. Crawford, "Imaging the Human Body: Quasi Objects, Quasi Texts, and the Theater of Proof", *PMLA*, Vol. 111, No. 1, Special Topic: The Status of Evidence (January 1996), p. 66-79.

²³ Pascal Briost, "Les savoirs scientifiques", *Bulletin de la société d'histoire moderne et contemporaine, RHMC*, 49-4 bis, supplément (2002) p. 52-80.

²⁴ Alain Charles Masquelet, *Le Corps Relégué*, Paris: Presses Universitaires de France, 2007, p. 165.

²⁵ Nancy Siraisi, "Oratory and Rhetoric in Renaissance Medicine", *Journal of the History of Ideas*, Vol. 65, No. 2 (April 2004), p. 191-211.

²⁶ Andrea Carlino, "Les fondements humanistes de la médecine: rhétorique et médecine à Padoue vers 1540", *Littérature et médecine: approches et perspectives (XVI^e-XIX^e siècles)*, Genève: Librairie Droz, 2007, p. 19-48.

1.2 Historiography

1.2.1 Pre-20th century texts: Medicine and its History

Works concerned with Vesalius or the *Fabrica* which appear before the 20th century tend to consider the *Fabrica* for its scientific value as an anatomical textbook or the biographical details of Vesalius' life.

Published in 1852, the *History and Bibliography of Anatomical Illustration*²⁷, by Ludwig Choulant, contains an extensive amount of information about the history of anatomical illustration. It is a significant study for its encyclopedic nature, and Vesalius' *Fabrica* is mentioned within. Another 19th century book mentioning the *Fabrica* is *Les médecins et les chirurgiens de Flandre avant 1789*²⁸ by Alexandre Joseph Faidherbe. This book describes the achievements of medical doctors born in Flanders before 1789. Within its pages is a description of Vesalius' life and achievements. As already mentioned, texts describing Vesalius or the *Fabrica* which appear before the 20th century are largely in reference to the textbook's worth as a scientific document. This changes in the 20th century, when commentators show more interest in the social and historical aspects surrounding the *Fabrica*'s appearance.

1.2.2 Early 20th century texts (before 1950): Vesalius and his *Fabrica*

*Un Anatomiste au XVI^e siècle André Vésale*²⁹ by Émile Bain goes into detail about Vesalius' education and career, emphasizing the exemplary aspects of the *Fabrica*.

The essay "Andrea Vesalius: His Times, His Life, His work"³⁰ by Morris Keeton is concerned with Vesalius in a broad social context, considering political and cultural events which took place while he was alive. Details about Vesalius' humanistic education, his professorship at the University of Padua and the publication of his works are also mentioned.

²⁷ Choulant, *History and Bibliography of Anatomical Illustration*, p. 435.

²⁸ Faidherbe, *Les médecins et les chirurgiens de Flandre*, p. 347.

²⁹ Bain, *Un anatomiste au XVI^e siècle*, p. 104.

³⁰ Keeton, "Andreas Vesalius: his Times, his Life, his Work", p. 97-109.

Max H. Fisch's essay entitled "Vesalius and his Book"³¹ analyzes the importance of the *Fabrica* in relation to its ability to fuse images and text in a new form of pedagogy. Fisch writes that the *Fabrica* represents a turning point in the history of education. He highlights the *Fabrica*'s position as "an elaborate system of cross references between printed text and printed picture, [where] an integral effect could be achieved not unlike that of the simultaneous address to the eye and the ear in the dissection-room."³² By explaining the *Fabrica*'s mixture between text and image in this way, Fisch hints at the way the structure of the book makes reference to actual dissection scenes.

Another text focuses on the relation between Titian's *Laocoon Caricature* (fig. 1.1) and the controversy the *Fabrica* caused upon its publication in 1543. The essay, by H.W. Janson, is entitled "Titian's Laocoon Caricature and the Vesalian-Galenist Controversy."³³ The *Laocoon Caricature* (Fig. 1.1) is an engraving after Titian representing the *Laocoon* statue in the form of monkeys instead of classical Greek human figures. Janson argues that the *Laocoon Caricature* is related to the conflict between Vesalius and Jacob Sylvius. The conflict surrounded Sylvius' contestation that Galen's version of human anatomy was not in fact wrong- as the *Fabrica* suggests- but that human anatomy had indeed devolved since antiquity. Titian's *Caricature* thus represents the *Laocoon* sculpture as if the human figures had the anatomy of monkeys, perhaps poking fun at Sylvius' theory. Furthermore, Janson suggests that Vesalius and Titian would have likely known each other, given the geographical proximity between Padua (where Vesalius taught) and Venice (where Titian lived) in Northern Italy. Janson makes the suggestion that the *Fabrica* imagery was made either by Titian or someone working in his atelier³⁴, and that the *Laocoon Caricature* might have been made for Vesalius' use in a future publication.

Janson writes about some of the causes of the *Fabrica*'s immediate controversial effect, among the most important being that Vesalius had included "several hundred factual

³¹ Fisch, "Vesalius and his Book", p. 208-221.

³² Ibid., p. 218.

³³ Janson, "Titian's Laocoon Caricature", p. 49-53.

³⁴ Often the *Fabrica* imagery is attributed to Jan Kalcar. However, Vesalius does not mention the name of any artist in the *Fabrica*, and the name of the artist or artists who made the *Fabrica*'s images remains conjecture.



Fig. 1.1 Titian, *Laocoon Caricature*, 1543-1545

errors from the writings”³⁵ of Galen. Vesalius’ anatomy corrects Galen’s mistakes, and because the Roman writer was highly regarded in the 16th century, the *Fabrica* shocked those university professors and savants who adhered to the classic texts. By contradicting Galen in his text, Vesalius initiated a controversy which would follow him until his death in 1564.³⁶ Those anatomists who were more traditional than Vesalius tended to rely entirely on the authority of classical medical texts, and during the late Renaissance, no classical anatomist was more respected than Galen.

1.2.3 Later 20th century texts (the 1950s and 60s): More Detailed Observations of the *Fabrica*

Published in 1950, the book by J.B Saunders and Charles D. O’Malley, *The Illustrations from the Works of Andreas Vesalius*³⁷, contains not only the images from *Fabrica*, but image descriptions and an introductory essay exposing the *Fabrica* and its author.

The introductory essay largely serves to describe Vesalius’ biography, with an

³⁵ Janson, “Titian and the Vesalius-Galenist Controversy”, p. 50.

³⁶ *Ibid.*, p. 50.

emphasis on his education and achievements in medicine. It is interesting that when describing Vesalius' student years, Saunders and O'Malley emphasize his humanist education. This is partially due to Vesalius' interest in Greek medicine as a student. When describing the publication and significance of the *Fabrica*, Saunders and O'Malley show how, in its representation of anatomical figures, created through direct observation, the *Fabrica* has been seen as "the beginning of modern observational science and research."³⁸

Another significant aspect of their essay is the description of the *Fabrica* imagery. The frontispiece's commentary identifies the spectators for their class and profession. The mentioning of this significant part of the image reveals a sensibility toward the spectacular aspect of the dissection scene.

The essay "Vesalius and the Galenists"³⁹ by Ashley M.F. Montagu concerns the controversy the *Fabrica* caused among those medical professors who were adherent to the writings of Galen, often known as the Galenists. As already mentioned above, the texts of Galen, the Roman medical doctor and writer, were considered irreproachable in the 16th century. Montagu shows that Galen's authority was supreme at the time Vesalius was a student. It was not surprising, consequently, that all of Vesalius' teachers, and Vesalius himself, were Galenists: there was no choice in the matter.

Furthermore, Montagu exposes the state of anatomical study at the time when the *Fabrica* was published. He shows the *Fabrica* to be tendentious of several previous anatomical textbooks which also pointed out errors made by Galen and presented anatomies based on their own observations. Montagu's essay, in general, underlines that there has been a largely discredited tendency to "represent the *Fabrica* of Vesalius as having made a complete break with the old traditional anatomy."⁴⁰ He attempts to show how Vesalius was only acting "in the spirit that was the best of this time"⁴¹, by questioning the classical texts for their truth value. At the same time, Montagu admits the *Fabrica* to be on its own in terms of grandeur and spread. This he partially attributes to its imagery.

³⁷ J.B. Saunders, and Charles D. O'Malley, *Illustrations from the Works of Vesalius*, p. 248.

³⁸ *Ibid.*, p. 9.

³⁹ Montagu, "Vesalius and the Galenists", p. 230-239.

⁴⁰ *Ibid.*, p. 230.

⁴¹ *Ibid.*, p. 236.

The biographical book written by Charles D. O'Malley, entitled *Andreas Vesalius of Brussels*⁴², contains details about Vesalius' life and work. Important information concerning Vesalius' education, method and acquaintances are contained within this work. The book traces Vesalius' biographical detail through his education in Paris, Louvain and Padua, the publication of the *Fabrica*, and the imperial service he served after the achievement of his fame.

O'Malley's book also contains perhaps the most complete description of the *Fabrica* frontispiece. He takes especial care to identify members of the audience. In this way his analysis is literal, taking the image to be employed as merely a descriptive vehicle introducing the *Fabrica*.

1.2.4 Later 20th century texts (the 1970s and 80s): Various Subjects

The essay "The Shape of Things Seen: The Interpretation of Form in Biology"⁴³ by Philip C. Ritterbush is a historical overview of the relationship between science and art in the study of biological form. Science and art are seen to be intimately related in the history of representing biological form in the Western tradition. Their relation has to do with observation and representation. Within the article, Vesalius is mentioned as a turning point in the history of biological observation. Interestingly enough, the author makes a reference to the frontispiece, remarking that the bearded figure holding the closed book among the spectators is "pointing to the dissection in progress, as though to admonish a nearby student that more is to be learned from reality than books."⁴⁴ This reading of the image, whether correct or not, is of interest because it links Vesalius' method of dissecting cadavers with the overall message laden in the frontispiece.

Martin Kemp's essay "A Drawing for the *Fabrica*; and some thoughts upon the Vesalius Muscle-Men"⁴⁵ goes through the possible ways in which the *Fabrica* imagery may have been created. He takes a serious look at the possibilities of Titian or his studio being the

⁴² O'Malley, *Andreas Vesalius of Brussels*, p. 480.

⁴³ Ritterbush, "The Shape of Things Seen", p. 305-317.

⁴⁴ Ibid., p. 309.

⁴⁵ Kemp, "A Drawing for the *Fabrica*", p. 277-288.

progenitors of the imagery and considers the alternatives. There are no firm conclusions to be made.

The article "Foiling the Pirates: The Preparation and Publication of Andrea Vesalius' *De Humani Corporis Fabrica*"⁴⁶ by Harry Clark provides information concerning the logistics of the *Fabrica*'s publication. Through an analysis of Vesalius' choices of printer and production process, Clark shows the likelihood of Vesalius' desire to make the *Fabrica* known and available to the widest geographical region, in the quickest possible time. He shows this to be the reason why the *Fabrica* was published in Basel by Johannes Oporinus rather than in Venice, even though the book's images had been cut in the latter city. The article also deals with the problem of piracy in reference to the *Fabrica*'s images, thereby showing the tension involved in the publication process of potentially influential material.

Within the article, there is a pertinent analysis of the muscle men which is highly relevant to my own essay's subject of study:

The most striking of the illustrations in the *Fabrica* are a series of full-page engravings showing three skeletons in dramatic poses and fourteen frontal and dorsal views of a human body during successive stages of a dissection of the muscles, beginning with the flayed body and terminating with those muscles closest to the bone. The skeletons show front, side, and back views of the human frame in attitudes of appeal, contemplation, or mourning. The flayed figures bend, stretch, kick, point, and roll their heads in a dance macabre designed to show clearly the flexion and tension of the muscles depicted. In the later plates, flaps of exterior muscles, detached at one end and hanging from the knees, shoulders, and wrists of the figures, indicate clearly what has been removed to show the deeper muscles. These "musclemen" are regarded as unexcelled for clarity and beauty of execution.⁴⁷

This description illuminates the presence of narrative present in the muscle cadavers from the *Fabrica*'s second book.

In the essay "Two Conceptions of the Human Form: Bernard Siegfried Albinus and Andreas Vesalius"⁴⁸, James Elkins compares the representations of the human body as they appear in the anatomical textbooks of Vesalius and Bernard Siegfried Albinus. Albinus was

⁴⁶ Clark, "Foiling the Pirates", p. 301-311.

⁴⁷ Ibid., p. 302. I have maintained the entire citation in its integrity.

a French anatomist who, according to Elkins, created a more realistic image of human anatomy in the 18th century, in comparison with Vesalius' exaggerated baroque conception. The comparison shows how both anatomists' visual representation of the human figure became normative, used both by anatomists and artists as useful and iconic examples.

In this sense, Elkin's essay is largely concerned with the repetition of Vesalius and Albinus' representational models as they were used over the period of several centuries until their dissolution in the 20th century. This is of interest for the historiographical element of this essay because it shows that commentators before the 20th century were more likely to take the *Fabrica* imagery as a normative attempt to represent human anatomy. The significant changes that have taken place in medical imaging during the 20th century have necessarily changed the way we read the *Fabrica* images. This has allowed writers to become anthropologically critical but has also increased the likelihood of negative anachronism.

G.S.T Cavanagh's essay "A new View of the Vesalian Landscape"⁴⁹ considers the muscle plates, and the ways in which they appear to be lined up in a landscape when arranged in a specific order. This curious aspect of the *Fabrica* is interesting because it shows how much attention Vesalius paid to the details of his project. That Vesalius was heavily involved in the creation of meaning in these complex images reveals the importance he gave to stylistic choice in relating the pedagogical message of the text and imagery. There is a debate about whether the muscle cadavers actually line up or only seem to do so. Cavanagh's argument is that the landscape is problematically aligned due to the way in which block engraving technology of the time reversed the imagery it was meant to reproduce.

Giovanna Ferrari's essay, "Public Anatomy Lessons and the Carnival: The Anatomy Theatre of Bologna"⁵⁰, published in 1987, is instructive as to how public anatomy lessons came about, and how, during a brief window of time, they would take place during carnival. According to Ferrari's analysis:

⁴⁸ Elkins, "Two Conceptions of the Human Form", p. 91-106.

⁴⁹ Cavanagh, "A New View of the Vesalian Landscape", p. 77-79.

⁵⁰ Ferrari, "Public Anatomy Lessons and the Carnival", p. 50-106.

[...] the atmosphere reigning at this public anatomy lesson was as vivacious as the scene depicted on the title-page of *De humani corporis fabrica* (1543): a throng of spectators around the dissecting table, engaged in lively discussion, students jostling one another in an attempt to touch the organs prepared by the dissector. The public anatomy session that took place in 1544 was probably even more chaotic - and also less educational.⁵¹

In the small sections devoted to the *Fabrica*, her essay analyzes the frontispiece as it measures up to those historical public dissections Vesalius gave in and around the time of the *Fabrica*'s publication. The description of the frontispiece as reminiscent of what the actual public dissection would have been like is interesting for the purposes of my essay only in the sense that it explicitly reveals a carnivalesque/theatrical element present within the images. However, when she writes that the public dissection of 1544 was "even more chaotic- and also less educational", there is an implicit stress on the necessary seriousness of pedagogy. This historically biased emphasis seems to undermine any potentially beneficial educational aspects such a performance might have offered.

The essay "William Harvey's Prelectiones: the Performance of the Body in the Renaissance Theater of Anatomy"⁵² by Luke Wilson is concerned with the Renaissance theatre as the space where anatomy could be studied and presented. While the central aspect of Wilson's study is the 17th century British anatomist William Harvey's writings and lectures, the essay also endeavors to identify generalized traits of the anatomical theatre from the late medieval period onwards. Among those examples Wilson analyzes is Vesalius' *Fabrica*.

Within his commentaries about the *Fabrica*, Wilson compares the violent or distasteful actuality of a dissected body, to the "fantasy cadavers"⁵³ presented in the *Fabrica*'s second book, devoted to muscular anatomy. Beyond this, the essay points out what is different about Vesalius' method in terms of the separation of roles between physician and surgeon. Whereas previously, dissections were administered by a physician reading from a text, while a surgeon performed the cutting up of the cadaver, Vesalius joined these two roles, directing and performing his own dissections.

⁵¹ Ibid., p. 60.

⁵² Wilson, "William Harvey's Prelectiones", p. 62-95.

⁵³ Ibid., p. 63.

Through an intensive analysis of the *Fabrica* frontispiece, Wilson shows how the central aspect of Vesalius and the female cadaver is only one of multiple centers of attention, with every audience member enacting his own spectacle in a circuit of causalities. This circuit of centers has the effect of distracting the eye from the central focus of Vesalius and the cadaver, thereby employing all figures present in a more democratized performance, where every body is involved, both as dissector and dissected. About the *Fabrica*'s worth and function as an anatomical textbook Wilson writes "this visualization of all aspects of anatomy upset the traditional relation between body and text by inserting between the corporeal and particular and the disembodied and ideal a mode of access to the body capable of fleshing out the universal in its particular instances."⁵⁴

The essay "Andreas Vesalius and the Anatomy of Antique Sculpture"⁵⁵ by Glen Harcourt is about the way classical models of human figuration are used in the *Fabrica*'s imagery. The author argues that these models are used to mask the implicit presence of violence applied through the process of dissection. Harcourt begins by showing how the history and development of anatomy is wrapped up in the history of its representation. Furthermore, he contends that within the representation of anatomical information is contained ideology. As the center of his essay, the *Fabrica*'s representation of anatomical information contains elements of classical form as seen in sculptural models available during the Italian Renaissance. Harcourt thereby aligns the use of classical ideology in the *Fabrica*'s imagery with an awareness of the potentially questionable practice of dissecting real cadavers. By making the cadavers in the images appear as variations of classical sculpture, he argues, the images appear less controversial, associated more with classical form.

The essay "Disclosures in Print: the "Violent Enlargement" of the Renaissance Voyeuristic Text"⁵⁶ by Wendy Wall considers early modern print culture and the tensions which were implicit in the process of publishing. Within the essay, Wall uses the *Fabrica* frontispiece as an introductory example of the way fear and pressure were involved in early

⁵⁴ Ibid., p. 69.

⁵⁵ Harcourt, "Vesalius and Antique Sculpture", p. 28-61.

print culture. The frontispiece is odd, she maintains, because of the representation of a female cadaver at its center when the rest of the work almost exclusively contains images of male cadavers. Wall relates this off putting feature to a violent tension in early print culture where “the act of publication is an act of rape by the editor, or a type of harlotry by the text willing to disclose itself.”⁵⁷

Following Wall’s argument, the *Fabrica* frontispiece can be seen as representing this violence of publication through the invasion of the female cadaver’s body. Part of the reason for this violence of publication, as Wall presents it, is associated with the widening or “enlargement” of reader accessibility due to the mass produced form of the book as opposed to the more courtly (and therefore privileged) manuscript. The shift toward the book form informs this violence. As a justification of this shift toward print, the female body is used as an object to exemplify or embody the text, and often, Wall shows, this excuse or justification takes place in a book’s preface. In the frontispiece, the figure of Vesalius is shown in relation to the female cadaver, which could be seen as representing an author in relation to his printed book. Wall’s argument is interesting for the way it shows how the book form has an effect on the frontispiece.

1.2.5 Later 20th century texts (the 1990s): Various Themes and Methods

The essay “The Criminal and the Saintly Body: Autopsy and Dissection in Renaissance Italy”⁵⁸ by Katherine Park discusses the relationship between the human body, medicine and dissection during the Renaissance. This essay is of especial interest for its dispersal of the belief that the concept of dissection was controversial before the Renaissance. Rather, the author shows how it is during the Renaissance that the human body becomes studied by anatomists in increasingly large quantities, and that this, if anything, was the shift which took place between medieval and early modern anatomy, in relation to the treatment of human cadavers.

Vesalius is mentioned several times during the course of the essay as an example of the new tendency in dissecting large numbers of human cadavers. In fact, Vesalius is designated as the turning point in this history, given his

⁵⁶ Wall, “Disclosures in Print”, p. 35-59.

⁵⁷ Ibid., p. 36.

[...] lack of respect for persons and his candid pride in the acts of daring and deception required to obtain what he considered an adequate supply of cadavers. He and his students forged keys, rifled tombs and gibbets, and stole in and out of ossuaries in a series of nighttime escapades that he recounts with evident relish and amusement, particularly when female bodies were involved.⁵⁹

Vesalius is significant in this history of the treatment of human cadavers for his interest in dissecting as many bodies as possible, thereby allowing his method to become testable, by inventing a comparative methodology which is revolutionary in the history of medicine. At the same time, Park shows how this methodology was obscene and incredibly violent.

