

**MEDICAL PERCEPTIONS OF THE UNBORN IN
EARLY 19TH CENTURY AMERICA (1800-1865)**

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Abstract

This study explores the genesis of the presence of the fetus in American culture by examining the evolution of American medical attitudes towards the unborn (1800-1865) in the lead up to the Physicians Crusade Against Abortion in the mid 19th century. Specifically, it analyzes how American allopathic physicians reconciled their denunciation of abortions for reproductive limitation with their approval of abortions for medical reasons, shedding light on how American physicians resolved maternal-fetal conflict. The study begins with an exploration of the medicalization of childbirth in the 18th century and how it created medical concern for the fetus. The forceps could spare the pregnant woman the craniotomy operation (collapse of the fetal skull) and save the fetus. However, not all cases of obstructed labour could be solved with the forceps, and as physicians displaced midwives as the principal birth attendants, they were confronted with the prospect of performing craniotomy on a live fetus. As they dreaded this outcome, they proposed two operations to circumvent it: the Caesarean section and induced premature labour. This shows that medicalization created concern for the fetus, particularly in the later stages of pregnancy. With new embryological research in the 1820s, concern for the fetus was extended to all stages of pregnancy and expressed itself in advice to women to guarantee a healthy child. The publication of Alfred Velpeau's *Principles of Tokology and Embryology* was influential because it both normalized the union of embryology and obstetrics, and it justified recourse to early abortion in cases of contracted pelvises. Indications for the medical use of abortion began to multiply as a result of this shift, even as physicians denounced clandestine abortion and sought to criminalize it. This study argued the medical ideology of vitalism, as articulated by Xavier Bichat, was key in resolving maternal-fetal conflict in favour of the pregnant woman. Vitalism characterized fetuses as having the same functions as a plant and this lower level of functioning justified the sacrificing of fetal life in certain circumstances. Vitalism also viewed women to as having more sensibility, more cerebral activity, and more social ties. Therefore, women were viewed as the more deserving human being in maternal-fetal conflict.

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Chapter 1: Introduction

1. Contextualization

In America today, a pregnant woman undergoes an average of 2.7 ultrasounds per pregnancy to appraise the health status of her fetus.¹ At the end of her visit, she may obtain a black-and-white printout of the outline of their expected baby, or a link to website containing the images. A few may even obtain 3D or 4D ultrasounds, which show fetal images in greater detail. The ultrasound has made the image of the fetus common in American culture; the internet has made it even more pervasive. By the end of the twentieth century, the unborn were not solely the subject of medical or biological inquiry. They were commonly referenced and portrayed. Their image is now recognizable and is commonly used in entertainment, art, advertising, legislation, education, commerce, and of course as political propaganda,² creating what scholars have come to refer as “the public fetus”³ —the widely visualized image of a being who was once entirely shrouded in mystery.

From a historical standpoint, the evolution of the unborn’s standing in the culture can seem quite astonishing. At the turn of the twentieth century, the fetus made less of an impact on the broader culture. Writing in 2009, anthropologist Lynn Morgan wrote that “A hundred years ago, most Americans probably would not have been able to conjure up a mental image of a human embryo.”⁴ Historian Jane Maienschein concurs, stating that in the early 20th century, “the idea of an embryo had no biological or tangible meaning for them other than as something not really fully ‘there’ yet.”⁵ Nick Hopwood also concluded that women who were pregnant did not necessarily

¹ Cayla C. Ulrich and Olga Dewald, “Pregnancy Ultrasound Evaluation,” in StatPearls (Treasure Island (FL): StatPearls Publishing, 2022), <http://www.ncbi.nlm.nih.gov/books/NBK557572/>.

² Lynn Morgan, *Icons of Life: A Cultural History of Human Embryos* (University of California Press, 2009), 10.

³ Janelle S. Taylor, “The Public Fetus and the Family Car: From Abortion Politics to a Volvo Advertisement,” *Public Culture* 4, no. 2 (May 1, 1992): 71; Rosalind Pollack Petchesky, “Fetal Images: The Power of Visual Culture in the Politics of Reproduction,” *Feminist Studies* 13, no. 2 (1987): 281.

⁴ Morgan, *Icons of Life*, 4.

⁵ Jane Maienschein, *Embryos under the Microscope* (Harvard University Press, 2014), 24.

interpret their pregnancies in embryological terms.⁶ The unborn only occupied the thoughts of a relatively small number of specialists such as physicians, biologists and theologians. If ordinary people thought about the unborn, they left little trace of it.⁷ Women in the 18th, 19th and 20th centuries have left us a plethora of personal writings, but they almost never mention their miscarriages or abortions, do not dwell on their pregnancies, much less the beings they gestated.⁸

What a difference a century makes. American women went from being unable to even imagine a fetus, to undergoing an ultrasound every pregnancy, and being exposed to fetal imagery in a variety of contexts. The once unthought-of fetus is now practically ubiquitous, not hidden or peripheral.

