LOOKING FOR PLEASURE OR KNOWLEDGE?
DISSECTING THE NARCISSISTIC MEDICAL GAZE
OF WILLIAM HUNTER (1718-1783)

A Thesis

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in

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by

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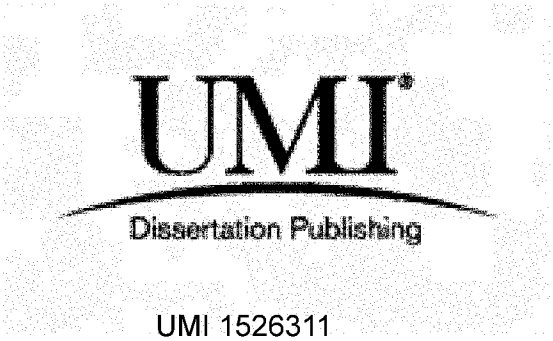

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PREFACE

I have always loved books, especially very old books. I will never forget the day in October 2013 that I spent in the rare book and special collections reading room at the Library of Congress, carefully marveling over the pages of William Hunter's magnificent anatomical atlas, *Anatomia Uteri Humani Gravidi* (1774). This book was obviously made with meticulous care and great passion. I could feel the imprint of each letter on the back of the printed pages, which were created in a time when each and every moveable type letter was carefully placed into a composing stick, inked, and then pressed into the paper. In the late 18th century, the images found in Hunter's atlas must have opened a view into a strange new world for many people. Crafted with precision and detail, each image teaches the viewer about the amazing physical relationship between mother and unborn child. However, I find myself conflicted about this book. While I greatly admire Hunter's vision and drive as a great learner and teacher, I find his treatment of other human beings confusing. While he seemed eager to be of service to others, he also put forth great effort to pursue his own fame and wealth. However, the book he left behind is truly a treasure.

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ABSTRACT

The images of dissected pregnant women in William Hunter's atlas *Anatomia Uteri Humani Gravidi* published in 1774 were among the first realistic, highly detailed illustrations of fetal development and pregnant female physiology. Commissioned by Hunter, the images established scientific truth about female reproductive anatomy, a previously misunderstood field, and aided in the elevation of the work of male-midwives to that of respected obstetricians. The fetal image he presented, like a Lacanian mirror, also opened the door into the psyche of William Hunter. Driven by his passion for anatomical research, Hunter pursued the uncharted territories of female anatomy and fetal development in a narcissistic path of self-aggrandizement. The thesis herein compares Hunter's images to historical images to examine Hunter's unique and innovative qualities. Hunter's images demystify the Jungian maternal archetype and reflect his desire to create artful images. The ethical use of the human body in the arts is also discussed.

INTRODUCTION

THE ETHICAL USE OF THE HUMAN BODY IN SCIENCE AND ART

The development of the fetus and its position within the maternal body have been captured and displayed over time by two controversial, yet incredibly successful anatomists. Separated by nearly three centuries, William Hunter (1718-1783) and Gunter von Hagens (1945 -), brought to light female reproductive anatomy in unprecedented and innovative ways. However, their works were often deemed shocking, irreverent, and even exploitive. Since 1995, Gunter von Hagens' exhibition *Body Worlds* has opened in more than ninety cities and been viewed by over 38 million visitors, with more exhibitions planned for the future ("Body Worlds"). The bodies displayed in the exhibition are actual human bodies, which have gone through a process of plastination. The preservation is accomplished by first removing all of the bodily fluids, fat, and skin. Then, the remaining tissues are impregnated with acetone and a polymer compound, which alters the composition of the

Fig 1. Gunter von Hagens. *Pregnant Woman.* Body Worlds Exhibition, Web; 11 June 2013.

tissues in such a way that they will not decompose and can be shaped and positioned before the hardening procedure ("Body Worlds"). Despite the overwhelming popularity of the exhibition, the response to the female anatomy portions has been an interesting mix of fascination and horror. The most controversial display in the 1995 *Body Worlds* exhibition is the plastinated corpse of a full term pregnant woman (see fig. 1). A surgeon, referred to as Orac, wrote on a science blog after his visit to the exhibition, "Perhaps the most difficult for me to stomach was a pregnant woman, who had been posed reclining, the wall of the uterus opened to display the fetus of eight months gestation." Another visitor to the exhibit, Kate Bluett, likened the stance von Hagens imposed on the pregnant woman to a "Playboy centerfold, one hand behind her head to show off the curve of breast and hip, her torso opened to expose her child in utero . . . a gruesome hooker." Despite the repulsion some may feel, the global exhibition draws crowds. *Body Worlds'* display of the human body blurs the line between science and art: between what is considered repulsive and beautiful, appropriate and abhorrent.

In his book *The Shock of the New,* Robert Hughes writes with regard to art, "appetite and repulsion are built into the same object" (357). Many people love to look at themselves and their bodies, thus treating the body as an artful object or an object of beauty. The current obsession with Facebook, "selfies," and Instagram attest to the truth. However, the need to look beyond the skin historically has been complicated because such a gaze enters the realms of personal privacy and death. In current medicine, the need to see inside the living body as opposed to viewing a corpse is pushing the limits of

current technology. Henrik Enquist, a biomedical engineer, has described medical imaging as Narcissus's new mirror. He argues:

> This narcissistic tendency, also present in the history of medical images, has its origin in the fact that most cultures throughout history have been fascinated by looking at and depicting themselves and each other . . . The wish to see beyond the horizon of the human biological eye is one of the major driving forces in the development of medical imaging technology.

Medical imaging of the interior structures of the human body has revolutionized medicine, making more precise treatment possible. However, digital imaging is not the type of imaging that Gunter von Hagens is promoting in the *Body Worlds* exhibition. Instead, he is opening up the human body as a work of art for the appetite and consumption of the common person's gaze, for a price. Orac, the surgeon writing on the science blog mentioned previously, wrote of *Body Worlds*, "I couldn't help but feel there was something exploitive about the whole endeavor, given the sold-out attendance and not inexpensive price for tickets, plus all the merchandise on sale in the obligatory gift shop that the exhibit exited into, clearly this exhibit is raking in money hand over fist." I argue that while the consumerist angle of *Body Worlds* is accurate, Von Hagens has capitalized on humanity's appetite to view itself. Von Hagen's work and motives mirror the efforts of another brilliant and innovative anatomist, the 18th century's William Hunter.

In 1774, Dr. William Hunter published a colossal book which he would count as his greatest accomplishment, an atlas of illustrations which captured pregnant female anatomy in ways never before seen. Like von Hagens' plastinated human sculptures, Hunter saw his atlas as a work of art to be viewed and appreciated by those who could afford to buy it. Published on the finest paper by a renowned publisher of quality books, the atlas was intended for wealthy patrons. As Hansen and Porter explain, "The expensive volume sold for six guineas" (117), a high price for the time. Hunter's and von Hagens' need to expose *artfully* the developing fetus and the gravid, or pregnant, uterus for public consumption stirs up ethical questions at the crossroads of science and art. First, both men used human bodies, some from questionable sources, as their artistic medium; second, both men prospered financially from the use of the bodies; and third, both anatomists paid special attention to embryology, which is a subject of ethical and moral debate. The images both men created of the unborn child stir up deep-seated religious and psychological emotions about human life but at the same time, serve to further scientific understanding. Enquist describes the power of images and their ability to "entice, seduce, inform, warn and entertain . . . only a few images are so intimidating and alienating that we do not know how to interpret or relate to them. From a layman's perspective, medical images are mysterious and in many cases terrifying in their enormous potential and fateful powers." The thesis herein centers on the images commissioned by William Hunter which opened the doors of knowledge concerning pregnant female anatomy in ways never before seen or understood.

The images created by Hunter served three purposes—they were visual proof of Hunter's intellectual research, they verified the scientific truth of gravid female anatomy which made childbearing more worthy to be considered a profession for skilled male doctors, and they changed the way both men and women perceived female anatomy and gestation. Chapter One of this thesis will examine Hunter's formative experiences which influenced the creation of the atlas and the historical context surrounding its production. Chapter Two will focus on the originality of Hunter's images in comparison to other historical anatomical images of the gravid, or pregnant, uterus. Chapter Three focuses on Hunter's motives, particularly his use of images and art to climb the social, scientific, intellectual and economic ladders. Finally, Chapter Four will focus on the impact of the images in the demystification of the female archetype and the access these images gave men, including Hunter, to gaze at both fetuses and female anatomy under the guise of medical science. My research is based on multiple primary and secondary sources including Hunter's lecture notes, biographical sketches of his life, and contemporary analysis of his work and motives. In this thesis, I will conduct a formal comparison of similar historical images and contextualize Hunter's atlas within the scientific discourse of the time. Although I examine the feminist and Marxist methodological views of Hunter's work in Chapter Three, my own argument is based on the psychoanalytic work of Jacques Lacan and Carl Jung in Chapter Four.

CHAPTER 1

WILLIAM HUNTER--VISUALLY SHOCKING HIS WAY INTO POWER

Don't think, just try.
William Hunter

Child in Womb presents an ironic juxtaposition of new life and death (see fig. 2). Attributed to William Hunter, the image immediately presents a question: Is *Child in Womb* proof of an actual event or rather constructed from the artist's imagination? The subject matter is complex and disturbing. The naked hips and lower abdomen of a woman are laid out, legs spread and amputated at the thighs, revealing a cross-section of muscle, bone, and adipose tissue encased in skin. Directly above the severed genital area, layers of tissue are open and folded back, exposing the perfect form of a fetus wrapped snuggly in the uterus of a dead woman—new life enclosed in a tomb of flesh. No doubt, Gardner's art history survey text, *Art*

Fig. 2. *Child in Womb,* engraving by Jan van Rymsdyk, *The Anatomy of the Human Gravid Uterus* by William Hunter. (London: 1774.) rpt. In Kleiner, Mamiya and Tansey *Gardner's Art Through the Ages. 11th ed.* 11th ed. Belmont, California: Wadsworth Publishing. 2000. Print. 838.

Through the Ages, included this illustration because of the artistic merit of its composition and the empirical evidence of scientific truth it provided during the Enlightenment (Kleiner 838). Three ovals created by the severed thighs and uterus form the corners of a symmetrical triangle. But the viewer's eyes are not directed to the apex of the triangle; rather one's eyes follow the converging lines formed by the open womb and folds of flesh which lead to the focal point of this work, the head of a child. One's attention is further drawn to the child's head by three points which accentuate the triangular composition—the two severed bones in the woman's thighs which flank the central focal point or the infant's ear, posed as if listening to our response.

The presentation of the subject matter is intensely frontal and direct, inviting the spectator to look deeply. Art Historian Lyle Massey argues that Hunter's perspective, as seen in *Child in Womb,* was very intentional. "Hunter . . . pursued a formal and stylistic visual language of objectivity. That is, his images of dissection were artfully arranged to convey the idea of unmediated contact between observer and object" (86). That unmediated contact represents a gaze—the gaze of the artist and, by his will and intention, the gaze of all others who look at these images. Hunter wanted the image to be shocking, powerful, and truthful. He wanted it to be looked at.

Child in Womb, a title given to this image only in the Gardner text, represents more than just a carefully constructed composition; it represents scientific truth. *Table VI*, the title given by Hunter to this image, represents one of thirty-four life-size, high-quality engravings of the *gravid* or pregnant uterus in various stages of gestation. Published in 1774, Hunter's atlas was entitled *Anatomia Uteri Humani Gravidi* or *The*

Anatomy of the Human Gravid Uterus Exhibited in Figures by William Hunter, Physician Extraordinary to the Queen, Professor of Anatomy in the Royal Academy, and Fellow of the Royal and Antiquarian Societies (see fig. 3). The atlas itself was a leather-bound, colossal text, measuring nineteen by twenty-six and a half inches in size. The preface of the book, written by Hunter, clearly communicates his vision concerning the purpose. He writes, "The art of engraving supplies us . . . an universal language . . . clearer ideas of the most natural objects, than words can express (and) makes stronger impressions on the mind [sic]." As a physician and anatomist, Hunter was privy to a rare view of human existence and eagerly sought to communicate exactly what he saw, believing deeply in the power of empirical truth-telling. Each of the thirty-four tables is accompanied by descriptive notes of the tables, or plates, presented in two columns on the opposite page—Latin on the left and English on the right. He provided Latin descriptions in order to facilitate the use of his book by all persons trained in the arts regardless of native tongue. In the notes which accompany *Table VI*, Hunter writes, "Every part is

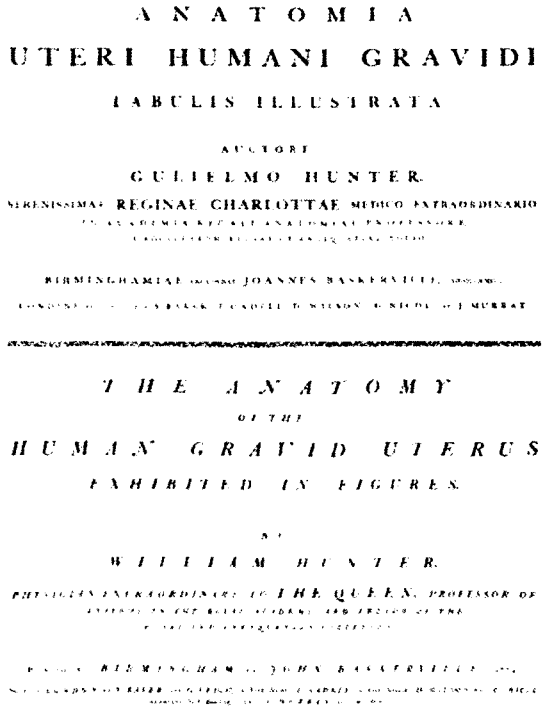
ANATOMIA
UTERI HUMANI GRAVIDI
TABULIS ILLUSTRATA
AUCTORE
GULIELMO HUNTER.
SERENISSIMAE REGINAE CHARLOTTAE MEDICO EXTRAORDINARIO
BIRMINGHAMIAE JOANNES BASKERVILLE
THE ANATOMY
OF THE
HUMAN GRAVID UTERUS
EXHIBITED IN FIGURES.
BY
WILLIAM HUNTER.
PHYSICIAN EXTRAORDINARY TO THE QUEEN, PROFESSOR OF
BIRMINGHAM JOHN BASKERVILLE

Fig. 3. Title Page. Engraving from William Hunter, *Anatomia Humani Gravidi Uteri* by William Hunter (Birmingham, 1774, n.p) National Library of Medicine, Bethesda.

represented just as it was found; not so much as one joint of a finger having been moved to shew any part more distinctly, or to give a more picturesque effect." His aim was to present the scientific truth of the female pregnant uterus more clearly than had ever been shown before. He succeeded, and by so doing, legitimized obstetrics as a medical field and presented to the world a new understanding of the subject matter in the art of anatomical images.

Although shocking, the clarity of the illustrations in the atlas allows for veracity in the depiction of the gravid or pregnant uterus. *Anatomia Humani Gravidi Uteri* is upheld by many scholars as one of the most important anatomical atlases created. Notes posted by the John Martin Rare Book Room at the University of Iowa Library state, "This stunning atlas, containing life-sized steel engravings of the gravid uterus is one of the most elegant and accurate anatomical works in existence" ("The Gravid Uterus"). The influence and impact of the atlas were immediate. Betsy Corner writes, "The publication of William Hunter's great anatomical atlas, *The Gravid Uterus* in 1774 created immediate and widespread interest in the medical circles of London and the world beyond" (1). Technically, the atlas was born of the labors of three men—William Hunter, the Dutch born artist Jan van Rymsdyk, and fellow Scotsman and printmaker Robert Strange, although Hunter gives scarce recognition to the other two men, which will be discussed in Chapter Three. A. A. Calder, Professor of Obstetrics and Gynecology at the University of Edinburgh, describes the impact as follows: "This wonderful atlas, engraved by Sir Robert Strange from the drawings by Jan van Rymsdyk of Hunter's original anatomical dissections, gave a remarkable insight into the uterus

during pregnancy more than two centuries ago, an insight which has scarcely been improved upon to this day, despite the sophistication of modern techniques of diagnostic imaging" (291). Hunter's atlas was innovative, scientific, and beautifully constructed.

