The “Spindle-Shanked Vesalius”
Simulating Dissection in The Anatomia Humani Corporis
by
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ABSTRACT
THE “SPINDLE-SHANKED VESALIUS”
SIMULATING DISSECTION IN THE ANATOMIA HUMANI CORPORIS

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The Dutch anatomical atlas the Anatomia humani corporis (1685) has continuously been dismissed in medico-historical discourse as only having aesthetic value. Much of the existing literature that examines the Anatomia concludes that as a result of author and anatomist Govard Bidloo’s shortcomings in his descriptive text and poor reputation among his contemporaries, the atlas offers little contribution to the development of early modern anatomy. This thesis examines the atlas’s history of dismissal and seeks to recuperate it by contextualizing the atlas’s design and purpose within Dutch sociocultural discourse, specifically with regards to attitudes towards death, the female gender, and the Mennonite faith. I argue that the Anatomia’s significance in medical discourse lies in its adaptation of Dutch cultural attitudes to produce the first attempt at objectively simulating the dissection process in anatomical study, ultimately providing future anatomists with a sound reference in the absence of a cadaver.
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Introduction

In 1685 Govard Bidloo’s anatomical atlas *Anatomia humani corporis centum & quinque tabulis, per artificiosiss. G. de Lairesse ad vivum delineatis, demonstrata, veterum recentiorumque inventis explicata plurimesque, hactenus non detectis, illustrata* was published in Amsterdam by a printing partnership formed by the widow of printer Joannes van Someren, the widow of printer Joannes van Dyk, the printer Theodore Boom, and the heirs of Dirk Boom.¹ The atlas featured 105 of the largest copperplate engravings of anatomy ever produced, designed by the Flemish artist Gerard de Lairesse (1641-1711), and accompanied by a purely descriptive Latin text written by the anatomist and originator of the atlas, Govard Bidloo (1649-1713). Bidloo intended that the *Anatomia* supersede Andreas Vesalius’ *De Humani Corporis Fabrica Libri Septum* (1543), still considered the authoritative anatomical text during this period.² The *Anatomia* featured a purely descriptive text, and more objective illustration of the human body in the process of dissection than previously seen before. However, Bidloo’s intentions for his atlas never came to fruition. Considered authorities on the Western medical illustrative tradition, K.B. Roberts and J.D.W. Tomlinson praise the great aesthetic value of the illustrations in the

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¹ Bidloo has been referred to interchangeably as Govard or Govert in medical history. For the remainder of this thesis, Bidloo’s atlas will be referred to solely as the *Anatomia* for the sake of concision. Two copies of the atlas are in the Thomas Fisher Rare Book Library at the University of Toronto, one of which is digitized and accessible through the Library website. Govard Bidloo, *Anatomia humani corporis centum & quinque tabulis, per artificiosiss. G. de Lairesse ad vivum delineatis, demonstrata, veterum recentiorumque inventis explicata plurimesque, hactenus non detectis, illustrata* (Amsterdam: for the widow of Joannes van Someren, the heirs of Joannes van Dyk, Henry Boom and widow of Theodore Boom, 1685).

² Andreas Vesalius’s atlas will be referred to henceforth as the *Fabrica*. The Thomas Fisher Rare Book Library at the University of Toronto also holds a copy of the 1555 edition of Vesalius’s *Fabrica*. Andreas Vesalius, *De Humani Corporis Fabrica Libri Septem* (Basel: Johannes Oporinus, 1543). Govard Bidloo, “Auctor Lectori S.P.D.,” in *Anatomia humani corporis centum & quinque tabulis, per artificiosiss. G. de Lairesse ad vivum delineatis, demonstrata, veterum recentiorumque inventis explicata plurimesque, hactenus non detectis, illustrata* (Amsterdam: for the widow of Joannes van Someren, the heirs of Joannes van Dyk, Henry Boom and widow of Theodore Boom, 1685), n.p.
Anatomia but dismiss the idea that the text might have had any meaningful influence in early modern medical discourse. The same opinion is found throughout the history of medical bibliography, dating back to the earliest efforts to define the study as a distinct genre in the works of Albrecht von Haller (1708-1777), James Atkinson (1759-1839) and Johann Ludwig Choulant (1791-1861).

The curious conundrum that motivated my research on this anatomical atlas is that, while the Anatomia has consistently been held in high regard for its aesthetic value by modern and contemporary scholars of early modern anatomy, it has always been assumed that the atlas had no real influence on the development of seventeenth and eighteenth centuries medical discourse. Yet, in a field of study where observation and visual experience have, since Vesalius, been deemed the primary method of learning and engagement, the very aesthetic value of the Anatomia should have automatically inferred its value in early modern medical discourse. While some contemporary research used the Anatomia as an ancillary object of study in relation to the more popular publications by C.B. Albinus (1700-1752), Hermaan Boerhaave (1668-1738) and Frederik Ruysch (1638-1731) and in relation to the plagiarism scandal of the English anatomist William Cowper (1666-1709), the Anatomia has yet to be studied in depth as a primary text in

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4 Albrecht von Haller, Bibliotheca Anatomica. Qua Scripta ad Anatomen et Physiologiam Facientia a Rerum Initias Recensentur (Zurich: 1778); James Atkinson, Medical Bibliography, A. and B (London, John Churchill, 1834); and Choulant, History and Bibliography of Anatomic Illustration.
order to recuperate its status in medical history. Scholars have not examined the rationale behind its relatively poor reception in medical discourse, instead relying on the critical responses of Bidloo’s direct competitors and on incomplete citations in early medical bibliographies from the works of John Bell (1763-1820), among other eighteenth-century anatomists, to justify their refusal to reassess the Anatomia’s value. While the Anatomia was rejected in early modern medical discourse for being outlandish and vulgar, a disorganized mess of illustrations littered with fanciful, inaccurate and appalling images, the entire atlas, or the images themselves, were reprinted on several occasions throughout the eighteenth century in the Dutch Republic and England.

In this thesis, I will identify and examine the reasons for the Anatomia’s dismissal in medical discourse, and seek to recuperate its significance, by properly locating it within early modern Dutch cultural discourse. By doing this, the Anatomia’s role and impact on anatomical study as the unique product of a particularized cultural discourse will be revealed. By adapting and employing uniquely Dutch cultural attitudes towards death, the female gender, and religion within the Anatomia, Govard Bidloo and the artist Gerard de Lairesse produced an anatomical

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atlas that initiated a departure from the standard Vesalian mode of anatomical study and representation, and signified a transition to a more modern, objective mode of representation. This new mode emphasized the importance of witnessing as an authoritative method of learning, sensorial experience, and the physical performance of dissection. Interestingly, the *Anatomia* presented a hybrid of these two styles; illustrative and didactic; with visual characteristics drawn from the Vesalian tradition and adapted into Bidloo’s new style. While the *Anatomia* did not completely erase the old traditions of anatomical representation, I believe that Bidloo’s new approach negotiated outdated modes of medical illustrative discourse to align more precisely with Dutch cultural attitudes towards death, gender and religion, in order to establish a new ontological approach in the creation of anatomical atlases. This new approach placed primary importance in the status of the cadaver as the practical subject and object of anatomical discourse. Additionally, I will argue that the various opinions of the aesthetic value of the *Anatomia* highlight its transitionary nature.

Tracing the atlas’s critical reception throughout the early modern period to the present, and then correlating those critical responses to Dutch cultural attitudes towards the body provides an excellent opportunity to justify the creative decisions of Bidloo and de Lairesse in their production of the *Anatomia*. Ultimately, by repositioning the atlas within early modern sociocultural discourse instead of solely within early modern medical discourse, the significance of the *Anatomia* as an advanced product of its time will be revealed over the course of this thesis. Departing from old Vesalian modes of representation to simulate the practice of dissection in an atlas, the *Anatomia* not only reintroduced the cadaver into medical illustration, thereby synthesizing the subject and object of anatomy, but also elevated the status of the female body by representing female cadavers as unrelated to studies of female reproductive physiology. Finally,
the *Anatomia* simulated the intricate processes of dissection through notions of witness and lived experience to provide students of anatomy with reliable instruction material in the absence of access to cadavers. Such a mode of representation was not popularly employed again until the end of the eighteenth century by the Scottish anatomists John and Andrew Bell.

In Chapter One, I will examine the critical reception of the *Anatomia* within the bibliography of medical illustration from the late eighteenth century up to the authoritative work of Roberts and Tomlinson. Identifying how the initial rejection of Bidloo’s *Anatomia* was perpetuated in the critical discourse reveals how modern biases towards historical medical discourse attempted to homogenize Bidloo’s book by dismissing all early ontological outliers as medically insignificant. The rejuvenated interest in anatomical discourse that arose at the end of the twentieth century, in response to the advent of new technologies and new attitudes towards what constituted “art,” allowed medical historians and art historians to further engage with objects like the *Anatomia.* Examining a series of art exhibitions that took place throughout the 1990s in the United Kingdom, the United States and Canada that featured Bidloo’s atlas reveals that, while new attitudes regarding the cultural and historical value of early modern anatomical

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7 Anatomical atlases like Vesalius’s *Fabrica* were frequently referenced and used by artists; so much so, that the Dutch artist Jacob van der Gracht created the *Anatomie der witerlijke deelen van het menschelijke ligchaam, ten dienste van Schilders, Beeldhouwers en Plaatsnijders door Jacob van der Gracht*, published by van der Gracht in 1634. The text contains 15 folio copperplates representing the musculature and skeletal structure of the human body, after the designs for Vesalius’s *Fabrica*. De Lairesse references this atlas in his own discussion on the benefits of studying human anatomy in artistic design in Gerard de Lairesse, *Grondlegginge Ter Teekenkonst, Zynde een korte en zeekere weg om door middel van de Geometrie of Meetkunde, de Teeken-konst volkomen te leeren* (Amsterdam: By de Ergenaamen van Willem de Coup, op ‘tRokkin, by de Valbrug, 1701), 57. Lyckle de Vries speaks of de Lairesse’s preference in Lyckle de Vries, “Theatre as the Realization of De Lairesse’s Ideals,” in *Gerard de Lairesse: An Artist between Stage and Studio* (Amsterdam: Amsterdam Univ. Press, 1998), 174. While anatomical illustration was considered complementary to artistic design, its status as an artistic genre wasn’t explored much until the 1990s in publications such as James Elkins, “Art History and Images That Are Not Art,” *The Art Bulletin* 77, no. 4 (1995): 553-571.
objects and art were developing, the Anatomia was still primarily included to reinforce its long-confirmed aesthetic value. Modern scholars have adapted new attitudes to the Anatomia, but continue to minimize the significance of the work, acknowledging only that it defies the once homogenized history of early modern medical discourse. Engagement with the broader cultural and medical implications of early modern anatomical practice, critical responses to the mind/body, subject/object relations and other issues in anatomical discourse by Jonathan Sawday, Katherine Park, Harold J. Cook, Francis Barker and others, are useful for situating the atlas among other products of early modern anatomy. Critical theory, as it applies to the body, is complementary to these historical studies, as are discussions of power relations, as posited by Michel Foucault. Foucault’s process of determining how power is exercised to construct identity seeks to identify how power operates in “concrete and historical frameworks.” His process is ultimately reductive in its attempt to define identities through the restrictive nature of power and control and requires cautionary engagement. Instead of solely relying on Foucault, I will employ Barker and Elizabeth Grosz’s concept of subjectivity, which acknowledges the layers of

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subjection that are impressed upon the “surface” of a model.\textsuperscript{11} Less common, but equally relevant, is the application of feminist theory, abject theory, and notions of performativity in the study of anatomical practice and display. The work of Judith Butler, Grosz and Julia Kristeva, among others is pertinent to exploring the culturally unique phenomenon of anatomical practice.\textsuperscript{12}

In Chapter Two, I examine the novel depiction of death that Bidloo introduced with his decision to represent the subject of anatomy as an inanimate cadaver undergoing the process of dissection, rather than the upright, animated, classical bodies of the Vesalian tradition. Initiating the discussion with an examination of where and how Bidloo obtained his objects of analysis offers interesting insights into the systemic belief of a “body shortage” that has often been, wrongly, perpetuated throughout medical history.\textsuperscript{13} My examination of the connection between dissection and the criminal corpse is complemented with research on the early modern Dutch criminal justice system performed by Pieter Spierenburg, Florike Egmond, Nancy Shield Kollman and Anuradha Gobin.\textsuperscript{14} Clarifying misinformation regarding access to cadavers and the

\textsuperscript{11} Elizabeth Grosz, \textit{Volatile Bodies: Toward a Corporeal Feminism} (United States of America, Allen & Unwin, 1994), vii.
\textsuperscript{13} While body shortages were common in British anatomical study throughout the early modern period, authors have had a tendency to ignore the geographic specificity of such shortages. For example, see A.M. Lassek, \textit{Human Dissection: Its Drama and Struggle} (Springfield: Charles C. Thomas, 1958), 6; de Moulin, “The Age of Enlightenment,” 117-118; and Annett Mooij, “Teaching and Research,” \textit{Doctors of Amsterdam: Patient Care, Medical Training and Research (1650-2000)}, Trans. Beverly Jackson (Amsterdam: Amsterdam Univ. Press, 2002), 76.
\textsuperscript{14} Pieter Spierenburg, \textit{The Spectacle of Suffering, Executions and the evolution of repression: from a preindustrial metropolis to the European experience} (Cambridge: Cambridge Univ.)
assumption of a chronic shortage of bodies perpetuated in much of the literature, the analysis of Bidloo’s activities provides some interesting revelations about the impacts of favouritism, rivalry and reputation on access to bodies for study.

Identifying the ways in which Bidloo’s Anatomia departs from the old mode of representation standardized by Vesalius, and his justification for this departure, offers an excellent introduction into the significance that the atlas had in the development of early modern anatomical illustration, and its negative reception in contemporary medical circles. In a study so often limited by a lack of access to cadavers, Bidloo and de Lairesse’s eyewitness style presented the process of dissection, making cadavers accessible to the general reader. Ruysch’s criticisms of Bidloo’s depiction of anatomized bodies as gruesome and dead cadavers prompts further comparison between the two modes of representation and how death was framed. This analysis will reveal how the subject of anatomical study, the cadaver, was distanced, or abjected, in anatomical illustration, and how Bidloo’s representation of the dissection process renegotiated the status of the cadaver in medical illustration. Kristeva argues in Powers of Horror: An Essay on Abjection that “abjection is a vital and determinative process in the formation of the subject,” whereby the “experience of abjection both endangers and protects the individual: endangers in that it threatens the boundaries of the self and also reminds us of our animal origins, and protects

us because we are able to expel the abject through various means.”15 Using Kristeva’s theories on abjection and its functions, I will argue that Ruysch’s effort to ruin Bidloo’s reputation by presenting the Anatomia as repulsive and morbid is not only a reaction to Bidloo’s renegotiation of the abject status of cadavers in anatomical study, but also Ruysch’s attempt to damage Bidloo’s reputation by associating his atlas with reactions associated with the abject.

Seeking further justification for Bidloo’s decision to represent the subject of anatomy as a cadaver, I turn to the treatment of death and the human body in Dutch culture, specifically with respect to the popular and radical philosophies of the French-born René Descartes (1596-1650) and Baruch Spinoza (1632-1677).16 Death was a popular subject in Dutch genre painting of the Baroque period. I will examine various paintings and sketches of Jan de Baen, Rembrandt van Rijn and Anthonie van Borssom in order to provide insight into how death was perceived in a variety of cultural phenomena. By tracing the development of Bidloo’s new mode of representation through medical and cultural discourse, I will propose that the presence of cadavers in the Anatomia does not express cultural anxieties towards dissection, as many historians have argued. Instead, this inclusion addresses early modern medical anxieties regarding the impact of separating the object of anatomical study from the subject. Additionally, it allows for the practical relationship between the student of anatomy and the cadaver to

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15 Rina Arya efficiently summarizes the main arguments brought forth by Kristeva in Arya, Rina, Abjection and Representation from Julia Kristeva, Powers of Horror.
continue, providing a virtual experience of the process of dissection. Employing already well-established displays of death, decay and dissection in artistic, political and literary culture, Bidloo attempted to reintroduce the body back into a discourse from which it had been essentially absent. While the reaction triggered today by flipping through the pages of the *Anatomia* is often characterized by shock, disgust, and discomfort, were the readers of the seventeenth century as abhorred by the display of death as today’s?

In Chapter Three, I examine how the depiction of female bodies within the *Anatomia* in particular, controversially represented in illustrations unrelated to female reproductive physiology, was the cause for much of Ruysch’s dismay. As with the common claim of “systemic body shortages,” female subjects of study are often assumed to have been generally unavailable for dissection. Given the relatively few depictions of women’s bodies, this might appear to be true, however examining the demographics of the female population, the frequency of references towards female subjects in anatomical writings, and the presence of several female bodies in Bidloo’s *Anatomia* indicate that, at least in Amsterdam, female bodies may have been more available and more widely used in dissection than has been previously thought. Ruysch was vehemently opposed to Bidloo’s inclusion of female anatomy, more specifically Bidloo’s decision to represent the external appearance of female genitalia in plates that were unrelated to female reproductive anatomy. Ruysch’s moral qualms—he considered Bidloo’s illustrations “immoral” and “lascivious”—motivates an analysis of how Bidloo’s representation of female anatomy differed from standards found in both medical discourse and more widely in Dutch culture.¹⁷ Bidloo’s willingness to objectively represent the reality of the female body beyond the

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¹⁷ The contrast between Bidloo’s inclusion and representation of female anatomy in comparison to standard representations will be explored with the assistance of the research published in Antoaneta Ciobanu, “En-Gendering Exemplarity in Early Modern Anatomical Illustration and
context of reproductive physiology requires an examination of how the female gender was defined in Dutch culture, and the role that women played in society. Did changing definitions of the female gender through the developments in reproductive physiology and the role of women in Dutch culture influence the increased visibility of female cadavers in the Anatomia? As well, the issues of morality and honour that preoccupied Ruysch indicate that Bidloo’s illustrations were easily misinterpreted as images of titillation. Examining the potential for pornographic subtexts to arise in the Anatomia, and any efforts to mitigate that problem performed by Bidloo in the text, I will posit that, while the anatomist did willingly present the female pudenda on the periphery of several illustrations, he desexualized them by objectively representing a more accurate subject of anatomy, unbiased regarding sex, as the witness would see it. The performance of dissection involved manipulating sheets and drapery, skin, fatty tissue


and muscle on the body to reveal the subject. This process involved all of the peripheral parts still attached to the body; the legs and arms, hands and feet, head and neck and female and male genitalia. Ultimately, I believe that Bidloo’s decision to include female cadavers in illustrations unrelated to reproductive physiology was informed by developments in Dutch culture in which the role and status of women was changing, allowing them more liberties and a more balanced position in society. To aid this endeavour, the changing status of women will be traced through literature produced at the time, women’s engagement with cultural and economic spheres, and more general trends in the visual display of the female gender.

Rina Kneoff, in “Moral Lessons of Perfection: A Comparison of Mennonite and Calvinist Motives in the Anatomical Atlases of Bidloo and Albinus,” correlates Bidloo’s decision to represent the subject of anatomy as a “suffering” and “tortured” corpse to the “Mennonite fascination for martyrs stories of torture and suffering.” In Chapter Four, using her research as an entry point, the Anatomia will be compared to the stories and illustrations of Thieleman van Brught’s 1685 edition of The Bloody Theatre, or Martyrs Mirror of the Defenseless Christians Who Baptised Only Upon Confession of Faith, and Who Suffered and Died for the Testimony of Jesus, Their Savior, From the Time of Christ to the Year A.D. 1660, in order to reveal how

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religious didacticism influenced Bidloo’s intended purpose for the *Anatomia*.

Here, I propose that the methodology presented in the *Anatomia* was not the direct result of Bidloo’s own religious beliefs in scripting human dissection to perform as the suffering and torture of Anabaptist martyrs, as Rina Kneoff believes, but rather an appropriation of the didactic methods of witnessing and performing the act of dissection, and the sensorial experience employed in Anabaptist theology. Drawing from Ernst Hemm, Samme Zijlstra, Jo Spaans and Troy Osborne’s research on religious tolerance and the Mennonite faith in seventeenth-century Dutch culture, I demonstrate how Mennonite didacticism correlated with Bidloo’s anatomical method. Here, the work produced by Sarah Covington, Jeremy Bergen and Keith Sprunger on van Braght’s the *Martyrs Mirror* will be primarily referenced in my comparison of the modes of representation and methods of disseminating information employed within the *Martyrs Mirror* and Bidloo’s *Anatomia*. Examining the witness’s relation to the cadaver through the lens of Foucauldian

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power relations, I identify how Bidloo’s efforts in reintroducing the physical body (within the limits of the illustrated page) back into anatomical illustration disrupts the anatomized body’s traditional subjection to the forces of the sovereign, the bourgeois gaze and the scientific gaze.24 The disruption of this act of subjection, which traditionally rendered the physical subject of anatomy absent from the process of studying anatomy, was changed by employing the methods of witness, living experience and the creation of a newly defined objective body. This chapter ends with a correlation drawn between Angela Vanhaelen’s arguments regarding the intended hybridity of paintings of Protestant church interiors and Bidloo’s illustrations.25 Using Vanhaelen’s method of identifying the transitional and hybrid nature of Protestant church paintings, I will identify and refute any qualms regarding Bidloo’s inclusion of “old” allegorical or symbolic material unrelated to the physical process of dissection and argue that Bidloo’s atlas performs in a similar manner to these paintings. Borrowing from old modes of representation in anatomical study, while still being influenced by these Mennonite emphases on witness, living and sensorial experiences, Bidloo produced an atlas that respected and applied old modes of representation alongside a newly developed illustrative ontology to change the discipline and provide sound access to cadavers (through the eyewitness recordings of Bidloo and de Lairesse) for students of anatomy who had no access otherwise.


24 Barker’s analysis of Rembrandt’s The Anatomy Lesson of Dr. Nicolaas Tulp provides an excellent method for examining how the anatomized body was subjected to different powers, forming layers of meaning. Barker, “Into the Vault,” 65-102.

Before examining the story behind the critical dismissal of the *Anatomia* in modern medical literature, the important players must be introduced. While Bidloo and Ruysch are the main characters of interest with regard to the initial controversy over the reception of the *Anatomia*, the artist who designed the illustrations for the atlas under Bidloo’s supervision cannot be forgotten. After all, much of the *Anatomia*’s reputation as one of the most aesthetically valuable atlases of the early modern period is based on the quality of the 105 copperplate engravings made by the Dutch painter and painting theorist, Gerard de Lairesse. Regarded throughout art historical study as the “Dutch Poussin,” de Lairesse was the leading artist, alongside Johannes Vermeer (1632-1675), of the Dutch Republic after the death of Rembrandt van Rijn (1606-1669). Born in 1641 in Liege, De Lairesse initially received artistic training from his father and, later, the Baroque painter Bertholet Flemalle (1614-1675). As early as 1665, De Lairesse made the acquaintance of the Amsterdam art dealer Gerrit van Uylenburgh and moved to Amsterdam, where he became acquainted with Rembrandt. Lyckle De Vries notes that De Lairesse’s transition into the Amsterdam art market came at an excellent time, as the death of Rembrandt in 1669, paired with a growing preference in the market for French classicism, replaced “Dutch virtues of frugality, diligence, and Protestant piety,” with a desire for luxury and more “frivolous” lifestyles.

During his stay in Amsterdam, De Lairesse was commissioned by Willem III of Orange (1650-1702), Stadholder of the Dutch Republic and later King of England after the Glorious Revolution, to paint his portrait, as well as a series of stately classical works for his palace in The

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Hague. In the 1670s, De Lairesse was deeply involved with the Dutch literary society *Nil Volentibus Arduum*, founded in Amsterdam in 1669 to practice and promote French classical style in the Dutch theatre.\(^{28}\) Beginning in 1676, the society’s weekly meetings were held in De Lairesse’s house.\(^{29}\) Working alongside *Nil Volentibus Arduum* and the city theatre, De Lairesse was responsible for designing and creating three stage sets. It is very likely that his involvement with the society brought him into contact with Bidloo, who was a member of the society and heavily involved in the Amsterdam theatre; Bidloo was responsible for translating the first opera performed in the Dutch Republic, and had written various popular plays performed at the theatre during the time he worked on producing the *Anatomia*.\(^{30}\) After the publication of the anatomical atlas in 1685, De Lairesse continued to paint and produce prints in the French classical style until he lost his sight in 1690.\(^{31}\) Though he no longer painted, De Lairesse continued to engage with art on a theoretical level, publishing two large treatises on art theory; *Grondlegginge ter Teckenkonst* in 1701, and *Het Groot Schilderboek* in 1707.\(^{32}\) His preference for the French classical style is obvious in both treatises as he continuously made a point to criticize “traditional” Dutch art of his period for its “vulgar” subject matter, contemporary context and

\(^{28}\) In English, the literary society was called *Nothing is Impossible for Those Willing*.  
\(^{29}\) De Vries, “De Lairesse’s Place in Dutch Painting,” 7.  
\(^{31}\) Simon Schama introduced the notion during an examination of Rembrandt’s 1665 portrait of De Lairesse that the artist very likely suffered from Congenital Syphilis a sexual transmitted disease passed down to an infant through an infected mother. The symptoms of congenital syphilis that are present within Rembrandt’s portrait are the beginnings of a “saddle nose,” a relative protruding jaw, a distinct forehead, and youthful appearance indicative of stunted growth. Simon Schama, *Rembrandt’s Eyes* (New York: Alfred A. Knopf, 1999), 696.  
\(^{32}\) Translated in English, de Lairesse’s 1701 treatise is titled *Foundations of Drawing*, and his 1707 treatise is titled *The Great Book of Painting*. 

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lack of decorum. It is perplexing that De Lairesse’s style and opinions were not fully exercised in the illustrations he made for the Anatomia, as they appear to be an anomaly in his artistic oeuvre.

Although De Lairesse’s illustrations received much praise in medical bibliographies, and in more recent art historical publications, similar attention has not been paid to the textual component of the atlas provided by the anatomist Bidloo. Born in 1649 to Govard Bidloo and his wife Maria Lambertz in Amsterdam, the foundational text on any form of biography for Bidloo, compiled by Fenwick Beekman, observes that little can be said about Bidloo’s youth aside from his interest in literature and theatre. In 1670, Beekman notes that Bidloo became

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34 Unfortunately, in the process of art historical development, and more specifically the efforts made to define a singular Dutch Golden Age art style over the span of the nineteenth and twentieth centuries, de Lairesse was dismissed in favor of Rembrandt and Vermeer. By defining the Dutch Golden Age as a period of realism in art from 1610 until roughly 1670, de Lairesse’s considerable reputation among his contemporaries was lost in translation, until the efforts of authors such as Lyckle de Vries in the late twentieth century sought to recuperate his impact on Dutch art history. Wilhelm Martin, a German-Dutch historian and director of the Mauritshuis in the Hague; Wilhelm von Bode, a German art historian living at the end of the nineteenth century; and H. E. van Gelder, a Dutch historian in the twentieth century who wrote a general history of the Netherlands in the 1950s, and more recently, Jonathan Israel, are notable contributors to Dutch history and art history who believed the phasing out of Dutch realism after the 1670s indicated the demise of Dutch visual culture. See Wilhelm Martin, De Hollandsche schilderkunst in de zeventiende eeuw, 2 volumes (Amsterdam: J. M. Meulenhoff, 1935-1936); Wilhelm von Bode, Studien zur Geschichte der holländischen Malerei (Braunschweig: F. Vieweg and Son, 1883); H. E. van Gelder, Guide to Dutch Art: Architecture, Painting, Graphic Arts, Sculpture, Applied Arts, volume 3 (The Hague: Minister of Education, Arts and Sciences, 1961); Jonathan Israel, The Dutch Republic: Its Rise, Its Greatness and Fall (Oxford: Clarendon Press, 1995).

35 Choulant, History of Bibliography of Anatomic Illustration, 251; Roberts, Tomlinson, “Govard Bidloo,” 310; and Atkinson, Medical Bibliography, A. and B, 279.

36 The information provided regarding Bidloo’s parentage is conflicting in each source. His father, Govard Bidloo was said to have been a milliner, a pharmacist, and even a hatter by...
apprenticed to the surgeon Frederik Ruysch, however, it is equally likely that he was apprenticed to the hospital physician of the Civic Hospital in Amsterdam, Bonaventura van Dortmont (1633-1710) and only received instruction under Ruysch in the form of weekly lectures at the Waag (Weigh House), the headquarters for the Amsterdam Surgeons’ Guild. In 1682, he enrolled at the University of Franeker to obtain the degree of “Medicinae Doctoris & Chirurgi” after completing the required amount of training from the Surgeons Guild in Amsterdam under Ruysch and hosting his own private anatomy lessons at his home.