In the essay “Vesalius and Human Diversity in *De Humani Corporis Fabrica*”⁶⁰ Nancy Siraisi takes a look at concepts of the normal and abnormal body as they are presented in the text and images of the *Fabrica*. Siraisi shows that while these concepts of human diversity were developed by writers and anatomists earlier in the Italian Renaissance, “no anatomist of the period seems to have given as much consideration to issues of diversity and uniformity as Andreas Vesalius in the *Fabrica*.”⁶¹ The problematic which Siraisi identifies in the text and images of the *Fabrica* is an attempt to bridge the existence of human anatomical diversity with the unified subject of a generalized human anatomy.

In this way, Siraisi attempts to show how Vesalius maneuvered through the potential conflict between representing an ideal human body type and the vast amount of variation in the human form, of which, through his dissection of large numbers of cadavers, he was clearly aware.

In *Books of the Body: Anatomical Ritual and Renaissance Learning*,⁶² Andrea Carlino analyzes the importance of the book medium for understanding anatomical study. Carlino shows that the frontispiece is a type of image which was a by-product of the invention of the book. He writes, the frontispiece “of a book is one of the few typological

⁵⁸ Park, “Criminal and Sainly Body”, p. 1-33.

⁵⁹ Ibid., p. 18.

⁶⁰ Siraisi, “Vesalius and Human Diversity”, p. 60-88.

⁶¹ Ibid., p. 62.

elements introduced by printing that is without precedent in the manuscript tradition.”⁶³ Thus the frontispiece of the *Fabrica* is a new type of image- and one with the specific task of introducing a reader to the contents of its book through the specific rhetorical appeal of an image. Carlino's description of 16th century anatomical textbooks is that “the illustrated title page, in effect, offers the most explicit and homogeneous description of the ceremony of the anatomy lesson shown at its most crucial and solemn moment, that of human dissection.”⁶⁴ This generalized analysis of the frontispiece is of interest partially due to Carlino's use of the descriptive word “solemn” in describing the dissection lesson. Indeed, it is hard to imagine how the *Fabrica* frontispiece could be described as solemn.

The essay “Imaging the Human Body: Quasi Objects, Quasi Texts, and the Theater of Proof”⁶⁵ by Hugh T. Crawford is a loosely historical analysis about ways anatomical and medical experiment lead to knowledge through the framing and identification of the human body. This complex subject draws upon the ideas of the philosopher of science, Bruno Latour. In his book *Nous n'avons jamais été modernes*⁶⁶ Latour writes about the concept of the hybrid, where supposedly natural objects, once brought into the realm of human perception, by necessity contain human aspects of social or political origin. Crawford uses this concept of hybridity to analyze three anatomical texts, one of them being the *Fabrica*.

Crawford identifies Vesalius' method as modern in its attempt to identify an objectivity about human anatomy, in comparison to the medieval method of referring to the texts of Galen or Hippocrates. This objectifying method, however, relies on the displaying of anatomy in a way which brings the object into an ideological realm based on the way it is presented.

Crawford analyses the *Fabrica*'s frontispiece in reference to the public dissections Vesalius performed in 1540. By making this comparison Crawford assumes the image to be related to the event. The frontispiece is analyzed for its implicitly violent character, the opening of a female cadaver to objectify its parts with the aim of creating truth. Crawford

⁶² Andrea Carlino, *Books of the Body: Anatomical Ritual and Renaissance Learning*, Chicago: University of Chicago Press, 1994, p. 266.

⁶³ *Ibid.*, p. 8.

⁶⁴ *Ibid.*, p. 8.

⁶⁵ Crawford, “Imaging the Human Body”, p. 66-79.

relates the construction of this anatomical truth to the presence of the audience members, a presence deemed important for its collaborative and responsive nature. While the spectators in the frontispiece are participating in the dissection through their presence, Crawford notes that "the illustration suggests Vesalius's theater of proof was not particularly efficient...[because] the audience is not united in rapt contemplation of [his] activities or of the viscera laid out before it. Indeed, the observers seem more concerned with looking at one another."⁶⁷ The assumption that a more persuasive form of truth making would encourage a more united rapture in the audience is perhaps misleading. Crawford goes on to suggest that the *Fabrica* is only able to give the suggestion of proof within its text and images; that Vesalius' authority is based on the rhetorical dimensions of his book.

In her 1997 article "Vesalius and the Reading of Galen's Teleology,"⁶⁸ Nancy Siraisi takes a look at a specific aspect of Vesalius' relationship to the writings of Galen. Siraisi suggests that Vesalius'

[...] attitude to Galen, his principal ancient predecessor, was a complicated mixture of dependence, reworking, and critique. This is, of course, the situation regarding the relation of Vesalius' actual anatomical teaching to that of Galen. But a similar relation also exists between the *Fabrica* and some of Galen's philosophical ideas, together with the rhetoric in which Galen expressed them.⁶⁹

In this way, Galen is shown to be a major influence on Vesalius' anatomical knowledge and dissection practices.

1.2.6 Early 21st century texts: History and Rhetoric

According to Magali Vène, in *Écorchés: l'exploration du corps XIV^e-XVIII^e siècle*⁷⁰, Vesalius' importance in the history of medicine "repose aussi sur l'éclatante réussite

⁶⁶ Bruno Latour, *Nous n'avons jamais été modernes*. Paris: Éditions La Découverte, 1991, p. 206.

⁶⁷ Crawford, "Imaging the Human Body", p. 70.

⁶⁸ Nancy G. Siraisi, "Vesalius and the Reading of Galen's Teleology", *Renaissance Quarterly*, Vol. 50, No. 1 (Spring 1997), p. 1-37.

⁶⁹ *Ibid.*, p. 2.

⁷⁰ Magali Vène, *Écorchés: l'exploration du corps XIV^e-XVIII^e siècle*, Paris: Bibliothèque nationale de France, 2001, p. 95.

formelle de la *Fabrica*.”⁷¹ Indeed the *Fabrica*’s success was manufactured through the “sept cents pages d’une typographie élégante où le discours de l’anatomiste s’appuie sur plus de trois cents illustrations parfaitement intégrées au texte et d’une précision jusque-là inégalée.”⁷² This information highlights the precision and importance of the illustrations for the success and historical importance of the *Fabrica*.

An essay by Pascal Briost entitled “Les savoirs scientifiques”⁷³ considers significant changes that took place in the sciences during the Renaissance. Briost is careful to clarify that science, in the sense that we think of it, did not exist at the time. The science and scientists he describes are largely those tendencies which were moving towards what has become known as science, due to their experimentation and observation, among other things. Among those scientists, authors and artists mentioned in the essay is Vesalius, who appears as an innovator of anatomy. Vesalius, according to Briost, combined an interest in ancient texts with “les résultats des dissections que lui même opérait.”⁷⁴

Another interesting feature of Briost’s essay is his highlighting of the way magic mixed inextricably with scientific practice, leading to both positive and negative results. According to Briost, one positive aspect of the presence of magic in the scientific revolutions of the Renaissance is that it helped lead to a more experimental approach.

Cynthia Klestinec’s dissertation “Theatrical Dissections and Dancing Cadavers: Andreas Vesalius and Sixteenth Century Popular Culture”⁷⁵ provides analysis concerning Vesalius’ dissection practices and 16th century popular culture as it exchanged with the academic study of anatomy. She notes the spectacular nature of the dissection scene in the frontispiece, thereby highlighting the theatrical and carnivalesque elements in the image.

The essay “Oratory and Rhetoric in Renaissance Medicine”⁷⁶ by Nancy G. Siraisi

⁷¹ Ibid., p. 14.

⁷² Ibid., p. 14.

⁷³ Briost, “Les savoirs scientifiques”, p. 52-80.

⁷⁴ Ibid., p. 66.

⁷⁵ Cynthia Klestinec, “Theatrical Dissections and Dancing Cadavers”, Doctorate Thesis, Chicago: University of Chicago, 2001, p. 201.

⁷⁶ Nancy G. Siraisi, “Oratory and Rhetoric in Renaissance Medicine”, *Journal of the*

highlights the increased importance of rhetoric and oratory in the study of medicine during the Renaissance period. Siraisi shows the increased popularity of ceremonial oration during the Renaissance to be symptomatic of a shift toward humanism in medicine, in the sense that it positioned the study and profession of medicine in a broader cultural field, belonging not only to specialized knowledge.

Through a thorough analysis of historical examples, Siraisi is able to show that rhetoric and oration were important for the reception of pedagogical and ceremonial information. For example,

[...] a vivid glimpse of the dilemma that faced medical lecturers who lacked rhetorical skills comes from mid-sixteenth century Padua. There, by custom, students of law as well as medicine attended the formal opening of a course of medical lectures. If the lecturer, uncertain of his oratorical ability, plunged straight into specialized commentary on a medical text without giving an introductory oration suitable for a broad audience, he would be interrupted by whistles and catcalls.⁷⁷

This example is interesting for several reasons. First, it shows the importance of rhetoric in pedagogical presentations of the period. Second, it shows the audience was expected to react to the pedagogical presentation of the teacher. Third, the pedagogical presentation and the reaction of the audience is shown to be intimately related.

While Siraisi's essay does not specifically mention Vesalius or the *Fabrica*, it analyzes tendencies within medicine during the mid 16th century, and insists upon the point that "a substantial part of Renaissance medicine involved knowledge and attitudes shared with and highly dependent on the broader society."⁷⁸

The essay, "Les Fondements humanistes de la médecine: rhétorique et médecine à Padoue vers 1540"⁷⁹ by Andrea Carlino, shows how the Renaissance anatomists were not merely manual practitioners or savants limited to knowledge in their own field; they were humanists, working at a broader scale of intellectual ambition and working within communities of intellectuals.

History of Ideas, Vol. 65, No. 2 (April 2004), p. 191-211.

⁷⁷ Ibid., p. 201.

⁷⁸ Ibid., p. 204.

⁷⁹ Carlino, "Fondements humanistes", p. 19-48.

Carlino's text establishes a connection between Vesalius and other writers, artists and thinkers who would have been his contemporaries in Northern Italy (Padua, Bologna, and Venice) during the first half of the 16th century. Two of the most well known examples- Sebastian Serlio and Giulio Camillo- are interesting because of their expertise on architecture and theatre, respectively, and their common adherence to Vitruvian principles. The presence of theatre and architecture are clear and dominant forces in the frontispiece, and as Carlino has helped show, the word *Fabrica* in the book's title can be linked with architecture and human anatomy. While Carlino underlines the importance of rhetoric in Vesalius' project, he does not fully describe how rhetoric (and thereby mnemonics) is transformed in the making of a book memorializing human anatomy.

In her essay "Fugitives in Sight: Section and Horizon in Andreas Vesalius's *De Humani Corporis Fabrica*"⁸⁰ Manuela Antoniu writes about the presence of architectural concepts in the *Fabrica*. More specifically, she focuses on the way the Book II muscle cadavers, when lined up side by side, make up a nearly continuous landscape.

Alain Charles Masquelet's book *Le corps relégué*⁸¹ is about anatomical dissection, looking at the history, method, and representation of the subject with an anthropological perspective. A section of the book is devoted to the *Fabrica*, and some analysis of its images is provided.

1.3 Conclusion

My intention in presenting the above texts chronologically has been to provide a broad overview of reflections made about the *Fabrica* during the 19th and 20th centuries. I have found the most recent texts presented here the most useful for my own study. For example, the emphasis on the importance of rhetoric in essays by Andrea Carlino⁸² and

⁸⁰ Manuela Antoniu, "Fugitives in Sight: Section and Horizon in Andreas Vesalius's *De Humani Corporis Fabrica*", *CHORA 5*, Montréal: McGill-Queen's University Press, 2007, p. 1-21.

⁸¹ Masquelet, *Le corps relégué*, p. 165.

⁸² Carlino, "Fondements humanistes", p.19-48.

Nancy Siraisi⁸³ has helped me understand the oral aspect of the *Fabrica* imagery. The way Giovanna Ferrari⁸⁴ and Cynthia Klestinec⁸⁵ highlighted the carnivalesque aspects of the imagery further allowed me to develop my own suggestion that the violence in the *Fabrica* imagery must be considered a pedagogical tool. Also, the emphasis on Vesalius' method of dissecting multiple cadavers in Katherine Park's⁸⁶ essay illuminated the importance and development of a comparative scientific method. My own reflections have been built in reaction to the concepts exposed in these articles and essays. The importance of Renaissance humanism for understanding Vesalius' pedagogical aims and methods illuminates the complexity of the *Fabrica*'s imagery.

In the following chapters, I will develop my own arguments, often citing a foregoing text in order to strengthen or add depth to my own reflections.

⁸³ Siraisi, "Oratory and Rhetoric", p. 191-211.

⁸⁴ Ferrari, "Public Anatomy Lessons", p. 50-106.

⁸⁵ Klestinec, "Dancing Cadavers", p. 201.

⁸⁶ Park, "Criminal and Saintly Body", p. 1-33.

CHAPTER II

MONUMENTAL ARCHITECTURE

2.1 Introduction

I will begin with an analysis of the permanent monumental architecture represented in the upper three quarters of the frontispiece (Fig. 0.1). This permanent architecture consists of a semi-circle of seven pillars and a lintel which rests above, with Roman arcs between the pillars. Above the decorated lintel is another level, where a few observers can be seen looking down on the spectacle below.

I have chosen to begin with the architecture for several reasons. First, because it creates a frame around the frontispiece's dissection scene, setting the tone of the image, and lending connotations of classicism and tradition. Second, it will be my method in this essay to go from the periphery towards the center of the frontispiece, attempting to approach the unspoken centre, and as the permanent architecture helps frame the upper three quarters of the image, from the top of the image to the beginning of the theatrical architecture in the lower half, it is suitable to begin with it. My analysis will rely on the assumption that the presence of architecture in an image, regardless of which architecture, creates a perceptual and behavioral affect on a reader, which largely remains tacit.⁸⁷ This assumption is based on the concept that architecture, the materially organized sense of place and space, is a primordial aspect of human perception, and it cannot help but infect those who have perceived its presence.

The *Fabrica* frontispiece is surely not an exception to this rule. As a whole, the

⁸⁷ The tacit nature of a perceiver's reaction to the presence of architecture helps explain the difficulty in describing architectural forms. Part of my goal in describing the frontispiece here is to disturb the normally tacit affect created by the architecture.

pillars, lintel, bucrania, arcs and triglyphs in the upper half of the image have an effect which might be described as ideological framing. An architectural space, always contingent on its characteristics, cannot help but manipulate in one way or another, and the space represented in the frontispiece is no different. First, it has the effect of ordering the behavior of those figures present within its frame (which will be a part of the figural analysis in chapters 4 and 5), and second it plays a role in forming the perception of a reader looking at the frontispiece, an image where architecture is present. This chapter will focus on the potential symbolic meanings the architecture might contain in relation to the *Fabrica* as a book containing information which is meant to be remembered and accepted as a permanent offering to the study of human anatomy.

Considering that the permanent architecture in the upper half of the frontispiece acts as a frame around the more centralized events and objects, its affect on the reader is to be considered of considerable importance in forming and inventing the image as a whole. I will identify this overall affect as being linked with memory, and more specifically with mnemonic tools which were current at the time and place of the frontispiece's production. The concepts about mnemonics come largely from Frances Yates book *The Art of Memory*⁸⁸, which serves as a thorough history of mnemonic practices, and makes a close analysis of the revival of the classical art of memory during the Italian Renaissance. This chapter will help establish that the frontispiece contains mnemonic tools which were circulating in the mid 16th century humanist circles based in Northern Italy, an idea which has already been suggested by Andrea Carlino⁸⁹ in an essay that has been influential for my own work.

The architecture in the frontispiece is exposed as serving to memorialize the human cadaver being dissected in the center of the image. In this sense, the dissected body is directly related to architecture, and the presence of the latter helps normalize the former. Various parts of the permanent architecture (the seven pillars; the semi-circle formed by the arrangement of the pillars) will be shown to be representative of mnemonic techniques. In this way, the permanent architecture helps invent and remember the anatomy of the human body which is represented in the *Fabrica* frontispiece and its seven chapters. The dissected body in the frontispiece will be shown to be related to the anatomical images within the

⁸⁸ Frances Yates, *The Art of Memory*, Chicago: University of Chicago Press, 1966, p. 400.

Fabrica, but perhaps especially to those muscle cadavers from Book II who are represented as standing in a landscape (Fig. 0.2). Moreover, the framing of the frontispiece with architecture offers a permanent space which acts to endorse and create the activities taking place within its borders. In this way, the logic and structure of the architectural space represented in the frontispiece will be the subject of this chapter, an image which is invented and proportioned by mnemonic architectural frames.

2.2 Classicism

The dissection represented in the *Fabrica*'s frontispiece takes place in a space surrounded by seven architectural columns, below which a wooden theatre has been setup to allow spectators a place to stand and observe. As part of the representational construction of the frontispiece, the architectural structures in the upper part of the image refer, directly or indirectly, to the canonized culture of antiquity. Both ancient Greek and Roman architectural forms are represented: the former through Doric pillars; the latter through Roman arcs. The figuration of the architectural structure allows the dissection to appear more dislocated in time, a feature further developed by the presence of non-contemporary spectators among those present around the dissection, an aspect of the image which will be discussed in Chapter 4. The architectural frame thereby lends a temporally ambiguous support to the central event of the image: the dissection performance. In this way, the architecture acts as an overarching frame (which helps define or invent the image of the human body presented within its context), an ambiguous temporal and geographical location, and a stabilizing feature of permanency.

In an analysis of the frontispiece, Carlino writes "it has been suggested that [the architecture] is intended to represent the courtyard of the Bo', the university of Padua, in which the same Doric decorations of the trabeation in the form of bucrania, triglyphs, and vases could be found."⁸⁹ Whether or not the architectural iconography is meant to represent

⁸⁹ Carlino, "Fondements humanistes", p. 19-48.

⁹⁰ Ibid., p. 46.



Fig. 2.1 Donato Bramante, *Tempietto*, 1502

the University of Padua, where Vesalius taught, it might be more broadly seen as representing an ambiguous location which resembles an example of institutional architecture. There is also a suggestion of church architecture in the makeup of seven columns forming a semi-circle, an example being Bramante's *Tempietto* (Fig. 2.1).

Regardless of whether the architectural space in the frontispiece is the representation of a real place, a church or a university square, it is steeped in an atmosphere of classical and monumental permanence. By having the dissection take place in a politically acknowledged (permanent) space there is an effect of normalizing the dissection performance and perhaps imbuing its message with a more official atmosphere. Through this presence, the performance of the dissection is able to take on a more official frame, allowing the frontispiece to contain an air of truth content. The theme of truth and the invention thereof is a subject which will be addressed as an important theme throughout this essay, notably in

Chapter 5 where Vesalius' role⁹¹ as expert within the image will be discussed.

A further aspect of the overall affect of the architecture's presence can be seen as stabilizing the impermanence of the wooden theatre and the crowd of spectators. The presence of the pillars and arcs creates a contrast between what is permanent and what is temporary. Where the theatre and spectators are ephemeral, temporally impermanent, the architecture above these creates a contrast of permanency which can be aligned with the figures of Vesalius and the dissected cadaver, making the dissection scene seem of permanent worth. The Greek pillars and Roman arcs- in a sense- spatially control the events taking place within the frame of their spatial allowance. The dissected body at the center of the image is thus invented or contextually legitimized by the frame of the architecture above and around it. Moreover, these classical structures highlight the presence of tradition within Vesalius' dissection practice. This element of tradition is further highlighted by the presence of classical figures among the spectators (to be further developed in the fourth chapter). Vesalius, as a figure, is thereby related to the traditions of Greece and Rome, a trait that might be identified as a central part of the definition of a Renaissance humanist.⁹² Of particular interest for the purposes of this essay, are the traditions of mnemonics and rhetoric present and circulating within the humanist circles of Vesalius' own time and geographical location. The following sections will be an examination of those elements in the frontispiece which are similar or might be associated with the mnemonic methods of mid 16th century Northern Italian humanists.

An essential aspect for understanding the presence of mnemonic techniques within the *Fabrica* frontispiece is the idea that the permanence of architecture can be thought of as a place for memory to be established and rehearsed. The frontispiece presents a particularly evident case in this strain of memory places for several reasons: first it presents a semicircle of seven pillars and second, within that semicircle it presents a human figure. In the following sections, I will further examine these features.

⁹¹ This role is supported and framed by the presence of the architecture, and as will be noted in Chapter 5, there is a similarity between Vesalius' solid gaze and the permanence of the architecture above.