Following the Enlightened Footsteps of Leonardo da Vinci and Andreas Vesalius

Hunter's atlas was the offspring of the Enlightenment. Enlightenment thinkers such as John Locke (1632-1704) and Francis Hutcheson (1694-1746) taught students to question tradition, to think for themselves, and to uphold reason and rational thought over superstition and imagination. The Enlightenment's new way of thinking led intellectuals to look differently at the world around them, especially the natural world. Students of the sciences were encouraged to observe, test theories, and record results. For the anatomist, the human body was the object of intense study, and a crucial part of that study was the documentation of one's findings. Words could not describe completely what was discovered—images were necessary. The relationship among anatomy, art, and science had begun to develop strongly during the High Renaissance. Leonardo da Vinci (1452-1519) believed that a verbal description of anatomy without images would only lead to confusion. He states, "And you who think to reveal the figure of man in words, with his limbs arranged in all different attitudes, banish the idea from you, for . . . your description . . . will confuse the mind of the reader and . . . you will lead him away from the knowledge of the thing described" (qtd. in Duden 37). Hunter keenly understood Leonardo's concept as shown by Hunter's belief that images are a "universal language" (Hunter preface). Another Renaissance anatomist, Andreas Vesalius (1514-1564),

considered the first great anatomist of early modern medicine, also knew the value of images over words as a part of the scientific analysis and documentation. He writes, "Illustrations greatly assist the understanding, for they place more clearly before the eyes what the text no matter how explicitly describes" (qtd. in Pamela Smith 86). As artists and scientists worked together to create illustrations that could represent scientific truth, their observations and medical texts were greatly enhanced. Pamela Smith explains, "Art gained importance as it came to be seen as a new mode of investigating reality . . . Images became an important way of recording, collecting, cataloguing, and witnessing the curious, the marvelous, and the peculiar" (89). However, Hunter's atlas differed in key ways from the atlases created by the Renaissance anatomists in that his images brought the viewer directly to the anatomy lab instead of to a fantastical place where dissected figures could still walk and pose themselves, as had been the practice in previous centuries. Chapter Two will focus on these differences in order to clarify why Hunter's images were so revolutionary.

The Role of the Artist in Scientific Illustrations

In 15th century Europe, the development of the printing press by German printer Johannes Gutenberg gave the scientist and artist team the opportunity to document their efforts through the medium of print. Although Leonardo sketched his own images, most anatomists like Andreas Vesalius used the skills of various artists, including Jan Stephan Calkar (d. 1568), to create his famous prints (Hansen and Porter 32). Smith writes that the third party, the printmaker, was the key to success. "The printer-entrepreneur was often key in bringing these two groups, with their previously independent trajectories,

into conjuncture" (87). The collaboration applied especially to the natural sciences and illustrations of plants and animals. The National Library of Medicine at the National Institute of Health mounted an exhibition in 2002 titled *Dream Anatomy,* which centered on the Institute's collection of historical anatomical images. An online gallery of the images featured in the exhibition describes the relationship of the artist and scientist: "Professors of anatomy performed dissections for their students and sometimes published beautiful, imaginative, and monumental books of anatomical studies that were works of art in their own right" (*Dream Anatomy*). But often, it is the scientist that is remembered for these beautiful images and not the artist. Smith argues, "The fact that the scholar-naturalist-physicians are more familiar to historians of science than the artisans who made the images points to a tendency both in the history of science and in our contemporary perception of 'art' and 'science' to privilege the scholar, and conceptualizer above the maker" (84). Hunter's atlas is no exception.

In London, the relationship among scientist and artist began to change in the halls of the Royal Academy of Art. Reflective of the Enlightenment taste for scientific evidence and empirical truth, Sir Joshua Reynolds, the first president of the Royal Academy of Arts and William Hunter, its first professor of anatomy, encouraged observation of the human figure in the arts. However, Martin Kemp argues that their views, although seemingly congruent concerning the importance of observation, actually conflicted. "Hunter had come to espouse an uncompromising empiricism . . . he was utterly committed to observational science, founded upon minute scrutiny, systematic description in words, images, and inductive analysis" (79). When a contemporary British

painter, printmaker and satirist, William Hogarth (1697-1764), first saw *Table VI*, he exclaimed, "Good God, how snug and compleat the child lies. I defy all our painter's in St. Martin's Lane to paint a child in such a situation" (sic.) (qtd. in Hopkinson 156). This comment highlights a debate among the artists at the Royal Academy. Reynolds taught that beauty was not necessarily based on exact truth, as revealed in a speech delivered in October of 1770: "We are not always pleased with the most absolute possible resemblance of an imitation to its original object. Cases may exist in which such a resemblance may even be disagreeable" (qtd. in Kemp 82). What was aesthetically pleasing to the scientist was not always visually pleasing to the artist. The desire to represent the empirical truth during the Enlightenment clashed with contemporary artistic views of beauty.

Jan van Rymsdyk and Robert Strange: The Artists Behind Hunter's Famous Images

In the preface of *Anatomia*, Hunter, the scientist, makes his relationship with the illustrator Jan van Rymsdyk and engraver Robert Strange clear:

> A woman died suddenly, when very near the end of her pregnancy the body was procured before any sensible putrefaction had begun, the season of the year favorable to dissection; the injection of the blood-vessels proved successful; a very able painter, in this way, was found, every part was examined in the most public manner, and the truth was thereby well authenticated. (preface)

Hunter's role in the production of the specimen for illustration involved injecting the blood vessels with colored wax, thereby preserving their full and "lifelike" appearance and the dissection of the body. There is no doubt that he must have guided the desired outcome of the image, the chosen viewpoint and focus, but he did not create the two-dimensional image. He hired an artist, van Rymsdyk, to sketch exactly what he saw, and then van Rymsdyk's sketches served as the foundation for engravings completed by Strange. In the preface of *Anatomia,* Hunter states that "the engravings of flesh and bone reveal what words could never say—more easy and pleasant than studying a cadaver." He also recognized the value of the print in making a view of female anatomy available to a broader audience than just those students in his classroom. For as Barbara Duden argues, Hunter was aware of the advantage of producing a serialized engraved image. "Hunter is keenly aware of the epoch-making power of the two techniques, which now mutually support each other. He stresses the fact that the engraving opens and preserves for the eye what has been revealed and isolated in subsequent sections by the anatomist" (39). The engravings would also give the anatomist the opportunity to study long after the opportunity to dissect had passed.

Medical historian Heidi Heilemann describes the atlas as "one of the most controversial books of this genre" (27). Part of the controversy centers on the authorship of the images. Although Hunter describes the artist or painter who worked for him in his preface as "a very able artist" (Hunter preface) he fails to mention Jan van Rymsdyk as the artist. Born in Holland, van Rymsdyk spent most of his life working in London and Bristol. His first documented work appears in London in 1750, when he began working

for William Hunter (Huffman 4). Although van Rymsdyk advertised himself as a portrait painter and acknowledged his displeasure working for anatomists as a medical artist, he worked under the patronage of four man-midwives in his lifetime—William Smellie, William Hunter, C. N. Jenty, and Thomas Denman (Thornton 91). He "started drawing the first ten plates for William Hunter's *Gravid Uterus* in 1750, and continued at intervals until 1772, when he made the fourth drawing on Plate 34. The atlas was finally published in 1774, twenty-four years after the first drawing was executed" (Thornton 4). Perhaps inspired by Hunter's publication in 1774 or as a way of expressing his desire to also be known as the author of his own work, van Rymsdyk published an atlas of his own in 1778, entitled *Museum Britiannicum.* This atlas contains engravings of drawings van Rymsdyk made of birds and other favorite exhibits in the British Museum in London. His eye for detail and his skill as an artist have been noted by admirers for over two centuries. Professor of Obstetrics John W. Huffman describes van Rymsdyk's "skillful manipulation of lights and shadows and his use of perspective" (972), stating that unlike other artists his day, van Rymsdyk did not embellish his drawings but focused on capturing with the clearest detail exactly what he saw. The *Echini Marini* found in van Rymsdyk's text *Museum*

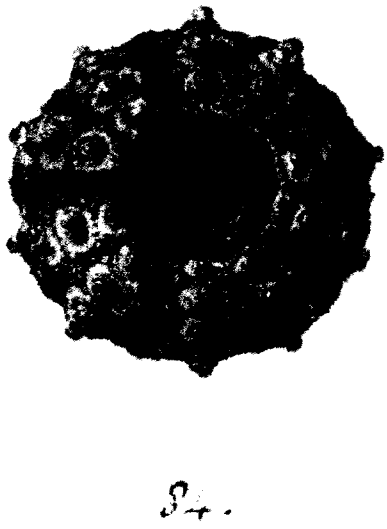

Fig. 4. *Echini Marini,* copperplate engraving from Jan van Rymsdyk. *Museum Britannicum. (London,* 1778. 84), Smithsonian Cullman Library, Washington, D.C.

Britannicum, demonstrates his abilities (see fig. 4). In *Museum Britanicum* van Rymsdyk's illustrations are accompanied by his own descriptions of the object. Of *Echini Marini*, he wrote, "*Echini Marini,* without spines, the sea hedge-hog, or urchin, the sea egg, the sea cake, are all *English* names of the different species . . . is generally armed with a great number of spines, or prongs, which are moveable at the animal's pleasure, by means of muscles" (71). Van Rymsdyk's detailed images combined with his verbal description made the natural sciences more accessible to the public, or at least to those who could afford to "subscribe" or buy one of his texts. Of his drawings, van Rymsdyk writes that "he has truly imitated all of the Objects, without adding or diminishing, an established solemn Law he had formed from his Cradle, for his future Conduct as a Painter (sic)" (V). His belief in objective naturalism and attention to detail captured the attention of the anatomists of his day, who "with great care and expense employed Mr. Reimsdyk" (sic) (Huffman 973). Although William Hunter employed Rymsdyk to create images of his dissections, Hunter's name is the one most dominantly associated with Hunter's atlas, because he was the driving force behind its production both financially and conceptually as Chapter Two will explain in further detail.

The Formative Experiences of William Hunter

William Hunter was born on May 23, 1718, at Long Calderwood, Lanarkshire Scotland, the seventh of ten children. Hunter's father was eager to guide the futures of his children. "The father of the Hunters was a man of high character, and made many sacrifices to advance his children; his anxious disposition kept him, we are told, often

awake at night, pondering his cares" (Fox 3). Helen Brock argues that William must have felt concern about family finances, "being brought up in an atmosphere of financial anxiety and I suspect early learnt respect for money and extreme care in its expenditure: a lesson well learnt and remembered throughout life" (Brock "Happiness" 35). Following early education at a local Latin school, William entered the University of Glasgow at age thirteen with the intent to enter the ministry. While there, he was greatly influenced by the teachings of Francis Hutcheson (1694-1746), a professor of ethics who is believed to be one of the founders of the Scottish Enlightenment. "Hutcheson taught his students to think for themselves, and introduced them to a secular morality based, not on a religious dogma, but on reason" (Brock 3). Hunter's ready acceptance and interest in the teachings of Arius, which questioned traditional religious practices, "made him unsuited" (3) for the pursuit of a career in the Presbyterian Church, so he left his studies at the University of Glasgow and returned home. While at home, his father arranged for him to apprentice to a local well-trained doctor and family friend, William Cullen, in 1737. Cullen became a friend and mentor to William. Brock describes William's relationship with Cullen as, "the man to whom he owed the most and loved the most of all men in the world" (3). Cullen found that William was a bright and amiable student; so much so, that he offered to share his medical practice with him after his training was complete. As a part of his training, Cullen sent Hunter to London in 1740 to study under William Smellie, a Scottish man-midwife and friend of Dr. Cullen (4).

Smellie was a revolutionary of sorts in the field of man-midwifery who had just completed training in Paris with a doctor named Grégoire who used a "phantom" or life-

size figure of a pregnant woman with which to practice (6). With the help of John Theophilius Desaguliers, Smellie began using a much improved model constructed from leather and wood that simulated the breaking of water and dilation of the cervix (7). Eager to help rural and lower class midwives, both male and female, understand the complicated process of childbirth, he "advertised that he, with his students, would gratuitously attend poor women in their homes" (8) "on the condition that they allow his students to observe them during birth" (Massey, "Pregnancy" 76). Typically, women gave birth with the help of female midwives and male doctors were only called in when a problem arose that would require their help to save the mother's life. Even then, "when they were called in, it was only to advise the midwife, the patient not permitting herself to be touched" (Fox 29). Dr. Smellie was eager to help midwives understand how to handle various crises that might arise. He was also eager to use instruments that could ease the birth process such as forceps (Massey, "Pregnancy" 76). Smellie was very successful, teaching large classes and aiding the lower classes of London society in childbirth. In her book, *Birthing the Nation: Sex, Science, and the Conception of Eighteenth-Century Britons,* Lisa Cody states that Smellie trained at least 900 male midwives (163). He published a text, which he intended to be used as a birth manual, *A Sett of Anatomical Tables, with Explanations, and an Abridgement of the Practice of Midwifery*, in 1754. However, Fox, a nineteenth-century surgeon and admirer of Hunter, describes Smellie as "uncultured and unpleasing to those of polite manners, so that he never acquired a large practice amongst the upper classes, skillful practitioner though he was" (30). Although Hunter found Smellie's clientele, manner and use of the forceps to be against his liking,

his praise and blame of the man, according to Adrian Wilson, made him, "in the sphere of midwifery . . . something of a father-figure for Hunter" (361).

In 1741, Hunter was introduced to another Scottish man-midwife practicing in London, James Douglas. Unlike Smellie, Douglas was a refined collector of precious coins and books who taught anatomy classes and walked in the circles of the upper classes in London (Brock 10). More than any other mentor, Douglas became the role model of Hunter's aspirations. Luckily, the admiration was returned and Douglas offered Hunter the opportunity to work for him as his anatomy assistant. The opportunity was a pivotal event in Hunter's life. By accepting the position as assistant to Dr. Douglas, Hunter broke his agreement to work for Dr. Cullen in Scotland and embarked on a long-term career in London (10). Although Hunter's father did not approve of William's choice to break his contract with Cullen, he did support his son's professional goals. However in a letter addressed to William, he expressed concern that something might happen to Dr. Douglas, leaving William without a profession (11). Hunter's father's concerns were prophetic, and in 1742, Douglas died unexpectedly.

Hunter's Road to Success

Three key factors contributed to Hunter's success: his personality and intelligence, the intense public interest in the natural sciences and human anatomy, and the poor living conditions of the lower classes in London. Hunter was an eager and optimistic student. Brock describes Dr. Cullen's perception of Hunter as "an apt and intelligent pupil—his conversation remarkably lively and his whole conduct at the same

time more strictly and steadily correct than that of any other young man he had ever known" (3). He was disciplined in his personal behavior. A contemporary of Hunter, Samuel Foart Simmons, described Hunter in a speech given in 1783 to the General Meeting of the Society of Physicians of London, of which Hunter had been president before his death earlier that year. Simmons described Hunter as a man who woke up early, lived simply and frugally, and worked tirelessly. He was a man of excellent understanding, sound judgment, and good manners. He loved learning and teaching. He states that Hunter seemed to have no relish for luxuries and amusements of London, choosing instead to "live in the midst of a crowd, master of himself, and his own pursuits" (Simmons 67). Professionally however, Hunter was sought after by the upper class of London who desired him to attend to their pregnant wives. Simmons states, "There was something very engaging in his manner and address, and he had such an appearance of attention to his patients when he was making his inquiries as could hardly fail to conciliate their confidence and esteem" (67). His skill and excellent bedside manner eventually opened even more grand doors. "On the recommendation of Sir Caeser Hawkins, he was appointed Physician-in-Extraordinary to Queen Charlotte supervising the births of all of her children" (Bynum and Porter 11). However, it is uncertain if his bedside manner was based more on his genuine interest in humanity or his keen business sense. He never

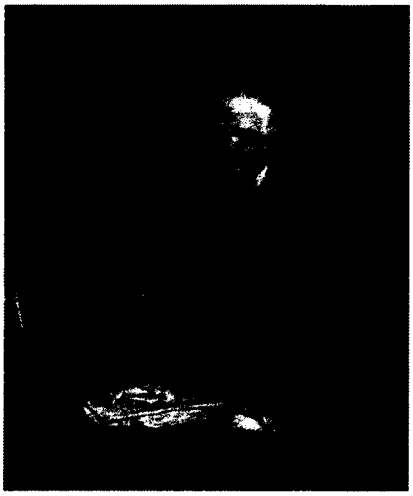

Fig. 5. Sir Joshua Reynolds, *William Hunter*, 1787, Hunterian Museum Art Gallery Collections. Glasgow.

married and his involvement with his family, although attentive in some ways, was always on his terms as discussed below.