In 1685, potentially years after the illustrations for his atlas had been completed - since he was noted to have “shown them off” at any opportunity he had—Bidloo’s publishers released the Anatomia. After the immediate success of the atlas in heightening Bidloo’s reputation, he was appointed to a professorial position in the Hague in 1688. During his occupation as lecturer of anatomy for the Surgeon’s Guild in The Hague, Bidloo became acquainted with Prince Willem III of Orange, Stadholder of the Dutch Republic. With the aid of Willem III, Bidloo was assigned the position of Superintendent General of all doctors, apothecaries, and surgeons of the Dutch civil and military hospitals. He was later appointed head of all hospitals in England, following

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multiple sources. His brother was Lambert Bidloo, another notable author and poet in Dutch history. Beekman, “Bidloo and Cowper, Anatomists,” 113.
39 After a theatre conflict between Bidloo and several members of Nil Volentibus Arduum, a popular art dealer, and a lawyer led to his arrest and near imprisonment, Willem III rescued the anatomist, excused him of any charges and appointed him as Superintendent General to end any efforts to seize Bidloo. Rina Kneoff, “Sex in Public: On the Spectacle of Female Anatomy in Amsterdam around 1700,” Europäische Zeitschrift für Feministische Geschichtswissenschaft 23, no. 1 (2012): 53. Luuc Kooijmans, writing on Frederik Ruysch noted that “Bidloo, with his ‘wild expression and hollow, sunken cheeks,’ was described as ‘a hawk with a well honed beak and chin,’ a man who often ‘betrayed his God and his friends,’ a scoundrel who as ‘as wayward as the wind.’” Kooijmans’ and others’ opinions of Bidloo are shaped heavily by Ruysch’s
the Glorious Revolution and instatement of Willem III as King of England. In 1690, working with the original publishers of the first edition of the *Anatomia*, Bidloo published a Dutch translation of the atlas, *Ontleding des Menschelyken Lichaams*. Later, prompted by Willem III, now William III, Bidloo was elected Professor of Medicine at the University of Leiden in 1694, a position he held until his death in 1713. Unfortunately, his efforts as a doctor, surgeon and lecturer were “stretched thin” as he was called upon by William III to care for his failing health at the end of 1695 until the king’s passing in 1702. During this period Bidloo was largely absent from his position at Leiden, neglecting his duties to the University, the Civic Hospital, and City as a surgeon and lecturer. Bidloo’s lack of dedication to a singular objective, his relentless social climbing, and his disagreeable temperament are generally what he is remembered for. Indeed, Roberts and Tomlinson even note that he was so disliked that no one offered to speak at his funeral.

There is one final character who is crucial to the story of the reception of the *Anatomia* and to its subsequent reputation. Frederik Ruysch, who remains one of the most significant figures in Dutch medical history, was appointed as *praelector* of anatomy in 1666 to the Amsterdam Surgeon’s Guild and, beginning in 1668, became a professor of anatomy and botany at the *Athenaeum Illustre*. Responsible for the training of surgeons in weekly lectures hosted...
by the Amsterdam Surgeon’s Guild, the training and examination of midwives in the *Athenaeum Illustre*, and given the honour of performing the annual public dissections at the Amsterdam anatomical theatre, Ruysch was one of the most active anatomists in Amsterdam at the end of the seventeenth century. By 1667, Ruysch was hosting annual public dissections at the anatomy theatre in Amsterdam, which he advertised in the popular newspaper the *Oprechte Haelemsche Courant*. He is best remembered for his large commercial anatomical collection, and more notable curiosities, the entire collection of which was later purchased by Czar Peter the Great during his second visit to Amsterdam for 30,000 guilders.

Ruysch was not only Bidloo’s teacher, but an immediate, if not his main, competitor. After the *Ontleding* was published, and a year after Bidloo’s appointment at the University of Leiden, Ruysch published the first edition in a collection of medical letters called the *Epistolae anatomicae*, within which his first published criticisms of Bidloo’s atlas appeared. Luuc Kooijmans observed that the author of almost every letter Ruysch published in the *Epistolae* had found errors in and offered criticisms of Bidloo’s publications, and that Ruysch remarked on

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43 The collection featured a series of dioramas that used the skeletons of infants and children, flora, and fauna to create imaginative and delightful *momento mori* scenes. The remaining prints of these displays are often fixated upon in contemporary research to highlight the unique and bizarre method of display that Ruysch pursued, however in reality they reflected but a small percentage of the larger collection. Jeroen Salman, “The Battle of Medical Books: Publishing Strategies and the Medical Market in the Dutch Republic (1650-1750),” in *Books in Motion in Early Modern Europe: Beyond Production, Circulation and Consumption*, ed. Daniel Bellingradt et. Al. (Basingstoke: Palgrave Macmillan, 2017), 183, 190; Kooijmans, “Established and Envied,” 71.


45 In art historical studies, the role and impact of competition and rivalry is explored by Rona Goffen, who examines the impacts of rivalry and competition in Italian Renaissance art production in Rona Goffen, *Renaissance Rivals: Micheangelo, Leonardo, Raphael, Titian* (New Haven: Yale Univ. Press, 2004).
these in his own replies. In 1695, during a dissection, Ruysch demonstrated the inaccuracy of Bidloo’s depiction of the structures of the heart. Over the following year, the two exchanged criticisms back and forth between Ruysch’s published letters, Bidloo’s poetic endeavors and Ruysch’s public demonstrations, within which he continuously criticized Bidloo his efforts in the *Anatomia*. In 1696, Bidloo responded to Ruysch’s criticisms “in a rude and caustic manner” in a pamphlet entitled ‘*Vindiciae Quarundam Delineationum Anatomicarum Contra Ineptas Animadversiones Fred. Ruyschii*.’ In this, Bidloo addressed the criticisms of Ruysch, and offered his own response of Ruysch’s abilities; he argued that the illustrations Ruysch attacked were successes that Ruysch was unable to carry out himself; and that he was criticizing Bidloo for striving to make progress in the anatomical field. He added that Ruysch sought to slow that progress, using a static wax method; in fact, he claimed that Ruysch was incapable of being taught progress. Reflecting on Ruysch’s relationship with Bidloo, James Atkinson notes that:

> This old Ruysch was a formidable competitor and not to be so easily extinguished as a common rush-light, or farthing candle. So we may not much doubt that Bidloo, with all his splendor as an anatomist, had not been famous in his day, for an overabundance of milk of human kindness…

The squabble between these two anatomists indicates a much larger trend within the medical field in the seventeenth century, a time when medical professionals were highly competitive, and often quarreled publicly in an attempt to surpass their competitors in popularity. Kneoff notes

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that the conflict between Bidloo and Ruysch efficiently demonstrates how controversies were
“battled” out in the medical profession:

It shows the demonstration was far from being a quiet affair with anatomists respectfully
gazing at and working on a corpse. On the contrary: anatomists shouted at each other, they held organs in each other’s faces, and were incredibly rude in calling each other
names. It would happen that in the heat of the debate they waved organs at each other,
bones, and tissue about.51

Ruysch’s long established reputation in Amsterdam likely ensured that his opinion against
Bidloo held, effectively dismissing the atlas from medical history. Academics have unfortunately
only further perpetuated Ruysch’s criticisms, failing to consider how the atlas’s reception may
indicate a more heterogenous narrative, a narrative of the history of anatomical atlases that
involved frequent conflict between anatomists, multiple approaches to medical study informed
by cultural differences, and anatomists working against and with each other to achieve the
highest reputations in medical practice, thus ensuring the legacy of their work. To trace the
virtual dismissal of the Anatomia in medical history, I will begin by examining the reputation of
Bidloo’s atlas in the period immediately after Ruysch’s very public attempts to ruin his rival’s
reputation.

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51 Rina Kneoff, “Dutch Anatomy and Clinical Medicine in 17th-Century Europe,” European
Chapter One

The “Spindle-Shanked Vesalius”: Bidloo and the Anatomia

Much of the scholarship on Bidloo’s Anatomia has been adversely affected by the lingering effects of a “reputation war” among the fiercely competitive Amsterdam anatomists. Early modern reviews of the atlas identify multiple medical errors in the text and images, and direct more personal slander towards Bidloo. Tracking the reputation of the Anatomia from its immediate reception through the nineteenth and twentieth centuries and into contemporary research on early modern Dutch medical practice, reveals exactly how these initial reviews of the atlas perpetuated damaging biases. In this analysis of the literature, I will demonstrate how the negative bias towards the quality and significance of the Anatomia in medical discourse has restricted any further engagement with the atlas itself. The emphasis on the faults of the atlas and its author has obscured the importance the Anatomia had as new kind of medical text, one that moved beyond the euphemistic depictions of the walking dead to a more clinical, objective picture of the art and process of dissection.

One of the earliest published reviews on the Anatomia was written by Francisci Willughbeii and published in Philosophical Transactions just after the atlas’s initial publication in 1685. Willughbeii’s review is brief, demonstrating more concern for the quality and beauty of the illustration and their “demonstrative” properties. Bidloo’s descriptive text is hardly mentioned, given that he did not engage with any medical “controversies” that contributed to the

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52 Philosophical Transactions was the major journal for scientific publications in England, run within the Royal Society, with which many Dutch anatomists and physicians had close relations. Francisci Willughbeii, “Account of Two Books,” Philosophical Transactions 15 (1685), 1309.
development of anatomical study.\footnote{Compared to other reviews published in Philosophical Transactions, which could be multiple pages of praise, Willughbeii’s review of the Anatomia is infinitesimal. Reviews of later works published by Bidloo, such as Christiani a Steenvelt dissertation, de Ulcere verminoso ad. Clarissimum virum Godefridum, written by Jordan Luchmans in 1697, thoroughly details Bidloo’s process regarding the treatment of Mary Bulte who had broken her leg above her ankle, a wound from which flies developed from. Progressing through Bidloo’s method of observation and arguments regarding the origin of these flies and their relation to ulcerous wounds, Luchmans’ review emphasizes the value of this contribution, unlike Willughbeii’s review of the Anatomia. Jordan Luchmans, “Christiani a Steenvelt dissertation, de Ulcere verminoso ad. Clarissimum virum Godefridum Bidloo. Lugd. Bat. apud Jordanum Luchmans. 1697, in 40. Pag. 24.” Philosophical Transactions 22 (1700-1701), 570-571.} In this, the review appears to focus more on the contributions of the artist de Lairesse than the anatomist.

Much of the dispute between Bidloo and Ruysch throughout the 1690s involved mocking each other in weekly lectures and public dissections, however the majority of Ruysch’s criticisms referenced in medical bibliography and contemporary literature are detailed in “Antwoort van Fredrik Ruysch, Op het Boekje van Govert Bidloo, Het welk hy den naam van Verdediging gegeven heeft,” published in Alle de Ontleed-, Genees-, en Heelkundige Werken van Fredrik Ruysch.\footnote{The pamphlet’s English title is “Reply from Frederik Ruysch, On the Book of Govert Bidloo, which he gave the name of Defense,” and is published within the larger work, All of the Dissection, Medicine, and Surgery Works by Frederik Ruysch This compilation of Ruysch’s major publications was published posthumously. This edition of his works is the most commonly referenced across literature on the Dutch anatomist, including the work of Rina Kneoff, Luuc Kooijmans, Julie Hansen, Dániel Margócsy and Raphael Cuir, among others. This text will henceforth be referred to as Alle Werken. Frederik Ruysch, “Antwoort van Fredrik Ruysch, Op het Boekje van Govert Bidloo, Het welk hy den naam van Verdediging gegeven heeft,” Alle de Ontleed-, Genees-, en Heelkundige Werken van Frederik Ruysch (Amsterdam, 1744), 439-483; Luuc Kooijmans, “Rivals,” 233.} Although most of the pamphlet addressed Bidloo’s criticisms of Ruysch’s understanding of the structure of various glands throughout the body, Ruysch continuously criticized Bidloo’s “eyewitness” and vulgar approach to anatomy.\footnote{Ruysch, “Antwoort van Fredrik Ruysch,” 439-483.} Ruysch even called the illustrations in the Anatomia figments of imagination, giving the idealistic illustrations more
credit than “eyewitness” depictions based on their adherence to established and proven principles regarding the structure of the body.\textsuperscript{56} Ruysch uses his tract to criticize Bidloo’s pomposity, calling him “a man, shameless, who is disgraceful, scandalous and without honour, shameless and mischievous, frivolous, dirty, lascivious, a moral cancer, an utter enemy of peace and learning.”\textsuperscript{57} Between slandering Bidloo’s reputation, and declaring the quality of his work so poor that Ruysch would use the pages of the \textit{Anatomia} to wipe his rear after defecating, Ruysch defended his own reputation with references to authoritative sources, his own observations and those of his colleagues.\textsuperscript{58} Historians Rina Kneoff and Dániel Margócsy isolate the contentious relationship between Ruysch and Bidloo, and Ruysch’s critique of Bidloo’s \textit{Anatomia}, to this single pamphlet published in Ruysch’s \textit{Alle Werken}, failing to expand upon the conflict using other sources, including Bidloo’s own published responses.\textsuperscript{59}

Minor references are made to the \textit{Anatomia} in numerous pamphlets published during a major medical controversy that erupted in Amsterdam in 1677 regarding the complicated birth of Lysbeth jan Ravesway’s stillborn child, exposing deep discord in the city’s medical

\textsuperscript{56} Ruysch, “Antwoort van Fredrik Ruysch,” 441-443.
community. These pamphlets, written by Andries Boekelman and members of Nil Volentibus Arduum, among others, supported Ruysch’s opinion of Bidloo. These factional pamphlet wars permanently tainted Bidloo’s professional reputation and reduced the Anatomia to the status of a picture book. A surgeon and colleague of Ruysch’s, Boekelman quarreled with Bonaventura von Dortmond and Bidloo over the complicated surgery performed on Ravesway in 1677. During this conflict, Boekelman dismissed Bidloo’s preparations for the Anatomia, stating that “most of the praise will go to the draughtsman and the engraver.” Bidloo allegedly displayed the completed designs for his atlas during the years prior to its publication, thus the already “picture book” nature of the Anatomia was not aided by Bidloo’s eagerness to show off the designs whenever he had a chance. Each of the pamphlets that mention Bidloo’s atlas, whether during the process of

60 Boekelman, Bonaventura van Dortmont, and Bidloo were all associated during a massive medical conflict between the three and Frederik Ruysch and his own supporters over the effects of surgical delivery of a stillborn on Lysbeth Jans van Ravesway. The rough delivery of Lysbeth, who had been in heavy labour for three days, was seen to by Ruysch and Boekelman in her home. Later, when her state continued to worsen, she suffered from a rupture in the perineum and rectum developed gangrene, and other forms of infection and was sent to the Civic Hospital, where she was put under the care of van Dortmont, the chief physician and a close friend of Bidloo’s. The conflict that followed between the two doctors’ abilities to perform proper surgery and who was responsible for Lysbeth’s declining health resulted in a large pamphlet war. Here, the rivalry between factions within the medical community was paramount. 48 pamphlets are documented, written by Boekelman, van Dortmont, Bidloo and even members of Nil Volentibus Arduum, who exposed the controversy in “The Abandoned Estate of Medicine at this Time” (Desolate Boedel der Medicijne deses Tijdts). It is apparent in these instances that Bidloo’s own rivalry with Ruysch was further developed by rifts within the Amsterdam medical community over who controlled the trade. The events of this conflict, or “crisis” as Kooijmans deems it, is detailed in Kneoff, “Sex in Public,” 54-57, and Luuc Kooijmans, “Under Fire,” in Death Defied: The Anatomy Lessons of Frederik Ruysch. Trans. Diane Webb (Leiden: Brill, 2011), 109-121. 61 Kooijmans, “Under Fire,” 121, from Andries Boekelman, Nader Vertoog Van Mr. Andries Boekelman, Dreuk- en Vroet-meester der Stadt Amsterdam (Amsterdam: By Pieter van den Berge, 1677), 71. Another text from 1677 was of the opinion that “the newly engraved plates of the scraggy Vesalius contain as few mistakes as there are lice in a beggar’s coat.” [Petrus van den Bosch, Abraham Cyprianus], Luijelack of t’samenspraeck tusschen Wit en Swart (Amsterdam, 1677), 56. 62 Kooijmans, “Rivals,” 224.
the atlas’s production or after its publication, were dedicated to ruining the reputation of Bidloo and defending the reputation of Ruysch. I argue that early opinions dismissing the *Anatomia* as a credible anatomical text were heavily influenced by this battle to gain reputation in a city where a substantial number of physicians and surgeons were vying for business, patronage and fame.63

A great deal about Bidloo’s character must be read through the lens of Luuc Kooijman’s biographic study of Ruysch, published in 2011. While Kooijmans casts Bidloo in a negative light, he also acknowledges that Bidloo’s reputation as pompous, even a bigot, did much to ruin his reputation as an anatomist:

He obviously had talent, but it was generally agreed that he jumped to conclusions and overestimated his abilities. He promised more than he could deliver, and often erred in his judgement. This would not be so bad if he did not rub people the wrong way by refusing to acknowledge his mistakes. Since the pamphlet war of 1677, he had been known as the “spindle-shanked Vesalius.” He was much criticized, but remained a high-profile personality in both medical and literary spheres.64

After the Dutch edition of the *Anatomia* was published in 1690, its poor sales motivated the publishers to make a deal with the English anatomist William Cowper’s publisher, Samuel Smith.65 Elected a member of the Royal Society in 1696, Cowper is best known for his

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63 Mooij observes that by the end of the seventeenth century, Amsterdam alone had over 200 practicing surgeons. And while there were fewer physicians, their vying for attention over a territory such as Amsterdam against dozens of other physicians, quacks, surgeons and apothecaries called for creative approaches. Annet Mooij, “Medical Professions and Medical Care,” in *Doctors of Amsterdam: Patient Care, Medical Training and Research (1650-2000)*, Trans. Beverly Jackson (Amsterdam: Amsterdam Univ. Press, 2002), 64.  
64 Kooijmans, “Rivals,” 220-221.  
65 Cowper (1666-1709) was an English surgeon and anatomist, a member of the Royal Society of London and best remembered for his discovery of the Cowper Gland. The exchange of prints between Bidloo’s publishers and Cowper’s are detailed in Beekman, “Bidloo and Cowper, Anatomists,” 128, and Roberts, Tomlinson, “Govard Bidloo,” 313. However, for a more thorough recounting of the events leading up to the publication of Cowper’s atlas, see Govard Bidloo, “Guillemus Cowper, Criminis Literarii Citatus, Coram Tribunali Nobiliss: Ampliss: Societatis Britannia-Regiae per godefridum Bidloo,” in *Godefridi Bidloo Opera Omnia Anatomico Chirurgica* (Leiden: Samuel Luchtmans, 1715), 59-122. Samuel Smith was one of the
Myotomia Reformata: Or A New Administration Of All The Muscles Of Humane Bodies:

Wherein The true Uses of the Muscles are Explained, the Errors of former Anatomists concerning them Confuted, and several Muscles not hitherto taken notice of Described; Which are subjoin’d, A Graphical Description of the Bones, And other Anatomical Observations (1694), and for his involvement in the copyright scandal when he published The anatomy of humane bodies, with figures drawn after the life by some of the best masters in Europe, and curiously engraven in one hundred and fourteen copper plates, illustrated with large explications, containing many new anatomical discoveries, and chirurgical observations, to which is added an introduction explaining the animal oeconomy, with a copious index (1698) using de Lairesse and Bidloo’s illustrations without the Dutch anatomist’s explicit permission.66 Cowper criticizes Bidloo frequently in the text he wrote to accompany de Lairesse’s illustrations in the 1698 atlas: “I Must confess notwithstanding all the Diligence I could yet use in examining this Part with the Microscope, or otherwise, I have hitherto doubted of the Existence of these Aqueous Vessels, between the Cuticula and Cutis…”; in another example a series of labels in a de Lairesse


illustration are called “confused descriptions of several pairs of nerves erroneously multiply’d into divers pairs by Bidloo.” In one other review, Cowper details mistakes:

Among many very considerable parts of the Humane Body, not ill exprest in the Tables published by Bidloo, and overlookt, or not known by him, this Trunk of the Pulmonary Vein is one; unless he may be allow’d to call it the Left Ventricle of the Heart, as he has done Tab. 22. Fig. 7. A. which mistake and omission, tho very gross, I corrected, without reflecting, or taking notice of the fault of the Professor, and some hundred others of that work, tho I could not possibly avoid naming him on near forty other such occasions, in my explication of those Tables, published not long since in English, of which and the rest perhaps more hereafter.

Cowper’s corrections and criticisms reflect the fact that dissection practices and the intricacies of the body made describing the smallest anatomical parts difficult for all anatomists, not just for Bidloo.

Bidloo’s character was frequently under assault by his peers, who criticized his personality, ego and failure to deliver on his promises. The anatomist’s contentious reputation, “grating” personality, his refusal to engage with medical controversies and discourse within the Anatomia, his ambitious goal to succeed Vesalius with a completely original book and his inability (chosen or otherwise) to match the quality of his text with the quality of illustrations, were all seized upon by his rivals to discredit him. As a result, Cowper’s republication of the illustrations accorded them greater authority than Bidloo’s text, which was completely rewritten. But Bidloo’s intention had been to offer an objective description of anatomical process, not a treatise on medical controversies. His contemporaries were not satisfied with this approach.

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67 Cowper, The anatomy of humane bodies, 43, 56.
More often than not, his rivals confused their criticisms of the man with their dismissal of his atlas.

But what of the *Anatomia*’s later reception among late eighteenth- and nineteenth-century medical practitioners? In his 1794 atlas, *Engravings, Explaining the Anatomy of the Bones, Muscles, and Joints*, the Scottish anatomist and surgeon John Bell observed that Bidloo’s illustrations were “all disorder and confusion; one must be both anatomist and painter to guess what is meant, how the limb is laid, and what parts are seen.”

While Bell also compliments Bidloo’s efforts in the *Anatomia* as progressive images towards a more objective depiction of the anatomical process, his review is notable because he offers an opinion unbiased by personal rivalry.

Modern bibliographic study of medical texts was formulated by the nineteenth-century surgeon and bibliographer James Atkinson. Atkinson’s *Medical Bibliography, A and B*, published in 1834, was one of the first attempts to compile a standard and detailed bibliography of anatomical atlases and their contributions to the history of medicine. By the middle of the nineteenth-century visual representations of anatomy were perceived to be distinct from any dominant visual “style,” ideally represented in an objective “non-style.” Atkinson’s work favours atlases demonstrating “objective realism” over the more animated and allegorical works. Of Bidloo, he wrote that the *Anatomia* was:

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One of the most splendid works possible. The plates are beautiful and exquisitely executed by Lairesse and engraved by Bloeteling. Nor does the imputation of bad drawing and faulty perspective, as has been represented, appear, to my eye, at all chargeable upon the work. On the contrary, they seem to me, in these respects, most particularly correct.\(^{71}\)

Bidloo’s text on the other hand, was “unsatisfactory to professional anatomists because of the high scientific standard of anatomy at the time…”\(^{72}\) His brief text, and at times questionable diagrammatic labels, did not meet the standards of Ruyschian or Harveyan anatomy, nor the high standards of the Royal Society in London.\(^{73}\)

Following Atkinson, the German physician Johann Ludwig Choulant was the next to comment on Bidloo’s work, in his *History and Bibliography of Anatomic Illustration in its Relation to Anatomic Science and the Graphic Arts*, published in 1852. Comparing Bidloo’s plates to earlier works written by Giulio Casserio (1627) and Johann Remelin (1661), Choulant observed that the Dutch anatomist’s plates “seem like a return to something better, and would have represented the very best of this period had the anatomist been just as conscientious as the artist, and had the latter himself recognized more fully and valued more highly the true beauty of nature.”\(^{74}\) While Choulant introduces the *Anatomia* in a more positive light in his introductory notes, he ultimately deems the work frivolous, spoiled by the system of alphabetic labelling,

\(^{71}\) Atkinson, *Medical Bibliography A and B*, 279.
\(^{72}\) Atkinson, *Medical Bibliography A and B*, 279.
\(^{73}\) Leeuwenhoek is credited with the discovery of micro-organisms living in water, his various experiments with his unique microscope allowed him to explore organic material magnified 250x. He is well known for his detailing of micro-organisms in lake and canal water, saliva, plaque, as well as exploring the fleshy components of the human body under microscopic view. More information on Leeuwenhoek can be found in Laura Snyder, *Eye of the Beholder: Johannes Vermeer, Antoni van Leeuwenhoek, and the Reinvention of Seeing* (New York: W.W. Norton & Company, 2015); and Reginald Clay, *The History of the Microscope compiled from original instruments and documents up to the introduction of the achromatic microscope* (Boston: Londwood Press, 1978).
\(^{74}\) Choulant, *History of Bibliography of Anatomic Illustration*, 279.
demonstrating a lack of expert anatomic guidance and far too expensive to be a rational expenditure.\textsuperscript{75} Similar to Atkinson, Choulant relied on the criticisms offered by Ruysch, Boekelman, Cowper, and Bell.

The next authoritative bibliography on medical illustration was not published until 1992, following an international trend of renewed interest in the aesthetic and artistic potential of scientific study. K.B. Roberts and J.D.W. Tomlinson, claiming to be the successors to Choulant, traced the development of Western medical history through illustration in \textit{The Fabric of the Body: European Traditions of Anatomical Illustration}.\textsuperscript{76} Their thoughts on the significance of the \textit{Anatomia} are brief, making it clear that after over a century, the reputation of the atlas has remained unchanged. They do not credit the \textit{Anatomia} with making any contribution to anatomical development, highlighting only its aesthetic value. This is perhaps unsurprising, since their emphasis is on the visualization of anatomical practice.

Atkinson, Choulant and Roberts and Tomlinson are the most prominent sources for the history of anatomy, and set the tone for other historians such as T.V.N. Persaud, Shane Tubbs and others, who do not accord any real importance to Bidloo’s \textit{Anatomia}.\textsuperscript{77} However, independent studies by Fenwick Beekman, Paul Dumaître and other twentieth-century scholars have re-examined the \textit{Anatomia} to reveal its deeper significance in the context of scientific culture in the seventeenth century.

\textsuperscript{75} Choulant, \textit{History of Bibliography of Anatomic Illustration}, 250.
Beekman’s article was the first to examine the controversial relationship between Bidloo and Cowper’s anatomical atlases and remains the key source on the publishing and copyright history of the *Anatomia*. In addition, Beekman highlights the sociopolitical significance of the *Anatomia* in the discourse of early modern copyright law. Dumaître’s *La Curieuse Destinée des Planches Anatomiques de Gerard de Lairesse*, published for the medical collection at le Bibliothèque Interuniversitaire de Santé in Paris, examined the original designs de Lairesse made for the *Anatomia*, which are in the collection at BIU. While some of his conclusions regarding the production process of the work seem speculative, he offers a detailed study of the provenance of the plates and a useful examination of the differences between de Lairesse’s designs and the final illustrations. De Lairesse took certain artistic liberties that were ‘corrected’ in the final plates.

Over the span of the 1990s medical images gained more attention within art historical discourse. In the same period, art historical studies were redefining their objects of study in general to include previously ignored areas of image production, particularly the art of book illustration. In his 1995 article “Art History and Images That Are Not Art” James Elkins defined “scientific imagery” such as anatomical illustration and proposes that “principally intended —in

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the dry language of communication theory—to convey information.”\textsuperscript{80} However, of this wider range of imagery he argues:

That they engage the central issues of art history such as periods, styles, meanings, the history of ideas, concepts of criticism, and changes in society; that they can present more complex questions of representation, convention, medium, production, interpretation, and reception than much of fine art; and finally, that far from being inexpressive, they are fully expressive, and capable of as great and nuanced a range of meaning as any work of fine art.\textsuperscript{81}

Regardless of whether the designer was an artist or anatomist, the illustrations themselves were created to convey visual information to the reader about the interior structures of the body, accompanied by a text concerned with physiological description and medical and anatomical practices. The aesthetic is intrinsic to efficacious communication, which demands accuracy and recognition in order to promote engagement and understanding. Like Martin Kemp and Reinhard Hildebrande, Elkins observes that the separation of these two types of images—artistic and scientific—has been a systemic issue since the second half of the eighteenth century, when the introduction of Romantic attitudes drove these two fields further apart, finally determining that they were solely complementary, and not intrinsic, to each others’ function.\textsuperscript{82} All three scholars argue that it was at this point that scientific imagery, like the illustrations of the \textit{Anatomia}, were used solely to complement the design process of visual arts.\textsuperscript{83} Thus, for an atlas like the

\textsuperscript{80} Elkins, “Art History and Images That Are Not Art,” 553.
\textsuperscript{81} Elkins, “Art History and Images That Are Not Art,” 553-554.
\textsuperscript{83} Elkins’ “systemic issue” can arguably be dated to the beginning of the eighteenth century, if not the mid seventeenth century where artists and anatomists were beginning to distinguish the purpose of anatomical imagery in serving one practice or the other. Gerard de Lairesse himself commented on the intended audience of the \textit{Anatomia} in his \textit{Het Groet Schilderboek} and
Anatomia, traditionally recognized for its aesthetic value, this new approach to scientific images creates an opportunity to reassess the value of the atlas within art historical discourse. Speaking of the Anatomia, Elkins observes that medical illustration is merely “the shadow of fine art—art depictions of the body participating in many of its meanings and conventions but remaining hidden within the ostensibly scientific.”