2.3 The Seven Pillars and Circular Frame

The seven pillars in the frontispiece can be read to have multiple symbolic meanings. The most evident is a reference to the seven chapters of the *Fabrica*. In this way the pillars and the frontispiece refer to the content of the *Fabrica* to follow, suggesting a narrative feature to the frontispiece which I will expand upon below. While the seven pillars clearly refer to the seven chapters, there is a more esoteric function, I believe, which makes reference to the art of memory and the culture of the Northern Italian humanists of the mid 16th century. Within the context of the Northern Italian humanists of the mid 16th century, the seven architectural pillars can be seen as referring to Vitruvius' *The Ten Books on Architecture*⁹³, which had fairly recently been translated or rediscovered. The *Ten Books* establishes the relationship between the human body and those of architecture which can also be found in the *Fabrica* frontispiece. Furthermore, the theatre Vitruvius describes is formed in a semi-circle, like the one found in the frontispiece. The influence of Vitruvius' book was far reaching in establishing new architectural principles for those humanists who read it. In the same vein, the frontispiece also possibly refers to Giulio Camillo's *Memory Theatre*⁹⁴, and other mnemonic textbooks.⁹⁵ As for establishing a direct connection, Andrea Carlino goes a long way in connecting Vesalius with the Northern Italian humanists of his time period, among whom was included Camillo and the original translators of Vitruvius.⁹⁶

These esoteric elements in the *Fabrica* imagery can perhaps be explained by the fact that Vesalius was a humanist with knowledge and interests which reached beyond his immediate discipline. As previously mentioned, this is well covered by Carlino⁹⁷, where he explains Vesalius' connections to humanist academies and to figures like Giulio Camillo and the architect Sebastien Serlio. Carlino highlights the connection between medical humanism

⁹² Ibid.

⁹³ Vitruvius, *The Ten Books on Architecture*, New York: Dover Publications, 1960, p. 319.

⁹⁴ Giulio Camillo, *Le théâtre de la mémoire*, Paris: Éditions Allia, 2001. Camillo was considered a celebrity expert on mnemonics in the 16th century, having developed the concept of a memory theatre which he proposed to build, but only ever succeeded in composing as a written treatise.

⁹⁵ These include Cicero's writings on rhetoric and those more Gnostic texts said to have been written by Hermes. For more details see Yates' study.

⁹⁶ Carlino, "Fondements humanistes", p. 19-48.

⁹⁷ Ibid.

and rhetoric. In a similar way, Siraisi⁹⁸ has made the connection between rhetoric and medicine, noting the ambiguous position of rhetoric in medical thought and method during the Renaissance. If we follow Carlino's suggestion that Vesalius was a humanist working in the post-Florentine tradition of Marsilio Ficino and Pico della Mirandola as it had moved northward toward Venice and Padua, it is reasonable that the *Fabrica's* imagery would contain a more esoteric set of rhetorical tools: it is imbued with the new type of mnemonics hinted at in Giulio Camillo's theatre. This new type of memory device is pagan both in its language (Ciceronian oratory-rhetoric) and in its symbolically steeped imagery. The presence of this type of tool within the pages of a book makes it different from older rhetorical-mnemonic traditions. With the *Fabrica*, it is the book itself which contains and transforms the mnemonic tools present within traditions which were previously oratory and/or theatrical. Let us briefly take a look at Camillo's treatise as a prime example of this tendency within the confines of the theatre.

Giulio Camillo's theatre (Fig. 2.1), though never materially realized, was to have been a wooden architectural structure which would allow a single spectator access to combinations of esoteric imagery, to be associated with parts of the human soul. In his introduction to *Le théâtre de la mémoire*⁹⁹, Bertrand Schefer defines Camillo's goal in creating such a theatre: "en effet, le projet de Camillo consiste, selon ses propres mots, à produire une 'âme construite', c'est-à-dire un plan visible de l'âme humaine lisible dans la restitution qu'il opère du déploiement de la machine du monde."¹⁰⁰ Camillo's construction of the soul would be associated not only with its readability, but its readability in association with the larger world. There is a clear relation between the microcosm of the human soul with the macrocosm of the world. In a similar way, Vesalius' *Fabrica* is a project which aims to make the parts of the human body readable, explicit in their parts and forms. As Masquelet comments upon the suffering of the *Fabrica's* muscle cadavers:

⁹⁸ Siraisi, "Oratory and Rhetoric", p. 191-211.

⁹⁹ Bertrand Schefer, "Les lieux de l'image", introduction to *Le théâtre de la mémoire*, Paris: Éditions Allia, 2001, p. 7-31.

¹⁰⁰ Ibid., p. 22.

THE MEMORY THEATER OF GIULIO CAMILLO
From Frances Yates, *The Art of Memory*

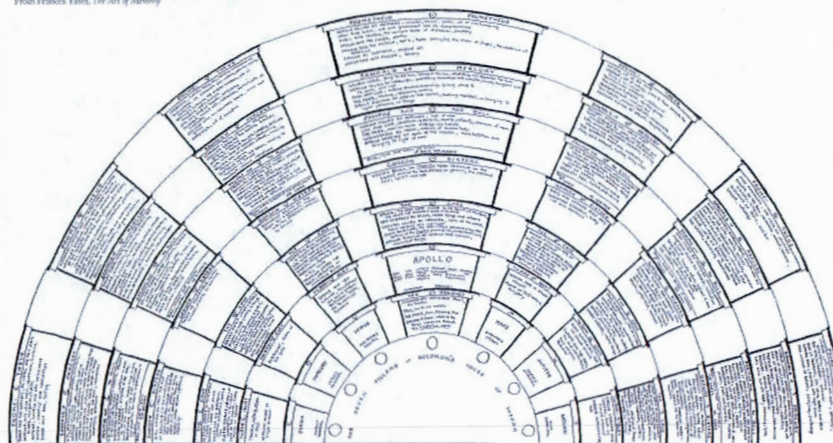


Fig. 2.2 Giulio Camillo, Memory Theatre, 16th century

[...] le masque de souffrance témoigne d'une séparation de deux mondes : l'un, l'univers, le macrocosme; l'autre, le Parvus Mundus, le petit monde, l'Homme en correspondance étroite avec le cosmos. Le terme de la séparation est un résidu qui est précisément le corps. Le scalpel Vésalien opère la dissociation du corps et du sujet qui trouvera sa formulation philosophique avec Descartes.¹⁰¹

For Vesalius' project, the microcosm of human anatomy is also related to the macrocosm of urban space (as in the frontispiece) or the landscape (as in the *Fabrica*'s muscular plates (Fig. 0.3) from the second chapter of the *Fabrica*). This similarity would perhaps not be enough to offer a structural comparison between Camillo and Vesalius' different subject matters, the human soul and human anatomy, respectively. But when we consider the description of the actual structure of Camillo's theatre, with its seven columns, and seven levels, the comparison becomes more tangible. In the first part of *Le théâtre de la mémoire*, written in 1544 and first published in 1550, Camillo writes,

[...] dans la neuvième de ses Proverbes, Salomon dit que la sagesse s'est édifiée une maison reposant sur sept colonnes (Pr 9, I). Il nous faut comprendre que ces colonnes, qui signifient la très stable éternité, sont les sept Sephiroth du monde supracéleste, les sept mesures de la fabrique des mondes céleste et inférieur qui contiennent les idées de tout ce qui se trouve en ces mondes; c'est pourquoi il nous est impossible d'imaginer aucune chose hors de ce nombre.¹⁰²

¹⁰¹ Masquelet, *Le corps relégué*, p. 62

¹⁰² Camillo, *Le théâtre de la mémoire*, p. 46.

According to this schematic plan, the entire world must be able to be defined within the parameters of the number seven. Camillo's theatre would contain seven levels, each pertaining to different aspects of the soul and world. The similarity with the *Fabrica* is considerable: the theatre in the frontispiece contains seven columns, and the structure of the book itself is made up of seven chapters or books, each pertaining to different parts of the human body (1. bones, 2. muscles, 3. blood vessels, 4. nerves, 5. organs of nutrition and generation, 6. the heart and lungs, 7. the brain and organs of sense). The entire world (and in the *Fabrica* the human body is a microcosm of the world) is thereby contained within seven chapters. Furthermore, Camillo's suggestion that the columns signify "la très stable éternité" can be related to an important feature of the *Fabrica* frontispiece's overall message: that Vesalius' book is a prescient statement on human anatomy, containing knowledge of permanent worth. The seven pillars memorialize the *Fabrica* by making it into a visual monument, a document which contains the whole world.

The architectural place presented in the frontispiece utilizes mnemonic structures in several ways. First, it conforms to the idea that the image utilizes a specific place to frame the object or objects to be remembered. In the classic terms of the art of memory, defined by Frances Yates in *The Art of Memory*¹⁰³, it is in a specific architectural place that an object or subject must be remembered. The suggestion that the image refers to the art of memory is also significant and makes sense because the *Fabrica* is a pedagogical book at its basis, meant for a pedagogical function: to teach human anatomy. It is the body being dissected at the center of the image, framed by the seven pillars which form a semi-circle at the top of the image that is the object to be remembered and made into a monument, memorialized by the stone frame of monumental architecture. As Yates, writes, "the Seven Pillars might refer to the creation- both divine and human- of man's body."¹⁰⁴ The relation between the seven pillars in the frontispiece and the seven chapters of the *Fabrica*, already noted by Carlino¹⁰⁵, further elevates the notion of a frame for the body and its anatomy. According to Camillo's concept, the number seven is the perfect number to contain all the elements of the soul and

¹⁰³ Yates, *The Art of Memory*, p. 146.

¹⁰⁴ Ibid., p. 146.

¹⁰⁵ Carlino, "Fondements humanistes", p. 19-48.

world. The number seven acts as a frame or container, both figuratively, within the frontispiece, and literally, within the seven chapters of the *Fabrica*. Like the Biblical idea of the seven days of creation, during which all things in the world would have been created, the seven pillars refer to an invention or creation of the human body. In this way, the architecture in the frontispiece acts both as a space where invention is possible and at the same time a space where that which already exists can be contained. This tension between invention and conservation can be seen as a technique for memory to be contained and at the same time made explicit. It is this very tension- imbued in the *Fabrica's* images- that creates a dialectic between presence and absence, the hidden and seen, the implicit and explicit.

Furthermore, the seven pillars might be associated not only with the seven days of creation (which would follow the argument that the frontispiece architecture supports the invention of the body), the seven chapters of the *Fabrica*, but also the desire for the dissected figures in the book to be remembered. The combination of these factors might be further related to the way,

[...] in the new statutes of the faculty of medicine, drawn up toward the end of the sixteenth century, a week was given to this examination. On the first and second days the students dissected the abdomen and viscera; on the third, the chest; the fourth, the head; the fifth, the muscles; the sixth, the vessels and nerves; and on the seventh they took an examination in osteology.¹⁰⁶

The seven pillars and seven books of the *Fabrica* can thus be seen as directly related to the pedagogical organization of anatomical pedagogy. This combination of memory techniques and pedagogy, I will argue, is essential for understanding the ornate composition of the *Fabrica* frontispiece.

The significance of the number seven is largely abstract, mystical, but the importance of such tools for the Neoplatonic humanists should not be ignored as rhetorical devices used in mnemonics and the construction of images. As Edgar Wind writes in *Pagan Mysteries in the Renaissance*¹⁰⁷,

It would be absurd therefore, to look for a mystery behind every hybrid image of the Renaissance. In principle, however, the artistic habit of exploring and playing with these

¹⁰⁶ O'Malley, *Andreas Vesalius of Brussels*, p. 42.

¹⁰⁷ Edgar Wind, *Pagan Mysteries in the Renaissance*, Harmondsworth: Penguin Books, 1967, p. 345.

oscillations was sanctioned by a theory of concordance which discovered a sacred mystery in pagan beauty, conceiving it to be a poetic medium through which the divine splendor had been transmitted.¹⁰⁸

It would be equally absurd to ignore rhetorical and pedagogical devices present in a document merely because they are no longer used in the same way.

The function of symbols in the frontispiece, mixing rhetorical mnemonic tools with atmospheric permanence through the representation of architecture, is appropriate when considering the image's function as the introduction to a book instructing the reader on the parts of the human body in a complex and categorical way. While the use of these mnemonic symbols in the frontispiece may seem abstract and esoteric to a viewer used to having book and computer technology supplement their memory, to a student or reader of the 16th century, the book technology would have been informed by older devices for supplementing memory. Namely these were oral devices, used in oration, rhetoric and storytelling, and as Siraisi¹⁰⁹ and Carlino¹¹⁰ have shown, these devices were important parts of Renaissance medicine. That they would show up in a document such as the *Fabrica* is thus not surprising.

A second mnemonic symbol which might be said to be present in the frontispiece's permanent architecture is the semicircle formed by the seven pillars. The body presented in the circle is a Vitruvian trope, as seen in Leonardo's *Vitruvian man* (Fig. 2.2), and leads us to the connection between the circle, bodily proportions, and memory. According to Yates, the figure presented within a circle as in the *Vitruvian Man* or the *Fabrica* frontispiece, is meant to be remembered. The circle acts as a mnemonic device which helps install memory. The further relationship to proportions is significant, because, once again according to Yates, proportions help define and stimulate memory. While this relation to proportion is present with the circular frame of the frontispiece it is perhaps even more significant in the muscular cadavers from Book II of the *Fabrica*.

¹⁰⁸ Ibid, p. 25.

¹⁰⁹ Siraisi, "Oratory and Rhetoric", p. 191-211.

¹¹⁰ Carlino, "Fondements humanistes", p. 19-48.

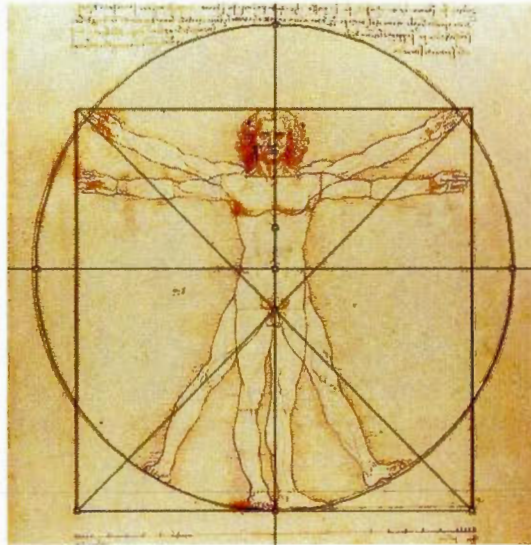


Fig. 2.3 Leonardo da Vinci, *The Vitruvian Man*, 1487

2.4 The Muscle Cadavers

The muscle cadavers (Fig. 0.3) found in the second book of the *Fabrica* present the flayed body of a cadaver coming undone in a series of landscapes.¹¹¹ These images can be seen as referring to the frontispiece's insular memorialized environment. Indeed, the landscape images are universalized representations of macrocosm/microcosm scope, connecting the images with the memorialized figure dissected within the architectural frame in the frontispiece. In the muscle cadaver images, the male figure represented in the centre exhibits its parts, thereby revealing what has been memorialized. The muscle cadavers can thereby be seen as a re-vindication of what has been made explicit. In this way, the cadavers are represented as a whole coming undone, a completion with its parts, a universalized theatrical image.

Architecture becomes emblazoned on the bodies of the *Fabrica* imagery, and as Carlino¹¹² has mentioned, there is a double meaning of the word *Fabrica* which has both an architectural and a bodily connotation. This way of making one thing stand for another

¹¹¹ Authors who have commented upon this aspect of the *Fabrica* imagery are Kemp, "A Drawing for the *Fabrica*", p. 277-288, Cavanagh, "View of the Vesalian Landscape", p. 77-79, and Antoniu, "Fugitives in Sight", p. 1-21.

¹¹² Carlino, "Fondements humanistes", p. 19-48.

(architecture for the body, or the body for architecture) further supports the relation between microcosm and macrocosm, which has its classical construction in Plato's *Republic*¹¹³, where the city is compared to the human body as a means of describing the ideal city state. In the muscled plates this relation between the microcosm of the body and the macrocosm of the landscape continues.¹¹⁴ This relation takes place between the body and an idea of civic space, and in the case of the *Fabrica*, the memorial center can be seen as the frontispiece's urban space which is refracted in the form of the panorama of muscular cadavers. The presence of Vitruvian principles within the frontispiece's architecture is further emphasized by this relationship between the body and the architecture. Within the *Ten books on Architecture*¹¹⁵ Vitruvius writes about how the proportions of an architectural structure should be made in relation to the proportions of a human body. The normalizing effect of the architecture in the frontispiece relates directly with the symmetry of the muscle cadavers which exhibit features of classical sculpture.¹¹⁶ Proportions and symmetry, according to Yates, are related to a device used in the art of memory. The classical frame of the architecture can be seen as taking part in the invention of a classical body in a later part of the *Fabrica*'s narrative.

2.5 Hybridity

The *Fabrica* imagery can be considered hybrid in the sense that Bruno Latour has suggested in *Nous n'avons jamais été modernes*¹¹⁷ and which Hugh T. Crawford has related directly to the *Fabrica* imagery.¹¹⁸ As an officializing spatial mechanism, the architecture helps invent the image of the human body presented in the *Fabrica* in a proportional way. The memorialized image of the human body is framed *and* invented by its surroundings, making it more than just the product of Vesalius' observation. In this sense, the *Fabrica*'s overall image of the human body is also the product of the architectural representations present within its pages.

The images of muscle figures in the second chapter of the *Fabrica*, those of figures

¹¹³ Plato, *The Republic of Plato*, London: Oxford University Press, 1976, p. 366.

¹¹⁴ Antoniu, "Fugitives in Sight", p. 1-21. It has been suggested the landscape behind the muscle cadavers represents a panorama view of Padua.

¹¹⁵ Vitruvius, *Ten Books on Architecture*, p. 319.

¹¹⁶ Harcourt, "Vesalius and Antique Sculpture", p. 28-61.

¹¹⁷ Latour, *Nous n'avons jamais été modernes*, p. 206.

¹¹⁸ Crawford, "Imaging the Human Body", p. 66-79.

in a landscape, present the idea that a memorable image is one that presents a human figure, dressed up or disfigured. A landscape, like an architectural structure, can be a memory place. The mutilated figures of the *Fabrica* are meant to be remembered. To remember an image it helps if certain visual devices are used.

In this sense there is likely a connection between Aristotle's concept of cathartic learning as presented in *Poetics*¹¹⁹ and the images of flayed cadavers in a landscape. If we consider that there is a learning process involved in catharsis, and that learning is done through looking at ugly things, it seems more than likely. Yates writes,

Can memory be one possible explanation of the mediaeval love of the grotesque, the idiosyncratic? Are the strange figures to be seen on the pages of manuscripts and in all forms of medieval art not so much the revelation of a tortured psychology as evidence that the Middle Ages, when men had to remember, followed classical rules for making memorable images? Is the proliferation of new imagery in the thirteenth and fourteenth centuries related to the renewed emphasis on memory by the scholastics? I have tried to suggest that this is almost certainly the case.¹²⁰

The *Fabrica* imagery, coming from a later period, carries this older way of remembering into the book form. However with the book form this way of remembering becomes unnecessary and is eventually shed.

2.6 Monument

The architecture presented in the frontispiece- and concomitantly Vesalius' practice of dissection- takes on airs of monumental permanence. The *Fabrica* itself is thus posited as permanent, a memorial to the act of dissection. Furthermore, the architecture is a space where the anatomical dissection can be exhibited and made explicit, and through this process become memorialized as a book. In this way, the institutional setting of the frontispiece acts in a similar way as the *Fabrica* itself.

This leads us to a concept of the archived memorial which has been posited externally and which thereby becomes something different, both externally and internally. As Pierre Nora has warned (quoted here from an essay by James E. Young): "the less

¹¹⁹ Aristotle, "Poetics". *Classical Literary Criticism*. London: Penguin Books. 1972, p. 17-75.

¹²⁰ Yates, *The Art of Memory*, p. 104.

memory is experienced from the inside, the more it exists only through its exterior scaffolding and outward sign.”¹²¹ The anatomical knowledge extracted from the body is represented in the frontispiece in multiple ways, and in the frontispiece, the architecture acts as the skeleton of the image, holding it up, ensuring its endurance as a memorialized space, and allowing the body to be represented.

When knowledge and memory become explicit, as they do with Vesalius’ anatomical figures, another type of inward knowledge is sacrificed, lost in a common forgetting. The ceremony performed in the frontispiece then, is a form of remembering and forgetting: remembering through the violent spectacle of public dissection; forgetting through the material memorializing in the form of a book. The *Fabrica* is an example of “memory [being] wholly absorbed by its meticulous reconstitution.”¹²² Indeed the book’s “new vocation is to record; delegating to the archive the responsibility of remembering, it sheds its signs upon depositing them there, as a snake sheds its skin.”¹²³ The book changes the form and function of memory by creating a material archive, and the *Fabrica* is a fascinating early example of this medium. With the book, memory and knowledge, once literally embodied in the human flesh, are transformed into the form of an archive. However, because the *Fabrica* appears early in the history of this archiving medium, it maintains some of those mnemonic traditions used in older forms of remembering.