Success from Pursuing Business before Pleasure, Family, and Friends

Early in his time in London, Hunter's sister Tibbie became ill. He promised that he would visit her when his pockets were full of gold and buy her horses and whatever else she wanted (Brock 15). This was a promise he never kept. His family's desires to see him were always secondary to his financial pursuits. In 1751, Dr. Cullen wrote on numerous occasions to Hunter conveying his dying mother's wish to see him. Dr. Hunter wrote back and thanked Dr. Cullen for his attentive care of his mother, but then he stated, "I cannot consent this season to her request . . . I want to tell you many things about colleges, hospitals, professorships, chariots, wives . . . I am busying forming a plan for being an author. In short, my head is full of a thousand things" (57). His letter then centers on his acquisition of rare books and coins. Brock quotes Thomson in an 1832 memoir of William Cullen that this was a crucial period in Hunter's career and that it would have been detrimental to leave (57). Hunter's reply conveys that his own personal goals trumped everything else. He did invite two brothers at different times to come and work with him. The second brother, John Hunter, worked as his assistant for years and eventually became a well-known surgeon and anatomist in his own right. But his financial goals were a driving force in his life. "Though generous to a few . . . Hunter was generally ruled by prudence, apparently declining to attend patients who could not afford his full fee" (Porter 14). He sought the patronage of those who could pay him

well. Hunter knew the power of money and the independence and ease that came with financial security. Eventually, Dr. Hunter's success allowed him to build his own private residence which housed an anatomy theater and museum on Great Windmill Street in London in 1768. His anatomy school was the base of his business, "an enterprise essentially self-created, self-owned, and self-managed right up to his death" (21). Then in 1774, at the height of his success, he was finally able to publish the atlas he had begun in 1750 when he dissected his first gravid uterus. The atlas was not intended to be used as a manual to guide other midwives as Smellie's text was. Instead, Hunter, a collector of rare books and fine art, sought to create something more connoisseurship-based. "Besides the book's size, cost, and numerous plates, his choice of John Baskerville as his printer indicates that he intended the volume to serve as a rare and limited collector's item" (Massey, "Pregnancy" 78). Baskerville was an unusual choice for a few reasons. Typically, Baskerville printed only fine copies of the classics. Hunter's atlas was the only scientific book he ever published and the most expensive due mainly to its size and the quality of the engravings. But the collector in Hunter understood what made a book valuable. Massey argues that Hunter sought out John Baskerville for the quality ink and paper he used in his products (78).

Success from Riding the Wave of Public Interest in Anatomy

Another factor which contributed to Hunter's success was the growing interest in the natural sciences, especially in the field of human anatomy, inspired by the Enlightenment and the Scientific Revolution. The first line of van Rymsdyk's atlas

points to the influence of Enlightenment thinking as follows, "The Taste of the present Day is happily engaged in the pursuit of Natural knowledge and in the Cultivation of those Arts that embellish the Mind, and furnish the most elegant Materials for Conversation" (preface). After Douglas's death, Mrs. Douglas let Hunter use her husband's library, research, and anatomy models for several years (Brock 15). Such fortuitous circumstances were incredibly helpful in Hunter's pursuits. He began practicing surgery and eventually studied anatomy using human bodies in Paris with Dr. Douglas's son. Upon his return, Hunter began teaching his own anatomy classes in the Paris manner, or in other words, with human cadavers (32).

Hunter was not the first to offer such a course. When Hunter began teaching, there were "at least twenty-eight private courses being offered in London, Cambridge, and Oxford" and in the Paris manner (32). Hunter's classes became especially popular and large, starting at five o'clock in the evening, allowing hospital workers to attend, and lasting two hours. Class size often exceeded one hundred people and most of the pupils were of the upper classes of London (32). In order to teach in the Paris manner, Hunter needed a constant supply of bodies. A cartoon created in 1782 by Thomas Rowlandson, one of his anatomy students, captures a comical view of resurrection morning in which many bodies are seen demanding Dr. Hunter to find their missing body parts (see fig. 6). In order to supply the need for bodies, private anatomists often turned to the gallows as a means of obtaining corpses. "Hanging day at Tyburn generally ended up in a riot as officials of those institutions legally entitled to bodies and anatomists clashed with the friends and relatives of the executed who wish to save them from dissection and give

them a Christian burial" (34). Another source of bodies was grave robbing. Although Hunter did not document where he obtained bodies, political cartoonists of his day sought to expose this side of an anatomist's job.

Fig. 6: The Resurrection of an Internal View of the Museum in W-m-ll Street on the Last Day, Etching from Thomas Rowlandson (London, 1782; n.pag.); Hunterian Museum and Art Gallery, William Hunter collections. Web. 15 Oct. 2013.

In this 1773 cartoon, two night watchmen holding a lantern have caught an anatomist, John Hunter in this case, fleeing from a grave robbery of a young woman (see fig. 7).

Success from Preying on the Poor

The third factor which influenced Hunter's success was the poor living conditions of the lower classes in London due to the Industrial Revolution. As more and more people moved into the cities to take factory jobs, urban living conditions became increasingly unsanitary and crowded. Historians generally assume that Hunter and his

brother, John, obtained their bodies from poorhouses. However, in a 2010 essay in the *Journal of the Royal Society of Medicine*, Don Shelton argues that forensic evidence shows that anatomists obtained some of their bodies, especially the bodies of the pregnant women, by burking or murdering on order. "There is great suspicion about the abundance of undelivered ninth-month corpses procured, dissected, and depicted in the anatomical atlases of Smellie and Hunter" (Shelton 49). Shelton's essay has sparked an academic debate about doctors so revered in medical science. No matter how he procured them, having a good source of bodies, especially bodies of pregnant women, was important to Hunter's success.

Fig. 7. The Anatomist Overtaken by the Watch . . . Carrying off Miss W--ts in a Hamper, colored etching from William Austin (n.p., 1773, n.pag.); rpt. in Michael Sappol, *Dream Anatomy* (Bethesda: National Library of Medicine, 2006; print, 74.).

CHAPTER TWO

HISTORICAL IMAGES OF THE WOMB

To acquire knowledge, and to communicate it to others, has been the pleasure, the business, and the ambition of my life.
William Hunter

A Case Study: Historical Superstitions and Misconceptions of the Wandering Womb

Misconceptions about the uterus, its location and abilities, are rife throughout human history. An article in the March 8, 2012 edition of *The Guardian* describes the etymology of the word *hysterical:* "It's a word with a very female-baiting history, coming from the Latin word *hystericus* 'of the womb.' This condition thought to be exclusive to women—sending them uncontrollable and neurotically insane owing to a dysfunction of the uterus, the removal of which is still called a hysterectomy" (Nunn). Indeed, the Greek word for uterus is *hystera* and many of the principles that guided those who sought to aide women with their health throughout history were based on ancient Hippocratic texts. Helen King states that ancient texts used as a basis in gynecology for thousands of years professed that "the womb is the origin of all diseases in women" (12). The uterus was also perceived to dominate women and their emotions. A painting entitled *A Lesson on Hysteria* by Pierre-André Brouille (1857-1914) captures a moment when a "hysterical" patient is receiving care in the form of hypnosis from one of the founders of modern neurology, Dr. Jean-Martin Charcot, observed by a classroom full of medical students in the 1830s (see fig. 8).

However, beliefs about the nature of the uterus have even earlier origins. Art historian Laurinda Dixon cites two ancient Egyptian papyruses dating back to the second millennium B.C. "which describe the 'wandering womb' syndrome, in which the uterus supposedly roams throughout the body violently compressing the vital organs" (15). In order to lure the womb back to the abdomen, physicians would use various scents to attract or repel the womb. "This was accomplished by fumigating the vagina with sweet smelling vapors to attract the womb back to its proper place, or conversely, inhaling foul-smelling substances—fumes of wax or hot coals—to repel the organ and drive it from the upper parts of the body" (16). Such concepts must have been well accepted by the ancients, for even Plato perpetuates the idea of the wandering womb. In a treatise entitled *Timeaus* written in the fourth-century B.C., Plato refers to the uterus as a beast within women that desires to

Fig. 8. Pierre-Andre Brouille, *A Lesson on Hysteria*, Musée d'Histore de la Médicine, Paris.

create and that "when remaining unfruitful long beyond its proper time, it gets discontented and angry, and wandering in every direction through the body, closes up the passages of breath, and, by obstructing respiration, drives them (women) to extremity, causing all varieties of disease" (18). Such ideas created many different and imaginative mental images of the womb. Helen King relates the mythological story of Pandora who appears to be an innocent virgin but contains a hungry uterus within her that, when opened, unleashed misery on mankind. The Hippocratic view of the uterus was that of a jar. In an engraving of Pandora by Abraham van Diepenbeek a woman is seen holding a jar over her pubic area. Erwin Panofsky quotes fifteenth-century collector of engravings Michel de Marolles who argued "that this was because it is the part from which flowed all the sorrows and concerns of man" (qtd. in King 36) (see fig. 9). Thus, such theories supported the idea that the character and disposition of a woman were an outward expression of the inner state of her uterus. "She is a womb-jar, insatiable in her appetites, lustful and deceitful, but fertile" (39). Ancient

Fig. 9: Pandora, copperplate engraving by Cornelius Bloemaert after a painting by Abraham van Deipenbeeck, *Tableux du Temple . . .* (Amsterdam, 1676; n.pag.); Web. 3 Nov. 2013.

Greeks also believed that there was a strong connection between the breasts and the uterus concerning the formation of breast milk which was believed to originate from the uterus. "Breast milk is menstrual blood diverted and refined" (34). Such misconceptions were based on mythology and faulty reasoning.

Before the eighteenth century, even among those who professed to know something of internal female anatomy, an understanding of the uterus and its function was based on external observation and the imagination. Some scholars used the male body as a means to understand female anatomy: "Aristotle argues that the human womb is always two-chambered because the male is the model for humanity and a man has two testicles" (34). King argues that some scholars even argued that there were more than two chambers, basing their findings on the dissections of animals (34).

When interpreted through Christianity, the womb took on the sin of Eve and became a spiritual cause for feminine instability. Dixon cites a prayer from a tenth-century Latin manuscript which combines the idea of the wandering uterus with demonic possession:

> In the name of God, the Father, God the Son, and God the Holy Spirit . . . direct thy attention toward the form of our nature and do not despise us, the work of Thy hands . . . Stop the womb of Thy maid N. and heal its affliction, for it is moving violently. I conjure thee, O womb, in the name of the Holy Trinity, to come back to the place from which thou shouldst neither move nor turn away . . . to the place where the Lord put thee originally . . . not to occupy her head, throat, or neck, chest, ears . . . but to

> lie down quietly in the place which God chose for thee, so that this maid of God be restored to health. (qtd. in Dixon 23)

Such misconceptions about women, their reproductive organs, and their emotional and spiritual state created a field of study begging for enlightenment. No longer willing to accept superstition as a basis for behavior or anatomy, Enlightenment thinkers began a quest to understand the truth concerning female anatomy.

Historical Images of the Gravid Uterus

Historical images of the gravid uterus are rare. Although ancient scholars and physicians such as Galen, Hippocrates, and Soranus, attempted to understand female anatomy, their theories were based merely on external observation and historical yet generally accepted misperceptions. Perhaps they also had a feeling that the study of the uterus was not really *their territory* and therefore, they did not feel that they had the right or opportunity to look deeper. Heilemann argues that "access to this subject in any century and in most cultures was typically forbidden, prohibited, or just plain unobtainable" (23). Consequently few efforts were made by scientists to represent anatomy, male or female, in images. Michael Sappol states, "Ancient and medieval anatomical treatises consisted largely or entirely of written descriptions of the body; illustrations were rare (and when they did supplement the text, crude and schematic)" (12).

However, manuals prepared for midwives contain examples of the earliest known depictions of the gravid uterus. In a fifth-century gynecology manuscript written in

Latin by Muscio, various positions of the fetus in utero were depicted and then copied for centuries (Yudakök 221). Muscio's images of uterine anatomy perpetuate the idea of the uterus as a free-floating jar, shown independently from the mother's body (Heilemann 24). Four *homunculi,* or little men, appear to swim and frolic within a large, jar-like cavity occupying various pre-birth positions (see fig. 10). The positions must have been ascertained from external observation as the fetus was emerging from the uterus during birth, but the internal structure of the uterus was still left to the imagination.

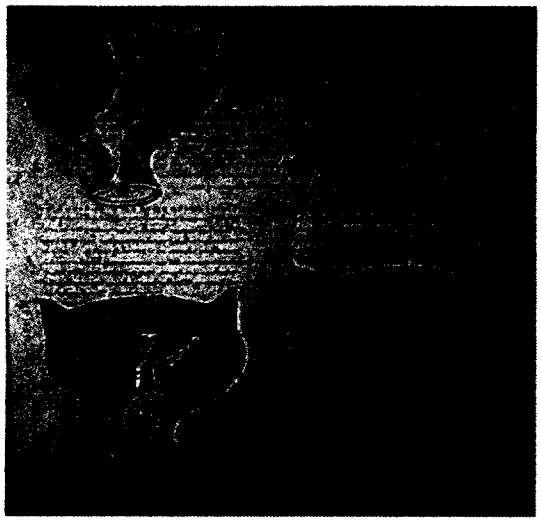

Fig. 10. Position of the Fetus, from the Muscio Manuscript (n.pub. 500 A.D. n.pag.) rpt. "Neo-natal Medicine in Ancient Art." *The Turkish Journal of Pediatrics.* 52 (2010). 221, Web; 21 Jan. 2014.

Fig. 11. Fetus in utero, woodcut from Heinrich Gran zu Hagennau in Eucharius Rösslin, *Der Schwanger frawen vud hebamme roszgarte* (n.pub., 1513, n.p.); University of Kansas Clendening History of Medicine Library. Kansas City, Web; 9 Sept. 2013.

In 1513, an early-modern midwifery manual entitled *Der Swangern Frauen vud hebammen roszgarten* (*The Rose Garden for Pregnant Women and Midwives*) was written by Eucharius Rösslin, the city physician of the city of Worms. Most likely, he did not attend any of births, but as city physician, he was responsible to guide the

education of the midwives in Worms. The manual and variations of the manual containing more innovative images of the gravid uterus were immensely popular and became the standard text for midwives in Europe (Massey, "Pregnancy" 76). In figure 11, a fully-formed little man is floating freely belly-down in a large, bulbous-shaped uterus. Meant to demonstrate a precarious birth position, this image still perpetuates the jar-like uterine shape (see fig. 11).

Fig. 12. Fetus in the Womb, pen and ink drawing from Leonardo da Vinci (n.pub., 1512, n.p.); rpt. In Clifford A. Pickover *The Medical Book.* (New York: Sterling, 2012); print, 67.