In the historiography of medical bibliography, however, the aesthetic value of the Anatomia, especially because its illustrations were created by Gerard de Lairesse (an artist whose own oeuvre was only just recuperated in the late twentieth century), has always been considered the most important aspect of the work. The fine art of the Anatomia has, in fact, hidden the scientific value of the text. My work examines how the modes of representation utilized in Bidloo’s Anatomia, informed and constructed by cultural attitudes of its own time, demonstrates how this “fine art” was carefully constructed to create a more objective and interactive form of medical illustration to simulate the dissection process.

Renewed interest in medical images in art historical studies prompted important public exhibitions (artistic and otherwise) that explored the history of the “art of medicine.” Gunther von Hagens’ Body Worlds, an exhibition that has permanent locations across the world today, first opened in Tokyo in 1995. Hagens’ efforts to exhibit the anatomized body, in all of its

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Grondlegginge Ter Teekenkonst, where he recommended an earlier atlas designed by the artist Jacob van der Gracht which was better suited for studying anatomy for artists.

84 Images of anatomy, dissection, and dead bodies more generally received much attention across the 1990s and 2000s. Elkins, “Art History and Images That Are Not Art,” 556.

uncomfortable intricacies, as a work of art, initiated a popularization of public interactions with the art of the human body. In 1996 the National Gallery of Canada exhibited *The Ingenious Machine of Nature, four centuries of art and anatomy*, highlighting medical illustration from the Italian Renaissance well into the twentieth century. Responding to the growing popularity of anatomical illustration as a subject of study within cultural studies, feminist theory, and art history, this exhibition stressed the central role of anatomical illustration in the history of anatomy. Curators K.B. Roberts, Mimi Cazort, and Monique Kornell detailed the *Anatomia’s* significance in medical history by emphasising the ways it broke from traditional, Vesalian conventions of bodily representation. Rather than depicting the body “progressively denuded of flesh, muscles, and organs down to the skeleton,” they demonstrated that Bidloo examined the body “part by part” using both male and female cadavers. While they argue that Bidloo’s atlas represented a larger trend of objective realism of seventeenth-century Dutch art, popular and “standard” representations in anatomical illustration did not employ objective realism as a standard mode of representation until well into the eighteenth century. The exhibition highlighted the newfound significance of aesthetics in anatomical illustration, indicating that the *Anatomia’s* illustrations were not only advanced for their time, but signified that the *Anatomia* held some value in the history of anatomical study as an early prototype of objective illustration. Even in 2018, the *Anatomia* continues to be displayed primarily for its aesthetic value. The Museum Boerhaave in Leiden exhibited the *Anatomia* alongside Vesalius’ atlas and the work of

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Herman Boerhaave in order to demonstrate the progression of anatomical study. The atlas was also displayed in a small exhibition dedicated to medical texts in the Rijksmuseum in Amsterdam.

Renewed interest in anatomical illustration has prompted a variety of research into Dutch medical art in the seventeenth century. Although the *Anatomia* is mentioned more frequently in research from the last decade, the atlas is often used as a secondary or tertiary object of analysis in comparison to more established and reputable contributions. Rina Kneoff examined the *Anatomia* and Bidloo’s other publications in contrast to Ruysch and other more notable anatomists, highlighting the achievements of those other anatomists and revealing the structure of medical debates in the early modern period.\(^8^9\) The public feud between Ruysch and Bidloo is often referenced by Kneoff in her examinations of Ruysch’s anatomical cabinets and his career as the *praefectum* of anatomy in the Amsterdam Surgeon’s Guild.

In *Commercial Visions: Science, Trade and Culture in the Dutch Golden Age (2014)* Dániel Margócsy offers the first attempt to examine the various epistemologies developing in early modern anatomical discourse at the turn of the seventeenth century. Drawing on the work of Bruno Latour and the historiography of paper epistemologies, Margócsy argued Bidloo’s preference for an illustrated (paper) portrayal of the human body versus anatomical specimens, allowed him to correctly depict “chaotic nature in all its whimsical particularities.”\(^9^0\) On paper, Bidloo was able to represent the various parts of the body in multiple states of movement and


highlight minutely different structural compositions, in contrast to preservations, which could only capture a single, static state. These particularities that Bidloo and Margócsy speak of were widely condemned by Cowper, Albinus, Bell, and others, as anatomical inaccuracies on the part of the artist, even though the range of variability among individual bodies meant that the structures represented applied to at least one person in the world. Bidloo refused to conform to established visual modes of representation in anatomical study; his interest was in the true subject of dissection: an individual human cadaver on the dissection table.

Tim Huisman explored the role of the *Anatomia* in furthering Bidloo’s career and boosting his reputation, arguing that the atlas likely aided in his appointment as *praelector* of the Hague Surgeon’s Guild in 1688, as well as his later patronage under Willem III of Orange. Other incidental contributions to research on Bidloo and the *Anatomia* are provided by Frank Ijpma, R. Shane Tubbs, Susan Donahue Kuretsky, and Julie Hansen. Articles like Kuretsky’s are common among special collections libraries, which offer summaries of published research compiled when an institution acquires a copy of the *Anatomia*. The same descriptions—truly almost word for word—are provided by Sotheby’s and Christies auction houses on occasions when the *Anatomia* has been offered at auction. In comparison to the vast scope of research

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91 Margócsy, “Peter the Great on a Shopping Spree,” 200.
93 Huisman, “Govard Bidloo,” 98.
95 Three copies of the 1685 edition have been put to auction through Sotheby’s in the last decade, and nine copies have been put to auction through Christie’s auction house. The descriptions

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that has been lavished on other anatomical texts, like Vesalius's *Fabrica*, the relative lack of interest in Bidloo would seem to highlight the atlas’s forgettable status.96

Early modern reviews of the *Anatomia*, predominantly influenced by personal biases and an ongoing “reputation war” perpetuated the atlas’s lamentable value in medical discourse. Eighteenth- and nineteenth-century medical bibliographies assessing the atlas’s quality predominantly through these early modern reviews continued to dismiss the *Anatomia* as having any lasting impact on medical discourse. Contemporary research on anatomical illustration has begun to reassess the significance of anatomical atlases in artistic and medico-historical discourse, introducing new opportunities for a previously understudied genre of art. Taking inspiration from the growing field of research on early modern medical art, this thesis aims to challenge pre-existing attitudes towards the *Anatomia* by contextualizing the atlas’s design and ontology within Dutch sociocultural discourse.97 My efforts to reassess the *Anatomia* through

97A wide variety of literature on medical art produced by Sawday and William Hecksher, among others has provided much inspiration in terms of methodology and avenues of analysis. Sawday, *The Body Emblazoned*; Park, *Secrets of Women*; William Heckscher, *Rembrandt’s Anatomy*
contextual and theoretical analysis is done with appropriate caution, in accordance with the warning issued by Jonathan Culler:

…the notion of context frequently oversimplifies rather than enriches the discussion, since the opposition between an act and its context seems to presume that the context is given and determines the meaning of the act. We know, of course, that things are not so simple: context is not given but produced; what belongs to a context is determined by interpretive strategies; contexts are just as much in need of elucidation as events; and the meaning of a context is determined by events. Yet whenever we use the term context we slip back into the simple model it proposes.98

Ultimately, this thesis will identify the unique cultural circumstances of production that determined the Anatomia’s significance as the earliest atlas to objectively simulate dissection practice in anatomical illustration.

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Chapter Two
“Muscle-Men” or “Machina”? Synthesizing the Subject and Object of Anatomy within the Cadaver

Opening the Anatomia to its first page, the reader is greeted by an elaborate frontispiece (fig. 1). Here, Father Time, holding an hourglass while his scythe lies on the ground beneath him, pulls aside a curtain to reveal the remainder of the scene. Framed by classicizing architecture, indicative of de Lairesse’s personal style, three putti study anatomy: one holds a piece of parchment with an anatomical diagram on it, one holds a skull and another points to a separated forearm resting upon a small table. Behind them, the title of the Anatomia is inscribed on a crest attached to a pedestal, upon which sits the allegory of Medicine. Beside the allegory stands another putto, his face shrouded by drapery, and the skin and fatty tissue of his arm removed to reveal the inner musculature. Behind Medicine and the putto, used by her to demonstrate anatomical study, flies the allegory of Glory blowing her trumpet. Finally, in the background, are two fully assembled skeletons, standing at attention in profile and frontal views. The frontispiece and the next three images of the complete male and female body do nothing to betray the deeper contents of the text. They appear to subscribe to the standard trend of anatomical representation in the seventeenth century, following the example of Vesalius’ infamous atlas, the Fabrica. If the reader is unable to read Latin and be introduced to the purpose of the atlas, Bidloo’s justification for the mode of representation he employs, his structure and his goal for the Anatomia, then they will be shocked by a drastically different mode of representation from the fourth table onwards. Breaking from the standard Vesalian representation of idyllic and lively bodies, controlled and rigidly framed sculptural cross-sections, and artfully

99 The allegory of Medicine is commonly identified by the large volume, an anatomical atlas, that she holds or rests against. In this instance, Medicine holds a scalpel, indicating the specific area of medicine that the reader will engage with in this text, dissection.
curated displays of inner structures, Bidloo exposes the reader to a more realistic and practical rendering of the subject of anatomy: the segmented or whole cadaver. To a contemporary reader who has no knowledge of dissection, these fragmented, decapitated heads, emptied torsos and open abdomens sprawled across a dissection table make the presence of death overwhelming.

The signs and signifiers of death in the *Anatomia* are impossible to ignore. Bidloo’s contemporary Frederick Ruysch questioned why Bidloo wanted to depict the subject of anatomy in such a repulsive manner, exposing the reader to the horrors of anatomy. In this chapter, I will examine the stark contrast between Bidloo’s mode of representation and the Vesalian mode of representation to identify how and, more specifically why, Bidloo attempted to establish a new visual standard that championed the deadness of the anatomized body by representing cadavers as the true object of anatomical study. In Bidloo’s hands, the subject of anatomy is resituated within the object of anatomy. This inhibited opportunities for convolution between the theory of anatomy discussed in relation to idealized and imagined bodies, and the application of anatomy in cadaveric dissection, distancing the anatomist and viewer to achieve a more objective perspective. An examination of the text and images in the *Anatomia* will demonstrate that Bidloo sought to produce a reference work that prioritized the most valued avenue of learning in anatomical study by emulating the realistic processes of dissection. He used anatomical illustration not only to correct his predecessors, but also to provide a realistic reference for readers who did not have easy access to physical cadavers for dissection.

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The critical response of Ruysch, which heavily influenced the status of the *Anatomia* in medical bibliography, offers an opportunity to examine how Bidloo’s imagery broke from traditional modes. With this we can also identify how in Vesalian anatomy, through a process of abjection, the anatomized cadaver was rejected, controlled, and carefully re-imagined to suit early modern medical discourse. With the advent of the *Anatomia*, that body was brought back from the periphery and renegotiated in the virtual anatomical field. While Ruysch’s criticism against Bidloo’s representation of cadavers was supported by established trends in medical illustration, his revulsion was likely not echoed within sociocultural attitudes towards death. Therefore, Bidloo’s recuperation of the status of death as a necessity for anatomical study may be better explained outside of medical discourse. Looking to Dutch culture, specifically attitudes towards death and how it was defined philosophically, how it was performed and dealt with, and the ways in which it was displayed, will demonstrate that while Bidloo’s mode of representation was radical to the discourse of medical illustration, the presence of death was thoroughly integrated within Dutch culture. Indeed, the presence of death was engrained and accepted in other popular anatomical practices; entertainment, popular culture, politics and the Dutch landscape.

During his preparation for the atlas in the 1670s and early 1680s, Bidloo claimed to have dissected two hundred bodies.\textsuperscript{101} While it is commonly thought that there was a shortage of bodies for anatomical study in this period, Bidloo’s claim clearly disputes the validity of this assumption. Most contemporary scholars assume that the primary source of bodies for anatomical practice were those of executed criminals. Julie Hansen, Dániel Margócsy, Raphael Cuir and Jonathan Sawday, among others, agree that medical study predominantly depended on

\textsuperscript{101} Margócsy, “Commercial Epistemologies,” 143.
access to the bodies of executed criminals.\textsuperscript{102} However, such a blanket assumption ignores the legal and temporal contexts of each country’s access to cadavers.

In Amsterdam, the public practice of anatomy, and the establishment of an anatomical theatre in the city, was first permitted by the Amsterdam government in 1555.\textsuperscript{103} The city government and the Amsterdam Surgeon’s Guild agreed that criminal bodies could be used solely within public dissections for the purpose of inflicting moral punishment and thus public moral instruction was often regarded as popular entertainment.\textsuperscript{104} During the coldest weeks of the winter, between November and February, the Amsterdam anatomy theatre was filled with members of the public for multiple-day dissections led by the \textit{praecceptor} of Anatomy.\textsuperscript{105} Initially, the bodies were most often those of executed male criminals, and on the rare occasion, the body of a recently executed woman.\textsuperscript{106} Over the span of roughly three days the body was dissected for the crowd. Beginning with an incision in the belly and the removal of its contents on the first day, the second day involved the contents above the diaphragm (the heart and lungs), and the third day featured the contents of the head and the structures of the limbs.\textsuperscript{107} In fact, the various body parts were even circulated around the room among spectators, and some were purchased

\textsuperscript{103} Thijssen, \textit{Nicolaas Tulp als geneeskundige geschetst}, 24.
\textsuperscript{104} Such practices were not meant to offer any sound source of medical education, but rather a moral education and warning to citizens watching of the actions taken against criminal behavior. Records that remain from the Surgeon’s Guild indicate that between 1631 and 1645, and 1693 until 1770, only 42 corpses dissected were recorded to be criminals, all of young or middle ages. The rules that governed how these public dissections ran were formally established in 1606 in the Political Ordinance of the Surgeon’s Guild. Thijssen, \textit{Nicolaas Tulp als geneeskundige geschetst}, 31-35.
\textsuperscript{105} Thijssen, \textit{Nicolaas Tulp als geneeskundige geschetst}, 33-44.
\textsuperscript{107} Rina Kneoff, “Dutch Anatomy and Clinical Medicine in 17th-Century Europe.”
for private collections after the dissection had concluded.\(^{108}\) The popularity of such events is undeniable, and suggest that the Dutch public was quite familiar with the sight of dead bodies, both as a source of entertainment and medical knowledge. Although declaring public dissections as strictly medical endeavours is inaccurate as they were also meant to be moral demonstrations, the continuation of corporal punishment, and a general source of spectacle and entertainment for the public, the status of public dissections in Dutch society indicate that the displays of death and dissection similar to the processes portrayed in the *Anatomia* were not an unfamiliar site. In fact, given the international popularity of the theatricality of dissection, illustrations of the process might even have been particularly fashionable.

By the mid-seventeenth century it appears that, rather than using only criminal corpses in anatomical study, anatomists such as the famous Dr. Nicolaas Tulp obtained bodies from the government funded Binnengasthuis (the Amsterdam Civic Hospital).\(^{109}\) By mid-century, the bodies of strangers to the city could be dissected publicly, however the bodies of the impoverished, or those Amsterdam citizens whose bodies were not claimed were restricted to

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\(^{109}\) The Binnengasthuis was originally called the Sint Pieter’s *gasthuis* (guest house). Since the late sixteenth century, the Binnengasthuis acted as a hospital for the impoverished citizens of Amsterdam, travellers, soldiers, and sailors. It had a men’s wing, a women’s wing, a wing for surgical patients, a private room for dissections and autopsies, a pharmacy, a hostel for strangers, and later an obstetrics ward that was added in the 1680s. Additionally, Amsterdam also had the Pesthuis, or plague house. Originally built to hold plague victims, the Pesthuis was later repurposed in the seventeenth century to house the terminally ill patients identified by the head physician of the Binnengasthuis. In a busy season, the Binnengasthuis could fit seven hundred patients, often placing two patients in each cot to maximize space. Thijssen, *Nicolaas Tulp als geneeskundige geschetst*, 44; Annet Mooij, “Medical Professions and Medical Care,” in *Doctors of Amsterdam: Patient Care, Medical Training and Research (1650-2000)*, trans. Beverly Jackson (Amsterdam: Amsterdam Univ. Press, 2002), 52.
private lectures and private dissections.\textsuperscript{110} While the exact date this regulation changed is unclear, in 1684 Ruysch became the first anatomist in Amsterdam to perform a public dissection on the body of a woman obtained from the Binnengasthuis. This access to corpses from the civic hospital coincides with the same period defined by this popular idea of a body shortage in the latter half of the seventeenth century.

Ruysch’s biographer Luuc Kooijmans details an ongoing conflict between Ruysch and the governing body of the Binnengasthuis. In the late 1670s and again in 1681 Ruysch complained that the Binnengasthuis had failed to honour their contract to provide him with four female bodies a year to support his teaching within the Surgeon’s Guild and \textit{Athaenium Illustre}.\textsuperscript{111} Thijssen notes that it was the custom to quietly and respectfully transport these bodies from the hospital to the Guild dissection room or to the anatomical theatre and that these same bodies were later picked up by servants of the hospital and given private burials.\textsuperscript{112} It is likely that many of the dealings between anatomists and the hospital were carried out in a similar manner, quietly and informally—“under the table” or unrecorded—especially since the governors of the Guild began to complain about body shortages in the last two decades of the seventeenth century. Kooijmans suggests that the chief physician of the Binnengasthuis, Bonaventura van Dortmont, probably favoured Bidloo over Ruysch, and was willing to provide him with numerous body parts, preparations, and full cadavers.\textsuperscript{113} Indeed, in the preface to his \textit{Anatomia}, Bidloo notes that time and time again, having gathered all the knowledge he could

\textsuperscript{110} The Surgeons Guild was allowed to publicly dissect the bodies of strangers to the city for practical reasons; it was less likely that public outcry would occur against the dissection of a body that no one held a familial or close relationship with in life.
\textsuperscript{111} Kooijmans, “Established and Envied,” 97.
\textsuperscript{112} Thijssen, \textit{Nicolaas Tulp als geneeskundige geschetst}, 29-30.
\textsuperscript{113} Kooijmans, “Established and Envied,” 98.
from a large number of subjects, even a “pile” of various body parts, he allowed his fellow colleagues to examine the fruits of his labor and confirm the value of his work. In this he personally thanks van Dortmont, to whom he declares to owe much.

It was likely through van Dortmont that Bidloo obtained the 200 specimens he claimed to have used in preparation for the Anatomia. While this number of cadavers may be an exaggeration, and cannot be confirmed, it is clear that he had access to a wealth of cadavers while he prepared his atlas. Bidloo’s surfeit undoubtedly created shortages for other anatomists of the time, including Ruysch, as did the tendency to supply bodies to anatomists “under the table.” These factors have probably contributed to the modern perception of a body shortage. While this analysis adequately questions the validity of a common “body shortage” that is perpetuated without medico-historical research, a demographic approach to the question of available bodies for dissection would probably yield more accurate results for the period.

Prior to the publication of Bidloo’s atlas, the standard mode of representation in anatomical study was established by Vesalius in his Fabrica. In this, the anatomized body was treated in three different ways; through illustrations of individual organs, bones and structures, through cross-section anatomies of portions of bodies stylized as sculptural torsos, and through imaginative “muscle-men” that harken back to Antonio Pollaiuolo’s print depicting the Battle of the Nudes (1465-1475). Indeed, Domenico Laurenza observes of the relation between works

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116 Tim Huisman stated very briefly in his examination of the impact of Leiden professors of medicine in the seventeenth and eighteenth century that Bidloo had obtained his specimens from the head physician of the Binnengasthuis, but he did not explore this further. Huisman, “Govard Bidloo,” 96-102.
117 Laurenza argues that Pollaiuolo’s anatomical knowledge was more likely “a laborious synthesis of painstaking observation of living bodies and ancient statuary combined with
of art and anatomical engravings that after Pollaiuolo’s print: “the pre-eminence of the artist became more general, directly relating to the content and practice of anatomy as science.” 118 Like Renaissance models, Vesalius’s “muscle men” strike contrapposto poses, lean against walls, and look around the Italian landscape they inhabit (fig. 2). They are not depicted as real bodies, with fatty tissue, capillaries and blood vessels, skin and pores, hair and fingernails. These imagined bodies are idealized male exemplars used to depict the interior layers of the human body throughout the reductive stages of anatomy. However, there are no visible signs of the processes of dissection preferred for optimal anatomical comprehension. This idealization, especially the repetition of the complete body as an integral container of what lies within, removed the presentation of anatomy from the processes of dissection, which required bodily fragmentation and a continuous series of encounters with tissue and viscera.

Vesalius set the standard for the representation of early modern anatomy. In his own anatomical practice, by emphasizing the dissection and observation of human bodies, rather than the Galenic method of relying on the dissection of animals, Vesalius changed the epistemological and methodological foundations of human anatomical study. Visually, the Fabrica presented anatomized bodies as animated and willing participants (in most cases) in their own dissections. Standing figures are posed in elegant, classical contrapposto stances to show muscle engagement and relaxation; sometimes they helpfully hold open the clean-cut flaps of their own skin and muscle tissue to reveal the inner contents of their abdomens and chests. This gradual stripping of the body eventually reveals the underlying skeleton, which remained attached and mobile despite anatomical notions grasped from watching physicians perform dissections or simply conversing with them.” Domenico Laurenza, “Art and Anatomy in Renaissance Italy: Images from a Scientific Revolution,” The Metropolitan Museum of Art Bulletin 69, no. 3(2012): 9.

118 Laurenza, “Art and Anatomy in Renaissance Italy,” 10.
being stripped of the muscle, tendon, and cartilage holding the bones together. Jonathan Sawday examines the notion of the animated corpse and the reason that anatomists elected to visualize the human body in this manner. He argued that early modern anatomists’ decisions to visualize the body as animated or alive was to mitigate the risk of horror towards a ‘distasteful’ or ‘abhorrent’ representation of anatomical study just as it was gaining more popularity in the sixteenth century. Speaking of the censorship of signifiers of death that happen in Vesalian anatomy, Estella Antoaneta Ciobanu notes that

Anatomy—as both dissection and the ‘body-as-knowledge’—had never been so tamed as to enthrall the curious yet occlude the reality of death and dissection in order to achieve its epistemological aim: identifying and then introducing ‘general anatomical and physiological principals’ to the public.\(^{120}\)

The visual precedent set by Vesalius in the Fabrica was echoed throughout early modern medical discourse across Europe. His animated figures were recreated, and often times blatantly copied, over and over again in the figures of Charles Estienne (1545), Juan Valverde de Amusco (1556), Adriaen van Spiegel (1627), Ame Bourdon (1678), and Bernardina Genga (1691). Bidloo’s Anatomia, unlike the atlases that came before it, depicted anatomized bodies as they were observed upon the dissection table. Bidloo intended to correct the Vesalian tendency to idealize and imagine what the interior of the body looked like, a somewhat oxymoronic notion considering Vesalius’ emphasis on practicing the dissection of humans to learn about the structures of the body. In Bidloo’s Anatomia, cadavers in all their singular intricacies; hair, skin, fat deposits and internal structures; are surrounded by the cloths, bowls, pins, scalpels and other

\(^{119}\) One of the reasons for this was very likely that because the study was not yet fully sanctioned under law, anatomists had to present the study as attractive and appealing to a society growing in natural curiosity. Sawday, “The Autoptic Vision,” in The Body Emblazoned: Dissection and the Human Body in Renaissance Culture (London: Routledge, 1996), 2-5.

\(^{120}\) Ciobanu, “En-Gendering Exemplarity in Early Modern Anatomical Illustration,” 818-819.
tools of the trade that Bidloo presumably used. Working his way through each part, the anatomist pauses in his dissection to allow the illustrator to capture the process. Throughout his preface and in the descriptive text that complements each table, Bidloo emphasised that his efforts were focused primarily on objectively displaying his observations of the human body to the reader without any idealization or tampering. Additionally, he stated that he began this work with great zeal to create not something old (in the Vesalian manner) but aspiring for something new in representing the parts of the body, as they relate to the whole “of the machine,” “drawn after the life.”

A new representation of dissection emerged, Bidloo claimed, whereby demonstrating the processes of anatomy and casting the reader in the role of eyewitness to the events, Bidloo corrected the disputes and confusion of those who imitated and copied Vesalius before him. Margócsy, examining Bidloo’s argumentation regarding the effectiveness of anatomical illustration versus anatomical preservations in accurately representing the body, argues that

Bidloo did not subscribe to the abstracting and idealizing tendencies of other enlightened atlases and opposed the mechanical objectivity of anatomical preparations. Instead of relying on learned judgement, he embraced the naturalism of the mental eye. When nature itself was fickle, the creative imagination of the draughtsman was unable to lie.

He emphasized that eyewitness experience and the artistic liberties of the illustrator who drew the body after life allowed for an illustrative process whereby the artist could depict “chaotic nature in all its whimsical particularities.”

Laboring for the better part of several years, Bidloo

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124 Margócsy details Bidloo’s arguments regarding the unique and varying arrangements of miniscule structures that formed within the body. Indeed, in his attempt to defend his atlas against criticisms surround various anatomical inaccuracies, Bidloo argued that unlike the idealized and structurally consistent figures of Vesalian representation, real bodies had varying minute structures. And, while his illustrations may not have applied to every body’s internal structures, not only did he represent the variability that existed within bodies, but also the
intended to provide future students of anatomy with something perfect, without idealized and wandering statues, in order to allow them to objectively engage with dissection even without a physical body with which to interact directly.  

The *Anatomia* is structured in such a way that it examines the exterior of the body, first through the presentation of complete male and female bodies, and then providing a detailed microscopic examination of skin, hair, pores and the layers of epidermal tissue that make up the surface of the body. Beginning from the outside, the reader is guided through a series of dissections, starting from the head proceeding downward through the neck, into the torso and abdomen, into the reproductive organs, and branching outward into the limbs before looking at the underlying skeletal structure. Table 20 is the first to provide a more holistic view of the anatomized subject; the body of a male, with skin stripped, the left pectoral muscles pulled back from the chest, and the left oblique muscles pulled away and pinned to a book beside the body (fig. 3). Framing the scene are the globular and fatty folds of skin peeled away to reveal the muscular tissue. On the right, flanking the oblique and pectoral muscles that remain attached, de Lairesse depicts a large fat deposit, a curdled mass attached to the inner layers of skin. De Lairesse made every effort, according to Bidloo’s request to present the body as it was experienced on the dissection table, in these illustrations to include the small, globular details of fat, pores, and the texture of all tissues related to the body, muscular or otherwise. Whereas Vesalian anatomized bodies were usually stripped of any details of hair, skin, and underlying fatty tissue, the *Anatomia* demands their presence be regarded as a part of the process of anatomy. The Vesalian approach of cleaning the body of its individualized external markers and variability that anatomists had to accommodate in studying anatomy. Margócsy, “A Museum of Wonder or a Cemetery of Corpses?” 200.

animating it rescued the body from its “deathly immobility,” which Raphael Cuir and Jonathan Sawday generally acknowledge was a means for anatomists to address anxieties towards death, the dead, and dying in early modern culture. We will see that Ruysch’s criticisms of the Anatomia that Bidloo’s inclusion of anatomists’ tools and the external signs of dead bodies, provoked exactly this kind of anxiety.