2.7 Conclusion

The permanent material of architecture represented in the *Fabrica*’s frontispiece creates a contrast with the impermanence of the theatrical architecture below. The architecture above acts as a frame for the theatre below. In this way, the architecture is foundational as part of the image, an element which becomes tacit in its officializing presence, directing the image’s viewer towards the central activity of the spectacle. While the frontispiece’s permanent architecture frames it as an archival monument to the anatomy of the human body, we will see in the following chapter how this very monumentality lends

¹²¹ James E. Young, *The Texture of Memory: Holocaust Memorials and Meaning*, New Haven: Yale University Press, 1993, p. 55.

¹²² *Ibid.*, p. 55

¹²³ Pierre Nora (ed.), *Les lieux de mémoire*, Paris: Gallimard, 1984, p. 13.

itself to the implicit presence of violence. In fact, the very violence of the *Fabrica* imagery plays an essential part in the epistemological and mnemonic loquacity of the project.

CHAPTER III

THEATRICAL ARCHITECTURE

3.1 Introduction

This chapter examines the theatrical architecture in the *Fabrica* frontispiece, another spatial frame for the spectacle of dissection taking place at the image's centre. Like the permanent arcs, pillars, triglyphs and bucrania in the upper half of the image, the theatre, located in the frontispiece's lower half, is an architectural structure helping to organize and frame the spectators and spectacle. It is largely made invisible by the spectators, a mixed group of figures standing around the central figures of Vesalius and the cadaver. The basic seating structure and the platform can be seen stretching from left to right at the bottom of the image.

The architectural frame of the theatre can be correlated with and seen to have an effect on the energies present in the figures displaying muscular anatomy presented in Book II of the *Fabrica* (Fig 0.2, 3.5, 3.6). The frame of the frontispiece's theatre creates an architectural energy related to violence and memory, and in this chapter I will elaborate upon this aspect of the image using Jody Enders' *Medieval Theatre of Cruelty*¹²⁴ and Anthony Kubiak's *Stages of Terror*¹²⁵ as support. This theatrical feature, present equally in the frontispiece and the muscular images, can be seen in multiple ways: the violent dissection scene, the actor poses of the flayed cadavers, and the subtle importation of a medieval

¹²⁴ Jody Enders, *The Medieval Theatre of Cruelty*, Ithica and London: Cornell University Press, 1999, p. 268.

¹²⁵ Anthony Kubiak, *Stages of Terror: Terrorism, Ideology, and Coercion as Theatre History*, Indianapolis: Indiana University Press, 1991, p. 206.

theatrical trope from the Christian mystery plays.

In the same way as the permanent architecture, the presence of the theatre requires a reaction from the reader. The perceptual acknowledgment of a theatrical space creates a sense of invention based on rules of violence and memory. The presence of the theatre architecture helps frame the human figures within a theatrically connotated space. The complex effect of the theatrical presence is to create a dialectic between invention and remembrance, where theatre is inserted into the medium of the book, creating a representational tension in the imagery.

This chapter begins by describing the presence of the theatre in the frontispiece, and continues with an analysis of the theatricality of the scene as a whole. It is shown that the presence of theatrical architecture requires violence from the spectacle presented within its frame. Furthermore it will be shown how this theatrical violence is related to epistemology and pedagogy. Included within this assessment is a consideration of the Book II muscular plates in relation to their role as theatrical adjuncts to Vesalius' performance of an anatomical lesson.

3.2 Material Presence and Historical Considerations

While the frontispiece's monumental architecture might be associated with permanence, the theatre can be aligned with movement and impermanence. This is largely because, upon close examination, the theatre appears to be made of wood. This material feature is important both for its connotations of impermanence and its place in the history of theatre. For this reason, this chapter begins with a discussion of the material presence of the frontispiece's theatre. Later in the chapter the analysis becomes broader and more thematic, touching upon the way theatre tropes and structures are transformed into the *Fabrica*, in its book bound format.

The wooden aspect of the frontispiece's theatre creates a sense of impermanence, which is further elevated by the frenetic activity of the spectators standing in its rows. This feature of the theatre is a contrast with the permanence of the monumental architecture in the upper half of the frontispiece. Through this tension is created a dialogue between permanent and impermanent architecture, a symmetry which is inscribed in the *Fabrica* imagery as a

whole.

There are historical reasons for the wooden impermanence of the frontispiece theatre. The first reason is that the modern version of a permanent theatre had not yet been introduced in Europe. This historical aspect of theatre has been discussed by Thomas J. Oosting in *Andrea Palladio's Teatro Olimpico*.¹²⁶ At the time all theaters in Europe would have been impermanent and made of wood, built in public or institutional spaces for a performance, and then taken down or left standing, depending on the case. The second reason for this impermanence might be related to the dissection performances Vesalius undertook as a part of carnival season for several years in and around the publication of the *Fabrica* in 1543. This aspect of the *Fabrica* has been analyzed by Giovanna Ferrari¹²⁷ and Cynthia Klestinec.¹²⁸

A third and perhaps more conceptual reason is that the idea of theatre architecture was on the rise in Europe in the early 16th century and this was partially because of new translations and interpretations of Vitruvius' *The Ten Books on Architecture*.¹²⁹ This renewed interest in a Roman or classical idea of theatre was especially linked to the humanist circles in Italy, and in the early 16th century, this was perhaps especially taking place in Northern Italy, where Vesalius and Camillo lived and worked.¹³⁰

3.2.1 Historical Background for Wooden Material

If for a moment we take a look at the frontispiece scene as the representation of a real historical space, the wooden theatre in the frontispiece would have to be considered an impermanent structure, probably constructed specifically for the anatomical dissection. As Magali Vène writes, the anatomical theatres of the 16th century were "d'abord des constructions éphémères montées en extérieur dans la cour des universités."¹³¹ The impermanence of the theatre is significant, because it shows how as an institutional practice the anatomical dissection was in transition, moving toward a permanent position in the

¹²⁶ Thomas J. Oosting, *Andrea Palladio's Teatro Olimpico*, Ann Arbor, Michigan: UMI Research Press, 1970, p. 217.

¹²⁷ Ferrari, "Public Anatomy Lessons", p. 50-106.

¹²⁸ Klestinec, "Theatrical Dissections and Dancing Cadavers", p. 201.

¹²⁹ Vitruvius, *The Ten Books on Architecture*, p. 319.

¹³⁰ Carlino, "Fondements humanistes", p. 19-48.

¹³¹ Vène, *Écorchés*, p. 16.



Fig 3.1 Permanent Anatomical Theatre, University of Padua, 1594.

university. In 1594, just over 60 years after the *Fabrica* was first published, the University of Padua, where Vesalius taught, completed the construction of the first permanent theatre meant for anatomical dissection (Fig. 3.1). The *Fabrica* frontispiece, then, represents a moment of transition, where the anatomical dissection remains an impermanent fixture at the university, but is supported nonetheless.¹³² Another reason why the frontispiece represents an impermanent wooden theatre rather than a permanent theatrical structure is that, in 1543, there were still no permanent theatres in Europe. In fact, “the first permanent theatre in continental Europe built especially for plays”¹³³ was only completed in 1585- only nine years before the University of Padua would complete the first anatomical theatre. The theatre as a permanent space, then, arose in modern Europe at similar times, both in the realms of dramatic and anatomical performance. Through an analysis of the theatrical elements present

¹³² This support was perhaps limited when it came to public dissections. As Ferrari and Klestinec have written, Vesalius’ public dissections took place during carnival partially in order to mask their transgressive nature. Klestinec also mentions that the moment in time when Vesalius was performing his public dissections was transitory, moving towards a more institutionalized position.

in the *Fabrica* images, it will be seen that the difference between dramatic and anatomical performance was sometimes not so large, in that both relied on similar tropes of violent invention. The impermanent feature of the frontispiece is accentuated by the thought that theatre is a space where invention takes place, and that this invention comes through violent means, ideas exposed by Jody Enders¹³⁴ and Anthony Kubiak¹³⁵, which will be expanded upon in the following sections. The theatre in the frontispiece is presented as exactly that type of space, where anatomical invention takes place through the mutilation of a corpse.

The wooden material of the frontispiece's theatre might also be associated with Giulio Camillo and his memory theatre, which would have also been made of wood¹³⁶, had it ever been constructed. Both Vesalius and Camillo's theatres existed as conceptual elements used to accentuate their respective projects. In this way, the wooden theatre in the frontispiece is at once a conceptual space, but also a space which can be aligned with a specific historical situation. This historical placement is further solidified by the fact Vesalius actually performed dissections for a public seated in a theatre.

In the following sections, it will be seen how, as a spatializing feature present in the *Fabrica*'s frontispiece, the theatre integrates and confronts the way spectacle, memory, and invention work together in the *Fabrica* imagery. The product of this confrontation is the dialectical appeal of the *Fabrica* imagery, a dialogue where theatre plays an indelible role.

3.3 Defining the Theatrical Space

The theatre is not only a material architectural structure but also the space it creates and the behaviour it organizes for those who use it. In the frontispiece this space forms a central compositional role in the image, while remaining difficult to describe. Perhaps this descriptive difficulty arises from both the challenge to articulate the power of architecture and the nature of the frontispiece's spectacle in relation to the spectators sitting and standing within the designated theatre seating. In this section I will look at the connotations the theatrical space takes in its appearance in the frontispiece to better understand the relationship

¹³³ Oosting, *Palladio*, p. 1.

¹³⁴ Enders, *Medieval Theatre of Cruelty*, p. 268.

¹³⁵ Kubiak, *Stages of Terror*, p. 206.

¹³⁶ Schefer, "Les Lieux de l'image", p.7-31.

between performance and spectatorship in the further chapters.

Part of the reason it is difficult to define the theatrical space in the frontispiece, if we were to momentarily apply an anachronic lense to our reading, would be the thought that violence is being enacted on the cadaver for scientific reasons. This would make the theatrical space in the frontispiece a type of normalized scientific laboratory, where all experimentation involving violence is cleansed¹³⁷ by a rigorous desire for knowledge. However, this type of reading, though pertinent for exploring our own anachronic values, disregards the dramatic potential of such a theatre setting.

In this sense, it might be useful to look at another type of theatrical performance (or performance which took place within a theatre) that utilized torture as a means of extracting knowledge or information. An image which represents an impermanent theatrical space where a body being tortured acts as the central spectacle is *The Martyrdom of St. Apollonia* (Fig. 3.2) by Jean Fouquet. Comparing the *Fabrica*'s frontispiece to the *Martyrdom*, it is evident there is a significant similarity. The body is at the center of these epistemological researches as the place where a type of tacit knowledge is extracted through violent means. The story of Apollonia is similar to that of many martyrs: she was a Christian who was tortured in order to extract a renunciation of her faith. In the *Martyrdom*, we can see her teeth being removed, an anatomical allegory, which has led Apollonia to be deemed the patron saint of dentistry. The theatricality of the performance in the *Martyrdom* is entirely ambiguous, in the sense that it is very difficult to tell if the represented scene is a dramatic performance or a scene of actual torture. This ambiguity is contingent with the theatricality in the *Fabrica* frontispiece, where, removing the represented scene from its institutional medical context, it is difficult to tell whether the performance is sacrificial, epistemological, erotic, or a combination of the above.

Both *The Martyrdom of St. Apollonia* and the *Fabrica* frontispiece represent a theatrical space where a body is represented being tortured or dissected as part of a spectacle. Given the common aspect of tortured/dissected bodies, is it possible to say there is a representational difference between the ambiguous violence of the supposed dramatic scene and the violence of the supposed dissection? The *Martyrdom* and the *Fabrica* respectively

¹³⁷ Harcourt, "Vesalius and Antique Sculpture", p. 28-61.

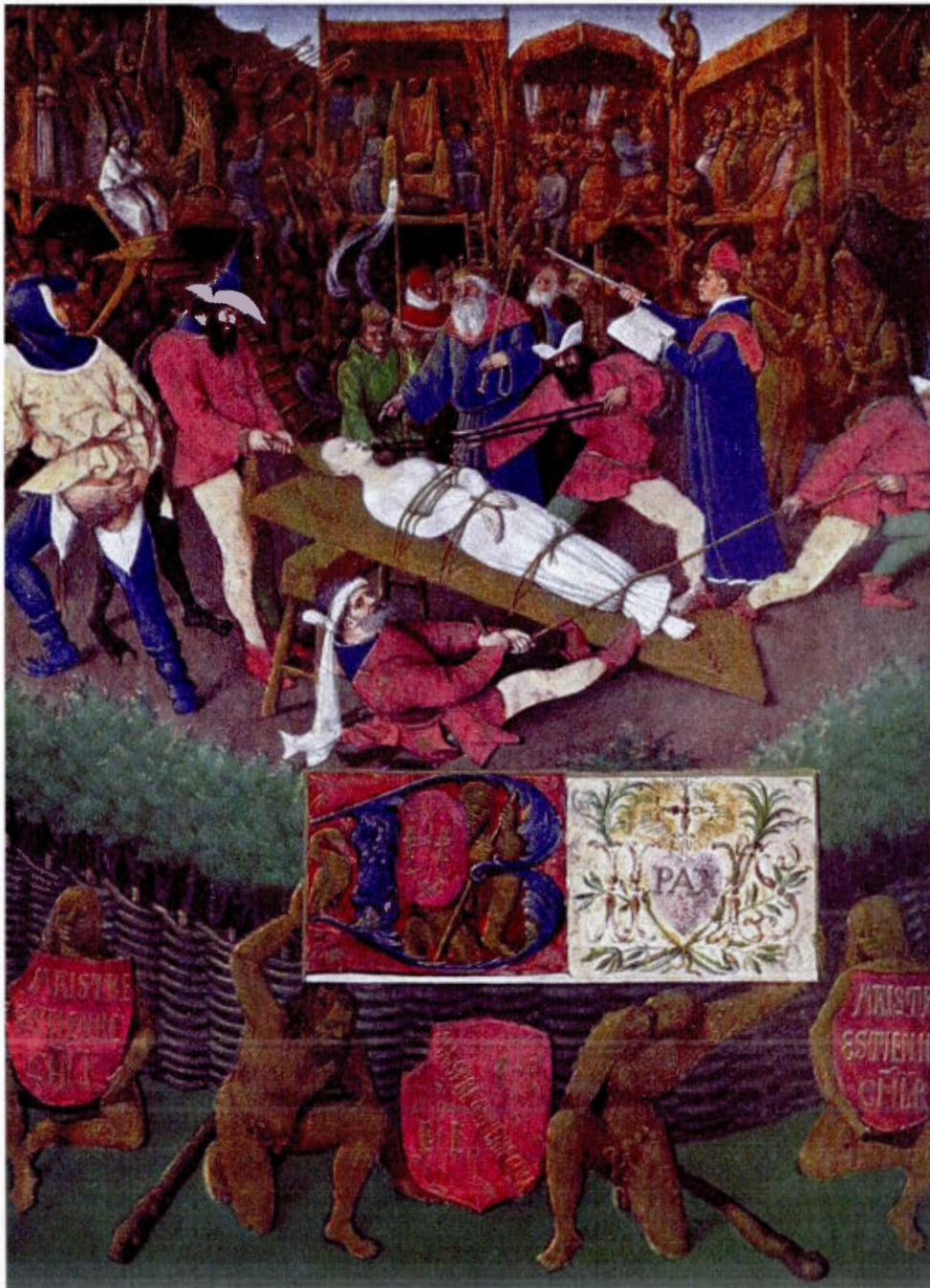


Fig. 3.2 Jean Fouquet, *The Martyrdom of Saint Apollonia*, 1452-1460

contain this violent aspect within the confines of a theatre space. What function does the representation of violence serve if it is such an essential feature of theatre and theatrical representation?

Indeed, the spatial and figurative structure of the frontispiece can be compared to countless images from the Italian Renaissance. The combination of architecture with a figurative scene where a central figure (often a saint or dying figure) is surrounded by other, peripheral figures (often forming a type of audience or spectatorship) is a common composition structure for images during the Italian Renaissance. In these images, there is a sense that the saint is a public figure, in that the death or torture scene of the saint is often represented with a significant crowd of onlookers or spectators. For example, Bronzino's *The Martyrdom of St. Lawrence* and Donatello's *The Miracle of the Avaricious Man's Heart* (Fig. 3.3, 3.4) are both images which represent figures being tortured in a theatrical-spectatorial setting.



Fig. 3.3 Bronzino, *The Martyrdom of Saint Lawrence*, 1569



Fig. 3.4 Donatello, *The Miracle of the Avaricious Man's Heart*, 1446-1453

3.3.1 Violence and Knowledge

A theatre is highly recognizable for its feature of being a centralized space surrounded by seating. In the frontispiece the theatre is immediately perceivable, both for these structural features of performance space and seating, but also for the type of performance taking place in the central area. Indeed, the performance space in the frontispiece allows for the exhibition of a scene which could be deemed as highly suitable for the theatre.

As a type of architectural space the theatre can be said to demand a form of performance that is universal in character. In his book *Stages of Terror*, Anthony Kubiak attempts to identify this universal form of theatrical performance as requiring violence:

[...] theatre is not merely a means by which social behavior is engineered, it is the site of violence, the locus of terror's emergence as myth, law, religion, economy, gender, class, or race, either in the theatre, or in culture as a theatricality that paradoxically precedes culture.¹³⁸

If we apply this analysis of the theatrical space to the frontispiece, it becomes evident that the

impermanent wooden theatrical frame creates and demands specific elements from the spectacle. Defined by Kubiak, the theatre is shown to have an inventive quality, an ability to define and present new cultural values, and a capacity for showing violence as epistemological method. This last quality, violence as epistemology, is of particular interest for our analysis of the frontispiece, where Vesalius is dissecting (we might easily use other adjectives: mutilating, torturing...) a corpse in order to extract anatomical information. He is extracting the information in order to pedagogically display it to the theatre spectators and the book's reader. Here the book takes on a theatrical element, carrying the qualities of this other medium/space (which remains architecturally present in the frontispiece itself) in the bind of its imagery.

The theatre is a site for representing violence, a transformative vacuum where cultural values have a place to emerge. The very presence of a theatre in the frontispiece carries this connotation of violence because it is a fundamental requirement of the *type* of architectural space. The theatre, as all architectural structures, requires a certain type of behavioral reaction and a complimentary acceptance of activities taking place within its frame. In fact, the theatrical space of the frontispiece, taken in Kubiak's terms, makes the violence of dissection *necessary*, thereby further endorsing the anatomical study of the human corpse on display. Following this reading of the frontispiece, the figure of Vesalius (seen to the left of the cadaver, gazing outwards toward the image's viewer) can be seen as a theatrical guide, introducing and inviting the reader to enter the *Fabrica*, as if through the violent opening in the cadaver's belly.

3.3.2 Tropes of Medieval Narrative

Looking further into the defining features of the theatrical space, we might attempt to designate the presence of a narrative within the bind of the frontispiece's theatricality. Reading the *Fabrica* as an image based narrative, with the images of the book appearing one after the other, the *Fabrica*'s imagery can be seen to follow a theatrical construction which is typical of medieval theatre, with a three part narrative construction: 1) torture (as seen in Vesalius' dissection of the cadaver in the frontispiece); 2) death (as seen in the frontispiece

¹³⁸ Kubiak, *Stages of Terror*, p. 5.

cadaver, and the skeleton hanging above); 3) rebirth (as seen in the muscle figures, where the standing cadavers appear in a state somewhere between life and death (Fig. 0.2).¹³⁹ The argument for a narrative structure is strengthened by the fact the *Fabrica* is organized like an anatomical lesson, with the seven chapters each representing an aspect of human anatomy.¹⁴⁰

This construction follows a mythological structure that might be associated with Christian mystery plays of the medieval period. As Jody Enders writes in *The Medieval Theatre of Cruelty*,

[...] the object of remembrance must first die in order to be brought back to life; that the metaphorically encrypted and subsequently resurrected dead are moving, talking, images or simulacra; that mnemotechnics renders present those who are absent or dead; and that it does so by repainting their picture and by giving them voice.¹⁴¹

The connection between this narrative structure and the type of knowledge the *Fabrica* presents is evident: by extracting anatomical knowledge through a process of torture/dissection, the knowledge can be transformed, and be reborn, represented (or, equally, resurrected) as anatomical images. In this way, the *Fabrica*'s imagery can be associated with the extraction of a type of information (memory or knowledge, but also renunciation in the case of the martyrs) so that it might be represented in an archived/memorialized format.