Leonardo da Vinci's (1452-1519) depiction of a fetus within a womb was remarkably innovative and insightful for the time in which it was created. He depicts the female gravid uterus with a vascular system and various layers. "It was not until Leonardo da Vinci's pen and ink drawing of the fetus in the late 1480s, that the fetus is shown in a more realistic, albeit breech, fetal position" (Heilemann 25). There is no record that Leonardo's drawing of the gravid uterus is based on an actual dissection; however, the fact that the gravid uterus is depicted with a circulatory system, gives some indication that he was familiar with the anatomy of the pregnant uterus (see fig. 12).

Within the same century, another manual was produced by Jacob Rueff (1500-1558), a physician and professor of medicine in Zurich who oversaw the education of midwives and also had experience with deliveries (Massey, "Pregnancy" 76). Rueff's innovative image depicts a pregnant female figure sitting peacefully on a birthing stool

with her legs crossed at the ankles (see fig. 13). She is alive with flowing hair and a peaceful expression on her face, despite the fact that her torso is cut open for viewing. "This manual contains an image of female reproductive anatomy based on a dissection although not one performed by Rueff himself. According to Rueff, the image is borrowed from the 'Anatomy book of the most famous and learned Andreas Vesalius' so that 'whoever is performing services for pregnant women may make good use of it' as a mirror image of the feminine body" (qtd. in Massey, "Pregnancy" 76). The image to which Rueff is referring was one included in Andreas Vesalius's text *De humani corporis fabrica* of 1543 (see fig. 14).

Andreas Vesalius (1499-1546) is considered the first true anatomist of the Renaissance. His work opened the door for anatomists to explore the human body with greater freedom than ever before. Although Vesalius did not dissect a gravid uterus, his work is crucial in understanding the important shift visually in the creation of anatomical images. He sought to capture more clearly than ever before the exact structure of the human body—bones, muscles, ligaments, nerves, and organs. However, he chose to present his findings in images that were full of fantasy and frolic as was the trend in the sixteenth century (see fig. 15). He wrote, "Our pictures . . . will give particular pleasure to those who do not have the opportunity of dissecting a human body or who . . . although fascinated and delighted by the study of man . . . , yet cannot bring themselves to attend a dissection" (qtd. in Sappol 11). His flayed figures, while posing in dance positions in picturesque landscapes, display anatomical details in clarity never before displayed. The image Rueff refers to was different. *Female Urogenital Dissection* (fig.

14), commissioned by Vesalius, displays the interior of a female cadaver. Although Vesalius does not capture an image of the gravid uterus, his insight into female anatomy is unprecedented and influential.

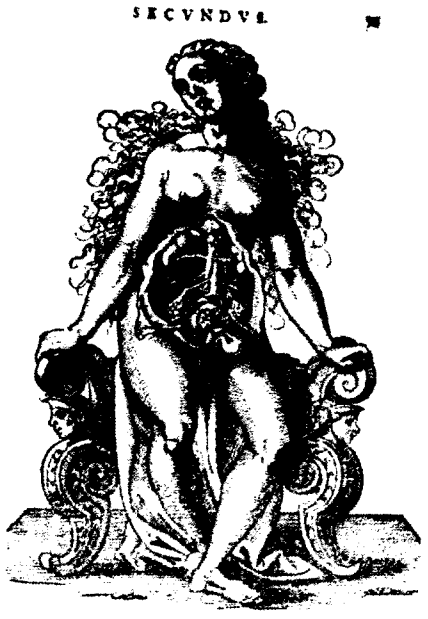

Fig. 13. *De conceptu et generatione homini*, woodcut from Jacob Rueff, (Frankfurt, 1587; n.pag.); University of Kansas Clendening History of Medicine Library. Kansas City, Web; 9 Sept. 2013.

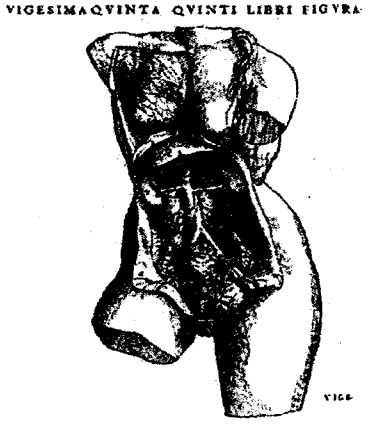

Figure 14: Female Urogenital Dissection, woodcut from Andreas Vesalius, *De Humani Corporis Fabrica* (Basel, 1543; 478); National Library of Medicine, Bethesda. Web. 15 Oct. 2013.

Fig. 15. Woodcut from Andreas Vesalius, *De Humani Corporis Fabrica* (Basel, 1543; n.pag.); rpt. in Michael Sappol, *Dream Anatomy* (Bethesda: National Library of Medicine, 2006; print, 74.).

In his text, *De humani corporis fabrica,* Vesalius mocks the ignorance of other physicians. He states that when he was a child, he read a book by Albertus Magnus which he found to be full or errors. Vesalius explains that Magnus wrote:

> That women have seven chambers in their uterus . . . Not only the ignorant mob but also the dregs of anatomists who maintain that there is not one cavity but seven; they count seven cells in the uterus, saying that

> the three on the right side are for male children, the three on the left for female, and the remaining one for hermaphrodites . . . which reveal(s) an ignorance of anatomy. (qtd. in Vesalius 171)

The work of Vesalius began to bring to light historical fallacies and truths concerning the anatomical position of the uterus.

Fig. 16: Engraving from Andreas Spigelius, *De Formato Foetu* (Frankfurt, 1627; n.pag.); National Library of Medicine. Web. 13 Oct. 2013.

Renaissance anatomical images combined artistic fantasy—pastoral landscapes and creative poses—with scientific truths. Scientific illustrations of the Renaissance were often charged with references to scripture, folklore and mythology. Following the tradition, another anatomist, Giulio Casserio (Casserius) (1552-1616), created illustrations which were published in a text by Andreas Spigelius entitled *De Formato Foetu* 1627. "The most unique of these oversize engravings depict the pregnant uterus, placenta, and fetus" (Heilemann 23). The book continued the tradition begun by Vesalius of hiring artists to create not only detailed but imaginative and aesthetic depictions of anatomy. In figure 16, a woman stands in an idyllic setting, resting her knee on a tree stump as if pausing from a leisurely stroll. A plant conveniently covers her genitals and seems to form the stem of a flower that is her dissected abdomen. Her flesh is opened in layers like the petals of a flower,

revealing a fetus within her (see fig. 16). In her book, *Reproducing the Womb: Images of Childbirth in Science, Feminist Theory and Literature,* Alice Adams describes the Renaissance tendency to idealize the images of the fetus in the womb. "Intimate physical connections between the fetus and the mother, the umbilical cord, placenta, and the uterine walls surrounding the fetus, are elided in these images" (128). Although those components of anatomy are present, their exact relationship to each other is very ambiguous—most likely, because it was unknown.

Smellie and Hunter: Pioneers in the New World of Female Reproductive Anatomy

None of the images already discussed represent a depiction created from an actual dissection of a pregnant uterus. However, the situation was about to change. "Between 1680 and 1800, anatomists began purging imaginative elements from scientific illustration. The truth of anatomy, they argued, was compromised by visual metaphors, fantastic landscapes, and comic poses" (Sappol 25). Inspired by Enlightenment philosophers, the current of scientific illustration was changing. Francis Bacon (1561-1626), an English philosopher and scientist, wrote prophetically that when men turn from superstition and seek after truth, they would "examine and dissect the nature of this very world itself" (26). As discussed in Chapter One, the 18th century in London was a time of scientific revolution and exploration. Anatomists were teaching anatomy classes for profit in their homes and hotel rooms (Brock 32). Anatomy was the new frontier, waiting to be explored. In an image funded by Casserio, the analogy of anatomical study as a conquest of the unknown is depicted (see fig. 17). "This clumsy frontispiece features five

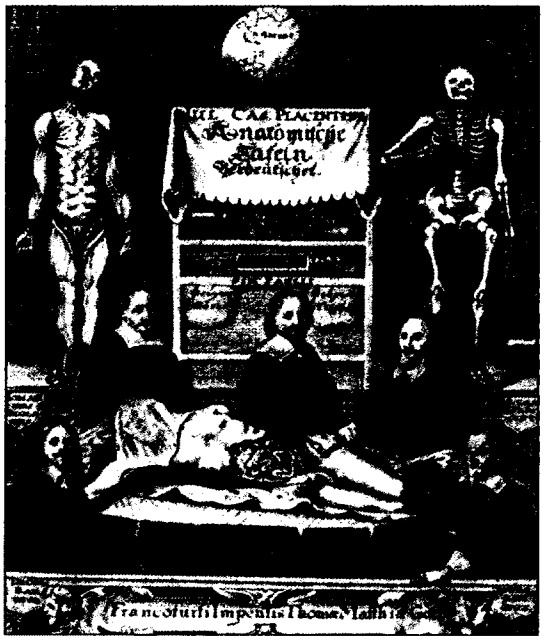

Fig. 17. Copperplate engraving from Giulio Casserio, *Anatomische Tafeln* (Frankfurt, 1656; n.pag.); National Library of Medicine. Web. 13 Oct. 2013.

notable anatomists posed around a cadaver. In the center of the picture, the image of the Earth, with the continent of 'America' visible, signifies that the anatomized body is a "New World," and dissection, a voyage of discovery" ("Dream Anatomy"). Artists now left behind fantastical settings and poses, opting instead for realism. More than ever before, the image became the driving force of communicating scientific data. Thornton argues that the shift served three important functions. Images could "convey to viewers at a glance more information than can be gleaned from laboriously poring over many pages of manuscript or printed text . . . they are international, and can be comprehended without translation" (Thornton vi). The change was particularly true concerning female reproductive anatomy.

As an area of anatomy never before explored, the bodies of pregnant women became a new area of intense focus. Roberta McGrath, author of *Seeing Her Sex: Medical Archives and the Female Body,* explains that "it is then that the female body was, for the first time, conceived as new terrain, a final frontier to carnal knowledge" (1). William Smellie and William Hunter were on the forefront of the exploration of female anatomy and they chose to celebrate their research with images that brought the viewer

right to the heart of their work environment and research. For Smellie, that place was the birthing room and for Hunter, it was the anatomy theater. The images attributed to both attest to their contributions. Huffman wrote, "Modern obstetrics was born in their classrooms and at the bedsides of their patients" (971). However, Smellie's and Hunter's images differ in very specific ways.

Although both men hired Jan van Rymsdyk to capture their work, the resulting images keenly reflect the different intentions of each doctor. Smellie was eager to serve the lower class, teaching both male and female midwives separately. The text he published was intended to aid his students. McGrath writes that Smellie did not encourage Rymsdyk to capture fine details. "Smellie was not so much interested in 'delicacy and elegance' as in 'a strong and distinct' manner. He thought this type of rendition would make the atlas cheaper and therefore 'of more general use'" (McGrath 68). His text was written in English and Massey argues that its intended audience was "male practitioners and anatomists" (Massey 77). Smellie's atlas focuses on the moment of birth. "It is filled with images of forceps-induced delivery, bad presentations, and other indications that require a surgeon's intervention" (74). In figure 18, a dangerous presentation of the fetus at birth is depicted. This circumstance often took the

Fig. 18. Arm First Delivery, engraving from William Smellie, *A Sett of Anatomical Tables* (London, 1754; n.p.); University of Kansas Clendening History of Medicine Library. Web. 15 Nov. 2013.

lives of both the mother and the baby. Often, a surgeon would need to be called in to save the mother's life by removing parts of the baby in pieces if it had died in the process in a timely manner before the mother died. Depicted in shocking realism, one senses that there is hope for the mother and the child who both might still be alive.

Smellie was trained in the use of forceps in Paris in 1738 (76). Eager to promote their use, Smellie's atlas contains several images demonstrating how to use them in various situations (see fig. 19). Smellie is described as an excellent teacher who advocated hands-on teaching, but he also knew the importance of being able to see the whole picture. Therefore, he also dissected pregnant women in order to facilitate images that captured both anatomical features and the moment of birth. "By forging a visual link between anatomical dissection and the process of birth, Smellie's atlas makes visible the internal forces working on the mother and the fetus" (77). Devoid of any unnecessary details such as legs or skin, Figure 19 clearly focuses on the process at hand. Sappol argues that "the goal of realism is to maintain an almost airtight correspondence between the visual representation and the subject of the representation" (33). Smellie's intent was to present "the body correctly, from inside out" so that his midwives, both men and women, would have a clear picture of the birthing process (Massey 77).

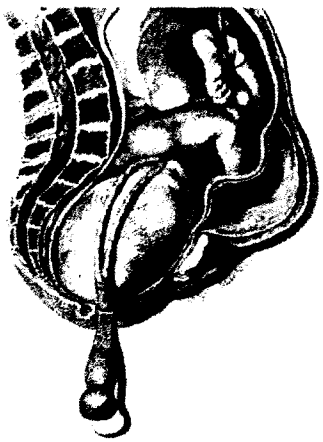

Fig. 19. Forceps Delivery, engraving from William Smellie, *A Sett of Anatomical Tables* (London, 1754; n.pag.); Galter Health Sciences Library. Northwestern University. Chicago. Web. 15 May 2013.

How Hunter's Images Differed from Smellie's Images

Hunter's motive seems to have been different as the images he published prove. Massey argues that in *The Anatomy of the Human Gravid Uterus,* "Hunter did not view the volume as a manual for midwifery or even necessarily as a manual for dissection . . . (but as a) rare and limited collector's item" (78). Indeed, Hunter knew the world of collecting well. He was a collector of coins, paintings, medals, and "anatomy dignified in art . . . Collecting was his symbolic act of assimilation into the values of high society, literally acquiring culture, while, at the anatomy school, annexing tangible objects of control" (Porter 30). I find it interesting to note that although Hunter dissected scores of male bodies, his most famous images are those of the gravid uterus and fetus, the very images he sought to immortalize. His images of the uterus and fetus embody the Enlightenment ideals of scientific study and inquiry "posing as purely scientific and strictly anatomical, and seemingly without visual and narrative flourish, relying heavily upon the powerful visual image tied to a sparse text which is little more than captioning" (McGrath 79). Huffman agrees that Hunter succeeded in creating a collector's item. "William Hunter's *Anatomy of the Gravid Uterus* is one of the great events not only in obstetric literature but in the art of medical illustration" (973). A detail from *Table VI* demonstrates the great effort that was made to capture every fine detail and texture of the tissues (see fig. 20). Fetal toes are tucked behind a knee and thigh, while a tiny hand and fleshy arm lies in the narrow space flanked by the shiny, freshly tied off umbilical cord and the layers of maternal flesh and adipose. Various hatching, cross-hatching, and shading techniques provide the image with a wide variety of textures. Whereas Smellie's

images lead one to believe that the mother and the child are living, Hunter's images capture maternal death, but in a fascinating way.

Fig. 20. Table VI, engraving from William Hunter, *The Anatomy of the Human Gravid Uterus* (Birmingham, 1774; n.pag.); National Library of Medicine. Bethesda.

Fig. 21. Table, XII, engraving from William Hunter, *The Anatomy of the Human Gravid Uterus* (Birmingham, 1774; n.pag.); National Library of Medicine. Bethesda.