With regards to the textual component of the Anatomia, Bidloo was well aware, indicated by his commentary in the preface, that readers expecting the standard text would be disappointed. Acknowledging that there were already “so many writings of great and learned men” whose anatomical writings would cast his own in a bad light, he declared it more useful to provide only broad interpretations of the images “so that you will not be burdened by my discourse… or the already immense magnitude of this volume.” Instead, Bidloo details his preparatory methods, describing in detail how certain organs were boiled or rinsed in water, dipped in oil of turpentine, massaged to separate fat from fibrous tissue and injected with wax or other materials. And while Bidloo clearly anticipated complaints about the minimalism of his text, he managed to further anger his contemporaries by criticizing the frightened and fatigued attempts of his anatomical predecessors to critically engage with the practice in the absence of

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126 In “The Autoptic Vision,” Sawday explains that the “culture of dissection” prevalent in the early modern period was represented by the allegorical figure Anatomia, who held a mirror and knife, indicative of the story of Perseus and his prey, Medusa. In this, the theme of Medusa’s image, more specifically her petrifying glare, was appropriated in dissection culture to represent a fear of interiority. Unable to look directly at Medusa, unable to look directly at the interior of one’s body, for to do so meant death, Perseus, and in turn any interested in anatomy, could only look at the reflection of the subject through a dead cadaver or illustration. Sawday, “The Autoptic Vision,” 3; Raphael Cuir, “Preface, Hand in hand with the dead,” in The Development of the Study of Anatomy from the Renaissance to Cartesianism: da Carpi, Vesalius, Estienne, Bidloo (Lewiston: The Edwin Mellen Press, 2009), xi-xii.

actual subjects to study. This trend caused anatomists to resort to repeating analysis on a simulacrum of the human body that only multiplied mistakes and inaccuracies in the field.

One such contemporary was Ruysch who, in his own work, took the Vesalian mode of representation to new heights, applying it to anatomical specimens and preserving dead bodies and their parts to look as lifelike as possible. Ruysch’s own curatorial decisions in displaying anatomical specimens, dioramas, and illustrations, often included the bodies of infants and young children. Bibliographers and medical historians single out Ruysch primarily for the pigmented wax injections he administered to infantile cadavers to give them a lifelike appearance, and for the sheer volume of various body parts he collected and put on display in his anatomical cabinet. In 1827 the Italian writer Giacomo Leopardi remarked that Ruysch’s specimens achieved such a life-like effect that he actually conversed with them. Leopardi presents a scenario in which, following the 1697 visit of Peter the Great, Ruysch awoke in the night to the sound of singing in his cabinet of specimens. Entering the cabinet, Ruysch exclaimed:

Children, children, what game are you playing at? Do you not remember that you are dead? What does all this uproar mean? Are you so puffed up because of the Czar’s visit, that you imagine yourselves no longer subject to the laws of Nature? I am presuming this commotion is simply a piece of pleasantry on your part, and that, there is nothing serious about it. If, however, you are truly resuscitated, I congratulate you, although I must tell you that I cannot afford to keep you living as well as dead, and in that case you must leave my house at once. Or if what they say about vampires be true, and you are some of them, be good enough to seek other blood to drink, for I am not disposed to let you suck mine, with which I have already liberally filled your veins. In short, if you will continue

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128 Kneoff, Hansen, Roberts, Tomlinson, Cazort and Kooijmans, among others, speak of Ruysch’s relationship with Peter the Great as a defining event of Ruysch’s career. The Czar visited his anatomical cabinet in 1697 and returned in 1717 to purchase the first collection allegedly for 30,000 guilders. Upon viewing the collection, Peter was so convinced by the realism of Ruysch’s injections that he allegedly kissed the cheek of a young boy, whose rosy skin tone so convinced the Czar that he was merely sleeping.
to be quiet and silent as before, we shall get on very well together, and you shall want for nothing in my house.\textsuperscript{129}

While the story is fictional, Ruysch earned an international reputation for preserving bodies and their parts, and “restoring” them to be as lifelike as possible through his own secret injection methods.

In Ruysch’s own anatomical collection, the centre piece consisted of nine sculptural pieces of various dried and preserved bodily parts.\textsuperscript{130} In one particular engraving the complete skeletons of three infants are arranged on either side and on top of a mound of various preserved growths and body stones (fig. 4). Dried capillary networks and major veins stick out from the mound like foliage or coral while a preserved bird stands next to the highest skeleton. Each holds something different; the skeleton on the right wipes its eye socket with a thin translucent ‘kerchief’ of a preserved film (likely some part of the peritoneum), its small capillaries preserved and indicative of a fine cloth pattern; the skeleton on top holds onto a dried and stiff network of capillaries indicative of a bouquet of flowers; and the one on the left holds a small sickle (cut off in most prints). Throughout all of these diorama-like preservations, which made up only a small number of his larger collection, Ruysch sought to use these as memento mori, or reminders of the finiteness of life for his viewers. These specific decorations in his collection were wrought with the emotional charge of baroque ideals in mind. They were dramatic, bringing about an immediate emotional response to the emotive actions of the infantile skeletons among other bodily remains, playing with butterflies and birds. While the dioramas were carefully curated,


\textsuperscript{130} A few of these were later engraved by C. Huijberts a Dutch engraver, who also worked with Gerard de Lairese, for the publication of Ruysch’s catalogues of his anatomical collection. These displays very likely no longer exist.
they had no intrinsic value in medical discourse, serving predominantly as moral reminders for the audience viewing Ruysch’s larger collection.

The animation and lifelike appearance of Ruysch’s specimens was on a continuum with the animated corpses of Vesalian illustration, unlike Bidloo’s objective representation. These contrasting approaches to the anatomical subject inevitably led to further conflict. Ruysch opposed Bidloo’s truthful representation of cadavers and the inclusion of anatomical tools in his illustrations because he considered them too shocking and appalling for the average person. Margócsy, speaking of Bidloo’s response to Ruysch’s criticisms, notes that

Bidloo found it problematic that Ruyschian preparations looked alive. Cadavers were dead and no art could bring them back to life. Although coloured wax could make the cheeks of humans rosy again, the underlying structures were corrupted beyond repair… the mimesis of preparations was no scientific proof but only a ‘meretricious art’ to entertain the masses.¹³¹

In other words, Ruysch’s dioramas and more aesthetically stimulating wet specimens were attractive but essentially useless to the true student of anatomy. The point of dead bodies was that they were unchangeable, static and rigid in death, and thus were not captured truthfully when animated or prepared with the goal of achieving a life like appearance.

In defining the anatomized body with the idealization or absence of skin, hair and bodily fluids, early modern anatomy effectively distanced the illustrative products of the study from its material relationship with dead bodies. The dead, as the ‘other,’ were expelled from representation and inhabited what Judith Butler labels the “unlivable” and “uninhabitable” zones of those who do not enjoy the status of the subject.¹³² To Butler, “this zone of uninhabitability

will constitute the defining limit of the subject’s domain; it will constitute that site of dreaded identification against which- and by virtue of which- the domain of the subject will circumscribe its own claim to autonomy and to life.”

In the *Anatomia’s* tables, the reader identifies similarities to the cadavers undergoing dissection within these minute details of pubic and facial hair, among other identifiable surface features.

Missing from Bidloo’s illustrations, though he does discuss them in his descriptive text with regards to preparing bodily material for study, are any signs of bodily fluids. It appears as though the preparations and cadavers for each of his illustrations had been cleaned of any blood, bile, mucus, urine and feces prior to de Lairesse’s recording. These fluids, which were removed and absent from Vesalian representations, actually linger and are present through their very absence from the images of the *Anatomia*. The practical reason for this absence is these materials’ threat to the stability of Bidloo’s subject of anatomy (the human body). However, for the reader, their absence signals a process of abjection, a struggle to both inhabit and abandon the anatomize subject. A major contributor to abject theory, Julia Kristeva argues:

> On a psychic level… the experience of abjection both endangers and protects the individual: endangers in that it threatens the boundaries of the self and also reminds us of our animal origins, and protects us because we are able to expel the abject through various means.

Ultimately, Bidloo’s desire to reintroduce the cadaver in anatomical illustration still required careful consideration regarding boundaries. Rather than detailing the various fluids produced within the body, though Bidloo describes the structure of blood cells, he focusses primarily on

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creating a clear, unveiled representation of the dissected cadaver. Rina Arya, writing on Kristeva’s work with abject theory clarifies that

While the operation (of abjection) seeks to stabilize, the condition (of the abject) is inherently disruptive, meaning that there is a constant tension of drives. The concept is both constructive (in the formation of identity and relationship to the world) and destructive (in what it does to the subject)... The threat of abjection (of being abject) gives rise to the operation of expelling the abject and thus restoring stability, albeit for a limited time. The expelled part does not disappear—it is the perpetual remainder—and continues to threaten the boundaries of the self, meaning that its presence disrupts the stability of self and society, thus activating the need for the operation of abjection.135

The alive, the dead, the cadaver, the last of which functioned at the periphery of both life and death, existed in the status of death, but was studied to understand the status of the living. Bidloo closed the proximity between the two zones by generally refusing the subject of anatomy a life-like place in the periphery between life and death. The true subject of anatomy is dead, and with that change in teleology, came an immediate threat to the placement and status of the anatomized body and the viewer’s relationship with it. Ruysch, worried at the revulsion and fear that Bidloo’s subjects would provoke in the viewer, inevitably criticized Bidloo’s efforts. Was he worried about the threat Bidloo’s illustrations posed to anatomical study and the stability of the relationship between the viewer and the subject of anatomy, or did he criticize Bidloo’s approach for another reason?

The conflicting visual methods used by Bidloo and Ruysch and the resulting pamphlet war that ensued throughout the 1690s has been cast by medical historians as resolving itself in favor of Ruysch. After all, Ruysch’s self-proclaimed moral superiority held more sway in a period when anatomists struggled to conceal and censor bodies in order to avoid inspiring titillation or other immoral thoughts. However, was Ruysch criticizing Bidloo in defense of the

readers who would be appalled by the *Anatomia*’s illustrations, or was he employing and
exaggerating a reaction towards the return of the abject cadaver into medical imagery to assist in
his attempt to discredit his young and rising competitor? Ruysch obviously felt that readers
should be revolted by Bidloo’s display. But the fact that the illustrations of the *Anatomia* were
reprinted in a translated, Dutch copy, and later in a number of English atlases after Bidloo’s
death, suggests that his atlas did have a lasting effect on anatomical study and illustration. He
cannot simply be dismissed as the useless megalomaniac, that Ruysch presented him to be.

Not only were cadavers a necessity for the weekly private lessons hosted in the Waag
(Weigh House) where the Surgeon’s Guild headquarters were, the private dissections hosted in
the Binnengasthuis, the annual public dissections that the general public paid to attend, but also
for the population of various public commercial anatomical collections. All of these theatres
demanded witness and interaction with cadavers from both those working in the medical field as
well as the general populace. Even Ruysch, for all his criticism of Bidloo’s approach saw the
necessity of studying cadavers directly, or else he would not have quarrelled with the governing
regents of the Binnengasthuis over access to cadavers for lecture material. While the *Anatomia*
was certainly the product of a critical reaction to the perpetual convolution that happened within
Vesalian representation in medical discourse, looking to the broader cultural discourse around
death in the Dutch Republic may provide more insight into broader factors that instigated
Bidloo’s new mode of representation.

The gradual anonymizing of medical cadavers, and the increased secularism of
anatomical practice, are indicative of an objective shift introduced in Cartesian dualist thought,
according to Cuir.\textsuperscript{136} The advent of Cartesian dualism and Descartes’ mechanical body were extremely influential in Dutch anatomical practice. Comparing the various anatomical structures to the mechanisms of machinery, Descartes asked of his followers: “I should like you to consider that these functions follow from the mere arrangement of the machine’s organs every bit as naturally as the movements of a clock or other automaton…”\textsuperscript{137} In accordance with Cartesian philosophy the study of the living no longer involved studying life, “because the body had become an organic machine to be investigated by philosophers and anatomists.”\textsuperscript{138} In his preface, Bidloo explicitly refers to this mechanical understanding in defining the anatomized body as a machine, examining its various parts in order to understand how that machine functions. Throughout the text in the \textit{Anatomia}, the term ‘\textit{machina}’ appears repeatedly when Bidloo describes how the various muscles, nerves, tendons and organs are arranged and connected within the larger system of the body. With Descartes, the death of the body was also defined as the moment when all movement of the mechanisms within the body ceased.\textsuperscript{139} According to Cuir, Descartes likened his own body to a corpse the better to reduce his body to an object of study.\textsuperscript{140} The corpse as an appropriate object of study is echoed in Bidloo’s teleology. Margócsy observes:

\begin{quote}
For Bidloo, no simple correspondence could be established between the two [cadavers and animate organisms] because the organs of the living body were in motion. External and internal pressure constantly changed the shape of the heart, the lungs and the skin.
\end{quote}

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\textsuperscript{136} Cuir, “The Death of the Écorché, or Cartesian Anatomy,” 155-174.
\textsuperscript{138} Cuir, “The Death of the Écorché, or Cartesian Anatomy,” 159.
\textsuperscript{139} James, “The emergence of the Cartesian mind.” 122.
\textsuperscript{140} Cuir, “The Death of the Écorché, or Cartesian Anatomy,” 159.
\end{flushright}
Since anatomical preparations, in contrast, were static and rigid, they could not represent temporal change.\textsuperscript{141}
The contrast between living bodies being in motion, and anatomical preparations being static and rigid indicates that Bidloo subscribed to Descartes’ understanding of death and employed that in his teleological justification regarding the true subject of anatomy.

Descartes effectively dismissed Aristotelian, and more developed Thomist ideas, about the soul’s relation to the body. Aristotle, and the later Thomas Aquinas, believed three souls inhabited and controlled the human body; the rational, the emotional and the vegetative.\textsuperscript{142} Descartes, influenced by the insistence of Catholic dogma on the immortality of the soul and the supremacy of human life above animals and plants, argued that the vegetative and emotional souls were instead a part of the body, and that the rational soul, which only humans possessed, was distinct and immortal.\textsuperscript{143} Without the rational soul, the body was simply an automaton, a machine, like animals. Cuir observes in his own examination of early modern anatomical practice and its philosophical and teleological undertones, that “with Descartes, the conquest of the human body led to its abstract and methodological reduction into an object of study like any other, and above all like any other artifact.”\textsuperscript{144}

Unfortunately, Descartes was never able to explain how human life functioned with two distinct parts, the body and soul, that could never be unified. This major issue was refuted and

\begin{itemize}
\item \textsuperscript{141} Margócsy, “A Museum of Wonder or a Cemetery of Corpses?” 194.
\item \textsuperscript{142} James, “The emergence of the Cartesian mind,” 112-114.
\item \textsuperscript{143} De Moulin examines how in Descartes work in \textit{Traits de l’Homme}, published posthumously in 1662, the philosopher composes his machinist view of the human body: “he described the body as a sort of engine, composed of solid parts and kept in operation by the blood and nerve spirits moving in the blood vessels and nerves. Man, however, is not only a machine for he has a conscious mind as distinct from animals which were thought to be merely automatons.” De Moulin, “The age of enlightenment,” 100.
\item \textsuperscript{144} Cuir, “The Death of the Écorché, or Cartesian Anatomy,” 159-160.
\end{itemize}
revised by the later Dutch philosopher Baruch Spinoza. Michael Sella Rocca notes that Spinoza’s ethics “generate an ethical system that is fundamentally egoistic-centered on the interests and power of the self.” According to Chantal Jaquet, Spinoza’s new insight made the mind and body “parallel and mutually correlated processes, mimicking each other at every crossroad, as two faces of the same thing.” For Spinoza, it was inconceivable for human life to consist of two distinct entities as Descartes had believed, and so he argued for a unity of mind and body: “the mind and the body are one and the same individual, which is conceived now under the attribute of thought, now under the attribute of extension.” The mind being the thought or idea, and the body extension of that idea as an object. Elizabeth Grosz has also noted that Spinoza was “committed to a notion of the body (and indeed the subject) as total and holistic, a completed and integrated system (albeit one that grows and transforms itself).” In her examination of Spinoza’s more unified approach to the body, Jaquet summarizes the philosopher’s approach to the human body effectively:

For Spinoza, all things have a formal essence that expresses their reality and an object essence that is the idea of this reality. The objective essence, therefore, is nothing other than the idea of the thing, and is different from the formal essence, which applies to the thing its material reality or form.

145 While Spinoza’s work is commonly studied for its political implications, seeing as he was reacting to public desires for freedom and equality in a period where political pressures from the French and English seeking control over the Dutch Republic constantly loomed.
146 Della Rocca, “The ethics of Ethics,” 175.
“Objectively” for Jaquet, should not be mistaken as the opposite of subjectively in this case, but rather “that a thing is taken as the object of thought and refers to the representation or the conception the mind makes of it.” While Bidloo still employs a distinctly Cartesian definition of the body as a machine, a Cartesian definition of death and a method of examining corpses as a means to understand that machine, the philosophy of Spinoza should be considered for its holistic approach to understanding the body.

Spinoza’s philosophies are relevant to the *Anatomia* because, during the years of its production, Bidloo was a member of the French literary society *Nil Volentibus Arduum*, whose founding members were closely allied with Spinoza. Gerard de Lairesse, though not an official member of the society, was commissioned to paint multiple sets for the society’s theatre productions at the Amsterdam *Schouwburg* (the Amsterdam Theatre). One of the preoccupations of the society was to discuss Spinoza’s philosophical writings. Cuir believes Bidloo’s *Anatomia* to be an example of Cartesian anatomy, however, I argue that Bidloo’s anatomical teleology was more indicative of a Spinozist understanding of the body. The holistic view that Spinoza held of human nature translated into Bidloo’s own more holistic representation of the anatomized body. Rather than only representing the mechanical, or structural components of anatomy, de Lairesse’s illustrations feature fatty globules and tissue, hair, finger nails and other bodily matter unrelated to the function and focus of specific illustrations. As well, taking

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152 Kneoff summarizes the motives of the society: their primary purpose was to promote French Classicism and to reform the productions in the Amsterdam Theatre, which they deemed too vulgar for their tastes, and secondarily, they secretly discussed the “forbidden philosophies” of Spinoza, whose publications and beliefs had led to his exile from the Amsterdam Jewish community that he originated from. Kneoff, “Sex in Public,” 53.
queues from Spinoza’s unity of the mind and body, the subject and its extension into the object, Bidloo sought to unify the subject and object of anatomy. He did this by reintroducing the cadaver, the very object anatomical study was performed upon, back into the discourse, synthesizing both study and practice, idea and application, in his illustration. Just as Spinoza sought to unify the body and soul to correct the disjointed mistakes of Descartes, Bidloo unified the subject and object of anatomy to prevent further convolution and disjointedness between study and practice as had been seen with the Vesalian mode of representation.

What of the display of the dead unrelated to medical discourse in early modern Dutch society? An excellent example is found in the political crisis that consumed the early 1670s as the Dutch Republic was onset by French invasions. In the year 1672, after the French of the southern provinces of the Netherlands led by Louis XIV, the Dutch liberal politician and Grand Pensionary Johan de Witt, and his brother Cornelis de Witt were blamed for failing to stop the invasion and were subsequently lunched by an organized mob in The Hague. On the 21st of August, Johan went to visit his brother Cornelis, who had previously been arrested on charges of treason, at the local jail where he was being held and tortured. Outside of the jail, the two were shot by members of the local militia and left in the hands of the Orangist mob, who were already organized for the occasion.154 The mob hung their bodies on a public gibbet, opened their chest cavities and proceeded to roast and eat their livers. Just after these events, William III of Orange took control of the Dutch Republic and was declared Stadtholder. The Dutch artist Jan de Baen, who had painted portraits of both of the de Witt brothers prior to their deaths, depicted the death of the two brothers in The Corpses of the de Witt Brothers (1672-1675) (fig. 5).

154 The Orangists were strong supporters of William III’s claim to the leadership of the Dutch Republic as the stadtholder, an opportunity that Johan de Witt strongly opposed.
De Baen presents the viewer with a gruesome scene of their execution. The scene appears to be situated in the evening, for the sky is dark and the canopy of trees is heavily shadowed, with torches far off in the distances providing some of the only light in the greenery. In the foreground, a man in red holds a torch over a brick wall to shed light upon the true subject of the painting. Tied to a stepped gibbet by their ankles, the bodies of the de Witt brothers hang upside down and stripped of clothing and, apparently, their faces. Their fingers, toes and genitalia cut off, these bodies are the victims of a terrible justice at the hands of the mob. Their faces have been relieved of their skin, slashes and gouges appear on the brothers’ legs and chests, but more noticeable is the gaping opening and emptiness of their abdominal cavities. Other signs of injury include the bullet wound that drips one stream of blood from the lower left ribcage of the body facing the viewer. De Baen presents the brothers bodies in a similar manner to the presentation of bodies at public dissections, or the more notable Anatomy Lesson paintings. As in public dissections, the bodies of the de Witt brothers are on public display, but here their evisceration is intended to teach a moral lesson to the viewer, just as their execution did. In the corpse presented frontally to the viewer, de Baen pays careful attention to the internal structures of the torso and to the musculature of the flayed face. In the abdominal cavity, a v-shaped line indicates the ureters (the tubes connecting the kidneys to the bladder), a horizontal line indicates the dome of the diaphragm (although it is anatomically inaccurate as it would be located closer to the second lowest rib) and the lungs. Ultimately their criminal bodies were subject to dissection (and consumption, both figurative and literal) as a form of punishment for their political transgression against William III of Orange and the Dutch Republic at large.

The presentation of the bodies here is similar to the Dutch sub-genre of paintings of hanging carcasses of slaughtered animals. In those paintings, such as Rembrandt’s *Slaughtered*
Ox (1655), Caspar Netscher’s *Slaughtered Pig* (1660-1662), or Jan Victor’s *The Slaughtered Hog* (1653) among many others, the skinned and gutted bodies of oxen, pigs, and other domestic livestock are put on display as they await further butchery and domestic consumption. These scenes, often associated with the general theme of *memento mori* or the idea of vanitas in Dutch art, have been seen to represent ideas surrounding death and the inevitability of life.\(^\text{155}\)

Finally, what of the every-day interaction with death? A common sight and site in Amsterdam was the Gallows Field, located on the Volewijk peninsula just outside of the city center. Any criminals hanged, broken on the wheel, or otherwise executed, and ordered to remain on display as an example to the Amsterdam residents could be seen in this area. Anthonie van Borssom captures the scene of an interesting interaction in the Gallows Field in his 1664 watercolour drawing (fig. 6). In this, the bodies of criminals can be seen hanging, dead, in a variety of manners. More surprising however are the living people that seem to leisurely stroll through the area, pausing to observe the bodies in various stages of decay. This interaction with death appears completely unfiltered and in the viewer’s control.

Although the purpose of visualizing death appeared to vary from situation to situation as art genres and areas of culture invested different meanings in dead bodies, what is apparent is that the dead body, in various stages of dissection, was a common, if not popular visual in early modern Dutch culture. So, while Ruysch may have based his criticisms towards Bidloo’s atlas on the average reader’s reaction to viewing dead bodies up close and personal, it appears that his criticisms fail to have a solid footing. Death was displayed and interacted with in a variety of different ways in Dutch culture, and even more so, the spectacle of dissecting dead bodies in

anatomical theatres, or the specimens of commercialized anatomical collections received
thousands of visitors each year. Taking queues from the philosophical attitudes of Spinoza, and
visual culture, Bidloo sought to halt the perpetuated convolution between the study of anatomy
and the practice of anatomy. Correcting what he perceived to be the fatal mistakes of his
predecessors, Bidloo introduced the dead cadaver back into medical illustration, synthesizing the
subject of anatomy with the very object practiced upon, to inhibit the reader’s misinterpretation
and provide them with a reliable reference text that complemented physical dissections.
Chapter Three
“A Moral Cancer”: The Controversial Representation of Female Anatomy in the Anatomia

In the 31st table of the Anatomia, a female cadaver is represented to, according to the text, examine the surface abdominal muscle tissue of the body (fig. 7). Four folds of skin have been cut away; on the right with the surface layer of fat attached, and on the left, without, and the naval of the cadaver remains fully attached to the layer of muscle underneath. The illustration presents the female body bordered by two sheets; one that drapes the upper thighs, and another that covers the shoulders and perhaps the head of the body which is absent from the frame. These draperies do not fully cover the breasts or the top of the labia majora, but rather reveal them for the viewer to see as structures connected to the abdominal muscles. While Bidloo’s intention, which he expressed in the descriptive text that accompanies the table, was to outline the surface muscular structure of the abdomen, the breasts and labia are equally prominent and, although unlabelled, draw the viewer’s attention to the fact that the body on display is female. Bidloo and Gerard de Lairesse’s decision to include these gender signifiers in their anatomical treatise became the main subject of a bitter public feud between Bidloo and his contemporary, the Dutch physician Ruysch.

Ruysch strongly criticized Bidloo for his ‘immoral’ and ‘unnecessary’ presentation of female pudenda throughout several of the illustrations in which the specific subject of study was structurally unrelated to female reproductive anatomy. In her examination of Ruysch’s medical cabinets, Rina Kneoff observes how the controversy that ensued between the two anatomists originated in a larger contemporary debate regarding how anatomists could respectfully represent
a female’s outer reproductive organs.\textsuperscript{156} I argue that this conflict represents more than an argument about the representation of physical parts, but rather exemplifies how anatomists attempted to navigate changing definitions of gender that were heavily influenced by developments in sexual physiology, the growing objectification of medical study, and the changing cultural connotations of gender deemed innate to the female sex in early modern Dutch culture.\textsuperscript{157} Disregarding the petty claims and colourful language used by Ruysch to denounce Bidloo’s visualization of the female gender, the Anatomia offers a unique opportunity to explore the interplay between medical developments and cultural connotations of gender within the anatomized female body. To underscore how the Anatomia navigates this discourse, I will examine in this chapter Bidloo’s atlas in relation to Ruysch’s approach to visualizing female anatomy in the context of early modern attitudes towards women. Evidence of these attitudes are found in popular treatises on marriage and domestic life by Jacob Cats and Mattheus Tengnagel, and in genre paintings by Gerard ter Borch and Gabriel Metsu, which collectively provide glimpses of Dutch womens’ perceived dependence, vulnerability, susceptibility to moral and sexual transgression and dishonour. Ultimately, by thoroughly situating the Anatomia within Dutch medical and cultural connotations of gender, I will identify how Ruysch’s methods to slander Bidloo’s reputation, using prevailing attitudes towards women to question his morality, negatively impacted the reception of Bidloo’s atlas. Furthermore, I will reveal how Bidloo’s

\textsuperscript{156} Kneoff, “Sex in Public,” 53.

\textsuperscript{157} When speaking of gender as innate to the female sex, Judith Butler offers clarification: “Indeed, if gender is the cultural significance that the sexed body assumes, and if that significance is codetermined through various acts and their cultural perception, then it would appear that from within the terms of culture it is not possible to know sex as distinct from gender.” However, while sex is not deemed as distinct from gender in the early modern period due to cultural perceptions, the definition of female gender did change as women began to develop more autonomy. Judith Butler, “Performance Acts and Gender Constitution: An Essay in Phenomenology and Feminist Theory,” Theatre Journal 40, no. 4 (1988): 524.
Anatomia represents a larger trend in Dutch culture whereby women were afforded more autonomy in economic, legal, and civil spheres, were able to defend their honour against men, public opinion and gossip, and had more control over the definition and defense of their gender. Such autonomy made the representation of female bodies more permissible in Bidloo’s Anatomia.

Ruysch was not hesitant to criticize Bidloo’s aberrant treatment of female anatomy in the illustrations of his Anatomia: “why does Bidloo feel the need to represent the pudenda, while not discussing them at the same time?... is it not the case that Bidloo is stimulated by the passions of Venus and also wants to encourage his flirtatious comrades and bosom friends?” Ruysch went so far as to call Bidloo a whoremonger, an immoral man in power who sought to “rob” women of their secrets and honour and present them for all to see. It is important to note that the competitive relationship that existed between a great many anatomists trying to secure their reputations in the Dutch Republic often resulted in one anatomist accusing the other of finding titillation in studying female anatomy. In fact, Ruysch himself kept preserved specimens of female reproductive anatomy in his own private collection, albeit tucked away on an upper shelf and shielded from the direct view of average visitors. On the one hand, he wanted to protect these “fallen” women, whose bodies were anatomized largely as a result of their fall into temptation and sin and, on the other hand, he claimed he wanted to prevent the viewer from immoral temptation. Ruysch believed that by presenting female genitalia without censorship,

159 Heyam, “Paratexts and pornographic potential in seventeenth-century anatomy books,” 1-33. Heyam examines the numerous conflicts that ensued between anatomists over the presentation of the female body over the course of the early seventeenth century.
and in a loose context that was easily misinterpreted, he risked instigating immoral thoughts and
titillation from his audience, who he believed would gain sexual pleasure from such undisguised
sights.\textsuperscript{161} No wonder, then, that one of the primary factors leading to Ruysch’s dismissal of the
\textit{Anatomia} was his rejection of Bidloo and de Lairesse’s ‘radical’ representation of the
anatomized female body. As an internationally renowned specialist in female anatomy and
obstetrics, Ruysch’s censure was extremely influential. His criticisms of Bidloo’s atlas have
often since been interpreted and presented within medical bibliography as having been informed
solely by professional opinions in medical discourse, and not by any more personal or petty
criticisms that reflect very real disputes over reputation.