In this way the architectural space allows human anatomy to be invented (seven days of creation) and remembered (seven chapters for seven parts of the body).¹⁴² This can be seen as a transfer of a narrative trope, where events normally associated with saints' bodies are transferred unto the narrative features of the *Fabrica*'s cadavers. The frontispiece is an example, perhaps of at least two of these narrative stages, torture and death. The cadaver being dissected is allegorically being tortured, and in fact, if we follow Enders, there seems to be an important similarity between dissection and torture when we consider both are used to extract knowledge from the body. The dissected body is dead already, but the fact it is a female corpse surrounded by male observers¹⁴³ adds a cruel and lively measure of eros to the

¹³⁹ These steps of medieval narrative are taken from Enders, *Medieval Theatre of Cruelty*, p. 268.

¹⁴⁰ Also, as already mentioned, the universities taught human anatomy over a period of seven days.

¹⁴¹ Ibid., p. 122.

¹⁴² The commonality and difference between the terms invention and remembrance form a dialectic which helps describe the way the *Fabrica* imagery works.

¹⁴³ Wall, "Disclosures in Print", p. 35-59. Wall relates this to the violent nature of print media.

thanatos. The ambiguously dead body is being tortured to extract information that will then be transformed into the knowledge applied and formed in the *Fabrica* itself. The seven chapters of the *Fabrica*, and more specifically, as an example, the muscular images, represent the resurrection stage of the narrative trope, allowing the anonymous dead body (the modern body) to be reborn as an invented version of the human body.

The Book II muscular cadavers (Fig. 0.2, 3.5, 3.6) standing in the landscape appear neither dead nor alive, but rather between thanatos and eros, flayed and tortured but also vital in their expressions and postures, actors posing with tragic pathos. These creatures are the completion of a cyclical repetition where the body is tortured and killed only to be transformed into knowledge transmitted into another medium: the book. The *Fabrica*, as a book, is a monument to human anatomy as it is transformed within the cipher of this new technology. By embodying the human body, the *Fabrica* takes on shades of the theatrical trope of a Christian medieval play. Here we might ask the question: what is the function of this trope in the *Fabrica* imagery?

At least part of the answer, I believe, is that often theatrical representations used scenes of torture as a means to attain knowledge. For example, in legal trials of the Middle Ages, often the accused was tortured to procure a verbal admittance of culpability. It was considered necessary to torture the accused to better access the truth. Indeed, violence was thought a useful way to procure the memory of culpability. An example of this tradition is analyzed in *Trent 1475: Stories of a Ritual Murder Trial*¹⁴⁴ by R. Po-chia Hsia, where the manuscript of a historical blood libel trial is analyzed. The trial took place in Trento at the beginning of the 16th century, and concerned a Jewish community accused of killing a Christian child. During the trial conducted by the authorities, each accused individual was tortured until their story fit with the authorities own rendition of events. In this historical example, the invention of truth is procured through violent means.

As Anthony Kubiak notes in *Stages of Terror*, there is a “distinct correlation [...] between theatre and the systems of economics, legislation and philosophy.”¹⁴⁵ He deems this correlating feature to be “forensic”, meaning that it is connected to the art of analyzing

¹⁴⁴ R. Po-chia Hsia. *Trent 1475: Stories of a Ritual Murder Trial*. New Haven: Yale University Press. 1996. p. 173.

information to form an argument or rhetorical appeal. The art of legal rhetoric is inextricable from the theatrical space where “the site of the legal hearing and the theatrical performance appear superposed.”¹⁴⁶ While the trial described in the pages of *Trent* is a legalistic form of theatrical performance, the *Fabrica*’s theatre scene could equally be analyzed for its ability to superpose theatrical performance and the assemblage of anatomical truth.

As legal systems are supposed to analyze empirical evidence to form an argument about truth, so does the dissection scene as the frontispiece represents it. Both the legal and anatomical types of theatre seek to demarcate an empirical truth, based at its foundation on the extraction of information through various forms of violence.¹⁴⁷ The point here is to show how the theatre space represented in the *Fabrica* is a necessarily violent space, where truth is forensically extracted from the dissected corpse as an attempt to assign truth, a truth which is made concrete in the text and images of the *Fabrica* itself. Indeed, dissection might be analyzed as a type of theatrical torture which helps designate a version of truth. As Enders writes, “torture enters the scenario with its own important role to play in the transformation of hypothesis into fact.”¹⁴⁸ The concept of a fact as something normative is held in tension within the anatomical plates of the *Fabrica*. In the frontispiece, Vesalius is shown dissecting the cadaver and consequently the reader associates him with the creation of facts. This designation will be discussed in Chapter 5.

The frontispiece represents a type of theatrical classroom, or classroom theatre, where the two types of spaces are superposed, on their way toward becoming more normatively institutionalized. But it is possible to go further in defining the presence and function of violence in this type of space: “since memory is situated between the tortured process of rhetorico-dramatic invention and the performance of violence, its mental rehearsals helped to reenact violence in medieval courtrooms, classrooms and theatres.”¹⁴⁹ In the frontispiece, the pedagogical aspect of the violent dissection scene must not be dismissed or left un-emphasized. The frontispiece, after all, is meant to introduce an

¹⁴⁵ Kubiak, *Stages of Terror*, p. 28.

¹⁴⁶ Kubiak, *Stages of Terror*, p. 27.

¹⁴⁷ These violent tendencies have largely become hidden in the normalized space and rhetoric of the modern institution.

¹⁴⁸ Enders, *Medieval Theatre of Cruelty*, p. 31.

¹⁴⁹ *Ibid.*, p. 66.

anatomical textbook where dissected knowledge about the human body is displayed through text and image. Yet, the way the frontispiece and anatomical plates display this information is in no way didactic. However, this dialectic style of presentation is no less pedagogical. The images require a dialectic gaze to approach an attaching sense of meaning. The creation of this meaning takes place somewhere between invention and remembrance, with memory as dialectical intermediary. The next sections will look at this dialectical process.

3.4 Memory and the Book

The frontispiece's theatrical violence acts as a tool to stimulate and access memory. It is part of the purpose of this essay to show how the *Fabrica*'s imagery of violent theatrical process is removed from the body and memorialized in the form of a book. Memory is an important feature of this process, because theatre relies upon violent forms of remembering. According to Enders, to remember, the body must first die, and to die it must at least symbolically be tortured. The central Occidental story of Christ is a primary example of such a process, where violence is a key feature acting to trigger memory.

Partially violence and storytelling are complimentary because a violent story or image is easier to remember. This concept is thoroughly developed in Walter Ong's book *Orality and Literature*.¹⁵⁰ It might be further aligned with Aristotle's concept of catharsis¹⁵¹, which is a type of aesthetic pleasure where a spectator learns by seeing what is distasteful. Evidently, the anatomical figures of the *Fabrica* are aesthetically realized in a cathartic fashion: half dead, half alive, and violently flayed for the pleasure of the spectator. We must remember the primary function of the *Fabrica*: to act as a complete anatomy lesson, a pedagogical textbook.

In the muscle plates the cadavers stand in a landscape. It has been noted by Kemp¹⁵², Cavanagh¹⁵³ and Antoniu¹⁵⁴ that the landscape in these images is represented as a

¹⁵⁰ Walter Ong. *Orality and Literacy*. London: Methuen. 1982. p. 201.

¹⁵¹ Aristotle, *Poetics*, p. 17-75.

¹⁵² Kemp, "A Drawing for the *Fabrica*", p. 277-288.

¹⁵³ Cavanagh, "Vesalian Landscape", p. 77-79.

¹⁵⁴ Antoniu, "Fugitives in Sight", p. 1-21.

type of discontinuous panorama. The rural countryside where the muscle cadavers are represented could be read as a panorama of memory places, surrounding the dissection theatre, and containing the hidden knowledge of the muscle cadavers, those flayed actors emanating from the ground- another carnivalesque theatrical trope- in a state neither alive nor dead. The muscle cadavers, then, are implicit in the frontispiece, hidden extensions held waiting within the broken body of the book. They are bodies hidden in the memory place that is the book. In this way the book acts as a body, to be opened in a process of dissection, read and anatomized as a means of inventing that ambiguous thing called self.

A further comparative feature between the *Fabrica*'s theatricality and the theatre conceptually proposed by Camillo is the combination of memory objects that are hidden and shown. Part of Camillo's intention was to have the rows of his memory theatre filled with documents to be memorized by an observer who would stand in the center of the theatre. By combining features the single observer would ideally have access to an unlimited array of memory images. Similarly, the muscle cadavers in the *Fabrica* are arranged in a panorama, meaning they are set up for a single perspective positioned in the centre. With each muscle plate a part of the body is exposed, a layer of muscle held together on a flayed cadaver. The book's reader has access to a single muscle plate at a time, only one part of the anatomical lesson made explicit while the rest remains hidden in waiting. The book, in this way acts as a theatre in a way similar to how Camillo might have conceived it. It is the theatre of the world which is presented in the muscle plates, where the single panoramic perspective is represented in the macrocosm of a landscape. The frontispiece presents an interior/urban landscape, and the muscle cadavers present an exterior/countryside landscape. This contrast between the urban and the extra-urban might be seen as the centre and periphery of knowledge, where the urban is the source of knowledge (with the spectacle and spectators making up a community of rhetoricians organizing their thoughts around the central spectacle of the dissected body), and the extra-urban is the outlet of knowledge, where the muscle cadaver can be projected, and in some ways, stored, as in the model offered by Camillo. The storing of knowledge in the extra-urban landscape allows for it to be recalled whenever it is needed, opened and visually examined on a page of a book. Camillo's memory model is modified to serve the dimensions and limitations of the book, while maintaining the advised memory places of the theatre and landscape.

The memory object of a muscle cadaver exposing specific parts of its anatomy thus remains implicit in the archived body of the book, until the body is opened, making the memory of that specific part of the lesson explicit. The book acts as the dissected body, to be opened, and made explicit, but only one section at a time. Each muscular image is a part of a whole, just as each background landscape is a part of an entire panorama. It has been noted that the landscape panorama, when lined up, is broken, not complete. It is exactly such a rift or cleavage in the landscape that follows the model of the open human body, as it is altered by human-epistemological means to better serve memory. It is almost as if an unbroken landscape would not serve the *Fabrica*'s mnemonic devices because it would not include the dialectical charge of dischord. As Cavanagh has noted, the break in the landscape is caused by the book technology itself: the reversal of the original drawings onto plates was the cause of the break.¹⁵⁵ It is the cleavage in the body and landscape which allows for the opening of memory, an entrance which is off putting, sometimes ugly, but appropriate for the pedagogical/mnemonic devices employed by the *Fabrica* imagery as a whole.

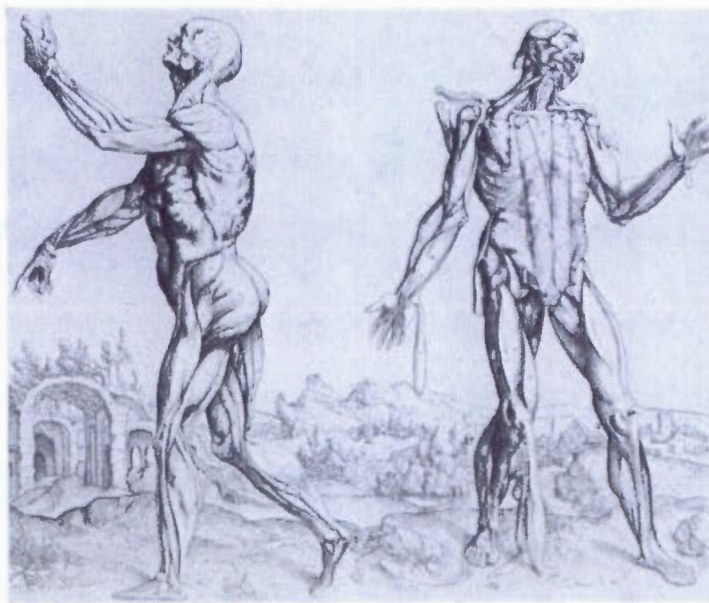


Fig. 3.5 Muscle Cadavers II and V, *De Humani Corporis Fabrica*, 1543

¹⁵⁵ Cavanagh, "Vesalian Landscape", p. 77-79.

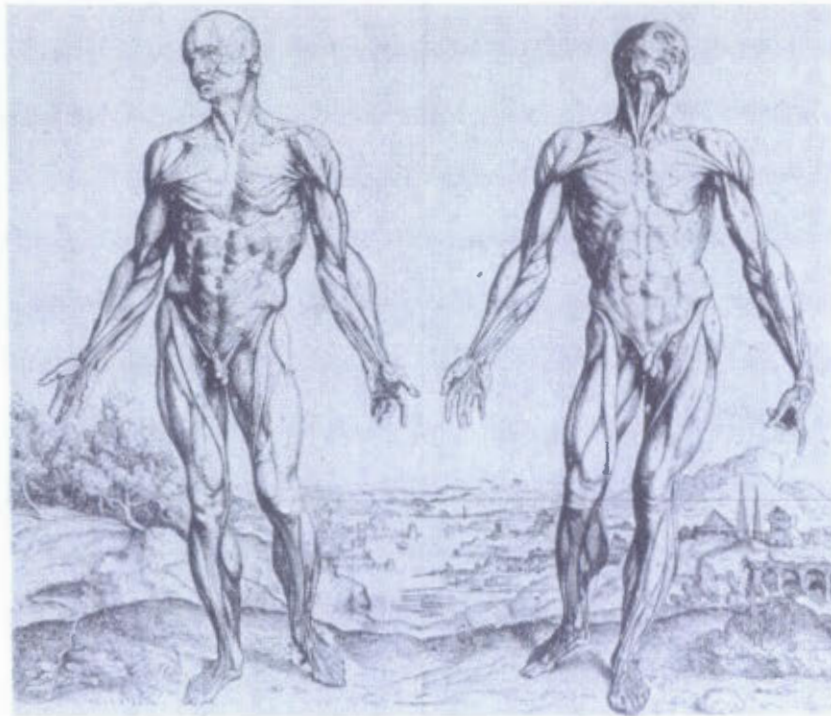


Fig. 3.6 Muscle Cadavers III and I, *De Humani Corporis Fabrica*, 1543

The theatrical element in the frontispiece is also evident in the Book II muscle cadavers in several ways. Possibly the most obvious of these are the theatrical gestures portrayed by the cadavers (Fig. 0.2, 3.5, 3.6). Another way, which is possibly less obvious but more important for an understanding between theatre and epistemology, is the narrative of flaying which takes place from the first plate to the last.

It might be argued, in fact, that violence is necessary for memory to be enacted, and that this process is well represented in the correlation between the *Fabrica*'s frontispiece and anatomical figures. The images of cadavers presented in the *Fabrica* might be seen as resurrected memories of the torture sequence represented in the frontispiece. The cadaver has died and is symbolically tortured, representing the extraction of knowledge to be represented in the following pages of anatomically remembered figures. The anatomical identity is anonymous in its universality, where the geographical regions and spatialities of the human body are named and coded. In the transfer of narrative tropes there is a transformation from the oral to the visual.

However, for the body image to reach this point, where spatial anatomical knowledge could be incorporated into the form of a coherent book, there needed to be the intermediary element of the theatre, to introduce a clarifying spatial frame. As Monika Grunberg-Droge¹⁵⁶ illuminates in her article "The Role of Illustration in Scientific Literature in Pre-Cartesian Times," early scientific imagery

[...] borrowed from the medieval theatre, with its multiple plots and locations on one undivided stage...in order to increase [the] concise and comprehensive rendering of information: it was the simultaneous representation of seemingly disconnected elements, which in combination offer a characteristically unique pattern regarding the particular scientific data under discussion.¹⁵⁷

Theatre is exposed as a means to frame schematic information within the pages of manuscript and book. Clearly the book borrowed from theatre in multiple ways, a process which takes place in the transfer of knowledge from one medium to another.

In this section I have attempted to show how the frontispiece and the anatomical images of the *Fabrica* represent resurrected memorials to the human body, dissected and made known according to the conformity of the book medium as it contains and uses theatrical spaces and tropes. While the book is able to contain and transform the other medium within its pages, those other mediums cannot help but remain present as structural traces. The theatre is highly present in the *Fabrica*'s imagery and this allegiance between the book and theatre forms a dialectic tension between invention and remembrance, and enforces a dialectic form of visual pedagogy.

3.5 Conclusion: Theatre and Spectacle

The dialectic of theatrical elements in the frontispiece leads us in a natural progression toward the presence of the spectators in the image. The dissection scene of the frontispiece might be read as a process of memorializing, where the cadaver must be tortured/dissected in order to be resurrected as a memorialized anatomical figure. This memorializing process takes place within a spatial frame of permanent and impermanent

¹⁵⁶ Monika Grunberg-Droge, "The Role of Illustration in Scientific Literature in Pre-Cartesian Times", *Systèmes de pensée précartésien*, Paris: Honoré Champion, 1998, p. 366.

architecture.

As can be seen in the Book II muscle figures, there is a represented body which is neither entirely alive nor entirely dead. It is difficult to know whether the represented body is in the process of dying, or if it is a cadaver that has been resurrected. Similarly, the cadaver Vesalius dissects in the frontispiece is dead, but at the same time, through its dissection it is in the process of being resurrected as an anatomical memory, both for the spectators present in the frontispiece, and the readers of the *Fabrica*. In this way, there is a correlation to be made between the theatrical spectacle and the book, where the spectators take part in a process of memorializing which requires both the theatre and the book in order to create a common consent of truth assignation. This will be the subject of the following chapter.

¹⁵⁷ Ibid., p. 138.

CHAPTER IV

THE SPECTATORS: A SUBJECTIVE REACTION

4.1 Introduction

Thus far I have looked at the architectural elements present in the frontispiece. These elements are important for the way they create a space, framing the image and defining the anatomical figures present within the *Fabrica*. This chapter will take a closer look at one aspect of those figures allowed for in the spatial frame of the frontispiece's theatre: the spectators.

Perhaps the most fascinating aspect of the frontispiece, the large group of male figures arranged in the theatrical seating around the central spectacle of the dissection is a converging mass of clothed bodies. This group is complex in multiple ways: belonging to different classes and social categories (barber-surgeons, professors, clergy members, and politicians), and gestural contrasts (some sit while others stand, some read while others discuss), they form groupings of interlocutors, mixed in their reactions.

The fascination caused by the spectators' mixed gestures and identities is further heightened by the subjective reaction of each individual. These reactions are a push and pull between figures, where a disparity of opinion is evident in each body posture, revealing the hybridity of the event to which they react (the dissection). Together the spectators act as a moving mass counteracting the solidity of Vesalius' figure dissecting the cadaver. The movement of these figures is excited, a frenetic impulse towards interaction. The figures gesture individually, a whole assembly of different poses ensuring each figure might be disassociated from the other. Meaning to be assessed from this movement might be

considered from several directions. Whatever the analysis, the common thread will be that the spectators' presence and mixed movements is a reaction to the dissection scene, where, significantly, there is an evident lack of movement.¹⁵⁸ The reaction of the spectators might be termed as subjectively varied: there is no unified reaction to the spectacle, but rather an individualistic understanding, a disagreement or tension in the individual spectators' bodily countenance. While certain types of figures can be identified- religious, civic, institutional- each figure has its own reaction, appearing to have a subjective emotional-rational perspective.

This chapter is an analysis of the presence of the complex mass of spectators, building an argument surrounding the presence of a Dionysian pathos relating the *Fabrica* frontispiece to the *Laocoon* sculpture and a reading public, leading to a broken continuity where subjectivity is emancipated. The subjective energy of the nascent public represented in the frontispiece in the form of the spectators has an effect on the *Fabrica* imagery as a whole, notably the muscle cadavers in Book II which appear as hybrid specters responding to the fractured vision of a book reading public.

4.2 Description

The spectators are largely made up of men climbing over each other, trying to catch a glimpse of the cadaver, while appearing to whisper or shout unknown commentaries to their nearest neighbours. Some groupings, especially those above the row closest to the cadaver, appear to remain entirely oblivious to the central spectacle, preferring to gather together and dispute intensely with furrowed brows and pointing fingers (in the upper left of the image). Those figures in the center, sticking their heads through the banisters, perhaps with a better view than the rest, watch the performance soberly, posing chins on hands, calmly making comments to their neighbours.

There are multiple dynamics among the image's gatherings of men which extend beyond the confines of a more rigid type of lesson. For example, on the bottom right a man with a hat is pushing down another younger figure below him. At the same time, as he is

¹⁵⁸ The lack of movement in the dissection will be further developed in Chapter 5.

being pushed down, this younger man reaches out toward a fully cloaked figure- the entire length of his body visible to the right of the cadaver- who, with a gesture, refuses whatever he is being asked for (Fig. 4.1, Section A). This agonistic scene, which may or may not have anything to do with the dissection, is paralleled with a similar example of grabbing and pointing figures to be seen just below the dissection table. These two quarrelers might be potentially identified as a pair of surgeons, displaced by Vesalius, who combines the roles of surgeon and physician in the performance of his dissection.¹⁵⁹ Pushed to a position below the table, they resort to disputing over the usage of a razor, held by the figure on the right. Their position directly below the dissection table highlights Vesalius' power in the image and helps reveal a general dynamic among the spectators: namely, their mimetic relation to Vesalius. Some of the spectators are outright unruly- they seem possessed by a frenetic pulsion to act out, engaging Vesalius' performance with distracted subjectivity.