Hunter was influenced by works of Leonardo da Vinci. "Hunter obtained access to Leonardo's anatomical works at Windsor Castle, which he intended to publish at some future date, a project that he never realized" (Massey 80). Figure 21 seems to resemble Leonardo's fetus (see fig. 12) but in a much more realistic way. Van Rymsdyk's life-size image is powerful, strikingly simple, and yet complex. The fetus is no longer a little man swimming in a large open vessel; instead the image captures the tight inter-connected

nature of a maternal-fetal relationship. Hunter describes the engraving (see fig. 21) which was created from the second pregnant woman he dissected. He writes: "A view of the womb and vagina fully opened . . . to shew the situation of the child, and the lower part of the placenta at the inside of mouth of the womb, under the child's head and detached from the womb; the occasion of the fatal hemorrhage" (Hunter Plate XII caption). His explanation of the cause of this woman's death was a fatal hemorrhage that today is referred to as a condition brought on by placenta previa. According to Medline Plus, an online service of the National Library of Medicine at the National Institute of Health, "placenta previa occurs in one of two-hundred pregnancies. Nearly all women with placenta previa will need a C-section. If the placenta covers all or part of the cervix, a vaginal delivery can cause severe bleeding. This situation can be deadly to both the mother and the baby" (Medline Plus). Today, a physician would ascertain the condition with an ultrasound. But in the 1700s, there was no way to diagnose the problem until it was often too late. Historically, C-sections were rarely performed as "the mother would not survive the operation" (Yurdakök 220). Hunter's image does not offer a solution to the condition. Instead, as Massey argues, Hunter's atlas concentrates on gestational morphology. "While Smellie's atlas details the many things that can go wrong for a physician while attending a birth, Hunter removed all signs of his practice as midwife from the volume. The messiness and contingencies of birth have no place in his account" (Massey 83). Smellie's text begins with images of early pregnancy and leads toward the situations that can occur at birth, but Hunter's book is opposite. Hunter's *Anatomia Uteri Humani Gravidi* begins with images of a dissected full term gravid uterus and moves

progressively backwards through different stages of gestation, ending with images of a uterus just five weeks after conception. His intent was to capture visually the scientific truth of the anatomy of the female reproductive system throughout various stages of gestational morphology.

Hunter writes that he was also influenced by the works of Dutch anatomist Govard Bidloo (1649-1713). In the preface of *Anatomia,* Hunter describes two different types of anatomical images—those which represent exactly what was seen and those which were not seen but constructed in the imagination. He credits Bidloo for providing images which were exactly what was seen and he patterns his work after Bidloo's *Anatomia humani corporis* (Leiden 1685). Bidloo's images are shocking in their presentation in that they demonstrate not only the dissection itself, but also the tools, strings, and pins used on the dissection table (see fig. 22). Massey argues that Bidloo did this intentionally, "The purpose is to transport the viewer into the laboratory itself" (80). In one of his images, Bidloo's artist, Lairesse, even includes a fly which has landed on the tissue of a cadaver. The presence of a fly is meant to make the viewer feel physically present in the anatomy theater.

Fig. 22. Head Dissection, from Govard Bidloo, *Anatomia humani corporis.* (Leiden, 1685; n.pag.); National Library of Medicine. Bethesda.

The images created by van Rymsdyk for Hunter also bring the viewer into the laboratory. Referring to *Table VI* (fig. 2), Massey states that "Riemsdyk pushed the

drawing viscerally into the viewer's space and made the dissected edges and cuts seemingly available in tactile as well as visual terms" (sic) (84). Focusing on a single body part, without embellishments or intervention, both Hunter and Bidloo bring human anatomy into focus. Sappol writes, "The new anatomy had a relentless gaze that seemed almost to terrorize its subjects and its viewers" (28). Hunter invites us to participate in his labor, to look deeply and long. In *Table XXVI* of Hunter's *Anatomy of the Human Gravid Uterus,* we are invited to gaze at the gravid uterus of the tenth of thirteen pregnant women he dissected whose bodies formed the foundation of his text (see fig. 23). The image shows a uterus at five months gestation which has been completely removed from the mother's body. The outer layers of the uterus have been cut away to reveal the transparent chorion, or outer layer of the amniotic sac containing the fetus inside. A reflection of a window is seen on the transparent chorion membrane. McGrath argues that "the reflected window in black and white suggested not only the presence of the

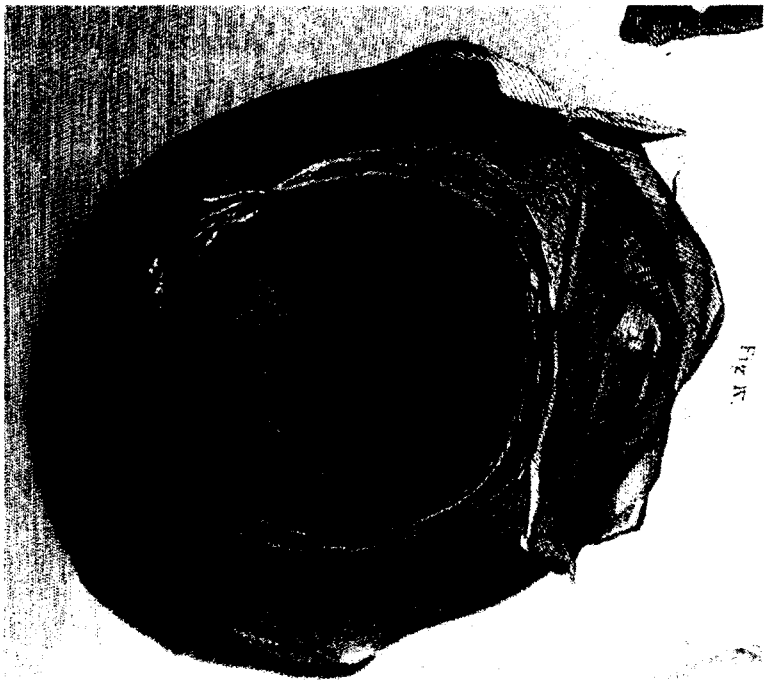

Fig. 23. Plate XXVI, from William Hunter, *Anatomy of the Human Gravid Uterus* (Burmingham, 1774; n.pag.); National Library of Medicine. Bethesda.

artist at the scene but the reality of image production faithfully carried through" (90). Massey also finds significance in the inclusion of the window. "Like the fly in Bidloo's preparation, the window acts as a temporal signifier that testifies to the artist's presence in the dissection theater and therefore to the reality on which the image is based" (Massey 81). The window is a signifier of one who was gazing at this dissection at the time of its execution. This must certainly also include the gaze of the patron of this work, William Hunter. What motivated the gaze? Why was Hunter so passionate about capturing the gravid uterus visually and creating a rare, fine text for collectors? Chapter Three will address these questions and examine the power of the uterine images from various methodological points of view.

CHAPTER THREE

FLAYING THE VULNERABLE

The history of all hitherto existing society
is the history of class struggles.
Friedrich Engels

In his professional climb up the scientific ladder, William Hunter passionately and anatomically pursued areas of the human body previously unexplored, bringing him fame and honor among scientific men of his day and ours. In *The Portraits of the Academicians of the Royal Academy* (see fig. 24), Hunter is depicted in his role as the Professor of Anatomy for the Royal Academy of Art in London, a position he served in from 1769 to 1772, working side by side with Joshua Reynolds, William Hogarth, and Thomas Gainsborough (Dunn). "Zoffany's group is conceived as a pastiche of the most famous intellectual conversation in art, Raphael's *School of Athens*, with Reynolds and William Hunter playing the parts of Plato and Aristotle" (www.royalcollection.org.uk). Reynolds and Hunter are the two figures standing in front of the square relief sculpture on the wall. William Hunter is depicted with his hand at his

Fig. 24. Johann Zoffany, *The Portraits of the Academicians of the Royal Academy,* Royal Collection, London.

chin gazing toward the nude model, and Reynolds, the president of the Royal Academy, stands next to Hunter with his back to the model, holding an ear horn to his ear to aid in listening to his fellow academicians' comments. Hunter used art as a means to gain publicity in his own day and immortality in the future. He knew the power of images and yet, in his climb, there are three groups of people who felt ill-used by Hunter in his professional artistic pursuits and the images he claimed as his own—the principal artist of his atlas, the poor, and women. Hunter faced challenges along his climb up the social ladder, but more specifically, he used the talents and bodies of others to make that climb successful.

The Scientist as the New *Bourgeoisie*

Prior to the Enlightenment, power and ownership was typically held by the Church and the aristocracy. The Enlightenment opened the door for a new member of the *bourgeoisie* or ruling class--the scientist. Because of their intellectual prowess, scientists and doctors were able to step over historical borders of power based on blood lines and divine investiture. Brock, Cody, and Porter describe how Hunter reached the peak economic and scientific professional power, beginning with the support he received from his father as a youth. His father, "John Hunter was forced to sell off land to provide the premium for . . . William's education at Glasgow in preparation for entering the church" (Brock 35). After William left Glasgow, his father helped arrange for his training with Dr. Cullen. As described in Chapter One, Hunter was bright, eager to learn, and driven to succeed, qualities that greatly benefitted him in his professional pursuits.

During this time in Europe, the profession of man-midwife was viewed negatively. Massey writes, "As late as 1827, Sir Anthony Carlisle, a prominent surgeon wrote in the eminent medical journal, *The Lancet,* that he still felt compelled to describe midwifery as a 'humiliating office' and therefore suitable only to women" (Massey "Dissecting"). Scottish man-midwives such as James Douglas, William Smellie, and William Hunter saw this social view of man-midwifery differently. They viewed the profession not only as an opportunity to distinguish themselves as men of medical science, but also to prove themselves as worthy citizens of England. Cody argues that most of the midwives in London in the mid-1700s were foreigners from Scotland and considered subordinate to the English men of medicine. "These men needed to make names, money, and elite connections for themselves" (Cody 155). Being Presbyterian, the Scottish man-midwives and surgeons could not attend Anglican universities like Oxford or Cambridge, so they had to be active and creative in their pursuit for power in London. Cody writes that man-midwifery opened the door for Hunter. "Considered either too feminine or too surgical, midwifery was beneath the interests of an elite Englishman" (155). The Scottish man-midwives saw the opportunity before them to overcome social and political barriers. Cody argues that these men were ambassadors, overcoming age-old prejudice between North and South Britain. By exerting themselves to the English men, "Scottish men midwives asserted that they were scientific, rational, and committed to the British nation" (197). Hunter saw midwifery as more than just an opportunity to be acknowledged scientifically, but also as an opportunity to enter the highest artistic and social circles.

Over the years, Hunter found his own way into the most aristocratic ranks of London by literally getting into the bedrooms of its most noble families. Historian Roy Porter described Hunter as "an interesting mix of both camouflage and conspicuousness" (30). He knew how to win the affection of the wealthy he served by caring for them but not publicly socializing with them. However, his care only extended to those who could pay for his services. Porter refers to notes left by Hunter's brother, John. "He was sparing in his philanthropy, according to John, pitying none 'who had been the cause of their own misery'" (14). Porter writes that Hunter learned how to work with the wealthy English. He was amiable, eager to please, curbing even his Scottish accent and his politics to meet the interests of his clients (30). However, it was an event of great disappointment that helped lead to his success. Historian Ruth Richardson argues that most likely encouraged by his appointment in 1764 to the position of Physician Extraordinary to Queen Charlotte, Hunter submitted for government patronage for a school and museum of anatomy a year later (37). Richardson writes that his plan was poorly received, so Hunter poured his energy into his work as a man-midwife and into the construction of his anatomy school and museum (37). Referring to the efforts of Smellie and Hunter to obtain financial and social success, Richardson writes of their commitment to hard work and genuine expertise. She explains, "They were the most influential figures of their generation, forming the transition between the early eighteenth-century anatomy school proprietors and the great teaching hospital entrepreneurs of the early nineteenth century" (39). They were truly the new rising power of the Enlightenment era--the new *bourgeoisie*, living the capitalist dream.

William Hunter: A True Capitalist and His Treatment of the *Proletariat* Artist

McCormack writes that Hunter frequently talked to his students about "the riches that await the young artist who is willing to work hard and take advantage of the opportunities presented to him" (78). Adams argues that Hunter's success was based on three key factors--his frequent opportunity to dissect bodies in the Paris manner, his love of naturalistic representation, and his entrepreneurial zeal (131). Hunter knew that the images he commissioned for his atlas would give him immortality and fame, in addition to the riches he had already accumulated. He wasted no expense in their publication. Corner writes, "Baskerville Press had been chosen in spite of expense 'not for the sake of elegance alone but principally for the advantage of the paper and ink, which because of superior quality Dr. Hunter thought would act as preservatives for his plates" (1). Hunter saw these plates as *his* works of art and, in doing so, he failed to recognize the talents of the artist who captured the images, Jan van Rymsdyk. The first image drawn by Jan van Rymsdyk for William Hunter's atlas was never published in *The Anatomy of the Human Gravid Uterus.* The life-size drawing, created with red chalk, displays Rymsdyk's artistic ability to capture various textures with photo realistic clarity (see fig. 25). Rymsdyk does not hesitate to capture pubic hair, sliced edges of human skin, or a taut uterus and push these features directly into the viewer's space. However, the sketched image, whether by his choice or by Hunter's guidance, displays an effort to "protect" the honor of the woman. A book was placed in front of her genitalia and her breasts and limbs were draped. Although the image was not included in the published atlas, the

images created by Rymsdyk for Hunter have been described as disturbing and controversial. McGrath describes the power of Rymsdyk's images, which display "the female body flayed and open to scrutiny. They fascinate and it is not too much to say that they seem to have been made with passion . . ." (2). McGrath represents many other scholars and viewers of the atlas who have been offended and surprised by their presentation of the female form. Besides teaching, these images seem to have been meant to shock and fascinate the viewer visually. Although Rymsdyk had sketched for other anatomists during this time, the images he created for Hunter were his most striking. And yet, Hunter failed to give him the recognition he felt he deserved. Laurie Schneider Adams quotes Karl Marx who describes how artists, considered 'workers' become alienated from their own works of art when the bourgeoisie use them for their advantage (qtd. in Adams 67). In the conclusion of his own atlas, *Museum Britannicum,* published in 1778 just four years after the publication of Hunter's atlas, Jan van Rymsdyk expresses his feeling of being ill-used by Hunter:

Figure 25: Dissection of Gravid Uterus at Full Term, fromWilliam Hunter, *Anatomia Uteri* . . . (n.p. 1750; n.pag.); McCormick Library of Special Collections, Northwestern University, Chicago, Web; 12 Sept. 2013.

> I flatter myself that I have been useful as a designer and sacrificed by talents to a good purpose . . . though I look on myself as a man betrayed . . . and this is the reason why I took a dislike to those anatomical studies in

> which I was employed . . . there is something so detestable and cowardly in that; and it is a dishonest mean cunning, in making oneself a great man with other peoples' merit. That is what the country people call reaping without sowing. (87)

How can one be certain Rymsdyk was referring specifically to Hunter? Both Massey and McGrath argue that this must be so, because other anatomists more fully acknowledged van Rymsdyk in their publications. Writing about the images Rymsdyk created for Hunter, Massey writes that Hunter "completely disassociated them from Riemsdyk. Unlike Smellie, who acknowledged Riemsdyk's skill in his preface, Hunter virtually ignored the artist in his atlas. To Hunter's mind, Riemsdyk was a mere conduit of pure empiricism, acting as nothing more than a competent scribe" (sic) (83). However, the description given by Massey is not fully true. Upon close examination of the text, one can see that Rymsdyk's name appears in very fine print at the base of thirty-one of the thirty-four engravings (see fig. 26). Another anatomist, Charles Jenty, included Rymsdyk's name in the title of his atlas. McGrath argues that, "It was clearly important to Jenty that van Rymsdyk, who made the drawings from 1755 to 1757, was

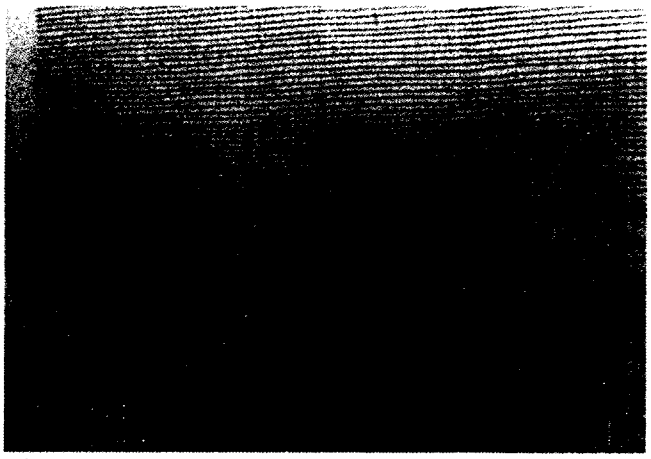

Fig. 26. Table VI (detail), engraving from William Hunter, *Anatomia Humani Gravidi Uteri* (Birmingham, 1774; n.pag.); National Library of Medicine, Bethesda.

acknowledged in the title—*The Demonstrations of a Pregnant Uterus of a Woman at her Full Term. In Six Tables, as Large as Nature. Done from Pictures painted after Dissections by Mr. Riemsdyk."* Although Rymsdyk was acknowledged by both Smellie and Jenty, his sketches for Hunter were not credited to him. About this struggle between anatomists and artists, Sappol writes, "The artist, who had always been intellectually and socially subordinate to the anatomist, lost creative control, even of the margins" (38). Anatomists gave the artist the command of representation, but they controlled the iconography. However, Rymsdyk's talent is worth remembering. Huffman argues that even though Hunter made notable contributions to obstetrics, it was the illustrations of Rymsdyk which give him the eminence he receives today (971).