Traditional Western medical epistemologies of the early modern period, visually
informed by Andreas Vesalius’s canonical anatomical text, the \textit{Fabrica} (1543), presented the
standard anatomized body as male. Vesalian anatomy, being the forerunner of the “new”
anatomy that revived and adapted Galenic epistemology in the sixteenth century, made
references to the female body solely in relation to its reproductive abilities (fig. 8).\textsuperscript{162} R.
Ballestriero notes that the stereotypical female body represented in early modern medical study

\textsuperscript{161} While Ruysch was cautious in his display of female pudenda within his anatomical cabinet,
his own reputation for having advanced knowledge of female reproductive physiology and
skilled experience with obstetrics and midwifery justifies the presence of these anatomical
specimens.

\textsuperscript{162} Galen emphasized that the most reliable kind of knowledge was obtained through scientific
demonstration and empirical evidence, however, it has been argued that much of his study was
not based on live observations of human anatomy, but rather adapted from observations of
various mammalian anatomies. Vesalian epistemology emphasized actively engaging with a
body and observing the contents of its interior, rather than studying it from a text, or as Galen
and other anatomists had, extrapolate mammalian anatomy to human purposes. Although
Vesalius is considered to be Galenic in his approach to anatomical study, especially with regards
to his interpretation of male and female reproductive anatomy, his emphasis on examining
cadavers set a precedent for later developments in anatomical study in the sixteenth and
seventeenth centuries.
was that of a sensual young, pregnant, woman, with firm limbs and muscle tissues and a lack of body fat. Vesalian anatomy, and the largely imitative works that followed, stressed the comparative sexual differences between male and female reproductive physiology. New interests in the difference between female and male skeletal anatomy, specifically observations of the distinct shape of a female pelvis documented by late sixteenth-century anatomists such as Berengario da Carpi (1521 and 1522) and Felix Platter (1583 and 1614), further developed the notion of a uniquely different, female body. In the seventeenth century the growing acceptance and standardization of dissection practices resulted in new developments in female physiology. Until the latter half of the seventeenth century, female sex was commonly conceptualized as an inverted male anatomy, after the Vesalian understanding. William Harvey’s observations on human generation distinguished the female sex from the previously established “inverted male anatomy” championed by Vesalius, redefining it as physiologically unique. Later, in 1668 and 1672, Reinier de Graaf wrote and published multiple texts on the organs of generation, contributing to the centuries-long debate about the origins of the “human seed,” and arguing for the presence of what contemporary medicine calls the Graafian Follicle in the ovary (where a mammalian ovum develops prior to ovulation). De Graaf was also responsible for formalizing

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164 Michael Stolberg notes that the pelvis and iliac bones were wider than those in male bodies, better accommodating the uterus and its growth during pregnancy, and to provide the required space for a child to pass through in birth. By the end of the seventeenth century, these anatomical differences were appropriated culturally to enforce gender roles associated with reproduction upon women. It was, after all to then contemporary Dutch citizens, because of their structural makeup, women were designed to bear children. Michael Stolberg, “A Woman Down to her Bones,” 276-277.
It is apparent that the common trend in observing female anatomy was that anatomists primarily focused on the organs of generation. Katharine Park, Jonathan Sawday, Rina Kneoff, Helen O’Connel and others have observed that major trends in anatomical development in the sixteenth and seventeenth centuries focused on women solely to explore the “secrets of women.”

Publications on the anatomy of women were primarily focussed on female reproductive physiology for a variety of reasons; Park argues that not just anatomists, but society at large was interested in the functions of female reproductive organs out of fear about, and ambiguity towards, the mysteries of reproduction, legitimacy of paternity and a desire to understand ones’ self better. Jonathan Sawday believes this interest was a result of how society perceived the womb, as “a separate animal creature housed inside a woman…like disease, the uterus operated according to its own laws, travelled at its own pace, hid itself from the searching gaze of natural scientists…” While the male body was recognized as the standard in visualizing anatomy, the female body was required only to demonstrate its significant difference from males. Kneoff notes that the preoccupation of anatomists with female reproductive anatomy could be explained as a reflection of the ideological obsessions of a male-

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dominated profession. However, Mimi Cazort, examining a variety of anatomical art produced in the early modern period in the 1996 Canadian exhibition *The Ingenious Machine of Nature*, speculate that anatomists’ obsession with female reproductive anatomy was also very likely an attempt to answer the question “where do we come from?”

Within Amsterdam in particular, the study of female anatomy was popularized and applied to both medical and cultural practices in a variety of ways. Ruysch, who held the position of municipal obstetrician in Amsterdam and was professor of anatomy for the Amsterdam Surgeon’s Guild, was also responsible for the education of midwives and surgeons in the city, applying his knowledge and experience with female anatomy to formalize Dutch obstetrical study. By dispelling traditionally superstitious rituals surrounding pregnancy and childbirth through a formal training regimen complemented by lectures with live dissections of female cadavers, Ruysch applied contemporary studies of female anatomy to medical and cultural practices related to reproduction. In his own collection of anatomical specimens, Ruysch preserved numerous fetal skeletons, pudenda, and other bodily parts related to gestation, birth, and female reproductive physiology, which were featured in the public museum within his own home in Amsterdam. Ruysch’s broad involvement in the Amsterdam medical community has

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171 Kneoff, “Sex in Public,” 43.
173 Ruysch established an agreement with the governing body of the Amsterdam Civic Hospital that he received four female bodies annually from the hospital for the purpose of medical lectures and the education of midwives. In numerous years however, the hospital was unable to comply with this agreement because, although female bodies were often available, they were bought, claimed, or given to the numerous anatomists who sought to pursue personal studies. The chief physician of the hospital, Bonaventura von Dortmund who was appointed in the 1670s favoured Govard Bidloo, often siding with him in conflicts between himself and Ruysch, and likely gave him preference over Ruysch for the donation of cadavers and parts. More information on Ruysch’s career can be found in the work of Julie Hansen, Rina Kneoff, and Luuc Kooijmans.
resulted in a common understanding of late seventeenth-century Dutch medical practice as being predominantly occupied with female reproductive anatomy.

In the last two decades, researchers have often claimed that the bodies of women used for anatomical study were obtained through a series of different events: as a result of pregnancy related death and/or the execution of prostitutes, thieves, or murderers. The most obvious reason for this assumption is that the tradition of visualizing the female body in anatomical illustration was solely related to its reproductive purpose; the body of a female is portrayed only to demonstrate anatomists’ grasp of the functions of the womb and fetal development. However, when examining anatomical material from this period, acknowledging regional differences regarding access to cadavers is important. The female bodies in Bidloo’s atlas are not all pregnant, which challenges the common assumption that female bodies used for anatomical study were primarily those of pregnant women. “T[able]. 49,” for example, reveals the urinary tract and reproductive organs of a female after the removal of the intestines. The colon, labeled as c. intestine recti is shown removed in “T. 50” and attached, via membranes known today as the rectouterine pouch (a section of the peritoneum), to the uterus. The rectouterine pouch is also portrayed in “T. 49” (fig. 9), with what appears to be a fallopian tube, labeled as b. uterin in ima abdominis cavitate sice pelvis immerse altera tuba, however the uterus itself is not visible. While the uterus may not appear to be present within this illustration, the status of the female cadaver’s pregnancy remains ambiguous. It could be argued that the female body was pregnant and that the uterus was removed. However, as the uterus shifts up above the colon in pregnancy and rests

174 In her examination of Ruysch’s medical cabinets, Hansen claimed that “female subjects were often executed prostitutes or thieves; they could also be unmarried pregnant women who had died from syphilis or in childbirth. Subjects also included women hanged for the crime of infanticide.” Hansen, “Resurrecting Death,” 672.
lower down when not pregnant, it could also be argued that the uterus is merely hidden beneath the folds of muscle tissue and fat that encase the abdomen. The presence of the fallopian tube indicates that this is the case, as well as the anatomist’s decision to label the vulva even though it is concealed by a cloth.

Another common claim held by contemporary scholarship was that there was often a shortage of female bodies for medical study. Numerous contemporary historians, art historians and medical professionals have continued to propagate a general assumption that female bodies were not readily available for dissection because so few were executed. Their rationale proves to be rather narrow. Although this discussion is unrelated to the bodies presented within anatomical atlases, as the bodies of executed criminals were used solely for the purpose of public dissections in the Dutch Republic, understanding the presence of female bodies in the wider sphere of Dutch medical practice is crucial to explaining how, and where many female bodies were obtained for medical illustration. Pieter Spierenburg, who has examined violence and the criminal justice system in early modern Holland, notes that the common assumption that women were not involved in violent acts or present in any significant numbers in the criminal justice system is based on very little evidence.\textsuperscript{175} His data reveals enough evidence to suggest that quite a high number of women, roughly 15%, were involved in the criminal justice system as a result of violent acts against neighbors, infanticide, and other crimes.\textsuperscript{176} It was, however, less common for women to be punished as severely as men, primarily as a result of male bias in the court system.

\textsuperscript{176} Pieter Spierenburg, “The stagers: the authorities and the dramatization of executions,” in \textit{The Spectacle of Suffering, Executions and the evolution of repression: from a preindustrial metropolis to the European experience} (Cambridge: Cambridge Univ. Press, 1984), 70.
and the assumptions in Dutch society of women’s susceptibility to sin.\textsuperscript{177} The Dutch criminal justice system at the end of the seventeenth century was, generally speaking, a fairly lenient system, likely as a result of the Protestant doctrine that involved the governing of the courts; Calvinist doctrine promoted forgiveness and a general aversion towards ‘unnecessary’ death. For these reasons, many criminals involved in violent acts were often released with a fine, sentenced to work, or given a short jail sentence rather than being executed.\textsuperscript{178} Naturally, exceptions to this rule were dependent on the severity of the crime; women found guilty of infanticide, murder and other killing-related crimes were executed, but these instances were few as the majority of female violence was manifested in verbal conflict.\textsuperscript{179} This, paired with the short window of time during which public dissections were performed—specifically during the winter months—made female cadavers rare commodities for public anatomical dissections.

The assumption that female bodies were those of executed prostitutes is of particular interest, considering the common characteristics between Ruysch’s description of Bidloo’s imagery in the \textit{Anatomia} and adjectives used to describe prostitutes. While prostitution was illegal under Calvinist informed law in the seventeenth-century Dutch Republic—5,784 people were tried for prostitution between the years 1650 and 1750—and prostitutes and their bawds (the women who owned and ran brothels) were often only “lightly punished and returned to work.”\textsuperscript{180} Specifically, first offenders were banned from inns and whorehouses, second offenders were banished from the city for a specified period of time, and any infraction of those bans could

\textsuperscript{177} Pieter Spierenburg, “The stagers,” 71.
lead to their imprisonment in the Spin House, a correctional work house dedicated to
rehabilitating women through forced labor. There is no case in the records of criminal trials
held by the courts, known as the Confession Books, in which a prostitute or bawd was
condemned to death, thus their bodies were likely not a major resource for public dissections.
However, their acute vulnerability to sickness and poverty very likely made them patients in the
Binnengasthuis, the more logical source of cadavers and anatomical material for anatomists.

In Ruysch’s collection, with which Kneoff and Hansen are well acquainted, the female
reproductive specimens were said to be the parts of ‘fallen’ women; by ‘fallen’ Ruysch means
women who engaged in prostitution or other sexually transgressive acts. Whether these
women died due to illness, sexually transmitted diseases, or complications in pregnancy is
uncertain. Prostitutes who were deemed too old, or too sick (the rise of venereal disease in the
period was heavily associated with sex trafficking and prostitution) were released or fired from
the brothels by the bawd to fend for themselves on the streets. The sick were likely committed to
the Civic Hospital, which was an early public hospital available to those too poor to afford
private care from physicians at home. Those that died, and whose bodies remained unclaimed by
family or relatives of any kind, were often bought under the table or donated to anatomists and
members of the Surgeon’s Guild for private and academic purposes. A number of female

181 The Spin House was a correctional facility established in Amsterdam in 1597. In this work
house, women underwent forced labor, learning how to sew and spin. According to Van de Pol,
very few prostitutes ended up in the Spin House, although enough did that the workhouse was
socially associated with the ‘immoral’ and ‘dishonorable’ women. In early modern Dutch
culture, sewing was seen as the most virtuous activity a woman could perform, indeed, aside
from serving as a maid or servant in a large house, the second largest employment opportunity
for women came in seamstressing. Van de Pol, “‘The world cannot be governed with a Bible in
the hand’,” 95-98.
183 In his chapter “The Collection,” Kooijmans details the conflicts surrounding obtaining bodies
for dissection between the regents that governed the Amsterdam Civic Hospital, and the multiple
patients in the Hospital’s care would not only have been sick, destitute, and possibly prostitutes, but an even larger number were unmarried and self-supporting. These women were more vulnerable to illness, the socio-political hardships of bearing illegitimate children and challenges to well-being due to the absence of the stabilities of marriage, financial support and status.\textsuperscript{184}

Likewise, pregnant women of a lower class who suffered from the potentially fatal consequences of complications, miscarriages or infections, provided opportunities for anatomists to obtain fresh cadavers for dissection. An over-reliance on the statistics obtained from studying public dissections and the visual evidence propagated through (male identified) anatomical illustration has informed our conclusions. Indeed, Anatomical preservations, and the details of medical pamphlets and letters, suggests the presence of a pool of female cadavers larger than previously imagined.

Why did Ruysch, and in turn, Dutch anatomists believe that, even after death, women’s parts could be subjected to and tainted by immoral acts? Furthermore, how was the female gender defined by Dutch culture in this period? Does Bidloo’s presentation of female bodies in the \textit{Anatomia} conflict with Dutch cultural attitudes towards women? The answers may appear surprising given the trend within medical biography and the history of dissection to reject Bidloo’s work on the strength of Ruysch’s accusations of flagrant immorality. How women were

defined legally, their economic roles, and the expectations placed upon them within the context of contemporary religious practice and belief, provide us with practical insight into the definition of the female gender in the seventeenth-century Dutch Republic. By further examining the representation of women in contemporary literature and art, the images in the *Anatomia* can be better understood in context.

A formally structured definition of the female gender, its role, and place in early modern Dutch society can be addressed within the legal parameters set in place to govern the provinces of Holland and Frisia. The Political Ordinance of April 1, 1580, examined by R.W. Lee in his text on Roman Dutch Law, remained the governing law within the region until Napoleonic forces invaded the Dutch Republic in 1811.\textsuperscript{185} The legal rights of women therein were delineated by rules of inheritance, marriage, contracts, and guardianship. As a result, women were able to inherit businesses from their dead spouses, engage in a variety of legally binding contracts (with the permission of their spouses) and take their husbands or any offender to court on charges of assault, harassment, or adultery.\textsuperscript{186} However, contemporary law was permeated with requirements of women’s dependence and submission to the power of their male counterparts, who were charged with their care and defense. Once married, a woman became classified as a minor (a status generally lost at the age of 25) and considered a dependent of a man.\textsuperscript{187} It was the responsibility of the husband to care for the wife and protect her honour, just as it was the wife’s

\textsuperscript{187} R.W. Lee, “Minority,” in *An Introduction to Roman Dutch Law* (London: Oxford Univ. Press, 1953), 44. According to Lee, the age of marriage set by Roman Dutch law was traditionally fourteen for males, and twelve for females.
responsibility not to taint the honour of her husband by engaging in adulterous or immoral behavior.  

Women engaged in the Dutch work force were largely involved in the textile industry or housekeeping. According to Lotte Van de Pol; spinning, silk winding, lacemaking and knitting were all virtuous trades for women, however they also worked as cleaners, street vendors, tobacco rollers, shop assistants and maidservants. Although her statistics are from roughly half a century later, Van de Pol notes that by 1742, more than 12,000 household servants were registered in Amsterdam, and that these positions were primarily held by women. The ability for women to inherit businesses is demonstrated by the fact that two of the publishers of Bidloo’s atlas were widows of the original publishers and booksellers who jointly owned the business. Such professional engagement among the working classes and in the urban fabric made women’s growing autonomy highly visible. However, the governance of the female gender, and their bodies, was largely informed by Dutch law and religion.

Judith Pollman, who wrote on the influence religion had on women in the Dutch Golden Age, notes that women were arguably more religious then men, and often sought religious

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188 Lee, “Marriage,” 64-68.
190 Van de Pol, “‘Birds of a Feather Flock Together’,” 144.
191 The widow of Joannes van Someren took control of his share of the group business after Someren’s death in 1678 or 1679, as did the widow of Dirk Boom. The date of Dirk Boom’s death is unknown, however Cornelis V. Schoneveld’s bibliography of Anglo-Dutch texts provides insight into the high level of productivity the book publishing group had throughout the latter half of the seventeenth century. Schoneveld, Cornelis W., Intertraffic of the Mind: Studies in Seventeenth Century Anglo-Dutch Translation with a Checklist of Books Translated from English into Dutch, 1600-1700 (Leiden: Brill/ Leiden Univ. Press, 1983).
alliance because so many remained unwed and wanted to be part of a supportive community.\textsuperscript{192} While a large portion of the Dutch population did not declare adherence to any specific religion, women, presumed to be the weaker sex and lacking male protection and support, sought the support and aid of the churches.\textsuperscript{193} A central tenet integrated throughout Dutch culture, but more specifically held in high regard in Dutch law, religion and social life, was the concept of \textit{eer} (honour) or a person’s good name.\textsuperscript{194} This concept was heavily influenced by moral standards, religious doctrine and, though not primarily associated with sexual activity, the predominant trend in literature and documentation shows that most conflicts surrounding the status of a person’s honour was with regard to their sexual honour.\textsuperscript{195} A man’s honour was dictated by chastity and sexual loyalty to their spouse, and was also grounded in his ability to inhabit the moral high ground and act as a defender of the more vulnerable sex.\textsuperscript{196}

Cultural works of the period, such as Jacob Cat’s popular text on marriage (1625), promoted notions of the vulnerability and susceptibility to sexual transgression believed to be inherent in women. In his book on marriage, Cats speaks of a woman’s honour as follows:

Whenever she makes a mistake or breaks a rule, it will immediately be out on the streets. She is fair game for all evil tongues… if ever a married woman misbehaves, her husband will carry some of the blame— just as when any good is done by women, their men will often get the glory. But if a widow, by careless foolishness, has become involved in a nasty rumor on a dirty deed, nevermind her good reputation for prudent behavior. The penalty and blame will all be hers… how fragile is a woman’s honour! A word uttered in

\textsuperscript{192} Pollman, “Women and Religion in the Dutch Golden Age,” 166.
\textsuperscript{193} Pollman, “Women and Religion in the Dutch Golden Age,” 166.
\textsuperscript{194} The notion of honour appears throughout the work of Kneoff, Cuir, Margócsy, Spierenburg, Van der Heijden, among others. It is never thoroughly discussed, but merely assumed to be understood.
\textsuperscript{195} Manon van der Heijden, “Women, Violence and Urban Justice in Holland c. 1600-1838,” 87.
haste, a glance of the eye, a nod of the head, has robbed many an eerbaer [honourable] woman of all lustre.\textsuperscript{197}

Cats charged men with the defense of the fragile virtue and honour of the female gender and claimed that the best way for women to protect their honour was to remain indoors and avoid exposing men to temptation.\textsuperscript{198} Cat’s regard for women was not strictly followed in the Dutch Republic as many women were involved in running businesses alongside men, and managing other economic affairs due to their unmarried status.\textsuperscript{199} In her study of prostitution in early modern Amsterdam, Van de Pol looks to a variety of literary sources to understand the moral pressure placed upon women to uphold their honour. For example, she examines Mattheus Tengnagel’s \textit{Klucht van Frick in ‘t Veur-Huys}, a fictional quarrel published in 1642 to highlight how a persons’ honour could be tarnished or stolen.\textsuperscript{200} Indeed, Spierenburg notes that the majority of female violence in the Dutch Republic in the seventeenth century came about as a result of women being taunted into defending their honour, largely sexual, when it was called


\textsuperscript{198} Pollman, “Women and Religion in the Dutch Golden Age,” 174, from Cats, Jacob, “Houwelijck, dat is de gantsche gelegenheit des echten Staets (1625).”

\textsuperscript{199} While accurate data is not available, as the first census recording age and marital status for cities like Amsterdam was not held until 1830, van der Heijden, Pollman, Jan de Vries and Ad van der Woude all argue that the percentage of single women (whether widowed, grass widowed, or never married) was likely quite high in the seventeenth and eighteenth century considering how unbalanced the male-female ratio was. Pollman, “Women and Religion in the Dutch Golden Age,” 168; Ariadne Schmidt, Manon van der Heijden, “Women Alone in Early Modern Dutch Towns: Opportunities and Strategies to Survive,” \textit{Journal of Urban History} 42, no. 1 (2016): 23; Jan de Vries, Ad van der Woude “The People,” in \textit{The First Modern Economy: Success, Failure, and Perseverance of the Dutch Economy, 1500-1815} (Cambridge: Cambridge Univ. Press, 1997), 75.

\textsuperscript{200} The English translation of Tengnagel’s work is \textit{The Farce of Frick in the Front House}. Van de Pol, “‘Whores and scoundrels always talk of their honour’,” 51.
into question in a verbal or physical manner.\textsuperscript{201} Van der Heijden and Ariadne Schmidt additionally argue that women’s criminal activity indicates “assertiveness and a high level of independence,” and furthermore, a higher level of autonomy than previously assumed by authors such as Derek Philips.\textsuperscript{202}

While Dutch law and popular texts such as Cats’ constructed a definition of the female gender based on its subservience to men, the female gender in practice differed quite radically. As van der Heijden and Schmidt observe, particularly with women living independently from men in the seventeenth century, women, though vulnerable, were supported by institutions, the communities they lived in, and the legal system in various cases of abuse, marital trouble and threats to their honourable reputations.\textsuperscript{203} Paintings of women of the period provide further insight into this departure from cultural expectations, and offer perplexing and contrasting connotations of the female gender as propagated by Ruysch, Cats and Dutch law. In Gabriel Metsu’s \textit{The Hunter’s Present}, a hunter offers a dead bird to a woman who is occupied with the virtuous activity of sewing (fig. 10). The bird represents the term ‘\textit{vogelen}’ (literally ‘to bird’), which was used euphemistically to refer to sexual activities in Dutch social life.\textsuperscript{204} A statue of Cupid, the god of love, watches over the scene from the top of a cupboard, further alluding to sexual tension within the scene. In this scenario, the decision to engage with the man is left up to


the woman who, deemed responsible for any immoral and unvirtuous activity should she accept
the bird, is in complete control of the situation. Her pause from sewing signals a warning to the
viewer about the temptations of sexual activities and their risk of bringing about the dishonour
and shame of the woman who gives in. Although Cats, Ruysch and Dutch law emphasized men’s
responsibility to protect women and defend their honour from their own inherent vulnerability to
sexual transgressions, this woman is ultimately in control of the exchange. The man does not
force the bird upon her, nor does she offer any opportunity for him to take advantage of her
vulnerability, aside from taking a pause in needlework.

Another painting, Gerard ter Borch’s The Paternal Admonition, depicts a young man
occupying a bed chamber in which two women are present and drinking wine (fig. 11). The
young man is seated, holding up his hand to offer what was originally a coin of payment to the
women (presumably a bawd and her prostitute). In her examination of prostitution in Amsterdam
in the seventeenth century, Van de Pol makes an interesting observation about traditional views
towards women:

Generally accepted medical theories held that women’s sexual appetites were more
powerful than men’s. This was blamed above all on the womb, an organ imagined as a
hungry animal that had to be appeased with semen and pregnancy. Men too craved sex,
but women, fickle by nature, were less able to control their lust… active and uncontrolled
female sexuality was especially threatening given the nature of male lust. Once a man’s
passions had been aroused by a woman’s seductive arts, his masculine wisdom and piety
went out the window, and he lapsed into foolishness and sexual servitude.205

Although the coin has been painted over, the exchange between the women and man and its
implied sexual tension is apparent in the almost empty glass of wine, the loosely hung and

205 Lotte Van de Pol, “‘The caterpillar in a cabbage, the canker in the leg’: Attitudes to
Prostitution, Prostitutes, and Woman,” in The Burgher and the Whore: Prostitution in Early
almost phallic sword at the man’s hip, and the privacy of the bedchamber that they inhabit together. From these visual and textual approaches to defining women through their actions in the Dutch Republic, to the ongoing emphasis on reproductive anatomy in medical practice, we can surmise that the female gender was at the time defined as follows: women were the more vulnerable gender and required protection and defense from men, they were inherently susceptible to temptation and sexual transgression and, based on the trends in medical study, as a gender women were almost solely studied for, and associated with, either their reproductive capabilities or their essentially sexual nature. Although the paintings conform with these ideas, they also place the woman in control of their individual situations. Ultimately, through assertive and autonomous acts in economic, legal and moral spheres, women’s actions constructed a definition of the female gender contradictory to popular cultural works like Jacob Cats’s.

In discussing the performance of gender, Butler describes it as “an act which has been rehearsed, much as a script survives the particular actors who make use of it, but which requires individual actors in order to be actualized and reproduced as reality once again.” Butler and Erika Fischer-Lichte both emphasize the significance of the unique interpretations of a constructed script, versus its performance, with relation to performative acts and gender: “… the gendered body acts its part in a cultural restricted corporeal space and enacts interpretations within the confines of already existing directives.” In contrast to Jacob Cats’ portrayal of

women as vulnerable, dependent, and subservient to men, Dutch women actively demonstrated their agency, challenging more traditional connotations of the female gender with performative acts of autonomy. This performance of gender that Butler describes is echoed in Bidloo’s own literary history.

Bidloo’s various theatrical and literary endeavors indicate that he was concerned with elevating the status of women in society. During the period of his involvement with the French literary society *Nil Volentibus Arduum* (Nothing is Impossible for those Willing), and his role as the director of the Amsterdam theatre in the late 1670s, Bidloo often cast women in female roles in his productions.\textsuperscript{208} This was not only unusual for the time but considered highly immoral by fellow members of the strictly male literary society for a number of reasons. Kneoff notes that the members of *Nil Volentibus Arduum* favored more sober productions in contrast to Bidloo’s productions, which they considered to be full of “orgies and female nudity.”\textsuperscript{209}

\textsuperscript{208} According to Kneoff, *Nil Volentibus Arduum* was a “group of Amsterdam intellectuals, established in 1669, following the example of the Académie Française. Their purpose was twofold: (1) to promote French Classicism and to reform the performances in the Amsterdam Theatre which were far too vulgar for their tastes and (2) to secretly discuss the forbidden philosophy of Spinoza.” Kneoff, “Sex in Public,” 53.

\textsuperscript{209} In February of 1685, Bidloo’s adaptation of Joost van den Vondel’s *Faeton, Oft reuckeloze stoutheid* (Phaeton, or Reckless Valor, 1663) was performed at the Amsterdam Schouwburg, as the Amsterdam Theatre was then known. *Faeton* was a drama detailing the story of how the son of the sun king crashed his father’s chariot into the Earth. Joost van den Vondel is considered one of the most influential Dutch playwrights of the early modern period. Writing after the classical Greek style of theatre, Vondel’s plays were extremely popular in the mid seventeenth century. Vondel’s style was replaced by the French Classicist style of the literary society *Nil Volentibus Arduum* in the late 1670s, who removed any religious implications from the theatre. Bidloo revised scenes presented in tableaux vivant, or static scenes, adding in spectacular and dynamic action, new characters, ballet, pantomime, and mechanical illusions to delight the audience’s senses instead of instilling a moral message. Mieke B. Smits-Veldt describes Bidloo’s productions as such: “what did go down well was excitement, emotion, a feast for eyes and ears, with plenty of music, song and dance.” The lack of morally guided characters, the shabbiness of his characters’ dress, and the sheer spectacle of his displays was contradictory to *Nil Volentibus Arduum*’s more moralizing and tasteful productions and resulted in heavy criticism towards Bidloo’s productions from other members of the literary society. Mieke B. Smits-Veldt,
unclear if Bidloo’s productions involved actual nudity, it is more likely that his emphasis on spectacle and sensory pleasures over the “more restricted and moralized relationship” that classical ideals introduced into Dutch theatre from the 1660s onwards, was associated with immoral and lascivious pleasures.\textsuperscript{210} Additionally, as the women involved in these revised productions were perceived to be unguided by any scripted moral messages, their lack of morality resulting from Bidloo’s style likely instigated the commentaries that Kneoff records. According to Kooijmans, Bidloo “expected his gala production to be a huge success, but instead he was severely criticized and the public’s disapproval was voiced, as usual, in pamphlets and poems.”\textsuperscript{211} While it appears that Bidloo’s colleagues in \textit{Nil Volentibus Arduum} readily criticized the physician for “violating” Vondel’s classical masterpieces, the wider public seems to have enjoyed the sensory spectacle of the productions.\textsuperscript{212} Indeed, his version of \textit{Faeton} was performed throughout the eighteenth and early nineteenth centuries.