As Saunders and O'Malley write in their introduction to the image, among those spectators present are "students and fellow physicians but also...the Rectors of the city and university, councilors and representatives of the nobility and the church."¹⁶⁰ Indeed, there are over fifty spectators observing Vesalius' dissection. Among these spectators are three figures wearing flowing robes, men standing near the dissection table. These are likely representations of men Vesalius held in prestige (Fig. 4.1, Section B).¹⁶¹

A common feature of this complex dynamic is that the spectators seem to confront each other in a mimetic relation to Vesalius, the central figure who is clearly posed as the master of ceremonies in the image. Their attempt to mimetically embody the role of Vesalius can be seen in the surgeons below the table but also in those figures vying for a position to see Vesalius' performance of the dissection.

¹⁵⁹ For the significance of Vesalius' combining the roles of physician and surgeon see O'Malley, *Andreas Vesalius of Brussels*, p. 480. The significance of this combination will be further discussed in Chapter 5.

¹⁶⁰ Saunders and O'Malley, *Illustrations from Vesalius*, p. 42.

¹⁶¹ O'Malley, *Vesalius of Brussels*, p. 480.

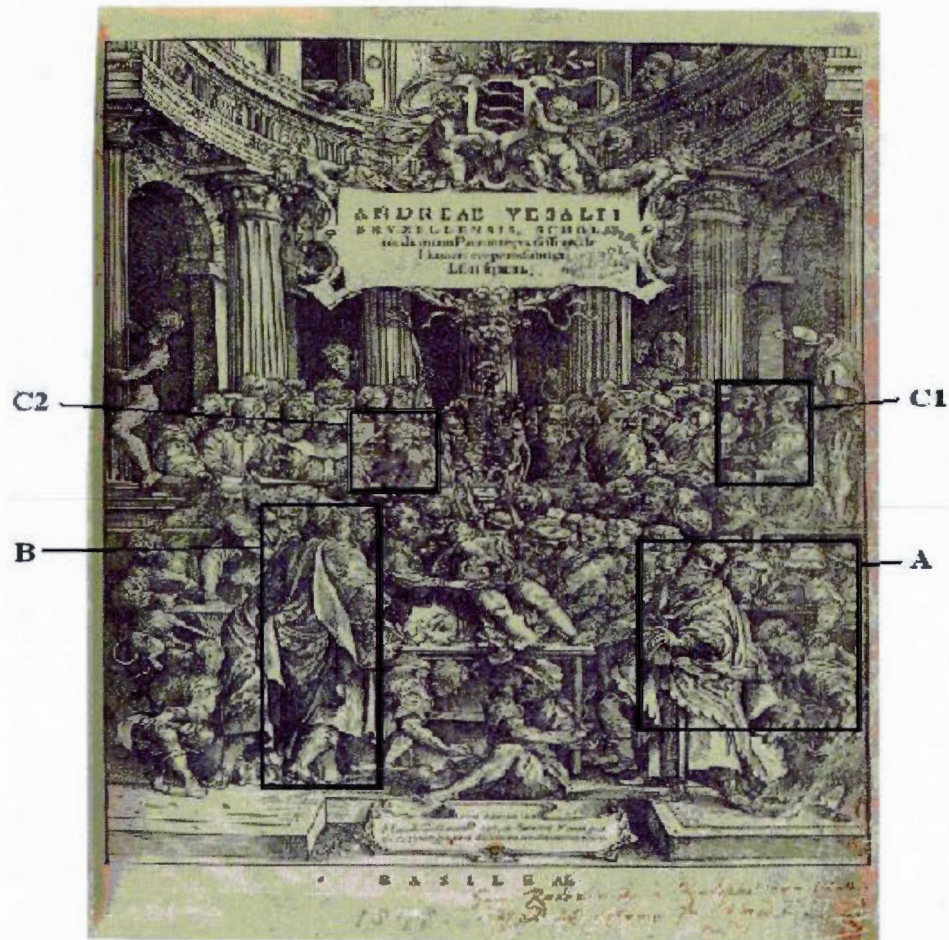


Fig. 4.1 Frontispiece Spectator Diagram, *De Humani Corporis Fabrica*, 1543

4.3 Historical and Carnavalesque Aspects

It has been documented that Vesalius himself undertook the performance of several dissections during carnival over the period of a few years in Bologna between 1540 and 1544. These public dissections took place during carnival, a time of year when the laws of the city changed. As Giovanna Ferrari illustrates,

[...] during the period of more than a hundred years between the 1405 statutes and Vesalius' examinations [...] the number of spectators had certainly increased, and their reasons for attending had become more sophisticated. No longer was the audience

composed of only twenty or thirty medical students, plus an assortment of ordinary townspeople and scholars interested in anatomy. And, almost imperceptibly, the time of year at which the public dissections took place also changed: in 1523, 1540 and 1544 they were held in January, during the carnival period.¹⁶²

It was thus specifically at the period where Vesalius came into prominence that the public dissection expanded its spectatorship beyond the specialized classes of university students and professors, becoming entrenched in the carnival period.

The consideration that the dissection represented in the frontispiece contains some realistic elements is a conclusion that might further be drawn because those spectators present in the image are not limited to university students and university professors, but rather might be identified as a varied mixture of clergy members, politicians, and members of the secular public. This is related to the carnivalesque aspect of the imagery, because during carnival the classes and types of people who would attend such an event changed.

The historical occurrence of carnivalesque dissections draws attention to the quantity of spectators present in the image. As Magali Vène writes,

À partir de la seconde moitié du XVI^e siècle, il est de plus en plus facile aux simples curieux d'accéder au savoir anatomique. Les dissections s'ouvrent à un large public et le succès rencontré conduit même l'Université à s'inscrire dans une sorte de rivalité avec le théâtre: pour ces séances payantes, annoncées par affiches très longtemps à l'avance, on conçoit de vastes salles circulaires où chacun peut commodément observer le cadavre placé sur une table centrale, illuminé par des chandelles et disséqué en grande pompe, trois ou quatre jours durant.¹⁶³

According to this historical description, the scene presented in the frontispiece might be argued as the representation of a public spectacle, providing a reason for the large number of spectators shown within the frame of the image. The intrigued expressions of the crowd lend credence to the argument that the majority of the spectators are there for the pleasure of seeing a corpse in the officially endorsed setting of the university theatre. There is an air of festivity in the frontispiece, endorsed by the theatre spectators chaotic fusion and the Dionysian head looming above them. If we look at the historical event of Vesalius' dissections, we see that several times around the year 1543 (the year of the *Fabrica's*

¹⁶² Ferrari, "Public Anatomy Lessons", p. 66.

publication) these public events took place during carnival.¹⁶⁴ It is within a theatrical-carnavalesque dynamic that the dissection scene takes place, and the dialectic dimension of the *Fabrica* imagery contains this carnivalesque temporality.

The relation between the carnivalesque element in the frontispiece and the Book II muscular images can be seen as the way the latter figures appear to have emerged from the landscape, connected to the ground, resurrected from the mutilated belly of the dissected frontispiece cadaver (Figs. 0.2, 3.5, and 3.6). In this way, the landscape serves as a theatrical stage where the resurrected body can emerge in its new form. The carnivalesque as a concept is important here in the way it connects the body to the ground. As Cynthia Klestinec¹⁶⁵ has noted, the cadavers in the muscle plates appear to be dancing, moving according to carnivalesque rhythms.

4.4 The Spectators' Reaction

A large part of the frontispiece's compositional dynamism comes from the presence of the crowd of spectators. As a group they are dynamically charged, each relating to the other, not in exact mimesis, but rather in a complex dance, which might be described as diverse, with the spectacle of dissection as the centre of relations. In Luke Wilson's analysis¹⁶⁶, the dissection scene in the center of the image directs the gazes of all those spectators around it, registering their body movements as the central source of power. He argues that the dissection is only one of multiple centers of attention, with every audience member enacting his own place in the spectacle in a circuit of causalities. This circuit of centers has the effect of distracting the eye from the central focus of Vesalius and the cadaver, thereby employing all figures present in a more democratized performance, where every body is involved, both as dissector and dissected.

The dissection can be seen as the causal moment of the entire scene and concentrates on the entire gamut of reactions caused by Vesalius and his knife, exposing parts of the female cadaver for a visual and tactile spectacle. Vesalius is clearly the central mimetic

¹⁶³ Vène, *Écorchés*, p. 16.

¹⁶⁴ Ferrari, "Public Anatomy Lessons", p. 50-106.

¹⁶⁵ Klestinec, *Theatrical Dissections*, p. 201.

figure in the image: as the figure with the most mimetic power every other figure in the image must react to his position. Yet, they do not react with cohesion; rather, their disparate reactions reveal a tension in the imagery that is challenging to define. If every individual spectator is reacting to the same event- Vesalius' dissection- why would there not be more cohesion to their reaction? Here we have an essential relativistic question, where a single object creates a multitude of subjective positions. Putting the potentially anachronistic aspect of this reading aside, there is an aspect of the image containing a familiar component of some other Italian Renaissance imagery.¹⁶⁷

Hugh Crawford is another commentator on the spectators' reaction who argues that while the spectators' presence in the frontispiece is participatory and important, "the illustration suggests Vesalius's theater of proof was not particularly efficient...[because] the audience is not united in rapt contemplation of [his] activities or of the viscera laid out before it. Indeed, the observers seem more concerned with looking at one another."¹⁶⁸ This argument, while provocative, remains unconvincing, because it does not take into consideration the option that the spectators' lack of "rapt contemplation" reveals a deeper form of theatrical reception: a form of subjectivity, where every spectator reacts differently to the same event. This form of picture making was suggested in the 1440s by Leon-Battista Alberti in his *De Pictura*.¹⁶⁹ He writes that in an image it is "nécessaire de s'appliquer à ce qu'on ne voie à aucun personnage le même geste ou la même attitude."¹⁷⁰ In this way, Alberti writes, the represented "scène saura émouvoir l'âme des spectateurs quand les homes représentés montreront avec force les mouvements d'âme qui les animent."¹⁷¹ This text had a significant effect on image making during the Italian Renaissance.

Perhaps another part of the reason for the dissymmetry in the spectators' movements might be associated with Aby Warburg's concept of *pathosformel*. This concept, useful for analyzing images¹⁷², has been interpreted by Georges Didi-Huberman in his book *L'image*

¹⁶⁶ Wilson, "William Harvey's Prelectiones", p. 62-95.

¹⁶⁷ Images containing subjective reactions to a single object/spectacle have already been mentioned in previous chapters: Fig. 3.3, Fig. 3.4, Fig. 4.2

¹⁶⁸ Crawford, "Imaging the Human Body", p. 70.

¹⁶⁹ Leon Battista Alberti, *De pictura*, Paris: Éditions Allia, 2010, p. 95

¹⁷⁰ Ibid., p. 56.

¹⁷¹ Ibid., p. 56.

¹⁷² This is perhaps especially true for images from the Italian Renaissance.

survivante.¹⁷³ According to him, *pathosformel* can be identified when figures in an image

[...] admettent le déplacement et l'antithèse pour l'entrelacer dynamiquement comme le ferait un amas de serpents... À l'eurythmie, à la symétrie et à la stricte mesure fait donc place quelque chose comme une polyrythmie complexe, un désordre apparent d'où fusent paquets dissymétriques et géométrie solitaires, battement souverains et moments de démesure.¹⁷⁴

This type of eurhythmic reaction is clearly identifiable in the frontispiece, where the spectators are engaged in a solitary confrontation with their own desire, repulsed and yet magnetically attracted by the spectacle posed before them. Didi-Huberman writes:

[...] il faut comprendre, d'autre part, qu'avec la démesure vient le dionysiaque et, avec celui-ci, le tragique... Il faut comprendre qu'avec le tragique vient le combat des êtres entre eux, le conflit des êtres en eux-mêmes, le débat intime du désir et de la douleur. Et qu'au paradigme chorégraphique vient s'enlancer, plus terrible, un paradigme agonistique.¹⁷⁵

The polyrhythmic relation of the spectators is here associated with Nietzsche's concept of the Dionysian, and this seems anachronistically justified not only by the presence of the wooden theatre but also the Dionysian stamp, located in the upper center of the frontispiece attached to the bottom of the script announcing the title. The presence of this Dionysian face hanging over the dissection scene, anchoring it with its specific energy, is vividly noticeable as a figural element outside the represented scene itself. We might look at the Dionysian mask anachronistically, through the filter of Nietzsche's *The Birth of Tragedy*,¹⁷⁶ where the Dionysian energy represents those non-plastic arts like dance, music and theatre. Clearly, the represented scene would fall into the non-plastic aesthetic of the Dionysian, while the image as a document would be considered Apollonian (the other part of Nietzsche's dichotomy). While analyzing the presence of a Dionysian mask using Nietzsche's dichotomy is anachronistic (*The Birth of Tragedy* was written at the end of the 19th century), it is of interest for us as a way of identifying the varying representational energies at play in the image.¹⁷⁷

¹⁷³ Georges Didi-Huberman, *L'image survivante*, Paris: Les Éditions de Minuit, 2002, p. 592.

¹⁷⁴ Ibid., p. 265.

¹⁷⁵ Ibid., p. 265.

¹⁷⁶ Friedrich Nietzsche, *The Birth of a Tragedy*, New York: Dover Publications, 1995.

¹⁷⁷ For a discussion of anachronism in the analysis of images see the first chapter of Georges Didi-Huberman, *Devant le temps*, Paris: Les Éditions de Minuit, 2000.

4.5 The Frontispiece and the *Laocoon*

Thus far I have established that the reactions of the spectators represent a series of different responses (effects) to the same cause (the dissection), all represented within the same temporal and spatial frame. This complex frame engages the differing perspectives of the spectators, capturing them in a contrast of varied movement. Georges Didi-Huberman, again in *L'image survivante* has made a similar analysis of the *Laocoon* sculpture: "Le *Laocoon* n'est donc en rien l'instantané d'une séquence narrative: il forme plutôt une *heuristique du temps* mouvant, un montage subtil de trois moments au moins, de trois motions pathétiques différentes."¹⁷⁸

While the artist who made the frontispiece remains questionable, H.W. Janson suggests there is a connection between Vesalius, the *Laocoon* (Fig. 4.2) and Titian¹⁷⁹. This link exists between the *Fabrica* and Titian's *Laocoon Caricature* (Fig. 1.1), where Titian caricatures the *Laocoon* by making a reference to Galen's practice of dissecting monkeys. This seemingly obscure reference is an important part of what Vesalius invented in terms of methodology: he was an early promoter of dissecting multiple human cadavers for the purposes of directly investigating human anatomy through comparison.¹⁸⁰ Titian's caricature can be seen as a criticism of those anatomists who continued to promote Galen's supreme authority (and thereby tacitly supported the dissection of animals as a stand-in for the human body) in the face of Vesalius' method of dissecting a multitude of human cadavers. That at the time of Titian's *Caricature* both the *Fabrica* and the *Laocoon* would have been well known enough to combine in a caricature is not surprising, but, as far as I know, the formal link between the frontispiece and the well known sculpture has not been made. The design of the frontispiece, especially in its representation of a response to an event, might have found inspiration in the *Laocoon's* own tension filled subjectivity. Goethe's analysis of the *Laocoon*, taken from Didi-Huberman, is perhaps the most revealing:

¹⁷⁸ Didi-Huberman, *L'image survivante*, p. 210.

¹⁷⁹ Janson, "Titian's *Laocoon Caricature*", p. 49-53.

¹⁸⁰ Vesalius' methodology will be expanded in Chapter 5.



Fig. 4.2 *The Laocöon*, first century B.C.

[...] le groupe du *Laocöon*, en plus des autres mérites qu'il possède et qui sont reconnus, constitue en même temps un modèle de symétrie et de variété, de calme et de mouvement, d'oppositions et de gradations subtiles. Tous ces éléments s'offrent conjointement au spectateur, en partie de manière sensible, en partie de manière spirituelle.¹⁸¹

Like the *Laocöon* in Goethe's analysis, the frontispiece is full of calm and movement, symmetry and variety, a balanced composition where a group of figures react to an event (in

¹⁸¹ Didi-Huberman, *L'image survivante*, p. 301.

the *Laocoon*, a snake; in the frontispiece, a dissection). The formal similarity between the *Laocoon* and the frontispiece is significant as it helps describe the interlacings of the spectators in relation to the central cause of the dissection. However, it also helps describe the contrast between the permanent and theatrical architecture on the one hand, and the movement of the spectators and the solidity of Vesalius on the other. In the following section I will show how the spectators' interlacings are related to the book technology where the frontispiece is contained.

4.6 Spectators and the Book

There is something frantic in the figural modes of the spectators, an energy of ambivalence between death, as represented in the skeleton, and desire, as represented in the naked female cadaver being dissected and the naked male figure in the upper left of the image. This ambivalence is heightened by the presence of movement among the spectators, a sense they do not know where or how to position themselves in relation to the event in which they are partaking. Many of the cloaked men are not looking at the cadaver, their gazes falling somewhere off to the side, a plethora of disjointed subjective perspectives making up the image, perhaps leading the image's viewer to his or her own discontinuous cause of ambivalence.

This may be related to one of the features of book technology: the discontinuity of turning the page within the continuity of a coherent text. Similarly, a fine example of this tension between continuity and discontinuity is found with the plates representing the Book II muscle cadavers, where a series of changing (increasingly disembodied) flayed cadavers stand in a landscape. Perhaps the most striking feature of this narrative of disembodiment is the near continuity of the landscape: when the muscle plates are lined up, the landscape appears somewhat continuous, a vast sprawl that has been possibly identified as being near Padua.¹⁸² However, as already mentioned in the previous chapter, the original book form broke up this continuity, making it disjointed and difficult to observe.

This technique of breaking up a coherent image to make it fit in a book form might

¹⁸² O'Malley, *Vesalius of Brussels*, p. 128.

be seen as a means of comparing the dissected cadaver with a dissected landscape. The landscape itself is categorized by its proximity with the human figure, but also by its representation within a book. The book, as Marshall McLuhan writes in *The Gutenberg Galaxy*¹⁸³, cuts up the reader's experience of the world, providing categorization as a technology of individual perception. Accordingly, the spectators in the frontispiece are shown to perceive the dissection as individuals somewhat disjointed from their fellow observers, each figure relating to the event in his own way.

4.7 Spectators with Books

This relationship between the spectators' reactions and book technology is further heightened by the figures holding books. Of these there are two that I can see among the crowded groupings of figures: one book is clutched by a bearded man on the right, holding a bound volume against his gut while he points across the room (Fig. 4.1, Section C1). The second example is a figure holding an open book just to the left of the skeleton: he is clearly writing or drawing, while several figures around him look over his shoulder (Fig. 4.1, Section C2). This visual presence of the book might be seen as a reference to both the author of the images and the book reading public. Those figures around the open book watch intently as the holder writes or draws what may be the frontispiece itself (or one of the anatomical plates contained within the *Fabrica*). This relating of the theatrical spectators to the book reading public further accentuates the transitional element of the frontispiece's contents, from the theatre (a public space) to the book and image (figurative spaces). In this way, the image contains the book within the theatre, just as the theatre is contained within the book. This element of microcosm/macrocosm has both a literal and figurative form. As seen in the previous chapter, while a theatre is represented in the book's frontispiece, the *Fabrica* itself might be seen to act as a theatre, unveiling the parts and sections of the human body in a narrative combining the hidden/unseen and the explicitly shown.¹⁸⁴ The anatomy of the human body- in its multifaceted intricacies- can never be fully shown or seen in a single image. The page turning technology of the book- a mutilation of sorts- allows for the entire

¹⁸³ Marshall McLuhan. *The Gutenberg Galaxy*. Toronto: University of Toronto Press. 1962. p. 293.

human body to be contained within a single volume, to be shown from a single perspective at a time, while the rest remains hidden. The spectators- both the *Fabrica*'s reader and those represented in the frontispiece- each maintain and enclose a single perspective on the intricate object at the center of the book/frontispiece: the human body as anatomized by Vesalius, the book's author.