Hunter's hubristic pride was also documented and criticized by other colleagues. In a letter written and published by a fellow man-midwife, William Rowley, Hunter is chastised "on the dangerous tendency of medical vanity occasioned by the death of the late Lady Holland" who died of terminal cancer (Rowley title page). After Lady Holland's death, Hunter was criticized for using what he called a "secret remedy" to cure her. Dr. Rowley states that Hunter used 1500 drops of laudanum, a derivative of opium, in one day and hemlock baths (Rowley 28). He publicly chastised Hunter for his actions:

> I am sensible, Sir, that the constant flattery of unlimited confidence which physicians of eminence receive, are often productive of self-sufficiency and pride, which lead them into errors. We can persuade ourselves that our practice and knowledge are superior to others . . . These evils were too alarming to escape my notice. I saw them with concern, but it was

> compassion for the sufferers, not a dislike to the practitioners that induced me to make my observations public . . . that it may teach you for the future, that a successful effort in your practice, ought to incite you to look farther than the limits of your own knowledge. (30,33, 34)

Dr. Rowley felt that the treatment Hunter gave to Lady Holland did not help her, and it may have given her more discomfort as she lay dying. Hunter took the criticism but continued his upward climb, stepping on the weak as he went.

Hunter's Treatment of Criminals

The second group of people who would claim to have been ill-used by William Hunter was the poor and destitute of London. Peter Linebaugh is quoted in Ruth Richardson's book *Death, Dissection, and the Destitute.* He writes, "On the gallows standing at the conjunction of the Tyburn and Edgeware roads, we find that the history of the London poor and the history of English science intersect" (qtd. in Richardson 30). To curb the practice of grave robbing, the British government passed the 1752 Murder Act, which permitted "the dissection of hanged criminals" (Jaffe 271). In 1751, William Hogarth illustrated the fictional life of one such criminal, Tom Nero, in a series of prints called *The Four Stages of Cruelty* (see fig. 27). In the first print, Tom Nero and other unloved and unsupervised children are depicted torturing small animals. In the second, Tom is shown beating a horse (Jaffe 274). In the third, he is depicted being arrested by law enforcement officers for murdering his pregnant girlfriend. In the fourth and final print entitled *The Reward of Cruelty*, Tom Nero is depicted lying on a dissection table following his execution (276). The bodies of criminals were fair game for anatomists.

William Hunter took this idea to new artistic heights. Instead of just using the bodies of hanged criminals for science, he also saw their availability as an opportunity to use the bodies for art.

Fig. 27. William Hogarth, *The Four Stages of Cruelty*, Tate Gallery, London.

On April 12, 1776, a criminal named John Langer was hung at Tyburn. After Hunter had acquired his body for dissection, he decided to do something new with the body. He felt that the study of the muscles of this cadaver would be particularly advantageous for artists. If he could position the body while it was still warm, he could manipulate the body before rigor mortis set in. An observer of this event stated, "Hunter was seized with the idea that the body might first be put into an attitude and allowed to stiffen in it, which was done and when he became stiff, we all set to work and by the next morning we had the external muscles all well exposed and ready for making a mold from him" (qtd. Richardson 72). Hunter commissioned a sculptor and fellow academician at the Royal Academy of Art, Agostino

Carlini to cast a plaster and then a bronze *écorché*, flayed body, sculpture of the body of this man (Trusted 783). "Hunter was so impressed by the musculature . . . he decided to preserve the body, placing it in a pose based on the classical form of *The Dying Gaul"* ("Smugglerius Unveiled") (see fig. 28).

Fig. 28. Agostino Carlini, *Smugglerius,* Royal Academy School, London.

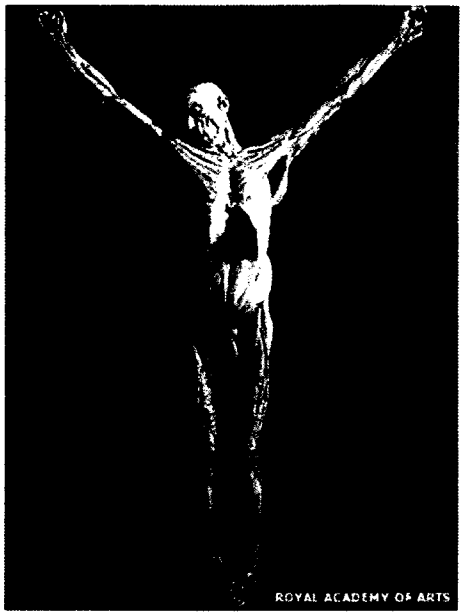

Fig. 29. Thomas Banks, *Anatomical Crucifixion (James Legg).* Royal Academy of Arts, London.

Inspired by Carlini's *Smugglerius,* another sculpture was created using the body of an executed murderer, Joseph Legg, in 1801 by the sculptor Thomas Banks and two painters, Benjamin West and Richard Cosway, who were "determined to demonstrate that most depictions of the crucifixion were incorrect" (qtd. in Stewart). Therefore, soon after he was hung, while yet warm, Legg's body was crucified and cast. Then he was flayed and cast again. Today, this sculpture is still a part of the collection at the Royal Academy

of Art in London (see fig. 29). The bodies of the poor, especially those of executed criminals, were available study materials for artists and scientists.

Hunter's Treatment of Women

William Hunter was the man-midwife of choice, but he had the means and intelligence to be of service to his fellow man, so he chose to do only as much as would benefit him financially. "Hunter could afford to buy the best because he was possibly the wealthiest professional man in the kingdom. His money came from his career as a society obstetrician "man-midwife," in the course of which he delivered fourteen royal children and scores of aristocratic ones, both legitimate and bastards, while charging the highest fees" (Blake 1). His conduct to women of means seems amiable enough, as long as their wealthy husbands and lovers could pay for it; yet his professional and personal life leave little to be said about his regard for them. Unlike Smellie, Hunter never admitted women to his classes or acknowledged their professional status as midwives. Massey argues that the publication of both Hunter's and Smellie's atlases played an important role in changing pregnancy from a household concern to a medical one. "The atlases present pregnancy as an illness that is fully exposed only to the trained eye and hand of the male anatomist and/or clinician" (73). The images of complicated presentations and positions made the mysteries of childbirth more clear. McGrath argues that, "these atlases were part of the professional struggles taking place both among male professionals and against women as midwives. By the mid-eighteenth century, especially among the middle-classes, men-midwives had begun to prise pregnancy and birthing away from the supervision and domain of women" (65). However, Porter counters,

"Feminist historians have seen *accoucheurs* (man mid-wives) as a motley, marginal crew, forceps wedged in the door. But the reality seems far different" (17). He argues that Hunter had a nose "for rich pickings and for access to the boudoirs of the great" (17). Whether man-midwives intentionally separated women from a solid profession remains a topic of debate.

Interestingly, the most heated topic of concern about Hunter's treatment of women does not seem to be the loss of the midwives' profession to the male obstetrician; rather, it is his treatment of the female body that is most volatile. McGrath argues that the representation of women has always been sought after. "Woman is also one of these curious, beautiful, grand objects hunted as trophy and, as the allegorical representation of nature, already had a long history of 'unveiling' herself before science" (McGrath 11). In Hunter's case, it is not the outward details of the feminine body that were being hunted, but the hidden aspects of her gender. Alice Adams writes, "Hunter's success as a capitalist, as a dealer in bodies and producer of an excess of dissections, allowed him to bring his images of mother and fetus in wide currency" (131) (see fig. 30). Hunter brought what had been hidden and only available to midwives in loose sketches into the forefront of scientific knowledge—but he did so with images of brutality. Ludmilla Jordanova describes Hunter's maternal bodies as "resembling chunks of meat" (388) and images of forced violation. In her analysis of Plate VI (fig. 2) she writes, "The net analysis is an image that is intimate yet impersonal, suggestive of humanity yet butchered, celebrating the act of generation, yet also conveying violated female sex-

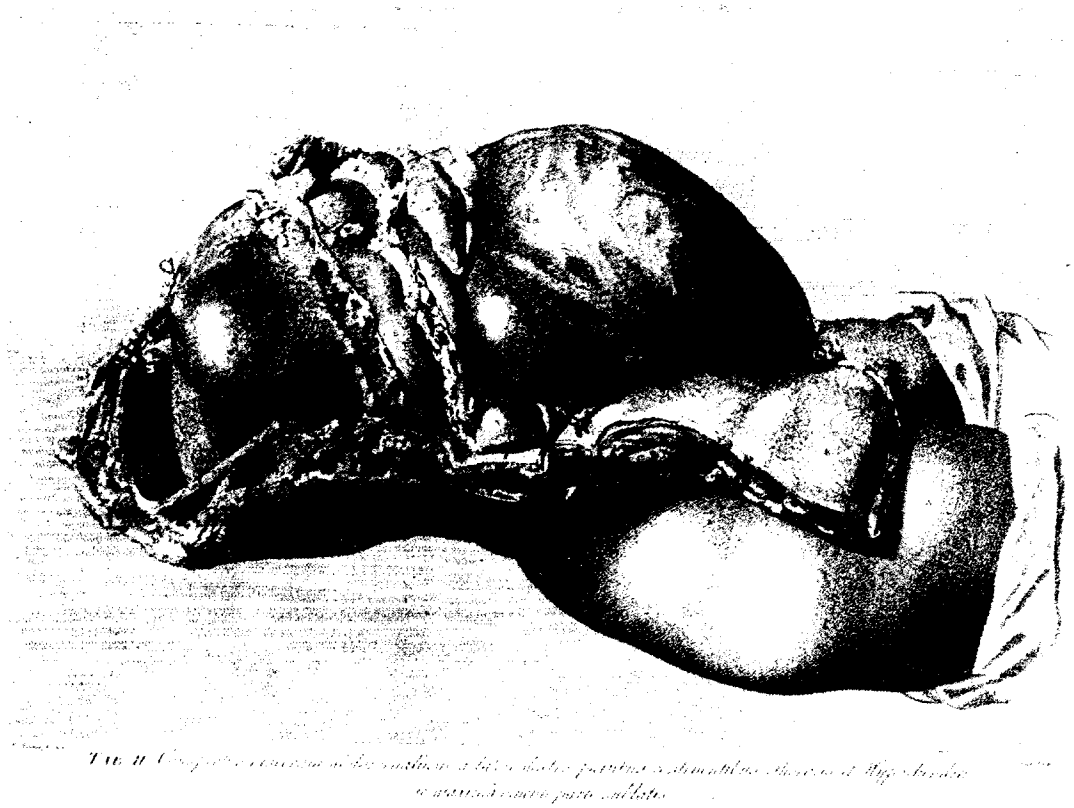

Fig. 30. Table II, engraving from William Hunter, *Anatomia Humani Gravidi Uteri,* (Birmingham, 1774, n.pag.); National Library of Medicine, Bethesda.

uality" (390). The female figure has been fragmented; the ability to reason is separated from the center of her procreative powers, and her body is open for public viewing without her knowledge or consent. McGrath goes further, describing these graphic images of female anatomy as a type of anatomical pornography. In referring to the anatomical works of Charles Jenty drawn by Jan van Rymsdyk in 1757, she writes, "The drawing style allowed the subject to appear to meet the viewer's gaze, and at the same time satisfied the sexual desire to see without fear of punishment" (McGrath 75). (see fig. 31). Michael Sappol agrees with the description, arguing that the anatomist feels

pleasure in self-mastery combined with the pleasure of the gaze, much like Hunter's description of necessary inhumanity or clinical detachment. Sappol wrote:

> The pleasure of mastery over death and the dead body; which was also the pleasure of mastery over oneself, the feeling of command that comes with the attainment of a high degree of clinical detachment. The pleasure of seeing, unveiled, sumptuary textures representing skin, breasts, back, legs and genitalia, especially of the female, a kind of anatomical voyeurism. (34)

A clear example of anatomical focus on skin textures and mastery is visible in fig. 32, created by anatomist Govard Bidloo (1649-1713) and the artist Gérard de Lairesse (1640-1711) in Amsterdam in 1690.

While there is no doubt that anatomical images of women may have been created by scientific men eager to gaze at the female figure without restraint, it is the reaction to such images, and the images of the gravid uterus, which are most interesting. Reactions signify deeper meanings and implications. Alice Adams writes, "Knowing more about the woman is unnecessary to the kind of truth Hunter is after, and so she has been amputated, not only visually and narratively but literally" (131). What do Hunter's images communicate about his attitude concerning the maternal role in gestation? Chapter Four will focus on various social and cultural meanings of gestation and the maternal archetype.

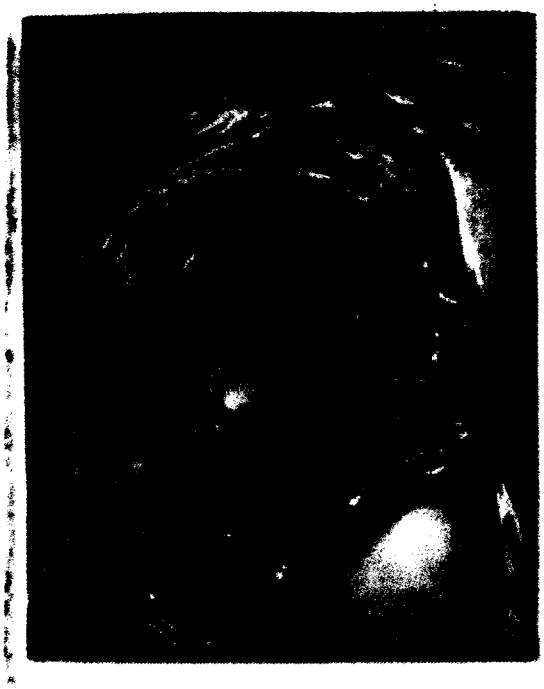

Fig. 31. Drawing from Charles Nicholas Jenty, *The Demonstrations of a Pregnant Uterus of a Woman at Her Full Time,* (n.p. 1757; Table 3); National Library of Medicine, Bethesda.

Fig. 32. *Onleding des menschelyken lichaams,* engraving with etching from Gerard Bidloo (Amsterdam, 1690; table 30); rpt. In Michael Sappol, *Dream Anatomy* (Bethesda: National Library of Medicine, 2006; print; 35).

CHAPTER 4

ARTISTICALLY NEGATING THE MATERNAL ARCHETYPE

Yet in its struggle against this Mother Goddess, the conscious mind, in its historical development, has had great difficulty in asserting itself so as to reach its patriarchal independence.
Erich Neumann

Stanley Kubrick's 1968 epic film, *Space Odyssey 2001,* ends with a thought-provoking scene. An old man lies dying alone in an elegant bed in a spacious bedroom. He is encountered by a large black monolith which has represented a mysterious power throughout the film. As he reaches out toward the monolith, he is transformed into a fetus floating within a protective amniotic sac (see fig. 33).