Bidloo’s desire to engage the visual and auditory senses in his productions is reflected in the illustrations of the \textit{Anatomia}, where engaging and dramatic visual performances of dissection are scattered across the pages. However, only so much speculation can be entertained in this thesis on Bidloo’s attitudes towards women in Dutch theatre due to the limited amount of

\textsuperscript{211} Kooijmans, “Rivals,” 222.
translated source material. Instead, his relations with the philosophies of Spinoza through his associations with *Nil Volentibus Arduum* may additionally prove more fruitful for explaining Bidloo’s decision to present the female body in the same manner as the male.

In her examination of Spinoza’s thoughts on the nature of things, power and the unity of body and soul, Genevieve Lloyd explores the philosopher’s unification of body and mind, and how his stress on equality and political freedom impacted the status of sex and gender. She argues that for Spinoza, minds could not be differentiated “at all independently of the bodies of which they are ideas.” Spinoza believed in a “continuity between the natural body and the socialized body. The powers of individual bodies are enriched by good forms of social organization which foster the collective pursuit of reason…” While bodies have their basic biological structures and functions, they are shaped and defined by social interaction and social pressures. When removed from a social context and fixed within its anatomical confines, the sex of one body matters no less than the other because human bodies, regardless of their intricate structural differences, are equal through commonalities of human life—biological functions such as sensorial experience, eating, sleeping, life and ultimately death.

Rather than asserting an already existing sameness of soul, underlying the extraneous accretion of bodily differences, the Spinozistic ideal aims at achieving commonalities… those differences can be set aside as irrelevant in specific contexts. But they are not minimized, negated, or subsumed under an idealized sameness.

Although his efforts to promote equality in all humans were primarily directed towards a political end, Spinoza’s philosophy applies equally to hierarchies in gender. I believe that Bidloo

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was influenced by Spinoza’s focus on the “extraneous” extensions of difference in the human hierarchy and emphasis on the commonalities of human life to justify social equality and employed this perspective within his atlas to represent the female body in the same manner as the male.

The opinion of Bidloo’s contemporaries that he engaged in vulgar and immoral visual displays was only further perpetuated by Ruysch’s personal animosity toward him. Ruysch criticized the younger anatomist using terminology often employed to describe prostitutes from the period: “a man, shameless, who is disgraceful, scandalous and without honour, shameless and mischievous, frivolous, dirty, lascivious, a moral cancer, an utter enemy of peace and learning.”  

This is exemplified throughout Van de Pol’s study on early modern cultural attitudes towards prostitution in Amsterdam; while her research focuses primarily on the typology of prostitutes in Dutch culture, Van de Pol does recognize that men engaging in dishonourable acts and associating themselves with prostitutes were also publicly shamed.  

Bidloo’s depiction of the female body provided Ruysch with enough evidence to accuse his rival of willingly exposing the genitalia of the female body. By claiming that Bidloo robbed these women of their innocence, Ruysch’s accusation offers two insights into Dutch culture: that the souls and identities of the persons who inhabited the cadavers used for medical study still lingered in the body for some time afterwards and were subjected not only to the brutality of anatomical dissection, but also to the shame of it; and that the proper and morally correct method of displaying gender required censorship of any female part that might be sexualized. Indeed, looking even to Michael Stolberg’s study of eroticization in medical illustration, Ruysch’s

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217 Van de Pol, “‘The caterpillar in a cabbage, the canker in the leg’,” 77, from het leven en bedryf van hedendaagse haagse haagse en emstonmesse zaletjuffers (1696).
disgust towards Bidloo fits within a broader history of the cultural censorship of gender, and not just in established visual standards of medical illustration at the time.²¹⁸

Ruysch’s criticisms require an exploration into the details of Bidloo’s illustrations. How are female bodies represented, and how do Bidloo’s visual decisions depart from or negotiate medical and cultural connotations of gender at the turn of the century? The illustrations treat both male and female cadavers as equal; that much is apparent in the illustrations that include genitalia within them, featuring similar framing of the torso and abdomen with bunched cloth lying upon the legs of the bodies, high enough so that only the hint of genitalia is present, but not entirely. Just as the limbs or the head of the body appear at the edge of the frame, so too do the labia majora and shaft of the penis. In the original design for “T. 42” detailing the mesentery, the tissue that holds the intestines in place within the abdomen, de Lairesse illustrated male genitalia in its entirety. This visual was later covered in the engraved copy with a study of the network of blood vessels within the structure. Oddly, or perhaps not, Ruysch does not criticize Bidloo’s inclusion of male genitalia in the tables of the atlas depicting the dissection of the torso. Based on Dutch attitudes towards gender, and even standard visual displays of anatomical procedure, male genitalia was not only assumed to be invulnerable to the immoral thoughts or dishonour that plagued female genitalia—assuming that the primary audience for this atlas was male and heterosexual in this period—but also accepted as standard, unsexual surface anatomy.²¹⁹

Bidloo’s visualization of the female gender in the *Anatomia* affords the female body a higher status than previously given by anatomists in medical discourse. The male body was no

²¹⁸ Stolberg, “A Woman Down to her Bones,” 274-299.
longer used as the primary or generic anatomized body, but instead presented interchangeably alongside female bodies. Seventeen illustrations of female cadavers are easily identified within the atlas, the majority of which are unrelated to reproductive anatomy. For context, Vesalius’s *Fabrica* only featured four illustrations of female anatomy, all of which depicted female reproductive physiology in some form or another. Bidloo’s exposure of the female body does not conform to the visual defense of female gender and virtue popular in the work of Cats because Bidloo and de Lairesse employed new methods of representation that disassociated the organs of generation with their cultural and gender connotations; ultimately they are reduced to another part of the human body, not unlike the attention Bidloo pays to the musculature of the forearm, or the fleshy composition of the eye. Furthermore, heavily influenced by Spinozist philosophies that aided in elevating the status of the female body, and women’s growing autonomy in Dutch culture, Bidloo chose to represent female bodies in the same manner as male.

The conflict between Ruysch and Bidloo and the accusations of immoral representation made against Bidloo by Ruysch have a long-standing history within anatomical illustration. In his examination of pornographic subtexts in seventeenth-century anatomical atlases, Kit Heyam examines a formal review of English anatomist Helkieh Crooke’s 13-book folio *Mikrokosmographia: A Description of the Body of Man*, which addressed concerns brought forth regarding the perceived obscenity of some of the illustrations.

Some… thought that some subjects and more indecent illustrations should be removed, and other points ought to be corrected, while many considered that book four with the pictures of the generative organs should be destroyed.220

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The review committee’s call for censorship was based on an anxiety that the medical illustrations would be appropriated and used for erotic purposes. The pornographic potential of anatomical atlases, predominantly associated with depictions of the organs of generation, especially those of women, comes to be applied to Anatomia through the specifics of Ruysch’s accusations against Bidloo. Heyam employs a useful methodology in his goal to uncover how illustrations become “indecent,” looking to their relation to legends, prefaces, and the main descriptive text and how those literary devices attempt, or neglect, to facilitate particular modes of reading.\(^221\) Although Deanna Petherbridge and Ludmilla Jordanova argue that any naked body offers up opportunities to elicit a sexual response from the viewer, these opportunities are, I would argue alongside Heyam, heavily structured and censored by the contents and structure of the subtext accompanying the image. Petherbridge and Jordanova, looking to a more general history of medical illustration, note that many anatomical images “register gender differences associate them with sexuality, emphasize the sexual organs, or place bodies in poses that carry erotic connotations− open legs, head thrown back, eyes rolled up, breasts revealed, body reclined.”\(^222\)

Looking to examples of both whole cadavers, and sections of female anatomy in Bidloo’s Anatomia, the relationship between text and image, Ruysch’s interpretation of the female gender in the atlas can be brought into context. Studies of breasts were often depicted in relation to imagery of the womb, directly associating them with womanhood, and relating their purpose to that of child bearing as well. Vesalius’s illustration of a female torso, with breasts visible and the

\(^{221}\) Heyam, “Paratexts and pornographic potential in seventeenth-century anatomy books,” 4.
surface tissue of the abdomen cut away to reveal the inner structure of female reproductive anatomy, represent a standard depiction of female anatomy.

In his *Anatomia*, Bidloo dedicates one table to the anatomy of the breast alone, with five diagrams illustrating the dissection of the surface tissue and fatty deposits alongside the dissection of the areola tissue and glands of the nipple. Bidloo’s “special attention” given to the breast is a direct result of his in-depth understanding of the physiology of the part, similar to his detailed examination of an eye ball, both of which are apparent in the lengthy and engaging discussions that complement the illustrations, as well as the variety of angles that Bidloo requires to effectively depict each part. Although female breasts are illustrated on the numerous cadavers presented in abdominal dissections throughout the text, they are not given special attention as the focus of the dissection. How then, is this different from earlier illustrations of female bodies? Earlier atlases did not commonly depict observations of the anatomy of the breast, instead merely associating them with the womb. Here, Bidloo disassociates the breast from the reproductive system and examines it as independent, without association to sexual anatomy; a body part with its unique structures not solely related to reproduction. The breasts of the female body are featured in illustrations related and unrelated to female reproductive anatomy, in “T. 31” and “T. 32” which examine the successive layers of muscle tissue encasing the abdomen, and “T. 49,” in the abdomen within which the small intestines have been removed.

An entire series of illustrations from “T. 27” to “T. 30,” depicting the dissection of the muscles of the back in four successive layers, is performed by Bidloo on a female body that is held upright in a seated position by a rope around the neck. The body faces away from the viewer, its arms resting at its sides or held up in three of the plates, and then tied behind the back with twine on the wrists in the last table of the series. This series of plates is arguably one of the
earliest examples of female anatomy utilized by an anatomist with no relation to reproductive physiology. In the first table of the series the surface layer of skin and fatty tissue has been cut away from the back of the female, cut cleanly from the neck and shoulders, and hanging down beside the latissimus dorsi muscles just beneath the arms (fig. 12). The upper swells of the hips have been peeled away, with some globules of fatty tissue remaining attached to the muscle as the skin hangs loosely down the gluteal muscles to rest atop a cloth. The right arm of the woman has been propped up on a block of wood, with the majority of the weight resting on the wrist to balance the body, while the left arm reaches out of frame and forward in the direction of the legs. The left leg appears to be positioned ahead of the torso in a manner not dissimilar to sitting cross-legged, or with knees curled up in front of the chest. The head of the female is wrapped tightly in a cloth, no loose hair escaping as the rope tightly holds the head upright. The identity of the female body is completely anonymous because we do not see the woman’s face, just as the sexual connotations of the body remain ambiguous because of the absence of breast and pudendum.

In the next table, the latissimus dorsi muscles and trapezius muscles have been cut away to reveal the obliques, teres major and minor, and erector muscles of the spine. The female’s position has shifted; though the right arm remains engaged to prop up the body, the left arm is lifted to demonstrate a better view of the teres major and minor and the deltoid muscles of the left shoulder. While the latissimus dorsi and trapezius muscles remain attached, they have been peeled back to rest on the arm and along the sides of the chest of the cadaver. Potentially significant is the realization that the cadaver no longer has a cloth covering the head, likely to better display the upper musculature of the neck. In the next plate, another layer of muscle has been peeled off to rest on the arms of the cadaver, which now appears to be curled up, its arms
and legs gathered in front of the chest to clearly present the erector muscles and tendons that run up along the spinal cord. And, finally, the last table of the series has the back stripped of all muscle to reveal the shape of the ribcage and spinal cord, with only the deep spinal tissue present (fig. 13). The body’s position has changed yet again. It appears to sit at the edge of a platform, with the head still tied up with a rope, and a cloth now draped over it rather than tied onto it. However, the arms of the body are now tied behind the back, resting on the cloth at the base of the spine, fingers curled and wrists bound with twine tied in a simple bow.

The gaze is naturally drawn to the harsh lines used to demarcate the bound hands of the cadaver. More immediate questions come to mind regarding the practical purpose of binding the cadaver’s hands in this position. Perhaps it was done during efforts to move the cadaver to the edge of the table or platform that it rests upon, or more likely to show the structure of the shoulder blades and the deep tissue that encases them. As Bidloo and de Lairesse stressed throughout the preface of the atlas, and through the purely descriptive attitude of the text towards the illustrations, they made every effort to provide a naturally objective examination of the cadavers and specimens illustrated for the text. The bound hands are defined in context as nothing more than that.

Ultimately, Bidloo’s method of representation foregoes any major moralistic or cultural mediation of imagery to present the human body just as it is seen in the process of dissection. While Ruysch’s criticisms of the anatomist are validated by Bidloo’s extreme departure from both traditional standards of female representation in medical illustration, and what is perceived to be traditional Dutch cultural connotations of gender, his illustrations arguably fit within a growing trend in visual culture at the end of the century whereby women were visualized with more power and liberties surrounding their bodies. The contrast between early seventeenth-
century Dutch literature and later paintings of women showcase this development. Bidloo’s own desire to cast women in theatre productions within the Amsterdam theatre demonstrate his more liberal attitude towards the role of females in Dutch culture, which I argue applies to the illustrations within the Anatomia. While the atlas is often defined as an outlier and was dismissed by Ruysch for its inability to adhere to cultural and medical standards, the atlas appears to capitalize on the growing objectification of medical study by the end of the seventeenth century as well as the growing power of women’s roles. Bidloo’s departure from traditional depictions of female bodies as solely related to their reproductive capabilities in anatomy fits within a larger cultural trend at the end of the seventeenth century whereby women gained more social liberty and autonomy in Dutch culture. Representations of women shifted to represent their assertion of control over their bodies, in addition to elevating the significance of their bodies as equal to those of men. The representation of female bodies in Bidloo’s Anatomia was influenced by the raised status of the female gender in late seventeenth-century Dutch society. As well, his representation of female anatomized bodies was shaped by his own emphasis on sensory experiences (in the case of the Anatomia, sight) from his literary career, and informed by notions of equality between female and male bodies as it was implied within Spinozistic philosophies.
Chapter Four

The Anatomia, the Martyrs Mirror and “lived experience”

In her chapter “Moral Lessons of Perfection: A Comparison of Mennonite and Calvinist Motives in the Anatomical Atlases of Bidloo and Albinus” Rina Kneoff initiates a conversation about the influence of religion on connotations of the ‘perfect’ anatomical subject in medical discourse. She argues that Bidloo’s “aversion to methods to ‘enliven’ dead bodies and his preference for depicting the mutilation and cruel reality of the dissected body, are remarkably close to the Mennonite fascination for martyrs stories of torture and suffering.”

Kneoff may be the first to examine the Anatomia within early modern Mennonite discourse, however, her examination is limited to exploring ideas of the ‘perfect’ in anatomy. In this chapter I will examine the Anatomia alongside Mennonite texts to identify how this discourse informed Bidloo’s intended ontology of the Anatomia.

First, by comparing the morals and characteristics presented in Mennonite practice, specifically the Waterlander community of Amsterdam that Bidloo was raised in, with Bidloo’s own epistemological emphasis on physically witnessing and performing dissection, similar traits of physical witness and lived experience between Mennonite methods of dissemination and Bidloo’s episteme will become apparent. However, I argue that even with these relations the established visual method of anatomical practice in the Anatomia is not the direct result of scripting human dissection to perform the suffering and torture of martyrs, as Kneoff believes, but rather an appropriation of the significance of witnessing, performing and comprehending dissection through the senses. While Kneoff identifies the similarities between Bidloo’s atlas and the images of Thieleman van Braght’s the Martyrs Mirror she does not consider the unique

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epistemological relation between van Braght’s and Bidloo’s work. Specifically, both are intended to be didactic, to situate the reader as an eye-witness and active participant in the scenes portrayed. The images trigger sensorial queues and notions of physicality to impress upon the reader the sensations experienced in their encounters with anatomized bodies. Additionally, the illustrations are performative and emphasize what Erika Fischer-Lichte terms the “bodily co-presence” that exists between the reader and the body that Bidloo represents, in order to produce meaning.\footnote{In Fisher-Lichte’s work, she emphasizes the role of bodily co-presence between actors and audience. This bodily co-presence consists of the acts performed by the actors bringing about strong emotions and responses from the spectators, but that the spectators also affect the actors’ performance, and ultimately “infect” each others’ experience. Building off of the work of Judith Butler, Fischer-Lichte applies performativity to aesthetics in Erika Fischer-Lichte, \textit{The Transformative Power of Performance: A New Aesthetics} (New York: Routledge, 2008), and Fischer-Lichte, “Transforming Spectators into \textit{Viri Perculsi},” 87-97. Additionally, the two primary texts that examine Baroque performativity with relation to art are \textit{Performativity and Performance in Baroque Rome}, ed. Peter Gillgren, Marten Snickare (Surrey: Ashgate Publishing Limited, 2012); and \textit{Corporeality and Performativity in Baroque Naples: The Body of Naples}, ed. Alessandro Giardino (Maryland: Lexington Books, 2017). More examinations of performativity in the early modern period are published in Erin E. Benay and Lisa M. Rafanelli’s issue of the \textit{Open Arts Journal}, Benay, Erin E., Rafanelli, Lisa M., “Touch me, Touch me not: Senses, Faith and Performativity in Early Modernity,” \textit{Open Arts Journal} 4 (2014-2015).} I will argue that, rather than imagine the anatomized body as martyr through notions of suffering and torture, Bidloo appropriates Mennonite didactic methods of witness and lived experience to reinstate the body within anatomical study. This is a discourse within which authority figures made active decisions to remove and censor the body, inhibiting the reader’s sensory relations to the body, protecting them from the realities of the body, death and illness and, as Bidloo believes, causing errors and misjudgements to run rampant in the medical study.\footnote{“I have worked to pass on to our descendants, something perfect, without ornamental and misleading representation in the illustrations; because none of the anatomists, as far as I know, has ever drawn and published a representation after life of all the parts of the human body.” Govard Bidloo, “G. Bidloo Wnscht zyzen Leezer veel Heyl,” in \textit{Ontleding des Menschelyken Lichaams, Gedaan en Beschreeven door Govard Bidloo, Geneesheer en Hoogvoorleezer in de}
While Bidloo rejects the idyllic and statue-like representations of the human body from the past, he does still include tropes from the previous mode of anatomical representation. For example, “T. 87” and “T. 88” depict animated skeletons walking to and from a tomb, the first, second, and third tables depict the figures of Adam and Eve prior to their banishment from the Garden of Eden and books, musical notation and other objects associated with the iconography of the memento mori and vanitas themes familiar from Dutch still life painting are included throughout the illustrations.226 Bidloo’s desire to present the physical body as it is actually witnessed in the process of dissection seems at odds with these pictorial devices. However, I argue that Bidloo’s approach can be compared to Angela Vanhaelen’s analysis of paintings of Protestant Church interiors created by artists such as Emanuel de Witte in the same period.227 During the iconoclast wars of the sixteenth century, Dutch church interiors were stripped of their religious paintings and ‘idolatrous’ décor, but they continued to function as places of worship and subjects for representation. The interiors were later repurposed for Protestant faith, however as Vanhaelen argues, de Witte’s paintings of church interiors demonstrate that rather than stripping these churches of their past, Catholic, purpose, the paintings highlight the hybrid and transitionary nature of the churches that kept stained glass windows, and other iconographic displays.228 In a similar way, Bidloo’s atlas does not present a complete erasure of the old visual methods of anatomy, but offers a transitional ontology of anatomic processes whereby the body,

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227 Vanhaelen, The Wake of Iconoclasm.
once distanced from anatomical study for a multitude of reasons, has begun to be reintroduced to the practice. Bidloo’s emphasis on witnessing, performing, and sensing the act of anatomizing a body through the successive pages of the Anatomia attempts to enact this change. Indeed, John Bell, in his own review of the anatomical atlases that he believed to be truly great, listed Bidloo’s, but reported that its major flaw was that it did not fully achieve the objective lens that Bidloo desired because of his adherence to some of the older, symbolic, methods of display.\textsuperscript{229}

Bidloo’s religious status as a Mennonite is generally accepted in medical history. Kneoff, among others, labelled him as a member of the more lenient sect of Mennonites within the Amsterdam Waterlander community.\textsuperscript{230} The Mennonite faith, named after the sixteenth-century Dutch preacher Menno Simons, developed alongside other Protestant theologies in the Spanish Netherlands during the religious wars of that century. With an emphasis on adherence to the ‘Word of God,’ Dutch Mennonites followed the teachings of scripture strictly, initially rejecting visual representations entirely and eventually rejecting any representations of God. In 1556, the Mennonites living in the Waterland region of northern Holland were no longer willing to follow the strict tenets of popular Mennonite practice, choosing instead to follow a more lenient method of worship that emphasized the significance of the spiritual, or ‘Living Word.’\textsuperscript{231} After the

\textsuperscript{229} Bell, “Preface,” x.
\textsuperscript{230} Kneoff notes that Willem Vasbinder was the first to label Bidloo as a Mennonite, arguing that he was deeply religious and that his Mennonite upbringing was influential throughout his life. While he does not further explore that judgement in his Ph.D. thesis on the conflict between Govard Bidloo and William Cowper (published exclusively in German), examining the publications made by Bidloo’s brother, and his own engagement with Anabaptist martyrrologies in several publications provides strong evidence to support Bidloo’s religious allegiance. Kooijmans, “Established and Envied,” 98-99; Lyle Massey, “Against the ‘Statue Anatomized’: The ‘Art’ of Eighteenth-Century Anatomy on Trial,” Art History 40, no. 1 (2017): 83, who cites Kneoff without engaging further in the discourse, Kneoff, “Moral Lessons of Perfection,” 126.
formation of the Dutch Republic in the last quarter of the sixteenth century, the Mennonites were allowed to practice their faith in private, as their refusal to raise arms, among other practices, convinced authorities that they did not have any political motives, unlike the Catholic worshipers.²³² According to Harold Bender, by the end of the sixteenth century Mennonite opposition to art, and especially Waterlander beliefs, had diminished as a result of the urban, commercial, and assimilationist nature of Holland, allowing for the rise in popularity of Anabaptist imagery in martyrologies.²³³

In the first quarter of the seventeenth century, the confessions of Hans de Ries, a prominent member of the Waterlander congregation and a witness to the martyrdoms of early Anabaptists were accepted to be the authoritative text for the community.²³⁴ According to Simon Episcopius, a Remonstrant leader at the time, the major issue that defined Waterlander faith, and de Ries’ approach, originated in a discussion about “whether the external Word of God, preached or written, is the means or instrument by which God wants to make clear to the people his whole will, perfect and ready, necessary and of service to their eternal salvation… or whether another inner hidden Word or meaning… is necessary to understand God’s will and to obey.”²³⁵ In 1615,

²³³ Anabaptists, also known as Mennonites after Menno Simons, a major leader of the Dutch Anabaptist faith in the sixteenth century, are a group of Christians who separated their faith from civic obligation and refused to baptize at birth, instead choosing to wilfully and knowingly follow Christ through voluntary baptism. Their faith emphasized following the Word of God, through Christ and the New Testament. Harold Bender, “Mennonites in Art,” The Mennonite Quarterly Review 27 (1953), 189-191, from Covington, “Jan Luyken, the Martyrs Mirror, and the Iconography of Suffering,” 453.
²³⁴ Such martyrdoms were not the formally authoritative texts for the Anabaptist faith to adhere to. For more information, see Samme Zijlstra, “Anabaptism and tolerance: possibilities and limitations,” 123.
de Ries published his *History of the Martyrs*, which was subsequently revised over the next two decades and eventually used by Thieleman van Braght as a model for his 1660 edition of the *Martyrs Mirror*.

From these publications, we can surmise that Waterlander theology, to which Bidloo subscribed, emphasized the importance of the ‘Living Word,’ popularized through the publication of martyrologies that made believers living witnesses to the “embodied testimony of the martyr.”

Keith Sprunger notes that there are multiple connotations invested in this notion:

[The] ‘Living Word’ (unwritten word) could mean a variety of things to different Anabaptists, but it always had spiritualistic, mystical connotations. In using the term ‘Living Word’ Anabaptists might be referring to Jesus Christ as the living word, or at other times, they meant the Holy Spirit’s active illumination that gives insight to the words of the Bible.

Martyrologies, most notably van Braght’s 1685 edition of the *Martyrs Mirror*, embodied ‘Living Word’ in the 103 engravings designed by the printmaker Jan Luyken, as well as recording the witness of those present at the actual executions of Anabaptist martyrs in the sixteenth and seventeenth centuries. The ‘Word of God’ was also found in the passages of scripture cited throughout the martyrology and used to advance the faith. Sprunger notes that the combination of the two; the printed Word and the living witness of participants in the acts of martyrdom were effective in justifying Mennonite beliefs. And so we arrive at the *Martyrs Mirror*, a product of an ecumenical effort, which Jeremy Berenger asserts was intended to sanctify the differences between Mennonite groups, as well as the differences between the Mennonites and the wide world. By placing many confessions together and linking them

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Sprunger, “Dutch Anabaptists and the Telling of Martyr Stories,” 149.


as he did, van Bracht aimed to persuade his Mennonite readers of the essential similarity of all the ‘baptism-minded’ Christians, rooted in a commitment to biblical faith and a shared history of suffering…  

Comparing the visual methods and epistemology of van Braght and Luykens’s *Martyrs Mirror* to Bidloo’s *Anatomia* reveals the ways in which Bidloo adopted and appropriated uniquely Mennonite epistemologies into his own project to create a new standard of anatomical representation. Jan Luykens’ illustrations in the second edition of the *Martyrs Mirror* (1685) display acts of martyrdom from the beginning of Christianity, starting with Christ’s crucifixion and extending through the religious persecutions of protestant martyrs in the sixteenth- and seventeenth-century Spanish Netherlands. Luykens’ illustrations captured the painful realities of acts of martyrdom while striving to show the perseverance and inner strength of the men and women who died for their religious beliefs. In the preface to the work, van Braght introduces his rationale by stating that “men are more easily converted by good examples than by good teachings, because examples are more impressive; yet here you have both.”

One such illustrated martyrdom is that of Barnabas, who was burned in Salamina on the island of Cyprus in the first century AD (fig. 14):

For, when he came to Salamina, a large city on the island of Cyprus, at this day called Famagosta, to strengthen the church at that place in the faith, he was very badly treated, as ancient history tells us, by a Jewish sorcerer, who stirred up all the other Jews and the whole people against him, so that they apprehended him in an uproar and were about to

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bring him to the judge, but fearing that the judge discovering his innocence, would
perhaps release him, they, after treating him lamentably, put a rope around his neck,
dragged him out of the city, and burned him. 241

Luyken narrates the story within his illustration by composing the episodes along a winding
curve. Barnabas is dragged by two men with a rope around his throat across the front of the page.
Two more men, carrying wood to add to a growing fire, walk around the bend. Behind them, the
sorcerer, arms raised, provides the initiation of the narrative. Luykens’ illustrations are active
narratives which overwhelm the viewer with the suffering of these martyrs. Describing how van
Braght intended the reader to engage with these martyrs’ stories, he writes: “Ah! How often did I
wish to have been a partaker with them; my soul went with them in the tribunal, to bear patiently,
without gainsaying or flinching, their sentence of death. It seemed to me as though I
accompanied them to the place of execution, scaffold or stake…” 242 While his words resonate
more with the desire to experience what the martyr experienced, Luykens’ method of display
situates the viewer specifically as a witness to, or participant in, the event unfolding, but not in
the role of the martyr. The emphasis on witnessing and experiencing God in Mennonite faith,
preached by van Braght throughout the text, is also present in Bidloo’s *Anatomia*. Bidloo also
presents the anatomical process as though the reader were there, witnessing the dissection taking
place, and engaging closely with the cadavers under examination. The process involved the
participants, the anatomists and assistants, taking hold of the body, moving, bending and

Martyrs Mirror of the Defenseless Christians Who Baptized Only Upon Confession of Faith, and
Who Suffered and Died for the Testimony of Jesus, Their Saviour, From the Time of Christ to the
242 Thieleman Van Braght, “Invocation,” in *The Bloody Theatre, or Martyrs Mirror of the
Defenseless Christians Who Baptized Only Upon Confession of Faith, and Who Suffered and
Died for the Testimony of Jesus, Their Saviour, From the Time of Christ to the Year A.D. 1660.*
manipulating it for a thorough examination, even hoisting it upright with a pulley attached to the ceiling to examine the back muscles. As witnesses to torture, martyrdom and dissection, we must necessarily also examine the performative role played by the bodies being witnessed.