Vesalius as guide encourages the discipline of these perspectives, by weaving them with dialectic nuance and enforcing a governing structure, a construction of memorialized parts which is unveiled in the form of an oral (rhetorical) lesson (as represented in the frontispiece) or a graphic (written or drafted) lesson (as represented in the *Fabrica*'s seven chapters).¹⁸⁵

4.8 Subjective Reactions and the Book

The spectators' reactions to Vesalius' performance are highly mixed, and what becomes clear is that each individual making up the crowd is different from the others. While their positioning is consistently differentiated, a common trait among these individuals is their invested vocal activity and their intrigued interactions. This can be seen in their gestures, the sheer quantity of their physical confrontation, and their expressions. This confrontational presence gives the impression of a multifaceted debate, where the oratorical powers of each spectator is in competition with his nearest neighbours. A similar dynamic can be seen in Raphael's *School of Athens* (Fig. 4.3), where groupings of philosophers can be seen debating unknown subjects in small groups, framed by a large Roman arch and surrounded by architecture. A difference between Raphael's painting and the frontispiece perhaps is that Raphael's painting does not have a central figure or object directing the discussion of those figures on the periphery. However, in another image, Raphael's *Disputation of the Holy Sacrament* (Fig. 4.4) there is a similar mass of discussing/subjective spectators, but in this image the host is the central figure to which all the spectators react. In this way, the spectators' subjective reactions can also be seen as a witnessing of a saintly

¹⁸⁴ This theatrical aspect might again be related to Camillo's theatre, where images would be presented in relation to each other, but not always at the same time.

¹⁸⁵ As mentioned above, this might be further related to the way anatomy lessons were organized at some 16th century universities. See O'Malley, *Vesalius of Brussels*, p. 480.

miracle, as well as a methodological demonstration of human anatomy. The spectators in this case are witnesses, in the religious sense, but also in a new, proto-scientific way. The transfer of tropes from the Christian mystery plays begins to make more sense when we consider the importance of the frontispiece's spectators as witnesses of Vesalius' pedagogical performance.

What becomes clear through a closer look at the spectators is that the frontispiece does not represent a solemn performance where all the spectators are in agreement as to what is taking place in terms of the spectacle. This appears to have been the error of at least one of those commentators who took the *Fabrica* to be a document with straight pedagogical methods, rather than containing the dialectical method the book's imagery demands.¹⁸⁶ Rather, the pedagogical framing of the *Fabrica* appears more connected to a space of public discussion, a temporality existing outside the confines of a normalized classroom setting. This lack of solemnity in the pedagogical scene relates the frontispiece to a carnivalesque temporality. As will be seen in the next chapter, the pedagogical method in the *Fabrica* utilizes carnivalesque aspects to enhance the memorability of the images. As already mentioned, Ferrari¹⁸⁷ has already associated the frontispiece with the carnival period, and more specifically with Mikhail Bakhtin's book, *Rabelais and his World*.¹⁸⁸ Bakhtin's book considers the role and presence of grotesque body elements in the oeuvre of Francois Rabelais, the 16th century French humanist. Given that both Rabelais and Vesalius were publishing in the same century, the presence of carnivalesque imagery in both oeuvres is not surprising, rather it perhaps indicates a contemporary stylistic approach to addressing the representation of the human body.

It is interesting to consider how the dissection in the frontispiece would be entirely different if it were not taking place in a theatre with the presence of spectators or if those spectators present were more unified in their reaction. As a performance, the dissection needs the spectators, and as a dialectically charged theatrical performance, the dissection requires active spectators, spectators who will react to the performance in question, either with solemnity or dissent, praise or disgust.

¹⁸⁶ Carlino, *Books of the Body*, p.266. Carlino calls the dissection scene in the frontispiece "solemn".

¹⁸⁷ Ferrari, "Public Anatomy Lessons", p. 50-106.

¹⁸⁸ Bakhtin, *Rabelais and his World*, p. 484.

4.9 Conclusion

While the spectators are placed in a large group, their reactions are represented as subjective. This group of subjective individuals has a powerful effect on the overall composition of the image, adding a public dimension that further relates the frontispiece to a carnivalesque pedagogy. As will be seen in the following chapter, the dissection spectacle is represented in such a way as to confirm the importance of the spectators' disparate subjective reactions.



Fig. 4.3 Raphael, *The School of Athens*, 1510-1511

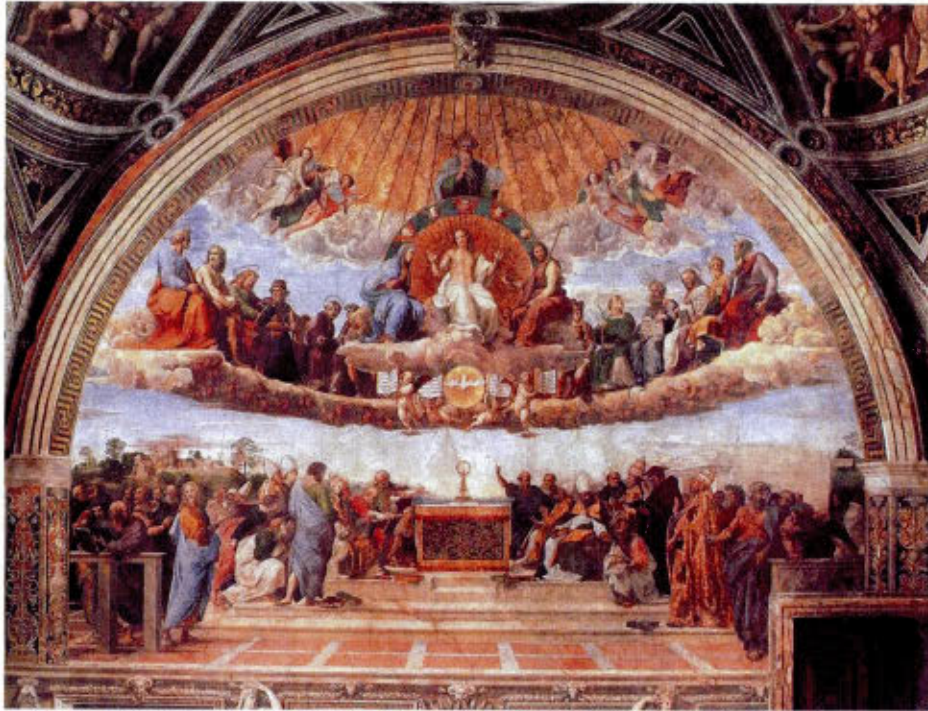


Fig 4.4 Raphael, *The Disputation of the Holy Sacrament*, 1509

CHAPTER V

SPECTACLE

5.1 Introduction

The spectacle represented at the center of the frontispiece consists of the dynamic between Vesalius and the dissected cadaver. This chapter will be about the centrality of the cadaver and its relation to those figures who surround it. The most important of these figures is clearly Vesalius, standing to the left of the cadaver and gazing toward the reader, acting as guide for the spectators in the image and the readers of the *Fabrica*.

In this chapter, the ways in which the frontispiece spectacle combines and contrasts epistemology/pedagogy and the carnivalesque are assessed. It is shown how this potential conflict in the frontispiece is complementary, creating a dialectic that serves the pedagogical function of the *Fabrica* imagery.

In the first part of this chapter, it will be shown that by positioning himself next to the dissected cadaver, Vesalius is made to be directly associated with the assignation of the anatomical truth provided by the *Fabrica*. Vesalius' version of truth is assigned authority in the image, where the anatomical facts presented are observed and reacted to both by the frontispiece's spectators and the *Fabrica*'s reader. Because Vesalius' figure in the frontispiece is represented with the most authoritative certainty, he is associated with permanent knowledge, positioned furthest from a subjective positioning.

In the second part of this chapter, it will be shown how within the frontispiece's spectacular presentation of anatomical knowledge there are elements related to the aesthetics of dramatic theatre and the carnivalesque. At the same time, with the methodical display of

the cadaver, a normative reading is setup, encouraging the displacement of the more morbid/erotic aspects of visual presentation. This contrast between the normative reading of the spectacle as a display of knowledge and those elements that are more violently theatrical (carnavalesque) is at the center of the frontispiece's dialectic.

The frontispiece's spectacle presents a contrast between an object of observation (the cadaver), its official interpreter (Vesalius), its secondary interpreters (the spectators), and the architectural framework allowing for the construction of space in the image. The combination of these elements makes up the entirety of the dissection scene. In this chapter, this dynamic will be analyzed and shown to be related to the complex rhetoric of the *Fabrica*'s violent imagery and its pedagogical function.

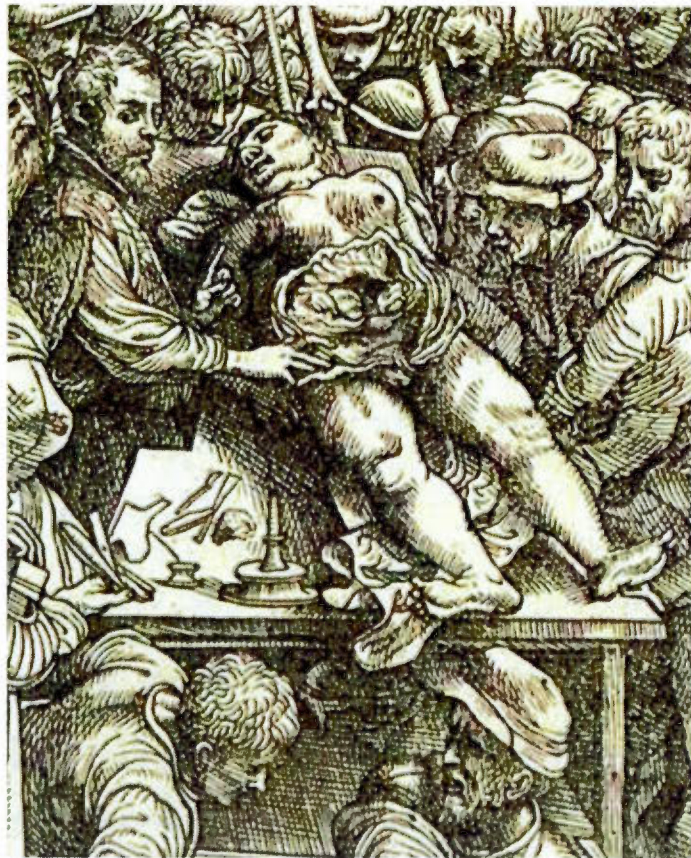


Fig. 5.1 Detail of the Dissection Scene from the Frontispiece, *De Humani Corporis*

Fabrica, 1543

5.2 The Positioning of Vesalius

The central figure of the frontispiece is the naked female cadaver being dissected by Vesalius. This central feature is a spectacle for the surrounding spectators. Vesalius is represented standing next to the female cadaver, holding a scalpel and looking calmly, likely towards the image's viewer. Vesalius' features are calm, even placid, giving his performance a sense of certainty (Fig. 5.1).

As described in Chapter 4, Vesalius is the central mimetic figure in the image, with the cadaver acting as both the source of knowledge and a displaced source of refracted lust and fear. As the central standing figure in the image, Vesalius can be seen incorporating the anatomical knowledge to be represented in the images of the *Fabrica*. Solidly standing up, with a calm expression on his face, he does not seem affected by the chaos surrounding him. He is looking outside the image, towards the *Fabrica*'s reader. His knowledge is thereby shown to transcend those figures in the crowd of spectators who are consumed by the events taking place within the image. The spectators' assumptions are represented as being held within the image itself, whereas Vesalius is consumed by firmer assumptions which link him directly to the cadaver and thereby the contents of the *Fabrica*'s lessons on human anatomy.

The figures surrounding Vesalius lack his credibility, because they remain on the outside of the performance and the inner positioning of the image, which can be related to power and knowledge. A figurative difference between Vesalius and the spectators can be seen in the way the spectators appear to be moving, while Vesalius' pose and gaze seem solid, made of stone. As already mentioned, of interest to an analysis of the frontispiece's composition is the similarity between the spectators' represented movement and the impermanence of the frontispiece's theatre architecture in comparison with the permanent monumental architecture and the stony gaze of Vesalius. This contrast is central to the frontispiece's dynamism, and seems an essential part of its composition. Both sides of this dichotomy are necessary to create a dialectically suggestive image.

The knowledgeable figure of Vesalius would be very different without the presence of those moving spectators surrounding the dissection scene. Their presence in the image adds validity to Vesalius' position as the holder of knowledge. His role in the image is to extract, interpret, present and display information from the cadaver, and his seeming lack of

movement adds certainty. The knowledge he presents in the dissection is made to seem as certain as the monumental architecture looming above.

The cadaver is the source of information and Vesalius is its interpreter. This relation between Vesalius and the cadaver is even more pronounced in his portrait (Fig. 5.2). Presented on the second page of the *Fabrica*, the portrait shows Vesalius performing a dissection on a cadaver's arm. In the frontispiece, he is also solidly standing up, with a calm expression on his face: he does not seem affected by the chaos of the spectators surrounding him. In this way, the dissection-spectacle acts as the calm at the center of a storm represented by the animated groupings of spectators in the surrounding space. Vesalius' calm poise in relation to the more disheveled movement of the spectators organizes the image in a way that suggests Vesalius' figure can be allegorically related to certainty. In this way of reading the image, the representation of Vesalius' certainty is related to a lack of movement, and the spectators' lack of certainty is related to their movement. In this sense, Vesalius' allegorical role in the image is to contain the anatomical knowledge being presented in the dissection spectacle and the pages of the *Fabrica*



Fig. 5.2 Vesalius' Portrait, *De Humani Corporis Fabrica*, 1543

5.3 Vesalius: The Designator of Truth

The representational question of truth and fact come into play through an analysis of the figurative organization of the frontispiece's spectacle becomes a problem of epistemology. By necessity this problem is related to the way the frontispiece might be read from a distanced historical perspective. As a document, positioned historiographically within a normative history of medicine, the *Fabrica* is a canonical text, but it also, from a 21st century point of view, contains mistakes concerning human anatomy.

However, in the frontispiece, Vesalius is very clearly positioned as the holder of knowledge, the displayer of anatomical facts. If we take his position in the frontispiece into context with his observational method, it is possible to analyze the positioning of Vesalius' figure as an example of what David Hume identified as an expert of aesthetic taste in his essay "De la norme du goût."¹⁸⁹ It will be seen how Hume's concept might allow a contemporary reading of the frontispiece to entertain the idea that a version of anatomical truth based on Vesalius' comparative knowledge is being presented in the image.

For Hume, the expert is someone who has experienced a certain type of object repetitively, thereby exposing him or herself to a form of comparative beauty, and gaining expertise over the type of object in question. With his or her comparative experience, the expert "ne perçoit pas seulement les beautés et les défauts de chaque partie, mais remarque le genre distinctif de chaque qualité et lui assigne la louange ou le blâme convenables."¹⁹⁰

Following the logic of Hume's concept¹⁹¹, Vesalius might be considered an expert of taste, because he had the experience of comparing the anatomies of many human cadavers¹⁹², and consequently was able to develop an observational concept of human anatomy which created his expertise. In this way, he is represented eschewing the role of those barber surgeons present below the dissection table in the frontispiece. He has combined the previously separate roles of physician (in the frontispiece of some older anatomical

¹⁸⁹ Hume, "De la norme du goût", *Les Essais Esthétiques*, Paris: Flammarion, 2000, p. 213.

¹⁹⁰ Ibid., p. 135.

¹⁹¹ While the use of Hume's concept may be an anachronism, its usefulness for understanding the comparative aspect of Vesalius' method is unrivalled.

¹⁹² Park, "Criminal and the Sainly Body", p. 1-33 and Siraisi, "Vesalius and Human Diversity", p.60-68.

textbooks, the physician is represented as presiding over the dissection¹⁹³) and surgeon (previously a role relegated to craftsmen called barber surgeons).

Furthermore, Vesalius' portrait is included (Fig 5.2), identifying him clearly as the author/inventor of the *Fabrica*. In this way we see how the representation of theatrical invention can be associated with the parallel invention of facts, and how these processes are similar, and in the case of the *Fabrica*, superposed. Even if, from our historical point of view, the *Fabrica* contains many mistakes concerning human anatomy, his book is a descriptive representation of nature, or at least the vision of nature Vesalius constructed.

The frontispiece represents multiple subjective visions of human anatomy, seen through the spectators' reactions, but also a representation of an expert's judgement of taste towards human anatomy, seen through Vesalius' position in the image. According to Hume's concept, the expert always remains subjective, but because his or her subjectivity has comparative experience of many aesthetic objects (in the frontispiece's case the object in question is the cadaver), it approaches a form of subjective certainty. Contrary to the expert, when an unexperienced observer sees this same type of object for the first time "le sentiment qui les accompagne est obscur et confus, et l'esprit est, dans une grande mesure, incapable de se prononcer quant a leurs mérites ou leurs défauts."¹⁹⁴ This lack of certainty might be applied to the way the spectators have been represented in the frontispiece, where their animated expressions denote a reaction caused by the presence of expert performance.

Equally, many anatomists of Vesalius' period¹⁹⁵, continuing to follow the consensus of classic anatomical texts such as Galen's, remained unexperienced observers of human anatomy. Largely this difference between Vesalius and other anatomists consisted of his experience of dissecting a large amount of cadavers.¹⁹⁶ By dissecting the cadavers himself, and by analysing human anatomy from its contemporary source in nature, Vesalius created an image of the human body based on his proper comparative experience, allowing

¹⁹³ Carlino, *Books of the Body*, p. 266.

¹⁹⁴ Hume, "De la norme du goût", p. 157.

¹⁹⁵ The originality of Vesalius' method has been at times exaggerated in the past. A more balanced view can be seen in Montagu, "Vesalius and the Galenists", p. 230-239.

¹⁹⁶ This aspect of Vesalius' method has been analyzed both for its violent and scientific components. See, respectively, Park, "Criminal and Saintly Body", p. 1-33 and Siraisi, "Vesalius and Human Diversity", p. 60-88.

him to forge the position of anatomical expert when many of his contemporaries continued to follow the magical regime of following classic texts. The dynamic of this epistemological methodology has been indented in the frontispiece, both in Vesalius' positioning next to the cadaver, and by his figurative contrast with the spectators.

5.4 A Question of Epistemology: The Process of Truth Making

Through Vesalius' positioning in the image he can be defined as the holder of knowledge. Continuing for a moment with Hume's concept of the expert¹⁹⁷, epistemology is presented as a social construction that requires the expert to design what is true, but it also necessitates the presence of less experienced spectators to support the facts in question. If we follow Hume's notion of the expert as an experienced subjective position, once again the importance of the spectators becomes essential to the designation of Vesalius' figure as an expert. It is the relationship between the expert and his or her community that allows for the establishment of facts, whether they are scientific or artistic.

Bruno Latour helps define the complexities of this process in similar terms, when he writes:

Les faits sont produits et représentés au laboratoire dans les écrits scientifiques, admis et autorisés par la communauté naissante des témoins. Les scientifiques sont les représentants scrupuleux des faits. Qui parle lorsqu'ils parlent? Les faits eux-mêmes, sans nul doute, mais aussi leurs portes paroles autorisés. Qui parle donc, la nature ou les hommes? Question insoluble avec laquelle la philosophie des sciences modernes va se battre pendants trois siècles.¹⁹⁸

Latour's description of the process which allows for facts to become designated as such is similar to Hume's notion of the expert, in that it is the expert who is the source of the facts which appear objective in his or her hands, while, at the same time, it is the "communauté naissante des témoins" that admits and authorizes these facts, and, consequently, without the spectators, the expert-scientist represented in the frontispiece could not be considered a source of facts. In the *Fabrica*'s frontispiece we see both aspects of this process that invents truth: in the center we have Vesalius, the holder/proclaimer of anatomical facts, and,

¹⁹⁷ Hume, "De la norme du goût", p. 213.

surrounding him, the spectators, observing, authorizing or challenging the presentation of information.

5.5 The Muscle Cadavers

As the product of Vesalius' methodology and comparative knowledge the *Fabrica* presents seven chapters in the form of a complete anatomy lesson, allowing the reader to learn about human anatomy in an organized way. At the same time, many of those images, and perhaps especially the Book II muscular cadavers (fig. 0.2), are dialectically charged with elements extending beyond a purely didactic presentation. The Book II muscular cadavers are represented on the fringe between life and death; their postures are variously grotesque, Christic, and dramatic. This way of presenting a readable version of human anatomy using stylistic elements that extend beyond what are currently considered pedagogical tools likely appears bizarre from a 21st century perspective. The frontispiece contains hints of displacement relating to a carnivalesque presentation of death/eroticism that complements the pedagogical function of the imagery.