Fig. 33. Stanley Kubrick, "Dave Reborn," *Space Odyssey: 2001.* Web. 17 April 2014.

Life and death converge in this moment as one life ends and a new one begins. The contemporary interpretation of new life displays a fetus unattached from a maternal body

which contrasts millennia-old images of new life closely associated with the nurturing reaches of a mother figure. Another contemporary film, *Man of Steel* (2013) directed by Zack Snyder, begins with scenes of a dying planet. In the planet's last days, Superman's father assists Superman's mother as she gives birth naturally to Kal-El, who later becomes Superman on Earth. His birth is an act of rebellion against a society which has been growing fetuses in synthetic wombs without the involvement of a natural mother. Once again, new life begins in a moment of death and modernity is represented by many fetuses born without maternal bodies. Both films approach the topic of genesis or the moment at which life begins. However, their approach to the matriarchal involvement in genesis differs. Kubrick's negates the maternal image, while Snyder's elevates it. The engravings found in William Hunter's *Anatomia Uteri Humani Gravidi Tabulis Illustrata,* especially *Plate VI*, demystified the maternal archetype by placing the focus on the fetus, established scientific truth about gestation, and provided Hunter and other men the opportunity to narcissistically gaze at both fetuses and female anatomy under the guise of medical science.

Demystifying the Historical Maternal Archetype

For thousands of years gestation was considered solely a woman's domain, little understood or managed by men, and consequently much was left to the male imagination. The pregnant woman embodies a maternal archetype of genesis and rebirth. Carl Jung argues that some concepts and ideas exist without tradition of culture. These *a priori* images are archetypes. He wrote, "Archetypes are not disseminated only by tradition,

language or migration, but they can re-arise spontaneously, at any time, at any place, and without any outside influence" (107). The maternal archetype is one of those. "Somewhere, in 'a place beyond the skies,' there is a prototype or primordial image of the mother that is pre-existent and superordinate to all phenomena in which the 'maternal,' in the broadest sense of the term, is manifest" (103). Grounded in the fact that a woman's physical body contains the organs which make her capable of bearing life, she is different from man, and this difference makes her foreign and mysterious to man. Jung wrote, "Because what is female is alien to a man, it will tend to position itself in the unconscious and hence exert an influence made greater by the fact of *its being hidden"* (Samuels, Shorter, and Plaut 62). Archetypal maternal images are plentiful throughout history denoting their involvement in the human psyche. Jordanova argues, "that the social and cultural meanings of images of pregnancy are complex, and that far from lying on the surface, they are deeply embedded in visual and verbal texts" (Jordanova 385). The mystery of generation, concealed within women, has been captured in images which depict a sense of power unattainable by man.

Thus woman, as the physical embodiment of the Great Mother archetype, takes on a dual nature—one being the good mother who nurtures and protects, while the other possesses and controls as a mysterious and dark force. In *The Fear of the Feminine,* psychologist Erich Neumann explains, "She appears positively as the child-bearing and protectively containing mother, and negatively as the possessive, imprisoning, depriving, and devouring Mother" (188). The Great Mother archetype is manifest in symbols of fertility—ripe fruit, a garden, or even Mother Earth. Neumann also connects this

archetype with hollow objects, "such as ovens and cooking vessels . . . and of course, the uterus, *yoni*, and anything of the like shape" (109). Hunter's images of the uterus reflect the urn shape, perpetuating the image of the maternal archetype (see fig. 34). Art historian Marcia Pointon argues that the uterus shape presents a strong correlation to the funerary urn, citing examples from literature which further support her argument that the uterus is referred to as a gestational tomb (18). The womb becomes a visual image for the maternal archetype—both good and evil, life and death. Art historian Griselda Pollock argues that "the body of the woman is endlessly refashioned as both its most detested and most desired sign" (51). Her body, her uterus in particular, was both good and evil.

Fig. 34. Plate XIII , engraving from William Hunter, *Anatomia Uteri Humani Gravidi* (Birmingham, 1774; n.pag.); National Library of Medicine, Bethesda.

As the mother's body conceals the moment of genesis, her position as carrier gives her a form of power over men. In describing the Great Mother archetype, Jung writes of "the magical authority of the female" and also the "secret and hidden" (Jung 110). Psychoanalytically speaking, where female fertility is strong, the fear of male castration is equally present. Pointon states, "woman is presented for the enjoyment of

man but constantly acts as a reminder of the fear of castration" (6). In linking the mother archetype to the earth, Neumann goes further by stating, "Devaluation of the Earth, hostility towards the Earth, fear of the Earth; these are all from the psychological point of view the expression of a weak patriarchal consciousness that knows no other way to help itself than to withdraw violently from the fascinating and overwhelming domain of the earthly" (171). Hence the realm of childbirth and pregnancy traditionally stayed within the hands of women due to male anxiety based on fear of violent repercussions and ignorance. Peg Brand writes of the Christian fears associated with pregnancy and moral implications of sin. In her words, "Invoking the biblical Eve as the paradigm of temptation, all women are seen to epitomize the over-sexualized danger intent on eroding man's sound reasoning" (170). The following case study demonstrates an incident which occurred during William Hunter's lifetime, in which medical men were taken advantage of by a woman on whom they relied to teach them about pregnancy, thereby eroding their sound reasoning.

Mary Toft and her Rabbit Babies: A Case Study of Eighteenth Century Medicine

In the fall of 1726, Mary Toft gave birth to seventeen rabbits, or at least that is what she claimed and what she persuaded a group of medical men to believe (Blackwell 98). In April of that same year, Mary was frightened by a rabbit while working in the fields. According to a nineteenth-century article in the *British Medical Journal,* Toft claimed that this excitement lead her to conceive rabbits ("Archæologica Medica" 209). Her convincing performance of labor pains and birth occurred every few days and were

witnessed by local doctors who then examined the parts of rabbit which she would "bear." The article states further that her case, "created such a sensation in London that Queen Caroline ordered Sir Richard Manningham to put an end to the affair by inquiring into its truth" (209). In London, Toft consulted with some of the most esteemed physicians at the time including William Douglas (William Hunter's future mentor), and "French-trained accouchers and courtiers Samuel Mollineux and Nathanael St. André, physicians to His majesty the King" who claimed "to be convinced by her fraudulent performance" (Blackwell 99). However, the University of Glasgow Special Collections claims that Douglas was never convinced and always believed Toft to be a fraud ("The Curious Case of Mary Toft"). The event was captured in a print by the painter, printmaker and satirist William Hogarth (see fig. 35). Later, when Dr. Manningham confronted Toft with the scientific need to perform an operation to prove her claim, she confessed. "On the morning of 7 December 1726, Toft revealed that her mother-in-law

Fig. 35. William Hogarth, *Cunicularii or the Wise Men of Godlimanin Consultation,* Wellcome Library, London, Web; 15 Nov. 2013.

concocted the idea of a fraudulent miracle after reading about a similar situation in a book of old wives' tales" (Blackwell 99).

The fact that medical men could be fooled by a couple of trickster women had a major impact on the developing scientific world of London. Bonnie Blackwell argues, "The public embarrassment of having been taken in by the Tofts and its disappointment at finding women less mysterious and more rationally organized than expected dissolved into outrage at the medical community for being taken in" (100). How could the physicians who Blackwell describes as "the high priests of visual interpretation" (100) be so deceived? St. André, the king's physician, designated by the letter A in Hogarth's print, suffered the greatest shame and loss of trust. He lost his position and retired to the country ("Archæologica Medica" 209). Other physicians, such as Douglas, tried to exonerate themselves by defending their actions while pointing out the failings of Dr. St. André's practices with Toft. Douglas also began collecting numerous specimens of monstrous births—adjoined twins, babies born without brains, and other deformities. He was eager to prove fact from fiction. Palmira Fontes da Costa, Assistant Professor of the History of Science and Bioethics at the Universidade Nova de Lisboa, argues that he collected such material to shed light on the subject of reproduction and human development which were yet unexplored. "Reports of monstrous births were sometimes used by man-midwives precisely to point out the limitations of obstetric practices of midwives" (161). The scientific men of London needed to prove themselves after such a travesty against their credibility.

The Role of Science in the Negation and Refashioning of the Maternal Archetype

The incident with Mary Toft and the resulting defacement of London's male medical elite brought the scientific ignorance of female reproductive anatomy and the genesis of the human body into public view. No longer willing to bend to superstition and traditional boundaries, Smellie and Hunter moved aggressively to establish scientific truth. McGrath describes their reaction as one based on fear. She writes, "Knowledge is masterful, powerful, and punishing: it interrogates, penetrates, extends, and creates. It is not knowledge born of love, but a defensive knowledge born of fear" (12). In the face of a woman who had used her skills to deceive men, they acted defensively to restore their intelligence and power as men of science. Toft's case acted like gasoline on a fire of desire to explore the uncharted territories of female reproductive anatomy and this exploration meant seeing what had been hidden. Jordanova writes, "seeing is itself an act of understanding and knowing" (394). Hunter's images testify that for him, female anatomy was the final frontier. He sought to boldly go where no *man* had gone before and to do so scientifically in order to shed light on what had been hidden and mysterious. And he does so passionately. In a letter to Cullen, Hunter wrote, "Since I begin to think for myself, Nature, where I am best disposed to mark her, beams so strong upon me, that I am lost in wonder" (qtd. in Jordanova 382). His creation of images which exposed hidden female anatomy to the world became the absolute truth concerning female reproductive health. Art historian Barbara Stafford writes that as a result of the modern medical gaze, "the autopsy, not the interview, was the moment of truth" (qtd. in Shaw

111). Instead of relying on a verbal description of internal sensations felt by the female patient, the doctor could look and see for himself, but only *post mortem* in the eighteenth century. Christian Hick explained, "Death is the adequate dark light in this objective reign of absolute perception" (135). Death was the doorway to greater enlightenment.

Michel Foucault's book *The Birth of the Clinic* (1963) dates the advent of modern medicine to the end of the eighteenth century "when sacred spaces were opened to the gaze . . . and the tangible gaze was brought together with the language of description" (xii). The approximate time that Foucault claims modern medicine began corresponds to the anatomical work of William Hunter. Jennifer Shaw argues that the timing is no coincidence. She uses Foucault's text to argue that "the effort to make the interior of the pregnant body visible in medical discourse was a crucial part of the development of the modern medical gaze" (110). A view of the inner workings of pregnancy on a woman's body, the complexity and tightness of the organs, bones, and muscle changed the scientific and public perception of the intricate relationship between the mother and the fetus. Shaw quotes Foucault, "at the dawn of modern medicine, death 'the great analyst'—bursts open the wonders of genesis in the rigors of decomposition" (113). Hunter's images opened up the opportunity to gaze not only to his anatomy students, but also to the public.

However, the opportunity to gaze at the "wonders of genesis" (113) came with a price—the life of a mother. Shaw argues that what anatomists sought was not only to expose the inner workings, but more importantly, reveal the fruit within without the barrier of the mother's body. "The effort to visualize the fetus was born of a desire to

clearly distinguish pregnancy from pathology; that is, to read the signs of the body without interference from the woman" (125). Hunter's *Table VI* captures the absence of the mother's agency visually. He boasts that the fetus in this image is just as he found it—not even one finger was manipulated for effect (Hunter *Table VI* description). The same is *not* true concerning the mother's body. Her thighs have been severed, genitalia cut away, skin flipped back to show what Hunter seemed most eager to gaze at—the fetus. Heilemann wrote, "By reducing the physical body of the child's mother to a helpless and inanimate butchered lower torso, the infant autonomy is further emphasized" (27). McCulloch, Russell, and McDonald, from the University of Glasgow, agree with Heilemann describing why *Table VI* remains visually arresting. They write, "Much of the force comes from the contrast between the tender detailed representation of the fetus tightly wedged in the mother's body and the surrounding carnage of the abdominal dissection and the butchered appearance of the transected thighs" (216). It is the image of the infant Hunter was most eager to capture and preserve in the print.

The prints commissioned by Hunter also represent a scientific shift in the perception of the maternal role in gestation. The body of the mother is presented as secondary, a passive participant in the formation of the fetus. Kristen Brown argues that around the time Hunter worked, women were beginning to be viewed as more passive. "In the history of the West, and especially in the wake of the Enlightenment, feminine bodies have been viewed with an indelible nature proper to women . . . naturally passive and weak, (while) man is active and strong" (53). Scientific illustrations which depicted the precarious nature of birth, presenting the woman as a passive participant in gestation,

supported these notions. Cody argues, "Once men believed they had conquered the world of birth, reproduction could operate as an objective reference point with the natural world and even social relations" (23). A woman's place during her pregnancy, especially if one was wealthy, was in the hands of a caring, knowledgeable doctor. Brown quotes Rousseau who wrote about the needs of the pregnant woman, "She needs care during her pregnancy; she needs rest at the time of childbirth; she needs a soft and sedentary life to suckle her children; she needs patience and gentleness" (53). Hospitals became the right place for a woman to give birth, where she could rest and be cared for: her biology demanded that.

The Narcissist Motives of William Hunter

While one must acknowledge the advancements that were made as a result of Hunter's work as an anatomist, the images he published have been deeply controversial, especially among women. Pointon writes, "Recognition that admiration, wonder, and scientific knowledge were employed oppressively against women should not discourage us from examining the manifestations of this preoccupation of the male psyche" (Pointon 9). In psychoanalytical terms, Hunter's behavior would have fascinated Freud. He attended wealthy women in childbirth but never admitted women to his lectures. He never married and once he left home, he neglected his mother. However, his eagerness to "possess" the mother in images becomes clear. Pointon writes:

> In psychoanalytic terms, such manifestations . . . such latent content in images of women by men, would be explained by what Irigaray has

> defined as 'the bringing into play the sado-masochistic fantasies, themselves ordered by the relationship of man to the mother: the desire to violate, to penetrate, to appropriate, the mystery of the abdomen in which one was conceived, the secret of his generation, of his origin. (9)

Hunter explored deeply, excavating layer by layer as he gazed into the abdomens of the pregnant women and he made certain that his explorations were captured in the images of his book like a travel journal. He seemed eager to possess every possible fold and vessel. However, I would argue that his desire to possess this information was not sexual, but narcissistic.

According to myth, Narcissus was incredibly handsome—so much so that he is pursued by several nymphs. One nymph in particular, Echo, is deceived when he calls her to come to him but only out of curiosity. When he rejects her, she is heart-broken and Narcissus is punished by falling in love with his own reflection and spends the rest of his life gazing at a reflection of himself, fascinated and tormented at the same time because he can never possess the image he loves (see fig. 36). The painting of Narcissus by John William

Fig. 36. John William Waterhouse. *Echo and Narcissus.* Walker Art Gallery. Liverpool.

Waterhouse captures Narcissus's consuming fascination with himself, while Echo is rejected. Hunter is the embodiment of Narcissus, but his beauty is intellectual, not physical. Once he arrives in London, he passionately pursues his own personal aspirations and neglects any type of emotional relationship with women, even his mother. Consumed with himself, he hungrily searches for the genesis of human intelligence by delving deeply into the bodies of pregnant women to gaze at fetal development. Like anatomists before him, he used cadavers as mirror images. Medical historian Elizabeth Fee writes, "the anatomical body is a body double, a 'mirror' that first anatomists, and later a larger public peered into" (qtd. Sappol ix). In this context, Hunter looked into the dissected body to better understand himself.