In her article “Performative Agency,” Judith Butler outlines the effects of performativity, stating that “performativity works, when it works, to counter a certain metaphysical presumption about culturally constructed categories and to draw our attention to the diverse mechanisms of that construction…” and that “performativity starts to describe a set of processes that produce ontological effects, that is, that work to bring into being certain kinds of realities.”243 In another article, entitled “Performative Acts and Gender Constitution: An Essay in Phenomenology and Feminist Theory,” Butler discusses how the body produces and is given meaning through social performance and historical construction. Speaking specifically of gendered, female bodies, she argues that

gender is made to comply with a model of truth and falsity which not only contradicts its own performative fluidity, but serves a social policy of gender regulation and control. Performing one’s own gender wrong initiates a set of punishments both obvious and indirect, and performing it well provides the reassurance that there is an essentialism of gender identity after all. That this reassurance is so easily displaced by anxiety, that culture so readily punishes or marginalized those that fail to perform the illusion of gender essentialism should be sign enough that on some level there is social knowledge that the truth or falsity of gender is only socially compelled and in no sense ontologically necessitated.244

Similar to the risks of punishment and marginalization that lie in performing one’s own gender wrong, as Butler describes, was the risk of Anabaptists performing their faith against the

Catholic norm, or early Christians against the Roman, polytheistic norm. Their “wrong”
performance was ultimately punished, which resulted in connotations of resolute faith, suffering
for faith and martyrdom manifesting in their bodies. Striving to live by the example of martyrs,
desiring to bear witness to their suffering and the events that defined the development of
Mennonite faith, van Braght’s construction of Mennonite martyrs through the performance of
their suffering bodies was historically and theologically justified. These are the bodies that
Kneoff identifies within the illustrations of the *Anatomia*. The suffering and tormented body of the martyr cannot survive being removed from its
context in the *Martyrs Mirror* and identified now in the *Anatomia* by Kneoff. Where the
emphasis on images of martyrs is in their suffering in life, Bidloo’s cadavers are explicitly dead,
both stated by his definition of the true subject of anatomy, and his representation of corpses. In
her Ph.D. dissertation “The Performative Corpse: Anatomy Theatres from the Medieval Era to
the Virtual Age,” Kristin Keating looks at the ways the dissected body, “placed in a privileged
position on a theatrical stage,” becomes a ‘performative corpse,’ with its dissection and
dismemberment demonstrating the ways that Western societies have fictionalized and defined
death to “avoid its dreaded unknowability.” With past modes of anatomical representation,
specifically the Vesalian representation’s removal of the physicality subject to better highlight
medical discourse, there existed no social or historical precedent where the practical subject of

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Keating insists that the term anatomy theatre applies more broadly to the general performance
of human dissection, be that in whichever medium it presents itself within. She defines the
‘performative corpse’ as “a clinically dead body that is not autopsied only to determine a cause
of death, although this may be part of the process, but that is ritually investigated with the
intention of broader social and personal understanding.” Kristin Keating, “The Performative
Corpse: Anatomy Theatres from the Medieval Era to the Virtual Age,” (Ph.D. Dissertation, Univ.
anatomy, the corporeal anatomized body, was realized. Vesalian anatomy imagined and constructed a very specific body fit to perform the reductive act of dissection; the physical process of dissection, the physicality of the body, and the realities of fragmented bodies and their discarded or non-mechanical components were rejected. The methods of constructing the martyr’s body through signs of suffering, physical stress, and trauma, and as a sight and site of reflective witnessing, may not apply in a study, at least in anatomical atlases, where the bodies of anonymous and idealized figures are not bodies at all, but constructed ideas of how flesh and bone sew together, and what that looks like in action. They are not given identities, they are removed from natural observation and the realities of the flesh, and are not historically circumscribed into real life events, unlike the bodies of martyrs.

Fischer-Lichte describes that for a performance to occur, “two groups of people are needed, the ‘doers’ and the ‘onlookers,’ who assemble at a certain time and place in order to share their interaction, which is to say that a performance takes place in and through the bodily co-presence of actors and spectators.” While Bidloo’s bodies do not perform as suffering and tormented martyrs, they do perform through interacting as directly as possible in the confines of paper pages with their audience. The emotions triggered within the reader/spectator through de Lairesse and Bidloo’s efforts to realize and define the anatomized body through its sensory interactions allows this bodily co-presence between the reader and the anatomized to take place. Weight in the bodies that hang from pulleys, sight in the organs that are presented life size, or larger than life in such fine detail and even touch in the table that features the anatomist’s hand

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246 Sawday details the ways in which the body was invented to suit religious, social, philosophical and cultural needs, over the course of the sixteenth century in Jonathan Sawday, “The Renaissance Body: From colonization to invention,” in The Body Emblazoned: Dissection and the Human Body in Renaissance Culture (New York: Routledge, 1996), 16-38.
holding part of the brain all signify those interactions between reader and cadaver. Butler speaks of performance, similarly to J.L. Austin, whereby certain speech acts provide an opportunity to, or successfully evoke a response from the audience and initiate change. Bidloo claims in the preface that he aimed for his atlas to succeed Vesalius’s text as the standard text of reference for anatomists, and to change the pedagogy of anatomical study. The critique of subject necessary for this act is found in Bidloo’s rejection of Vesalian modes of representation, with its enlivened and animated bodies dancing across the page, highlighting how imaginative anatomies and decorated, sculptural corpses have been exploited to the detriment of anatomical study. Not only did he intend for his atlas to be an accurate rendering of the process of human dissection, the first to be drawn after the life (naar het leven) of cadavers, but he also made the structural decision to segment the body, dissecting it from skin through muscle and tendon down to bone throughout the images. But what of the physical experience of the person performing the anatomy upon the anatomized body?

Another illustration from the *Martyrs Mirror* can be called upon to address this, this one of Geleijn Cornelus, a shoemaker from South Holland, captured on August 5th, 1572 along with five other Anabaptists, and destined to be burned at the stake on August 7th (fig. 15). In the two days between his capture and execution, Cornelus’ captors tortured him to force him to reveal the whereabouts of the other members of the Anabaptist congregation. Van Braght’s text goes as follows:


Geleyn [Geleijn], the shoemaker, was tortured most cruelly of all. They stripped him naked, suspended him by his right thumb, with a weight attached to his left foot, and while thus suspended he was burned under his arms with candles and fire, and scourged until the two commissaries of the Duke of Alva, who were present, themselves became tired and went away and sat down to play cards, the executioner looking on, for about an hour and a half. Meanwhile Geleyn was left suspended, who, during all the time that they played, experienced no pain, but was as though he had been in a sweet slumber, or in a swoon... 

In Luykens’ illustration, Cornelus hangs from a wooden beam inside a building while his captors play cards at a table nearby, their knives sheathed, while the fire beside Cornelus continues to burn steadily. Hanging from the beam by a rope tied tightly around his right thumb, a version of strappado torture, a large weight tied to Cornelus’s ankles pulls his body downwards, adding extra stress to his shoulder joint, increasing our perception of his physical pain. Luykens depicts the martyr’s body prior to any joint dislocation, indicated by the tension still present in his bent and stressed arm. He is naked but for the cloth draped from his waist and covering his genitals. The scene clearly elicits a comparison to Christ’s crucifixion, chest protruding, ribs bared, legs limp and head hanging heavily in slumber; the sheer corporeal weight of his suffering body is effectively captured by the artist. It is that weight, the corporeal realities of the body in this moment of suffering, not the emotional and physical status of suffering itself, that is appropriated in Bidloo and de Lairesse in their representations of the anatomized body in Anatomia.

251 Strappado torture generally involved the victim’s wrists being bound and suspended by a pulley, hook or beam so that all of their weight was held by the arms and shoulder joints of the victim. Variations of strappado include the victim’s wrists being tied behind their back, in front, by one arm or another, with a weight sometimes attached to the victim’s legs to add extra stress to the joints and tendons in their arms.
While Kneoff argued that Bidloo’s atlas is heavily influenced by the imagery of suffering in Luyken’s illustrations, with specific focus on the emotions of suffering, I argue that Bidloo’s desire to present the body as it appears on the dissection table does not utilize this iconography of suffering and emotional distress, but rather adopts a distinctly Mennonite method of representing the corporeality of the human body. This emphasis on the sensorial, the physical weight of bodies executed so acutely in the *Martyrs Mirror* is clearly present in the illustration of Bidloo’s cadavers. The cadavers, like the bodies of martyrs, manifest themselves in all of their solid and corporeal reality (excluding liquid components). The tautness of the ropes holding the cadavers upright by the neck in “T. 27” through “T. 30,” and the tension of the pins pulling back skin and muscular tissue from the inner structures of the body parts presented in many of the tables, forces the reader to be aware of the physical reality of the bodies presented.

Luyken’s illustration of the Apostle Bartholomew being flayed and beheaded permits further insight into the relationship between the anatomist and the anatomized in the *Anatomia* (fig. 16). Bartholomew, executed in Armenia in the 1st century A.D., is depicted with hands and feet bound, upside down on a wooden ‘x’. Still alive, he has been skinned from his feet to his breast, the skin of his body hanging from him like tattered cloth to be gathered by his executioners. Around him lie various knives for flaying, and an axe that hints at his later beheading. His executioners carefully carve away his skin to reveal the muscle underneath, two pausing to converse with each other. The scene is described by van Braght:

*When Bartholomew had replied to this accusation, saying that he had not perverted, but converted, his brother, that he had preached the true worship of God in his country, and that he would rather seal his testimony with blood, than suffer the least shipwreck of his faith or conscience, the king gave orders, that he should first be severely tortured and*
beaten with rods, then be suspended on a cross with his head downwards, flayed alive, and finally beheaded with the ax.\textsuperscript{252}

The act of flaying performed by Bartholomew’s executioners brings to mind the performative relationship between the anatomist and the cadaver, albeit in a more brutal manner as the body flayed in this image is still alive. In the introduction of the \textit{Martyrs Mirror}, van Braght writes to his readers:

\begin{quote}
But most beloved, do not expect that we shall bring you into the graecian theatres, to gaze on merry comedies or gay performances… true enough, we shall lead you into dark valleys, even into the valleys of death, where nothing will be seen, but dry bones, skulls, and frightful skeletons of those who have been slain; there beheaded, those drawn, others strangled at the stake, some burnt, others broken on the wheel, many torn by wild beasts, half devoured, and put to death in manifold cruel ways; a great multitude who having escaped death bear the mark of Jesus, their savior, on their bodies.\textsuperscript{253}
\end{quote}

The anatomized bodies in Vesalian illustrations appear alive, as though they were able to rise up after their flaying and gradual reduction to walk around freely. Bidloo’s cadavers indicate nothing of the sort. While there is no image present in \textit{Anatomia} that features a fully flayed body, the numerous torsos that have their skin peeled away and pulled aside to show the inner contents of the body show no sign of animation or liveliness.

Further comparisons can be made between the performance of flaying done by the executioners and Bidloo’s dissection of corpses. Butler, in discussing the ways in which the body is constructed, refers to Michel Foucault, who claimed that the humanist efforts to liberate the criminalized subject shackled it more deeply than originally thought.\textsuperscript{254} What Butler and Foucault mean by this is that the body, constructed or informed by historical circumstance, and censored by social performance, is restricted in its abilities to successfully perform in an

\begin{footnotes}
\textsuperscript{252} Van Braght, “First Part,” 89.
\textsuperscript{253} Van Braght, “Author’s Preface,” 6.
\textsuperscript{254} Butler, “Performative Acts and Gender Constitution,” 365.
\end{footnotes}
unprecedented or socially accepted manner. Important in this are the layers of subjectivity that become fixed upon a body, molding and shaping it to fit the needs of the discourse it is presented within. In anatomical practice in the seventeenth-century Dutch Republic, Francis Barker argues that anatomized bodies (specifically the body of Aris Kindt, pictured in *The Anatomy Lesson of Dr. Nicolaas Tulp*) point both towards a modern surgical regime of the body, whereby the body is constructed by the scientific and medical gaze, and early modern bodies of corporal penalty, in which sovereign power enacts dominion over the criminal beyond the boundaries of death.  

Examining the layers of subjectivity present in the painting, she identifies the modern and bourgeois gaze of the members of the surgeons guild, and their erasure of the body by directing their gaze elsewhere and denying the anatomized body an interaction. The act constitutes an erasure of the criminal body, the sick body, and the impoverished body from bourgeois society. Additionally, Butler identifies the guild members as enacting the scientific gaze, which avoids the physical body in favor of the audience and the anatomical atlas. Barker also identifies the scholastic shaping of the body within the anatomical atlas to which Dr. Tulp refers in the painting, and his own actions as praelector of anatomy, guiding the dissection.  

Furthermore, she reminds us that the body under consideration is subject to artistic convention and to the imagination as the artist, Rembrandt, who has imagined the dissection starting with the forearm, an anatomically inaccurate representation because the tendons that he represents actually belong to the other side of the hand and forearm. In this painting, and visual mode, the anatomized body in practice has been erased and replaced with a symbolic body, representing the

\[255\] Barker, “Into the Vault,” 74.  
\[256\] Barker, “Into the Vault,” 75-76.  
\[257\] Barker, “Into the Vault,” 77.  
\[258\] Barker, “Into the Vault,” 75.  
justice of the sovereign over the criminal behavior of Aris Kindt, the academic and bourgeois reputation of the men engaging in the study, the necessity to separate the corpse in its dead reality from the study and the ways in which artistic conventions work to subject the body and mediate its performance. Ultimately, this is done to mitigate the risk of the body performing as it naturally would in an anatomical dissection, as physically present, temporally changing and dead.

While Luyken’s image of Bartholomew depicts flaying as a form of punishment upon the living rather than a punitive and penal action taken upon the dead, the act itself, in all of its intricate brutality echoes within the atlas. By not being criminals, but rather the bodies of the impoverished and infirm that Bidloo obtained through his connections in the Binnengasthuis, or Amsterdam Civic Hospital, the penal associations of flaying found in the religious imagery of Luyken is distanced. Instead, the physical act of flaying and its affects on the body as depicted by Luyken, is adapted in Bidloo’s images to serve a more delicate purpose. Where the skin of Bartholomew hangs shredded from his body as it is hacked off by his prosecutors, Bidloo’s bodies are carefully and delicately peeled in effort to preserve and demonstrate the structures of the body, not reduce them to anonymity through brutality. After all, his cadavers are not martyrs, nor criminals, nor rendered as any person with any identity at all. They have been disassociated from the identity they were granted prior to death and are thus rendered solely in their corporeal manifestation as dead bodies.

Barker notes in accordance with the standard method of teaching anatomy in this period, the praelector would “pronounce the lesson direct from the text of authority without having
himself examined a body, or without a corpse even being available for examination.”  

Additionally, Keating, looking to explain the relationship between the viewer and the body as a performative object, argues that “an audience’s encounter with the opened corpse always poses a particular threat to the integrity of both psychic and somatic boundaries—an aspect of the anatomical ritual that medico-scientific discourse seeks to repress.”  This distancing from the body, through the intermediary of the anatomical atlas, whether by circumstance or active choice to censor and control the comprehension of one’s own interiority through idealized and statue-like bodily interiors, which so defined the old Vesalian method of representation and engagement, was replaced and renegotiated in Bidloo’s atlas. Jonathan Sawday defines this sense of our interiority as “inescapably central to the experience of the body within history.”

…a feature of our sense of interiority is that it can never be experienced other than at second-hand. We may look into other bodies, but very rarely are we allowed to pry into our own... They are passages into THE body, but not MY body. But is MY body different from any other body? Below the skin, when we have allowed for differences of ‘race’ and gender, are not all bodies the same?

While Sawday answers this question by saying that environment, diet, and symptoms of illness and injury individualize bodies, Bidloo’s defense of the variability of interior structures in anatomies indicates that the early modern reader risked introspectively looking upon their own interiority by looking upon others. The acts of censorship that heavily shaped Vesalian illustrations was completely rejected in Bidloo’s atlas in favor of an engagement with representations of the body rendered after life without artificial or imaginary mediating acts. Bidloo’s illustrations were intended to present the reader with the closest interaction they could

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have with an anatomized cadaver, emulating its physical presence through life-sized imagery and the co-bodily relation required between the anatomist and the anatomized to obtain knowledge from the body.

But, how do we explain the inclusion in the illustrations of objects unrelated to the physical practice of dissection, objects that symbolize the passing of time, the Book of Nature, the vanities of the flesh, and the notion of mortality? Modelling my analysis on Angela Vanhaelen’s examination of Dutch Golden Age paintings of Protestant Church interiors, specifically those created by Emanuel de Witte in Amsterdam between the 1660’s and 1680’s, I assert that, while Bidloo intended to replace Vesalian modes of representation with a new, witnessed body, he also does not erase some of the more traditional modes of representation associated with anatomical practice at the time. His atlas is not solely a “repudiation of the past,” as Vanhaelen states, but instead a visual method intended to bridge the old and new styles, combining new and old icons in a hybrid way.264 The iconoclastic events of the sixteenth century in the Northern Netherlands that stripped churches of statues, altars, and other religious imagery are commonly described as an erasure of Catholic worship in the provinces to make way for Protestant beliefs. Simon Schama claimed in *The Embarrassment of Riches* that the seventeenth-century Dutch population developed a new cultural identity by contrasting “between a new ‘us’ and an old ‘them.’”265 According to Vanhaelen, “the realism of church painters such as De Lorme appears as simply a portrait of the new historical situation in which the Dutch Republic found itself, one in which history and narrative seemed to have been banished from the arena of

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representation.” Referring to the opinion of G.W.F. Hegel in his lectures on Dutch painting, this erasure of a ‘Catholic’ mode of Dutch art is described as follows:

To frame a complete judgement on this last phase in our consideration of painting’s history, we must… visualize again the national situation in which it had its origin. What was responsible here was movement away from the Catholic Church, and its outlook and sort of piety, to joy in the world as such, to natural objects and their detailed appearance… The Reformation was completely accepted in Holland; the Dutch had become Protestants and had overcome the Spanish despotism of church and crown… This sensitive and artistically endowed people wishes now in painting too to delight in this existence.

In past interpretations of Dutch art of the seventeenth century, like that of Hegel and Schama, there was a distinct separation between the ‘Catholic’ mode, and its successive ‘Protestant’ mode. Religious imagery and icons of veneration were erased from visual culture to make way for a realism defined by ‘descriptive’ attention to the natural world. Looking at images of Catholic churches, images of iconoclastic acts and images of churches after iconoclasm appears to support this narrative of erasure in Dutch culture. However, in The Wake of Iconoclasm: Painting the Church in the Dutch Republic, Vanhaelen proposes that “in spite of the destruction

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266 The De Lorme painting that Vanhaelen makes mention of is Anthonie de Lorme’s View of the Laurenskerk of Rotterdam, 1665. Oil on canvas, 136 x 114 cm. Rotterdam, Collection Historical Museum Rotterdam. In it, the walls, pillars, piers, and vaults of the Laurenskerk are whitewashed, devoid of any church decoration but the Word of God, selected segments of text inscribed in ornate displays. In this church, there are no images of the Holy Trinity, the Apostles, or the Virgin; instead, the Word of God reigns over the clean space. Vanhaelen, “Introduction,” 8.


268 In The Art of Describing, Svetlana Alpers argues that Dutch art is descriptive, and that “northern images do not disguise meaning or hide it beneath the surface but rather show that meaning by its very nature is lodged in what the eye can take in-however deceptive that might be.” Speaking of the term “naer het leven,” used by Bidloo to describe de Lairesse’s mode of representation in the Anatomia, Alpers observes that the term is an issue of perception, and “refers to everything visible in the world.” Svetlana Alpers, The Art of Describing: Dutch Art in the Seventeenth Century (Chicago: Univ. of Chicago Press, 1983), xxiv, 40.
wrought by the iconoclasts, these interiors were never completely stripped: things like wall and ceiling paintings, stained-glass windows, organ cases and grave markers all survived as visual reminders of past functions.\textsuperscript{269}

Similar “relics” are included in Bidloo’s atlas to allude to the previous, Vesalian, mode of representation. In his preface, Bidloo writes, “I have worked to pass on to our descendants, something perfect, without ornamental and misleading representations in the illustrations…”\textsuperscript{270} Pointing out the flaws of the Vesalian method of representation, Bidloo rejects the past statue-like style of anatomical figures. These fantastical and idyllic figures of muscle-men and animated bodies posing like the Belvedere torso inhibited the reader’s ability to apprehend the realities of anatomical study.\textsuperscript{271}

Even in the first invention of our best anatomical figures, we see a continual struggle between the anatomist and the painter; one striving for elegance of form, the other insisting upon accuracy of representation. It was thus that the celebrated Titian consented to draw for Vesalius: Though it is but too plain that there can be no truth in drawings, thus monstrously compounded betwixt the imagination of the painter, and the sober remonstrances of the anatomist, striving for accurate anatomy, where the thing cannot be…\textsuperscript{272}

Only by witnessing dissection, a method that Vesalius himself championed in his atlas but did not always practice in his illustrations, could the participant comprehend the anatomy of the human body. Bidloo expanded upon this method to highlight acts of physical engagement with corpses in dissection.

\textsuperscript{269} Vanhaelen, “Introduction,” 9.
\textsuperscript{270} Translation obtained from Kneoff, “Moral Lessons of Perfection,” 123.
\textsuperscript{271} “The modern statuary, is like one wandering among the ruins of some noble city, who finding the remains of a temple, traces its lines among the ruins, and, upon this slender knowledge, tries to imagine and coldly represent to us its loft form and ancient grandeur.” Bell, “Preface,” xiv.
\textsuperscript{272} Bell, “Preface,” vi.
Bidloo’s refusal to adhere to old Vesalian modes of representation was furthered by his desire to capture anatomized bodies “after life”: “I have worked to pass on to our descendants, something perfect, without ornamental and misleading representations in the illustrations; because none of the anatomists, as far as I know, has ever drawn and published a representation after life of all the parts of the human body.” Indeed, while Bidloo focussed on presenting all of the parts of the human body as they were drawn, ironically, “after life,” some illustrations go against his efforts as they continued to employ tropes and symbolic imagery evoking the Vesalian style. Bidloo’s efforts to establish a new mode of anatomical representation did not immediately succeed, however, as his medical contemporaries rejected his approach. Seeing as “utterance alone does not bring about the day,” nor would Bidloo’s publication of the Anatomia necessitate its success in medical discourse. Ultimately, judgement provided by the surrounding medical community at which the Anatomia was primarily directed rendered the atlas dismissible. While the textual component was largely rejected by his peers, because it failed to further the historiographical narrative of anatomical study or contribute “significantly” to contemporary medical discourse, his illustrations were reused (commonly accepted as plagiarized and stolen) by the British anatomist William Cowper.

In her article “Against the ‘Statue Anatomized’: The ‘Art’ of Eighteenth-Century Anatomy on Trial,” Lyle Massey examines a growing trend in eighteenth-century anatomy to distinguish anatomical images from the ‘artistic’ images that came before. She argues that to redefine anatomical illustrations in this way—to insist that they be understood as instantiations of practical knowledge—authors not only had to make a show of erasing aesthetic traces, but also of establishing new ideological parameters for the act(s) of

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273 Translation obtained from Kneoff, “Moral Lessons of Perfection,” 123.
274 Butler, “Performative Agency,” 147.
275 Cowper, The anatomy of humane bodies.
anatomical representation… How something was shown became as, if not more, important than what was shown.\textsuperscript{276}

Massey, echoing the thoughts of British anatomist John Bell, believed Bidloo’s atlas to be a pioneering venture into a new mode of representation:

In Bidloo, we have the very subject before us! The tables, the knives, the apparatus, down even to the flies that haunt the places of dissection, all are represented with the main object of the plate; and thus we have perfect confidence in the drawing in which also the parts are laid out in a bold and masterly stile, so that the dead subject and the engraving can well bear to be compared.\textsuperscript{277}

Bell was very much aware of the flaws in the \textit{Anatomia} chiefly as the result of his own attempts to negotiate between artistic and anatomical representations of the anatomized body:

…in Bidloo there is often no classification nor arrangement, no breadth of parts, by which we can understand a whole limb; a thigh is presented with no one marked point; neither the haunch nor the knee are seen: His plates are all elegance in respect of drawing; in respect of anatomy, they are all disorder and confusion; and one must be both anatomist and painter to guess what is meant, how the limb is laid, and what parts are seen.\textsuperscript{278}

Regardless of the criticisms, however, Bell believed the \textit{Anatomia} initiated a transition in anatomical representation, whereby the artistic representation of the human body, often repeated and abused after Vesalius’s 1543 text, was partially nullified in favor of a more practical, anatomical representation. Regardless of Bidloo’s variety of styles of representation and his inclusion of old allegorical tropes, Bidloo developed a new episteme, largely influenced by his appropriation of Mennonite ideals of living witness, the sensorial experience associated with the witness experience and the impact that epistemology would have on the reader’s comprehension of the subject matter. While Kneoff, Massey, and Bell focus primarily on the discourse

\textsuperscript{276} Massey, “Against the ‘Statue Anatomized’,” 69-70.
\textsuperscript{277} Bell, “Preface,” x; and Massey, “Against the ‘Statue Anatomized’,” 83-91.
\textsuperscript{278} Bell, “Preface,” x.
surrounding the ‘perfect’ representation of anatomy and how that was visualized in Bidloo’s atlas, they continue to fail to perceive the medical implications of those bodies and their intended interaction with the reader. I argue the significance the *Anatomia* had in early modern medical discourse lies in Bidloo’s development of an epistemology of *how* anatomy is learned; by witnessing the gradual dissection of bodies in their parts, with organs and internal structures presented as roughly life-sized, Bidloo situates the reader within the act of dissection, handling parts of realistic size as they progress through the pages of his anatomy. It is not a perfect system by any means, as a result of his attempt to negotiate between the old style of Vesalius and this new style, but by appropriating and reinvigorating the Mennonite emphasis on witness and action Bidloo created an anatomical atlas that initiated a centuries-long change in the anatomical episteme. In short, and in a contemporary context, the *Anatomia* engages with the viewer in a manner similar to virtual reality technology today, immersing the participant in the physical act. Ultimately the objective style that Bidloo aimed to achieve would not be ‘fully realised’ for another century.
Conclusion

“The very subject before us!”: The Anatomia’s Impact on Medical Discourse

…in Albinus we think that we understand every muscle of the human body! But our knowledge hardly bears the test of dissection; the drawings and the subject never can be directly compared:—in Bidloo, we have the very subject before us! The tables, the knives, the apparatus, down even to the flies that haunt the places of dissection, all are presented with the main object of the plate; and thus we have perfect confidence in the drawing; in which also the parts are laid out in a bold and masterly style, so that the dead subject and the engraving can well bear to be compared.

- John Bell, “Preface,” in Engravings, Explaining the Anatomy of the Bones, Muscles, and Joints (1794), x. 279

I began this thesis by assigning myself the task of tracing the fortunes and misfortunes of the Anatomia from the time of its publication to the present. In the first chapter, I examined the critical responses of Bidloo’s contemporaries, discussions of the Anatomia in notable medical publications of the eighteenth century, and through nineteenth- and twentieth-century medical bibliography to contemporary curatorial practice and art and medico-historical research. I identified that the critical opinion of Bidloo’s atlas has changed very little since the formalization of medical bibliography in the mid-nineteenth century. Additionally, I demonstrated that these opinions were greatly influenced by personal bias against Bidloo’s character, informed by an ongoing reputation ‘war’ amongst the Amsterdam anatomists who were fighting for primacy in an oversaturated market, and had little to do with his actual medical acumen.