Sealed within the decorative aspects of the muscular cadavers is the spectacle of death, the revelation of layered flesh being a metaphor for the necessity of organic decay. The draw towards the spectacle of death is well explained by Aristotle: "we enjoy looking at the most accurate representations of things in themselves we find painful to see, such as the form of the lowest animals and of corpses."¹⁹⁹ A significant part of the pleasure to be drawn from looking at Vesalius' muscular cadavers is its "accurate representation" of a human corpse. However, the anatomical accuracy of the images is indistinguishable from those aspects of muscular cadavers that are otherwise purely aesthetic in a grotesque theatrical sense. The dialectic between anatomical accuracy and the grotesque allows the *Fabrica* images to be memorable in a way that would be appealing to a reader used to the dynamics of oratory performance.

Looking at the *Fabrica's* grotesque imagery from our clinically refined perspective it is hard to understand how the carnivalesque spectacle of death might be associated with

¹⁹⁸ Latour, *Nous n'avons jamais été modernes*, p. 45.

¹⁹⁹ Aristotle, "Poetics", p. 35.

anatomy. In the conclusion to his work, *Naissance de la clinique*²⁰⁰, Michel Foucault describes the institutionalizing of the dead body into the framework of medical knowledge:

[...] perçue par rapport à la mort, la maladie devient exhaustivement lisible, ouverte sans résidu à la dissection souveraine du langage et du regard. C'est lorsque la mort s'est intégrée épistémologiquement à l'expérience médicale que la maladie a pu se détacher de la contre-nature et prendre corps dans le corps vivant des individus.²⁰¹

According to Foucault then, the dissection of the cadaver, allows for "la maladie" (and human anatomy in general) to become exhaustively "lisible"; and once death has been put on display within the medical system in which the university plays a fundamental role and the *Fabrica*'s frontispiece represents, anatomy becomes institutionally normalized. In large part this process is by necessity aesthetic, meaning, in the case of the *Fabrica*'s frontispiece, that it relies on the appeal of the death spectacle as a promising source of catharsis, the process by which a cadaver might be analyzed in order to gain knowledge.

The rhetorical effect the *Fabrica*'s frontispiece creates is a transformed vision of the human body, altered through the new method of combining accumulated knowledge with methodological prowess. In some ways, Vesalius' method is a transformation of Aristotle's concept of cathartic pleasure as presented in *Poetics*²⁰²: knowledge which is applied to create something displeasing/ugly/educative.

By representing himself as performing the dissection, Vesalius engages the spectacle of death, applying his knowledge of human anatomy to reveal the underlying texture of flesh, and thereby creating a spectacle. This puts Vesalius directly in the figurative position of creator in both his portrait (Fig. 5.2) and the frontispiece (Fig. 5.1). The spectators observing his creation thus engage the Aristotelian concept of catharsis in its combined medical/poetic fount.

The tear in the center of the frontispiece cadaver's abdomen can be seen as a metaphorical entrance to the book. The frontispiece itself contains a peephole through which it is possible to access the dissected and anatomized information displayed in the *Fabrica*'s seven chapters. It is an entrance to the body, thus utilizing both the architectural and flesh

²⁰⁰ Michel Foucault, *Philosophie: anthologie*, Paris: Gallimard, 2004, p. 940.

²⁰¹ Ibid., p. 216.

derivatives of the word *Fabrica*.

The lower stratum and renewal are presented in Mikhail Bakhtin's *Rabelais and his World*²⁰³ as essential theatrical elements of the folk grotesque. Bakhtin identifies and defines this type of imagery as carnivalesque. One of the aesthetic qualities of the carnivalesque, as defined by Bakhtin, is its ability to reveal the inner truth hidden behind a veneer of corrupted truism. In this way carnivalesque imagery has the ability to renew what was previously stagnant. The opening in the female cadaver in the *Fabrica* frontispiece contains just this type of suggestion of energy renewal. By going into the cadaver- if we follow the imagistic narrative- the image of the body is renewed/reborn as the Book II muscular cadavers. This cycle is both theatrical and grotesque. The images of the Book II muscular cadavers might be analyzed as the presentation of the knowledge Vesalius attained through his study of the cadaver of the title page scene. The muscle men present a human figure in a landscape. The human figure is stripped of its skin, and the muscular flesh is exposed. Upon closer inspection each muscle has been given a letter or number, a categorical anatomization. In Fig. 0.3, the arms are slightly raised, and the head is arched back and to one side. It might be assumed the figure is in pain because of the open mouth it displays. Yet, for it to be in pain, the represented figure would have to be alive. The dichotomy of death and life is important for understanding the rhetoric of these pedagogical images. Bakhtin writes:

The grotesque image reflects a phenomenon in transformation, an as yet unfinished metamorphosis, of death and birth, growth and becoming. The relation to time is one determining trait of the grotesque image. The other indispensable trait is ambivalence. For in this image we find both poles of transformation, the old and the new, the dying and the procreating, the beginning and the end of the metamorphosis.²⁰⁴

The new truth of Vesalius' imagery might only emerge as a truth in the abnormal temporality of the grotesque carnival that is distant from any normalized truth. The significant ambivalence of the imagery is related to its memorability and the transfer of the theatrical and oratory mediums to the book.

²⁰² Aristotle, "Poetics", p. 17-75.

²⁰³ Bakhtin, *Rabelais and his World*, p. 484.

²⁰⁴ Ibid., p. 24.

5.6 Christic Skeleton

Other elements of the grotesque death spectacle are strategically present within the frontispiece. Near the dissection is a displaced reference to this secondary cathartic spectacle: the skeleton looming above Vesalius and the cadaver. Its position is unrealistic, almost phantasmagoric, not belonging to the temporal integrity of the dissection spectacle. As a figure not entirely belonging- displaced in the image- the skeleton is a symbol that might be associated with anatomy, but also with death. While the spectators watch the dissection, supposedly intent on learning the secrets of human anatomy, the skeleton looms above, illuminating a hidden appeal of the spectacle: the pleasure involved in observing death. For, the spectacle of death is also at the center of the image- in the form of the cadaver- while at the same time being peremptorily masked by the university theatre, the presence of learned spectators, and the promise of proto-scientific knowledge provided by a pedagogue who has dissected a large number of cadavers.

The figurative presence of the skeleton is one of the most unsettling of displaced elements in the image. About the skeleton, Carlino writes, "on the one hand, it may be there to stress the importance of osteology for the anatomist."²⁰⁵ Though this analysis is functional, it is not entirely convincing. For one thing, the position of the skeleton directly in the center of the image lends it great allegorical importance. O'Malley writes "the skeleton seems rather large, but whether it was that of an unusually large person, or whether the size is the fault of the artist or a means of drawing attention to the importance of osteology, is unknown."²⁰⁶ The skeleton's position is displaced in the image, as it is not spatially consistent with the "realistic" portrayal of the spectacle. Rather, its large and looming presence adds credence to notions about death and rebirth- while the cadaver is horizontally lifeless on the dissection table, the skeleton is vertically raised up, placed in a lively state. Like the anatomical figures which are to follow in the *Fabrica*, the skeleton is both alive and dead, a resurrected corpse which draws analyses with the nature of knowledge and the body of Christ.

²⁰⁵ Carlino, "Fondements humanistes", p. 47.

²⁰⁶ O'Malley, *Vesalius of Brussels*, p. 143.

5.7 Death and Birth

Regarding the process of epistemological theatricality, Enders writes “when violent imagery anticipates violent performance, brutality is also accompanied by creativity, death by birth, or- as is so common in a Christological context- death by rebirth.”²⁰⁷ It is not difficult to see that the frontispiece presents just such a death, to be followed by a “rebirth” in the form of the anatomical images where, at least in the muscle cadavers, corpses are presented standing with their flesh peeling, exemplifying the living dead recreation of resurrected knowledge.

While the dissection itself is an extraction of knowledge, the spectators’ reactions exemplify the impurity of such an observation. The open female cadaver is an example of what Georges Bataille in *L'érotisme*²⁰⁸ called impure nudity, a concept developed upon by Georges Didi-Huberman in *Ouvrir Venus*.²⁰⁹ Didi-Huberman’s contention is that represented nudity is never pure, never lacking in violent/erotic intention. The observers/spectators of Vesalius’ spectacle, while supposedly watching a purely epistemological dissection, are also participating in the opening of a female cadaver. The female cadaver changes as a natural object because it is gazed upon by the male spectators.

In *L'érotisme*²¹⁰ Bataille suggests the sight or presence of a cadaver is both repelling and attractive, and this reaction is related to the possibility of a contagion among the living. This contagion might be related to a chapter in Antonin Artaud’s *Le Théâtre et son double*²¹¹ on the plague in relation to the theatre, where the spectators ‘catch’ what is taking place within a spectacle, like the plague. The spectators are complicit in the performance, active as witnesses without which the dissection scene and with it the frontispiece would not be the same.

As Didi-Huberman writes “rien n’est plus *apparaissant* que la nudité au milieu du monde social.”²¹² The naked body appears even more naked when presented in contrast with the large group of clothed men. The clothed men, in this sense, help reveal the nakedness of

²⁰⁷ Enders, *Medieval Theatre of Cruelty*, p. 66.

²⁰⁸ Georges Bataille, *L'érotisme*, Paris: Les Éditions de Minuit, 1961, p. 284.

²⁰⁹ Georges Didi-Huberman, *Ouvrir Venus*. Paris: Gallimard. 1999, p. 149.

²¹⁰ Bataille, *L'érotisme*, p. 51.

²¹¹ Antonin Artaud, *Le Théâtre et son double*, Paris: Gallimard, 2007.

the female cadaver, making its presence ever more prominent in its visibility. Once again there is a contrasting relationship between what is hidden and what is visible, a fluctuation acting to indicate what needs to be seen and what should temporarily remain hidden.

5.8 The Naked Body

Following the lead of Didi-Huberman in *Ouvrir Vénus*²¹³, I would like to expose how a rigid historical analysis of the frontispiece would disallow the violent-cathartic elements of the image from being pedagogically related. Didi-Huberman's example is the normative analysis of the nude figure that avoids all possible elements of violence or eroticism. In *Ouvrir Vénus*, he analyzes the evident presence of eroticism and violence in certain paintings by Sandro Botticelli. There is a tendency, he argues, to explain nudity in images as pure and without any connotations of eroticism or violence. This avoidance, performed by some art historians, does not allow the nudity of the subject to be complex. It is Didi-Huberman's method to open imagery, disregarding the accumulated affects of normative anachronism, and thereby allowing the imagery to be complex

Similarly, in the *Fabrica* frontispiece, a normative analysis of the dissected cadaver might be reduced to a presentation of knowledge, an epistemological performance framed by the book. While this is surely central to the frontispiece's rhetorical objective, it would be very difficult, for example, to avoid the subject of the cadaver's gender in comparison with the spectators who are reacting to her presence, some of them "gazing" at her, as writers of feminist criticism might offer.²¹⁴ The presence of erotic interest in the image is evident to the extent that it would be very difficult to deny its role in the image.

Perhaps the difference between eroticism, violence and epistemological spectacle is not so important; perhaps, in fact, such categories have only been invented to support a schematic approach to analyzing objects. If we look at the concept of catharsis as developed in Aristotle's *Poetics*²¹⁵ - a multifaceted concept if ever there was one - there is a fundamental

²¹² Didi-Huberman, *Ouvrir Vénus*, p. 86.

²¹³ Didi-Huberman, *Ouvrir Vénus*, p. 149.

²¹⁴ The possibility for a feminist reading of the frontispiece is evident: I have consciously omitted one in order to avoid overtly moralizing tones.

²¹⁵ Aristotle, "Poetics", p. 17-75.

blurring of the lines between pleasure, epistemology and violence.

The cadaver is the spectacle for which the spectators have grouped together. Their postures and gazes react directly to her naked body, and their animated expressions reveal an emotional reaction- perhaps a mixture of fear, disgust, and epistemological intrigue: emotions which might be associated with a type of aesthetic pleasure Aristotle identifies as part of his definition of tragedy that: "is a representation of an action that is worth serious attention, complete in itself, and of some amplitude...[presented] by means of pity and fear bringing about the purgation of such emotions."²¹⁶ The dissection might easily be identified with an action worth "serious attention" which brings the spectator towards an understanding of human anatomy "by means of pity and fear." Their reaction is therefore very much theatrical, but also an effect relating to a cause.

Following the general trend of Walter Ong²¹⁷ and Michel Foucault's²¹⁸ work on the history of ideas, institutional (the university, the hospital) and technological (the book) changes have caused those elements of epistemological performance promoting "fear and pity" to become hidden or masked. This is certainly true of later anatomical imagery (Fig. 5.3) where the figures have become purposefully flat and one-sided to better serve a 'pure' pedagogical objective.

In the frontispiece this dialectic between pleasure, violence and epistemology is still clearly displayed in the image's figural organization. It is my argument that this very presence of violence and desire allows the frontispiece to maintain a dialectical tension. Furthermore, the dialectical-allegorical representation and organization of the image might be said to be synonymous with its epistemological/pedagogical purpose.

5. 9 Oratory, Rhetoric and the Book

It is important to remember that the rhetorical function of the *Fabrica* imagery is primarily pedagogical, meaning: the book is meant to teach about human anatomy. In this sense, it may at first appear odd that the *Fabrica* imagery is dialectically complex. Would not a more

²¹⁶ Ibid., p. 39.

²¹⁷ Ong, *Orality and Literacy*. p. 201.

²¹⁸ Foucault, *Anthologie*, p. 940.

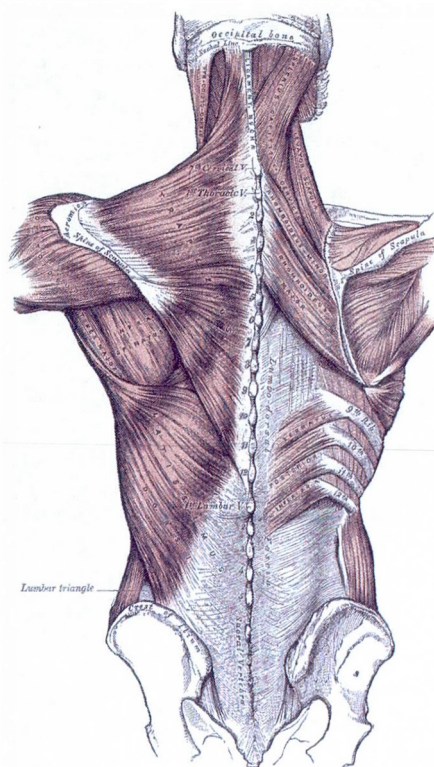


Fig 5.3 Back Muscles from Henry Gray's *Anatomy*, 1918

“solemn”²¹⁹ representation of an anatomical performance be more appropriate for a pedagogical textbook? Carlino mistakenly uses the word to describe the scene in the frontispiece. Ferrari’s comment that the actual dissection would have been “even less educational”²²⁰ seems to rely on a similar assumption. However, this is a negative form of anachronism: to assume education must be an entirely serious affair. This casting of the image as falsely “solemn” or lacking an “educational” appeal seems to limit these writers’ willingness to see the dissection spectacle as utilizing a different form of educational method which might be aligned with the mnemonics of oratory-rhetoric.

While it is certainly true that a more didactic form of anatomical imagery is used in

²¹⁹ Carlino, *Books of the Body*, p. 266.

²²⁰ Ferrari, “Public Anatomy Lessons”, p. 50-106.

later anatomical textbooks²²¹, the *Fabrica* imagery's inclusion of carnivalesque elements is part of the pedagogical method implicit in the images. To say that the carnivalesque cannot be educational, or is less educational, relies upon a more modern vision of what education means. This form of anachronism relies upon assumptions limiting any potential reading of an image. The violent/erotic aspect of the imagery is an essential part of the *Fabrica*'s pedagogical method. Whether the embodiment of violent knowledge in imagery and book form is otherwise necessary is debatable. Harcourt argues that the classical sculptural form of the muscular cadavers is a way to hide or mask the violent side of the imagery.²²² This does not seem convincing considering the violent aspect remains explicitly visible in the image. More likely is that the violent aspect is enhanced to make the imagery memorable and consequently pedagogical: to be attaching in the mind, searing in the memory. This methodological aspect of the imagery is a remnant of oratory and oral forms of presentation. In an essay on Vesalius and oratory performance, Nancy Siraisi²²³ has shown that oratory skills were an important part of Renaissance medicine, and Vesalius, as has been shown, was very much part of the humanist movement that would have been reading Cicero as part of their oratory training.

According to Jody Enders, Cicero shows that with the mnemotechnics of oratory performance

[...] the object of remembrance must first die in order to be brought back to life; that the metaphorically encrypted and subsequently resurrected dead are moving, talking, images or simulacra; that mnemotechnics renders present those who are absent or dead; and that it does so by painting their picture and by giving them voice.²²⁴

Similarly, the cadaver Vesalius dissects in the frontispiece has died, and at the same time is

²²¹ The didactic aspect of later anatomical imagery can be partially analyzed as having eschewed those elements of the imagery which are related to oral devices. Namely, these are educational mnemonic devices which allow the viewer/listener/reader to better remember what is being taught. Often (and this is certainly the case in the *Fabrica*), these devices are related to violent or cathartic imagery (see Ong, *Orality and Literacy*, p. 201). Later anatomical textbooks have abandoned these devices (because the book form does not require them in order to be remembered) and their imagery is more didactically pedagogical in a way a modern viewer might recognize.

²²² Harcourt, "Vesalius and Antique Sculpture", p. 28-61.

²²³ Siraisi, *Oratory and Rhetoric*, p. 191-211.

²²⁴ Enders, *Medieval Theatre of Cruelty*, p. 72.

being brought back to life to be exposed in the seven books of the *Fabrica*'s anatomy lesson. The process of bringing the cadaver back to life is the dissection itself. Through the dissection performance, with its large group of witnesses/spectators Vesalius creates an image of the human body through the identification of its parts. This type of memorial knowledge is further made concrete as an image in book form. Furthermore, Vesalius gives voice to a new image of the human body through a violent process of dissection, concretizing the idea that memory is created through violence.

In a similar way, the muscle figures from Book II of the *Fabrica* are aestheticized, both living and dead, and violently dismembered. They are resurrected memorials to the victim of Vesalius' scalpel. The body must be dismembered in order to be remembered. Quite startlingly, the anatomical images are alive in their artistic rendering, flesh peeling from their bodies displaying different parts of the human anatomy.

5.10 Conclusion

The imagery of the *Fabrica* absorbs this aspect of oratory: if a speech is to be memorable it cannot be flat, it must absorb the senses. The book as a solid long lasting object does not require this sensuality, its longevity removes the need for violence in its pages. But the *Fabrica* appears early enough after the invention of the book to absorb this violent quality directly from the oratory lesson, seven books covering seven parts of the human body, and all of these beginning with the imaginative reconstruction of a public anatomy lesson, the frontispiece marking the pages to follow with its stamped Dionysian seal.

CONCLUSION

The frontispiece introduces the seven chapters of the *Fabrica*, acting as the entrance to an anatomy lesson embodied in the form of a book. The image does not represent a solemn didactic ceremony, but rather figuratively forces an interaction between violence and epistemology. In this paper, the violent aspect of the imagery has been analyzed as an important part of the *Fabrica*'s rhetorical method. It has both been associated with Bakhtin's carnivalesque and Aristotle's catharsis. I have tried to show how violence is an important part of the epistemological research contained in the *Fabrica* and that in the representation of its imagery, violence has been exaggerated in order to increase the mnemonic force of the imagery.

By separating my analysis into four aspects of the *Fabrica* frontispiece (monumental architecture, theatre architecture, the spectators and the spectacle) I have aimed to show how each of these elements relate to the themes of violence, memory and knowledge, creating an image whose message is filled with compositional contrasts. A central compositional dynamic in the frontispiece can be seen in the way the monumental architecture is contrasted with theatrical architecture in a similar way as Vesalius is contrasted with the spectators in that the former are permanent (or are represented as such) while the latter are ephemeral. Both sides of this duality are essential to the power of the image.

As Ashley Montagu²²⁵ and Max Fisch²²⁶ have noted, it is not that Vesalius' *Fabrica* breaks with Galenic anatomy so much as it invents an imagery where the body, more than ever, is embodied in the book and image. In this way, as in others, the *Fabrica* represents a rebirth of rhetoric in the Ciceronian sense, where it is the images that hold the oratory power.

²²⁵ Montagu, "Vesalius and the Galenists", p. 230-239.

²²⁶ Fisch, "Vesalius and his Book". p. 208-221.

The images in the *Fabrica* speak, the visual part of rhetorical power soaking up the auditory, thereby becoming dialectical.

We can see this taking place in the frontispiece, where the spectators are visibly raucous in their noise making, while Vesalius looks on silently. In this sense, Vesalius is in time with the visual rhetoric of the *Fabrica* while the spectators remain medieval, reliant upon auditory clamor. What is clear in the frontispiece is that Vesalius, as he is represented, is showing, rather than verbally describing. It is this heightened reliance on the visual that soaks up the rhetorical power of the other senses.

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