However, what was the mirror double at which Hunter was eager to gaze? After all, he was a man and his images portray pregnant women. It is evident that Hunter's prime interest was the fetus as evident by his treatment of the maternal body. Shaw argues that the pregnant body became a "visual obstruction to a clear understanding of fetal development" (124). McGrath concurs with this opinion, "What mattered in Hunter's work was the integrity of the foetus. The body of the other had no such integrity; she was disembodied, dismembered, dislocated. She ceased to exist" (87). It was the placement and situation of the fetus that fascinated Hunter and has continued to fascinate the viewer ever since. Even McGrath says of Hunter's images, "I too am drawn toward these powerful images . . . I too find myself moving away from the lives of actual women and their desperate ends. I am seduced" (2). Indeed, Hunter's images are graphic and compelling, but why are we drawn to images of human genesis?

Jacques Lacan described the development of the ego, or the sense of self, in terms of a mirror stage. He explains, "A child sees itself in a mirror and sees a complete image . . . however, the image in the mirror is only a fantasy of control and unity, a denial of the fact that we are as humans, profoundly split" (qtd. in Hatt and Klonk 186). The image is not the child, yet in its realism it deceives the child into thinking the image is an extension of itself. But this recognition triggers a sense of loss. Lacan wrote, "There is a look back to what has been lost, a memory of the maternal body left behind" (189). Man seeks for his beginnings, his origin, his genesis. Clara Pinto-Correia writes, "Wondrous as it is, generation has never ceased to tease the imagination of those curious people who take up the task of thinking about life" (1). And this is precisely where the maternal archetype lives on in the human psyche. "The unconscious is always seeking the original object of desire" (Hatt and Klonk 188). So with this in mind, one can see Hunter's *Table VI* as a reflection of his desire for what was lost. What he sees is himself, but within the protective and *constraining* boundaries of the mother which might have caused him anxiety. "Lacan's notion of the gaze is rooted in castration anxiety" (189). Castration anxiety led him to create images that devalued the role of the maternal body, demystified the maternal archetype, and emphasized the strength and perfection of the fetus. Egon Schiele also captured such anxiety and the maternal archetype in his painting *Birth of Genesis: Dead Mother II* (see fig. 37). In this painting, the live infant with wide open eyes extends his hands, pushing against the womb in which he is encased. However, the figure of the mother is dead, her eyes closed. Schiele refers to himself as a "remarkable child, a genius" (qtd. in Harris 762). In a letter to his mother, he writes, "This is the great

separation. Without doubt I shall be the greatest, the most beautiful, the most valuable, the purest, the most precious fruit" (762). Schiele's image and own words capture a narcissistic view of himself which is echoed in Hunter's *Table VI* (see fig. 38). Both Schiele and Hunter captured the dead and encompassing mother and a fetus, perfect and beautiful, eager to be released from this compelling last embrace. Kathleen Ford describes the relationship as follows: "The feminine as maternal is never separable from the child in life and in the psyche and with the child, represents not only vulnerability but

Fig. 37. Egon Schiele. *Birth of Genesis: Dead Mother II.* Presumed destroyed. Photograph courtesy of Galerie St. Etienne, New York, NY.

Fig. 38. Table VI, engraving from William Hunter, *Anatomia Humani Gravidi Uteri* (Birmingham, 1774; n.pag.); National Library of Medicine, Bethesda.

also creative potential" (69). Hunter's images sought to release medical science from the powerful mystical embrace of the hidden female reproductive system.

Lacan also writes of "two modes of looking, the eye and the gaze" (qtd. in Hartt and Klonk 189). The mode of looking with the eye is the straightforward natural look of the eyes. The natural look would refer to the look Hunter used as he prepared the cadavers to be sketched by Rymsdyk and the look of those who viewed the sketches. But the gaze focuses rather on others' looking at Hunter's 'eyeing' of the images. "Being a subject who looks in and at the world means that one is also an object that someone else scrutinizes" (189). Hunter was very aware that the public, both scientist and layman, would remember him for the images he published. Social theorist, Anthony Elliott argues that, "narcissism is fundamental for a Lacanian understanding of subjectivity" (qtd. in Mannion). I believe he hoped that his images would communicate more clearly than his actions what he loved and what fascinated him.

Sociologist Oliver Mannion argues that Facebook allows contemporary people the same opportunity. Facebook participants can carefully construct how they want the world to gaze at them. He writes, "The existential question at the heart of subjectivity is not 'what am I?' but 'who am I to others?'" (Mannion). Hunter, knowing that others, particularly men of science, wealth, and power would gaze at *his* work, images that would proclaim *his* discoveries, *his* dissections, and *his* new power over female reproductive anatomy. He was self-absorbed. He watched over every detail of the production of the atlas that would define him "from the copper used for the plates to the ink and paper used for the print" (Hansen and Porter 117). He obsessed over the design

and organization of his anatomy studio and museum, his lectures, and his anatomical preparations and he was critical about how others performed their labors. R.W. Johnstone, professor emeritus at the University of Edinburgh writes, "Smellie was always ready to give credit to others, not excluding William Hunter. But William Hunter's own writing is full of self-defense, and he was not too careful in his criticism of others" (588). Hunter had achieved the respect of the highest ranks of society, both political and scientific in Great Britain and to him, this was success.

Near the end of his life, Hunter defended his actions and work in a lecture given in 1784. In this lecture, he delivered a lengthy account of the history of anatomical research and its development within the political and artistic history of the world. He describes the work of Leonardo da Vinci stating, "I believe he was, by far, the best Anatomist and physiologist of his time . . . Leonardo was certainly the first man we know of who introduced the practice of making anatomical drawings" (37). He describes Vesalius as "studious, laborious, and ambitious" and describes the atlases created by Vesalius and the artists he employed as "a noble system of anatomy, illustrated with a great number of elegant figures" (40). Leonardo and Vesalius were his heroes, his great examples, and he spent his life trying to emulate their work, creating his own atlas of anatomical images which he describes as "inferior to no book of anatomy; whether we consider the accuracy with which the natural appearances are represented, or the elegance both of the engravings and the press-works" (58). Hunter believed with heart and soul in the purpose of his work and he defended the purpose of anatomy. He stated, "Anatomy is the basis of surgery . . . It is dissection alone that can teach us, where we may cut the

living body . . . this informs the head, gives dexterity to the hand, and familiarizes the heart with a sort of necessary inhumanity" (Hunter 67). Inhumanity allowed him the emotional freedom he needed to complete his work. Hunter's legacy lives on in the shockingly detailed engravings he commissioned. Deemed as a genius and dedicated scientist by many, his work still remains controversial by those who felt he overstepped the line of inhumanity to those who were defenseless—women and the poor.

CONCLUSION

THE ETHICAL USE OF THE HUMAN BODY IN THE ARTS

Although the images of the autopsied gravid uterus were objects of beauty and wonder to William Hunter, the same medical images have been a source of controversy for many. Enquist's descriptions of the power of medical images to entice, seduce, alienate, intimidate and confuse the viewer captures where the power of such images lies (Enquist). The shock value and veracity of Hunter's images proved to ensure their legacy. In a similar manner, Gunter von Hagens's contemporary anatomical "art" in *Body Worlds* uses shock value and openness to confront the viewer with his perception of death in an effort to "democratize death" or make his perception of death available to the common man (Preston). Perhaps von Hagens's approach is not a bad idea for medical students, given the emotional struggles some experience when first handling cadavers. Allen Smith and Sherryl Kleinman examine various uncomfortable emotions felt by medical students when they interact with cadavers such as embarrassment, disgust, arousal, and feeling "that they are ignoring the sanctity of the body and breaking social taboos (Smith 58, 59). But where the use of the human body as a medium in art is concerned, perhaps the presence of such emotions represents deeper conflicts of ethical and moral values. The opportunities afforded by modern medicine, which demands hands on experience and evidence, have nurtured conflicts between religious and ethical traditions and modern science. A work of art which displays the kind of confusion felt in a world of societal and ethical change in Manet's *Bar at the Folies-Bergére.* In "Selling,

Seduction, and Soliciting the Eye: Manet's Bar at the Folies-Bergére," Ruth E. Iskin describes the gaze of the salesgirl at the counter. "Her 'sore eyes' signify the kind of *loss of control* inflicted by an *overwhelming environment of display* [emphasis added]" (33). In the painting, Edouard Manet was able to capture a world in a time of change, a period of transition, and the dizzying confusion that accompanies it (see fig. 39). Modernization has brought with it an overwhelming environment of display, with an alarming amount of images which engage, teach, and distract us. The images produced by both William Hunter and Gunter von Hagens also bring confusion and conflict concerning the use of the body in science and art within the public arena.

Fig. 39. Ėdouard Manet. *The Bar at the Folies Bergére,* Courtauld Gallery, London.

Are there ethical and moral limits which should guide the use and display of the physical body in our contemporary world? What most people have found disturbing about Hunter's and von Hagens' work is how the bodies of other people were used as an artistic medium for the anatomist's or exhibition designer's own personal gain. In analyzing viewers' comments about von Hagens' exhibition *Body Worlds*, Tony Walter explains that, "apart from the unease about the baby section, the major criticism, both by visitors writing in the guestbook and by journalists, concerned the way in which the bodies were posed" (Walter 468). Do the poses show a lack of reverence or regard for the deceased person? During an interview with von Hagens, John Preston, writer for *The*

Telegraph, is shown a plastinated female figure on a swing (see fig.40). Von Hagens says that his wife and business manager, Angelina, does not like the specimen "'because she thinks she's too sexy . . . but I am very pleased with her.' He reaches between the woman's legs and starts touching her organs. 'Look, you can see everything very clearly: the uterus, the ovaries, the rectum'" (Preston). What some people would deem as educational and artistic, others will see as sacrilegious and exploitive.

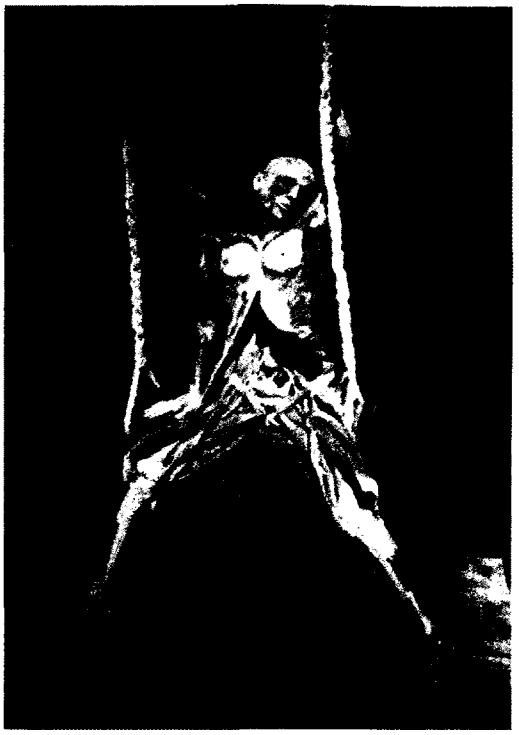

Fig. 40. Gunter von Hagens, *Woman on a Swing*, Plastinarium, Germany. Web. 13 Jan. 2014.

In his book, *Art and Fear,* French architect, cultural theorist and urbanist, Paul Virilio argues that contemporary art has been greatly influenced by the carnage of the First and Second World Wars. In the introduction, John Armitage describes that it was Virilio's horror at "the catastrophe of German Nazi concentration camps that encouraged him to respect the human body" (Virilio 3). He finds that the work of Gunter von Hagens and other efforts to engineer the

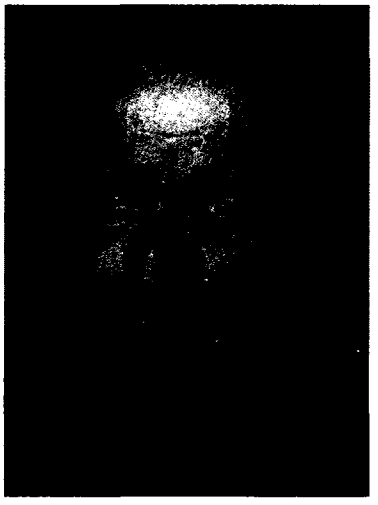

Fig. 41. Paul Virilio *Portrait.* Web. 15 May 2014.

genetics of the body as an extension of Nazi eugenics (10) and that man's silence to express concern or disgust at such things is a sign of a moral and ethical vacuum associated with our day. "Virilio wants to recognize that in video and film, TV and on the Internet, Auschwitz inhabits us all as a fundamental if often repressed component of contemporary processes of globalization . . . and that humanity is in jeopardy of preoccupying itself with virtualized self-absorption" (20). He condemns the works of performance artists such as Orlan, who creates art films of herself receiving plastic surgery, and Stelarc, who uses his own body in robotics demonstrations (see figs. 42 and 43). Both artists bring together science and the arts in displaying narcissistic self-manipulation of their bodies. Orlan refers to her art as "carnal art" which she says is a "struggle against the innate, the inexorable, the programmed, nature, DNA—and God." She feels narcissism is important "as long as one doesn't get lost in one's reflection" (Jeffries). It is this type of narcissistic, self-destructive behavior that Virilio warns against. He sees the current infatuation with scarring and piercing as an extension of self-mutilation and suicide (Virilio 24). Such conflicting views concerning the use of the human body present further issues of discussion within science and the arts.

Fig.42. Stelarc, *Portrait,* Web. 15 May 2014.

Fig. 43. Orlan, *Portrait,* Web. 15 May 2014.

Mahatma Gandhi described what he felt were the seven deadly sins of society. One of those sins is "science without humanity" (www.mgandhi.org). I believe that both in science and in art, respect for human life and the human body is vital to our ability to show genuine empathy. My views are upheld by many others of faith. According to an article in the *Journal of Medical Ethics and History of Medicine* published in 2009, Muslim tradition teaches that "the body is a 'gift' from God; therefore, the human being does not possess absolute ownership of his or her body. But the ownership by human beings of their bodies can be described as a kind of 'stewardship'" (Aramesh), a view which implies that one is accountable to God for how one cares for his or her own body and the bodies of others. In 2010, Catholic Archbishop Robert Zollitsch publicly protested against Gunter von Hagens' online store where one can purchase plastinated human body parts (Patterson). Israeli Medical Schools go to great efforts to confront the conflict of the need to dissect bodies and the religious concerns of their students. "Tel Aviv University has a commitment to maintain the highest respect for the dead in accordance with traditional Jewish customs. Laboratory dissections are carried out in a dignified and proper manner" (Notzer, Zisenwine, Oz, and Rak 445). On this point, my opinion about Gunter von Hagens and William Hunter differ. Somehow, although Hunter did pursue anatomical research with great passion and narcissism, his motives seemed more altruistic than von Hagens. He practiced medicine, taught anatomy, and delivered babies. Von Hagens only plastinates and sells the opportunity to view his work to the public. In describing his contributions to medical science, which he believed saved the lives of many women, Hunter stated in one of his final anatomical lectures:

> This affords me an heart-felt comfort, now, when years and reflection have given me the clearest view of the uncertainty, the shortness, and the miseries of human life. I sincerely pray that a great number of you may enjoy such a comfort in the close of life; when I am certain the most diligent, the most conscientious and the most humane, among you all, will most ardently wish, that you could have done still more service to the cause of your poor, distressed fellow creatures. (62)

I believe Hunter's intentions were good although his methods and behavior were at times selfish and greedy. I am not arguing that he necessarily suffered from the medical condition, Narcissistic Personality Disorder, but I am certain that his motives and behavior were self-centered and driven. In the sciences, human bodies should be treated with respect and dignity, using them to enhance the lives of the living. In the arts, I believe careful consideration should be used when using the body of oneself or others as an artistic medium. I believe Hunter's use of human bodies, to advance both science and art, walked the line of medical and artistic ethics. Gareth Jones and Maja Whitaker, researchers at the Bioethics Centre at the University of Otago, New Zealand conclude, "Some art may aim to outrage or bewilder people in a novel way, to challenge preconceptions. Even if we applaud this intention, it is not above ethical scrutiny" (Jones and Whitaker). Whether in art or science, we should temper our behavior, both professional and private, with compassion, empathy and respect for our fellow human beings.

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