After establishing the basis for my skepticism towards established opinions on Bidloo’s Anatomia and justifying my desire to reassess the atlas’s significance in the development of early modern anatomical illustration, in Chapter Two I investigated why and how the approach to the

279 Bell, “Preface,” x.
illustrations and text of the *Anatomia* reflected larger currents regarding the subject and reality of death in Dutch society and culture of the period. Contrary to the methods of representation employed in earlier anatomical treatises, Bidloo returned to the dead state of the anatomized body as a prerequisite to anatomical practice and its subsequent illustration. He presented meticulous, large-scale and frank images of cadavers undergoing the process of dissection. The sheer quantity of bodies Bidloo claimed to have dissected in preparation for this atlas motivated me to address the scholarship regarding how and where bodies were obtained to fuel the vast number of anatomists at work in Amsterdam in the seventeenth century. With this examination I argued that the belief of a ‘systemic’ body shortage in anatomical study that medical historians prescribe to the early modern and modern period is not accurate. In Bidloo’s instance, a large pool of resources was provided by the head physician of the Binnengasthuis. However, Bidloo’s ‘under the table’ monopoly of this body trade instigated a shortage for the remainder of anatomists working in Amsterdam, like Ruysch.

Using Kristeva’s theories on abjection and its functions, I argued that Ruysch’s efforts to slander Bidloo’s reputation by presenting the *Anatomia* as repulsive and morbid was not only a reaction to Bidloo’s renegotiation of the abject status of cadavers in anatomical study, but also Ruysch’s attempt to damage Bidloo’s reputation by characterizing his atlas with reactions associated with the abject. I argued that Bidloo’s reason to reintroduce the cadaver into medical illustration was to correct what he perceived to be a fatal flaw in anatomy, whereby the knowledge presented in medical treatises did not translate into dissection practices. Additionally, he sought to end the trend of anatomical engagement that favored simulacrums of the human body to prevent further convolution and error. While Ruysch’s reactions influenced a popular outcry against the unacceptability of the spectacle of death in the *Anatomia*, an examination of
how death was discussed and approached in the broader context of the period revealed that Ruysch’s reactions to these dead cadavers may not have been the norm. The frequency of public executions, the proliferation of gruesome, illustrated martyrologies and the domestic preparation of bodies for burial made death a commonplace in Dutch society. By examining attitudes towards, and representations of, death in a wider cultural context, it is apparent that the reality of death, and the objectification of the corpse, was widely ingrained and accepted in other medical practices, public entertainment, popular culture, politics and into the very landscape of the Dutch Republic itself. Thus, heavily influenced by the display of the dead, death, and corpses as a cultural norm, Bidloo brought the cadaver back into theoretical medical discourse.

In Chapter Three I addressed yet another cause for concern in Ruysch’s criticisms of Bidloo’s *Anatomia*: the representation of female bodies, and especially the uncensored display of their genitalia unrelated to the study of female reproductive physiology. Disregarding the petty claims and colourful language employed by Ruysch in his attacks towards Bidloo’s representation of the female gender, the presence of female cadavers in the *Anatomia* offered an excellent opportunity to examine the relationship between medical developments and cultural connotations of gender. An examination of early modern attitudes towards women in Dutch law, and disseminated in popular treatises written by Jacob Cats and Mattheus Tengnagel, as well as in paintings by Gerard ter Borch and Gabriel Metsu, revealed growing disparity by the end of the seventeenth century between the dependent and subservient women defined in treatises and law versus the independent and autonomous women depicted in paintings. Women’s involvement in economic affairs, business management, the criminal justice system and as independent agents in society suggests that, rather than the dependent and defenseless gender Cats and Ruysch constructed, women asserted themselves and enjoyed greater freedom and autonomy than earlier
generations of women. Then, through a discussion about Bidloo’s involvement in Dutch theatre and his direct relations with Baruch Spinoza’s philosophies on equality, I argued that Bidloo’s equal representation of female and male cadavers undergoing dissection was strongly influenced by this larger trend of female autonomy in Dutch culture. In economic, legal, and civil spheres, women gained more control over the definition and defense of their gender, elevating their status in light of emerging philosophies, such as Spinoza’s, that stressed equality.

In the fourth chapter, I responded to Rina Kneoff’s “Moral Lessons of Perfection: A Comparison of Mennonite and Calvinist Motives in the Anatomical Atlases of Bidloo and Albinus,” in which she observes that Bidloo’s “aversion to methods to ‘enliven’ dead bodies and his preference for depicting the mutilation and cruel reality of the dissected body, are remarkably close to the Mennonite fascination for martyrs’ stories of torture and suffering.” While I agreed that there were obvious similarities between the Anatomia’s mode of representation and the mode of representation and narration used in Thieleman van Braght’s illustrated edition of the Martyrs Mirror, I argued that, rather than appropriating the performance of suffering and torment acted out by martyrs in van Braght’s text, Bidloo instead adopts the didactic methods of the text. That is, rather than highlighting the suffering and torment of these cadavers, Bidloo employed van Braght’s didactic methods of witnessing, and performing and comprehending dissection through sensory experience. A comparison between Bidloo’s illustrations and intended purpose of the atlas, and the illustrations and narrative of van Braght’s the Martyrs Mirror, demonstrated how these methods of witness and performance were employed effectively in the Anatomia. Ultimately this emphasis on witness and lived experience helped to reinstate the primacy of the cadaver within anatomical study, and innovated an anatomical method whereby

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the *Anatomia* simulated the dissection process for its readers. Finally, addressing criticisms regarding the confusion of style, variety of illustrative modes, and confusing placement of Vesalian modes of representation within Bidloo’s new mode, I used Angela Vanhaeelen’s analysis of paintings of Protestant Church interiors to demonstrate the hybrid function of Bidloo’s atlas. Indeed, the transitionary nature of the *Anatomia* was recognized by the Scottish anatomist John Bell, whose commentary was recently reflected upon by Lyle Massey.

Let us return to Massey’s ideas regarding eighteenth-century anatomy: “How something was shown became as, if not more, important than what was shown.”281 As the majority of critical response towards Bidloo’s *Anatomia* focussed primarily on the quality of its illustrations, after effectively dismissing Bidloo’s descriptive text, the real impact of his mode of representation on medical discourse still requires further exploration. Bell and Massey’s argument for the *Anatomia*’s transitionary role from Vesalian representation to a more modern, objective, representation does not accurately represent the impact the *Anatomia* had on medical development. Nor does further analysis regarding the *Anatomia*’s impact on the Dutch medical sphere render any significant impact of Bidloo’s ontology, primarily because of the debilitating criticisms provided by Ruysch and his contemporaries. The English medical sphere, however, may provide more insight, especially considering the illustrations of the *Anatomia* were plagiarized by the English anatomist William Cowper (1666-1709) in his atlas *The anatomy of humane bodies* (1698). Exploring the role that Bidloo’s *Anatomia* played in eighteenth-century English medical developments, based primarily on how often his illustrations were subsequently copied, as well as on English anatomical practice and access to cadavers, will demonstrate that, contrary to the atlas’s minor impact in Dutch medical development, Bidloo’s mode of

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281 Massey, “Against the ‘Statue Anatomized’,” 69-70.
representation provided English anatomists with opportunities to engage with cadavers in a society where access was extremely limited.

Today Cowper is remembered for his observations on the “Cowper glands,” and his role in a copyright scandal with Bidloo that initiated the development of stricter copyright law in eighteenth-century England.\textsuperscript{282} Likely due to the poor sale of the Dutch edition of the \textit{Anatomia}, Bidloo’s publishers agreed to sell 300 imprints of the engravings Samuel Smith and Benjamin Walford, who published numerous texts for the Royal Society of London and William Cowper. The transaction between the Dutch and English publishers is detailed in a pamphlet written by Bidloo in 1700, entitled \textit{Gulielmus Cowper, criminis literarii citatus coram tribunal nobiliss. ampliss. societatis Britanno [sic] regiæ per Godefridum Bidloo}. In this, Bidloo claimed that Cowper was a “highwayman,” and a “miserable anatomist who writes like a Dutch Barber.”\textsuperscript{283} Bidloo stressed that Cowper’s act of plagiarism was a threat to all authors of arts and sciences and that he should be expelled from the society lest he do further harm.\textsuperscript{284}

\begin{flushleft}\textsuperscript{282} Beekman, “Bidloo and Cowper, Anatomists,” 128; and Roberts, Tomlinson, “Govard Bidloo,” 313. \textsuperscript{283} Beekman, “Bidloo and Cowper, Anatomists,” 126; and Govard Bidloo, \textit{Gulielmus Cowper, Criminis literarii Citatus Coram Tribunal Nobiliss: Ampliss: Societatis Britanno-Regiae, Per Godefridum Bidloo} (London: Jordan Luchtmans, 1700), 60. \textsuperscript{284} This pamphlet offered information regarding the sale of the 300 imprints to Cowper’s publishers: within a series of letters written in 1698, Bidloo reveals that one of the members of his publishing group, Henry Boom, had made an agreement with the printers Smith and Walford to provide 300 copies of the tables to be inserted into an English translation of the \textit{Anatomia} that Cowper was writing. These letters imply that Cowper had requested his publishers obtain the imprints for him, and additionally, that he had already prepared a complementary text of his own design, rather than a direct translation of Bidloo’s text, to the illustrations prior to obtaining the copies. In a later letter, written by Boom for Smith and Walford in 1699, he apologized and informed the English duo that he could no longer provide any imprints for future publications as Bidloo had banned them from doing so. After Bidloo’s death however, the heirs to his publishers’ business began to sell imprints of the \textit{Anatomia}’s plates again to the likes of C.B. Albinus, who published a revised Latin and English edition of Cowper’s atlas, and John Bell,\end{flushleft}
In his address to the reader at the beginning of *The anatomy of humane bodies*, Cowper wasted no time defending his decision to copy the *Anatomia*, readers well-aware of the *Anatomia*’s existence thirteen years after its initial publication:

The Fate of Authors, when they appear on the Publick Stage of the World, is extremally uncertain; Good or Ill Success, Reputation or 'Disgrace frequently depend more on the Humor and Prejudice of the Reader, than the Merit of the Performance. This hard Fortune of all Writers has made it Dangerous for any Book to venture Abroad, without some Harangue or Apology before it, to bespeak a favourable Treatment. For my Part, I have no Excuse to offer for not Complying with this reasonable Custom; but wholly resign my Cause to all Well-wishers, to the Advancement of *Anatomy*, the proper Judges of this Matter; whose Candor and Indulgence, I doubt not, will be a better Protection, from the Defects that shall be Discover'd in this Work, than any Reasons I shall be able to allege in my Defence.②

Taking up the delicate task of negotiating the negative reviews of Bidloo’s rendition of the atlas with his own original attempt at advancing anatomical study, Cowper was careful in explaining how his atlas was intended for the advancement of anatomy and that his efforts were supported by any who seek the advancement of the study. Interestingly, while Cowper prefaces his text by warning the reader of the mistakes they might come across in de Lairesse’s illustrations, he places strong emphasis on the physical experience of dissecting cadavers as a means to validate the truth of his descriptions. Furthermore, with respect to the additional illustrations added in the appendix of his text, Cowper notes that “these are not Drawn by Invention, but are Touch’d on after an Original Cast from the Life in *Plaister of Paris*, which I have now by me.”③ That

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② William Cowper, “To the Reader,” *The anatomy of humane bodies, with figures drawn after the life by some of the best masters in Europe, and curiously engraven in one hundred and fourteen copper plates, illustrated with large explications, containing many new anatomical discoveries, and chirurgical observations, to which is added an introduction explaining the animal oeconomy, with a copious index* (Oxford: Printed at the Theatre, for Sam. Smith and Benj. Walford, 1698), n.p.

Cowper reused Bidloo’s illustrations to form a new text, but also incorporated his own illustrations, already since published in his 1694 work *Mytomics Refortamata*, which, he explicitly states, were designed after a mould indicates two things; that Cowper saw the practical value of Bidloo’s mode of representation; and that he resorted to plagiarizing illustrations and reusing his own designed after moulds because he lacked access to a reliable source of cadavers for study.

In England, the Anatomy Act of 1832, enacted in reaction to an insufficient supply of human cadavers for anatomical examination and the criminal business of body snatching and even murdering persons to sell to practicing anatomists for source material, made legal the dissection of a larger variety of criminal bodies, bodies donated by relatives, and any unclaimed body who did not explicitly state in life that they did not desire to be anatomized after death. Prior to 1832, however, the bodies of criminals, only those convicted of certain crimes, were available for legal dissection to anatomists for practice and learning. Jessie Dobson and R. Milnes Walker note that for guilds in the early modern period, such as the London Barber-Surgeons’ Guild, anatomical lectures usually only took place four times a year, as permitted by the ordinance of the guild, which also stated that “private anatomies and other anatomies of any of the said Mystery shall not be made or wrought any time hereafter in any place or places but only within the Common Hall of the said Mystery.” While some executioners and bailiffs,

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287 “The Anatomy Act, 1832: An Act for regulating Schools of Anatomy (2 & 3 Will. 4, c. 75),” In *The Anatomy Act, 1832; the pharmacy act, 1852; the pharmacy act, 1869; the anatomy act, 1871* (London: H.M.S.O., 1832-1871), 902-906.


considered to be corrupt, were bribed by surgeons and anatomists to sell the bodies of executed criminals illegally for private dissection, contemporary research assumes that access to human cadavers for dissection was extremely limited.\textsuperscript{290} The Murder Act of 1752 added roughly 200 criminal offences that were punishable by death to the list of opportunities for post-execution dissections.\textsuperscript{291} Even with this expansion of source material, there was simply not enough access to fresh cadavers for anatomical study in the seventeenth and eighteenth centuries. From this lack of access arose two major avenues for anatomists; one was to rely on “resurrectionists” or body snatchers, who illegally dug up bodies from graves, and even murdered vulnerable persons who were then sold to anatomists; or to supplement their minimal access to fresh cadavers with other visual means of engagement. Elizabeth T. Hurren emphasizes that:

when the new capital statute became law ‘old anatomy’ underwent a paradigm shift by pursuing what became known as ‘new anatomy’. The body was no longer studied wholly as an object of God’s creation or indeed exclusively as an educational tool for medical students. The intention was to promote original anatomical research by exploiting the potential for scientific endeavour afforded by the criminal corpses of the capital code.\textsuperscript{292}

Drawing attention to this desire for original research, Hurren highlights the dilemmic binary that developed between obtaining original source material from a small and unreliable pool of available cadavers and through potentially illegal means, or adapting already existing anatomical content —whether illustrations, preservations, or models made after the life— that English anatomists faced in order to continue to practice anatomy. The limited access that English

\textsuperscript{291} “An Act for better preventing the horrid crime of murder (25 Geo. 2, c. 37),” \textit{The Murder Act 1751}, or \textit{Murder Act 1752} (London: H.M.S.O., 1752).  
anatomists had to cadavers for anatomical research and how they compromised these restrictions precisely identifies the true impact of Bidloo’s *Anatomia* on medical history.

The Scottish anatomist William Hunter (1718-1783), known for his role as the first Professor of Anatomy at the Royal Academy in London and as one of the most notable Scottish anatomists of the eighteenth century, published his atlas, the *Anatomia uteri humani gravidi tabulis illustrata* in 1774. In his preface, Hunter observes a binary in anatomical illustration, referring explicitly to Bidloo’s impact:

> Anatomical figures are made in two very different ways; one is the simple portrait, in which the object is represented exactly as it was seen; the other is a representation of the object under such circumstances as was not actually seen, but conceived in the imagination. Bidloo has given us specimens of the first kind… A very essential advantage of the first is, that as it represents what was actually seen, it carries the mark of truth, and becomes almost as infallible as the object itself.

Speaking of the mode of representation employed by Hunter in his own atlas, he provides a description of the nature of his illustrations that is all too similar to Bidloo’s prefacing material in the *Anatomia*:

> Anatomical figures being intended to shew, as much as possible, the true nature, that is, the peculiar habit and composition of parts, as well as the outward form, situation and connection of them, should certainly be large; otherwise the smaller component parts can not be distinctly represented and if the natural size of the object be tolerably fit for an engraving, that must be of all others the very best, as it has the advantages of shewing such an important circumstance. Upon these considerations, all the figures in this work were made of the natural size, except a few which were reduced in size, and one or two of minute objects, which, on that account, were magnified.

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293 A copy of Hunter’s atlas is held at the Thomas Fisher Rare Book Library at the University of Toronto and is available in a digital format for the public to view. William Hunter, *Anatomia uteri humani gravidi tabulis illustrata* (Printed at Birmingham by John Baskerville, 1774).
Hunter’s opinion regarding the infallibility of Bidloo’s mode of representation helps us to understand why Cowper used Bidloo’s illustrations. The Scottish anatomist’s desire to represent the parts of the body as it was seen on the dissection table, in a size akin to the physical structures obtained from the body in order to simulate the performance of dissection echoes the goals and purposes that shaped Bidloo’s design for the *Anatomia*. The Scottist anatomist John Bell went even further, and reprinted Bidloo’s illustrations in the first edition of his *Engravings Explaining the Bones, Muscles, and Joints* (1794). It was the belief of Bell that anatomy books needed images to complement their texts in explaining and demonstrating the anatomy of the human body:

As I proceeded in writing a book of anatomy, I felt more and more, at every step, the necessity of giving plates to it; for a book of anatomy without these seemed to me no better than a book of geography without its maps… Indeed any one, who, studying without some help of plates, tries to understand and to remember an anatomical description with no other representation than words merely, will feel, that he… ingenious in difficulties, making an abstract subject of one belonging to the senses chiefly, and attempting to obtain by words, those ideas which must come to him only through the eye.²⁹⁶

Writing at the end of the eighteenth century, the compromise British anatomists had to make in studying anatomy without access to reliable supplies of fresh cadavers is clearly delineated in Bell’s “Preface.” Not only does Bell highlight how disparity between text and representation inhibits anatomical comprehension, but also how English anatomists’ medical treatises suffered without illustrations due to this lack of access. For Cowper, and later, for Bell, attempting to contribute original research to anatomical study without reliable access to cadavers involved a careful adaptation of old imagery best suited to their needs with the creation of a wholly original and engaging text showcasing their own experiences and discoveries.

²⁹⁶ Bell, “Preface,” viii.
A decade after the first edition of Bell’s *Engravings explaining the Bones, Muscles, and Joints* was published, the second edition of the atlas was published in London (1804), and subsequently the third in 1810. These editions hosted the same preface, but featured new and original drawings designed by Bell. The illustrations are directly inspired by de Lairesse’s designs from the *Anatomia*; cadavers sprawled across dissection tables with skin, fatty tissue and muscle hanging off in strips and rivulets and hoisted by ropes to highlight the performance of dissection, all of which are characterized by Bell’s ability to objectively capture the processes of dissection happening before him.

Cowper, Hunter and Bell’s decision to either use the illustrations from Bidloo’s atlas or employ his mode of representation in their own original illustrations indicates that the *Anatomia* was much more valuable to medical history than previously considered. Bidloo’s efforts to synthesize the subject and object of anatomical study by reintroducing the dissected cadaver into medical illustration, to represent cadavers in all their individuality without censorship and regardless of gender, and to simulate the dissection experience, gave Cowper, and later anatomists, an opportunity to interact with and reference sound source material in the absence of reliable access to cadavers. Rather than engaging in criminal activity to obtain illegal corpses on a more regular basis in order to conduct research, anatomists like Cowper and Bell sought out Bidloo’s plates because they provided the closest experience to actually dissecting cadavers. Yet, while Bidloo’s text was scrapped for being purely descriptive and replaced with more precise

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discursive analysis, the mode of representation that he introduced in the *Anatomia* brought about a new, more reliable opportunity for English anatomists to supplement the study of physical bodies with almost life-sized, realistic images that re-enacted the dissection process.

Cowper was the first to employ the illustrations of Bidloo’s *Anatomia* by having them re-printed to illustrate his own anatomical atlas in 1698, however Bidloo’s illustrations from the *Anatomia* were republished many times, with an accompanying Latin or English text, in England and the Dutch Republic, by Cowper, Christian Bernhard and Bernard Siegfried Albinus, John and Andrew Bell and more. The atlases published and revised by these anatomists are considered to be among the most significant contributions to early modern anatomical discourse, with advanced and brilliant textual components featured alongside Bidloo and de Lairesse’s objective illustrations drawn after the life. The anatomists who republished Bidloo’s illustrations, especially John Bell, acknowledged the importance of Bidloo’s attempt to introduce a new mode of representation into anatomical practice that synthesized the subject and object of anatomical study, objectively represented cadavers in all of their unique physical traits, and simulated the performance and processes of dissection. These anatomists echoed Bidloo’s mode of representation by emphasizing the necessity of having reliable visual references to study, and to simulate full sensory experience, as witnesses and practitioners of dissecting cadavers in order to effectively study human anatomy.

Let us conclude with a brief consideration of the “aesthetic” value, traditionally ascribed to the *Anatomia*. Elaborating upon Svetlana Alper’s understanding of Dutch visual culture, Klaus Heintschel notes that “Alpers understood ‘visual culture’ as ‘a culture in which images, as distinguished from texts, were central to the representation (in the sense of the formation of
knowledge) of the world.”  

Ultimately, if aesthetics is considered in its early modern connotations, as the perception of things via the senses and the description of things in empirical terms, then it appears that the very “artful” aesthetic value that medical bibliography and contemporary reception assigned to the *Anatomia* was the very trait that allowed Bidloo’s atlas to influence and shape the development of anatomy in England throughout the eighteenth century.

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Appendix

Medical Treatises that feature the *Anatomia*’s illustrations

Bidloo, Govard. *Anatomia humani corporis centum & quinque tabulis, per artificiosissis, G. de Lairesse ad vivum delineates, demonstrate, veterum recentiorumque inventis explicata plurimisque, hactenus non detecti, illustrata.* Amsterdam: for the widow of Joannes van Someren, the heirs of Joannes van Dyk, Henry Boom and widow of Theodore Boom, 1685.


Cowper, William. *The anatomy of humane bodies, with figures drawn after the life by some of the best masters in Europe, and curiously engraven in one hundred and fourteen copper plates, illustrated with large explications, containing many new anatomical discoveries, and chirurgical observations, to which is added an introduction explaining the animal oeconomy, with a copious index.* Oxford: Printed at the Theatre, for Sam. Smith and Benj. Walford, 1698.

Cowper, William. *The anatomy of humane bodies, with figures drawn after the life by some of the best masters in Europe, and curiously engraven in one hundred and fourteen copper plates, illustrated with large explications, containing many new anatomical discoveries, and chirurgical observations, to which is added an introduction explaining the animal oeconomy, with a copious index.* Ed. C.B. Albinus. Leiden: Printed for Joh. Arn. Langerak, 1737.


Bell, Andrew. *Anatomia Britannica: a system of anatomy. Illustrated by upwards of three hundred copperplates, from the most celebrated Authors in Europe. In six parts. By Andrew Bell, F. S. A. S. Engraver to his Royal Highness The Prince of Wales. The work approved of by Dr. Alex. Monro, Professor of Anatomy, &c. in the University of Edinburgh. and conducted by Andrew Fyfe, his assistant*. Part 3. Edinburgh, 1798.
Figure 1: Gerard de Lairesse, *Frontispiece*, 1685. Copperplate engraving, 30.3 cm x 47.8 cm. In Bidloo, Govard. *Anatomia Humani Corporis* (1685). Amsterdam: Rijksmuseum.
Figure 2: Rear View of the Body (Page 194), 1543. Woodcut. In Andreas Vesalius, *De corporis humani fabrica libri septem* (1543). Maryland: National Library of Medicine.
Figure 3: Gerard de Lairesse, *Anatomical study of the muscles of the upper body* (Table 20), 1685. Copperplate engraving, 31.7 cm x 48.2 cm. in Bidloo, Govard. *Anatomia Humani Corporis* (1685). Amsterdam: Rijksmuseum.
Figure 4: Frederik Ruysch, *Allegory of Death*, 1710. Printed by Cornelis Huyberts, Etching on paper, 38.7 cm x 33.3 cm. From Frederik Ruysch *Thesaurus Animalium* (Amsterdam, 1710). London: British Museum.
Figure 5: Jan de Baen, *The Corpses of the De Witt Brothers*, 1672-1675. Oil on Canvas, 69.5 cm x 56 cm. Amsterdam: Rijksmuseum.
Figure 6: Anthonie van Borssom, *Gibbets on the edge of the Volewijk*, 1664-1665. Pen and ink on paper, 20.5 cm x 31.8 cm. Amsterdam: Rijksmuseum.
Figure 7: Gerard de Lairesse, *Anatomical study of the belly of a woman* (Table 31), 1685. Copperplate engraving, 27.8 cm x 44.4 cm. In Bidloo, Govard. *Anatomia Humani Corporis* (1685). Amsterdam: Rijksmuseum.
Figure 8: *Vigesimaquinta Quinti Libri Figura* (Female torso displaying female reproductive anatomy, Page 378), 1543. Woodcut. In Andreas Vesalius, *De corporis humani fabrica libri septem* (1543). Maryland: National Library of Medicine.
Figure 9: Gerard de Lairesse, *Anatomical Study of the Abdomen of a Woman* (Table 49), 1685. Copperplate engraving on paper, 33.2 cm x 47.8 cm. In Bidloo, Govard. *Anatomia Humani Corporis* (1685). Amsterdam: Rijksmuseum.
Figure 10: Gabriel Metsu, *The Hunter’s Present*, 1658-1661. Oil on canvas, 51 cm x 48 cm. Amsterdam: Rijksmuseum.
Figure 11: Gerard ter Borch, *Gallant Conversation*, known as ‘*The Paternal Admonition,*’ 1654. Oil on canvas, 71 cm x 73 cm. Amsterdam: Rijksmuseum.
Figure 12: Gerard de Lairesse, *Anatomical Study of the back of a woman* (Table 27), 1685. Copperplate engraving on paper, 30.5 cm x 49.8 cm. In Bidloo, Govard. *Anatomia Humani Corporis* (1685). Amsterdam: Rijksmuseum.
Figure 13: Gerard de Lairesse, *Anatomical Study of the back of a woman, bound* (Table 30), 1685. Copperplate engraving on paper, 30 cm x 47.4 cm. In Bidloo, Govard. *Anatomia Humani Corporis* (1685). Amsterdam: Rijksmuseum.
Figure 14: Jan Luyken, *The Burning of Barnabas in Cyprus* (Page 11), 1685. Etching on paper, 12.2 cm x 14.9 cm. In Braght, Thieleman van, *The Bloody Theatre, or Martyrs Mirror of the baptized or defenseless Christians* (1685). Amsterdam: Rijksmuseum.
Figure 15: Jan Luyken, *The Apostle Bartholomew Skinned Alive* (Page 26), 1685. Etching on paper, 12 cm x 14.9 cm. In Braght, Thieleman van, *The Bloody Theatre, or Martyrs Mirror of the baptized or defenseless Christians* (1685). Amsterdam: Rijksmuseum.
Figure 16: Jan Luyken, *Geleyn Cornelis, tortured and imprisoned in Breda, 1572* (Page Number), 1685-1685. Etching on paper, 11.5 x 14.3 cm. In Braght, Thieleman van, *The Bloody Theatre, or Martyrs Mirror of the baptized or defenseless Christians* (1685). Amsterdam: Rijksmuseum.
Works Cited

Primary Sources


Bidloo, Govard. Anatomia humani corporis centum & quinque tabulis, per artificiosiss, G. de Lairesse ad vivum delineates, demonstrate, veterum recentiorumque inventis explicata plurimisque, hactenus non detecti, illustrata. Amsterdam: for the widow of Joannes van Someren, the heirs of Joannes van Dyk, Henry Boom and widow of Theodore Boom, 1685.


Bosch, Petrus van den, Cyprianus, Abraham. *Luijelack of t’samenspraek tusschen Wit en Swart.* Amsterdam, 1677.


Cowper, William. *The Anatomy of Humane Bodies, with figures drawn after the life by some of the best masters in Europe, and curiously engraven in one hundred and fourteen copper plates, illustrated with large explications, containing many new anatomical discoveries, and chirurgical observations, to which is added an introduction explaining the animal oeconomy, with a copious index.* Oxford: Printed at the Theatre, for Sam. Smith and Benj. Walford, 1698.


**Secondary Sources**


Ballestriero, R. “Anatomical models and Wax Venuses: art masterpieces or scientific craft works?” *Journal of Anatomy* volume 216 (2010): 223-234


Snow, C.P. *The two cultures and the scientific revolution* New York: Cambridge University Press. 1959


Thijsen, F.H.M. *Nicolaas Tulp als geneeskundige geschetst, Eene bijdrage tot de geschiedenis der geneeskunde in de achttiende eeuw*. Amsterdam: 1881.