Feminist scholarship—primarily American— generated the concept of the “public fetus” to examine how the unborn have become an abiding presence in American life, particularly in the wake of the debate surrounding abortion, and related reproductive issues. The cultural presence of the fetus was often conceptualized in visual terms—as opposed to the printed form—in response to the use of fetal imagery by opponents of legalized abortion. While fetal imagery has been used in other contexts, for example, in advertising, second wave feminists have sought to evaluate how these images tend to humanize the unborn in ways that they consider detrimental to women.⁹

The fact that the “public fetus,” and the commentary surrounding the notion, is more prominent in the United States than in any other Western nation is even more astonishing when one views the contemporary context through the lens of what has gone before. Before the 19th century, the English-speaking world did not devote nearly as much attention to embryological

⁶ Nick Hopwood, “Producing Development: The Anatomy of Human Embryos and the Norms of Wilhelm His,” *Bulletin of the History of Medicine* 74, no. 1 (2000): 39 .as cited in Morgan, *Icons of Life*, 4.

⁷ Joseph Dellapenna, *Dispelling the Myths of Abortion History* (Durham, North Carolina: Carolina Academic Press, 2006), 412.

⁸ Lara Freidenfelds, *Myth of the Perfect Pregnancy: A History of Miscarriage in America* (Oxford University Press, 2020), 21. Shannon Withycombe had to work many years to scrape together a primary source base to extract what women thought about the subject of their miscarriages in the long 19th century. See Shannon Withycombe, *Lost: Miscarriage in Nineteenth-Century America* (Rutgers University Press, 2018), 2-3;. Kristin Luker writes that throughout the 20th century, abortion was not discussed in polite company. See Kristin Luker, *Abortion and the Politics of Motherhood* (University of California Press, 1984), 1.

⁹ See for example: Rachel Roth, *Making Women Pay: The Hidden Costs of Fetal Rights* (Cornell University Press, 2000), 31-36; Petchesky, “Fetal Images,” 264.

matters as their continental counterparts. As a result, the unborn did not have the cultural weight in Britain and America that they did in other European countries. For example, in the Early Modern period (1500-1800) one of the most important biological questions of the day was about the origins of prenatal development.¹⁰ Some English researchers such as William Harvey and William Hunter, made important contributions. But it was the likes of Regnier de Graaf, Jan Swammerdam, Marcello Malpighi, Albrecht Haller, Charles Bonnet, le Comte de Buffon, and Lazzaro Spallanzani—all continental researchers—who made the most important empirical and theoretical advances.¹¹

The British legal system also had *relatively* little to say about the fetus, compared to other European jurisdictions. For example, the fetus was not considered a person in Early Modern England. To be a person in the legal sense of the word, one had to be *in rerum natura*, that is, a being in nature. To achieve that status, the fetus had to be born. For that reason, inducing fetal demise before birth was not considered homicide.¹² Nevertheless, abortion was considered illegal under Common Law in the Early Modern period.¹³ The English position on abortion was best expressed by Sir Edward Coke (1552-1634), who held a number of important positions in the British Government, including Chief Justice of the King’s Bench, and whose *Institutes* was considered an authoritative compendium of the Common Law. He adjudged that abortion was a misprision, or what we would today call a serious misdemeanour, and not a felony. Only if the child was born alive could there be question of homicide.¹⁴ The reason that abortion was only considered a misprision, and not something more serious, probably had to do with the English jury system. Juries were composed of ordinary laymen, with no specialized medical knowledge, who

¹⁰ Angus McLaren, *Reproductive Rituals: The Perception of Fertility in England from the Sixteenth Century to the Nineteenth Century* (Routledge, 2020), 16.

¹¹ See for example Clara Pinto-Correia, *The Ovary of Eve: Egg and Sperm and Preformation* (University of Chicago Press, 2007).

¹² Dellapenna, *Dispelling the Myths of Abortion History*, 198-199.

¹³ Dellapenna, *Dispelling the Myths of Abortion History*, 200. As will be shown in Chapter 3 of this thesis, the perception of the legality of abortion in America under the Common Law would be transformed by the “quickening doctrine” in the first half of the nineteenth century.

¹⁴ Dellapenna, *Dispelling the Myths of Abortion History*, 198-199.

were designated as the arbiters of the facts.¹⁵ They might have been presented with a series of potentially speculative arguments on murky details about prenatal development, and the possible causes of fetal demise. That uncertainty, along with sympathy with the accused, and differences of opinion on the value of fetal life, might have created reluctance to deliver a guilty verdict for a more serious crime. The categorization of abortion as a “misprision,” that is, a lesser offense, was probably part of a wider trend of creating a more certain path to conviction by diminishing the potential consequences.¹⁶

Another indication that British society did not grant a great deal of focus on the unborn is that prosecutions for abortion were rare. To some extent, this was because abortion attempts failed more than they succeeded.¹⁷ Although the fetus did not have as high a status in Common Law countries as in continental countries, abortion was still heavily stigmatized. But it was not concern for the fetus that made abortion rare. Abortion was so dangerous that relatively few women attempted it before the 19th century.¹⁸ Those who did often died. If an abortionist was involved in the woman’s fatality, he *could* be prosecuted for the woman’s murder; but the main witness—the woman— could not provide testimony, thereby making prosecution difficult.¹⁹ If the abortion was successful, given the secrecy of the procedure, it could go undetected. Either way, the rarity of prosecutions, whether because abortions were rare or undetected, points to a lack of focus on the fetus.

The British legal system’s attitude towards the unborn is in great contrast to continental—Catholic— law systems. For example, the Holy Roman Empire promulgated the *Constitutio Criminalis Carolina* in 1532, which permitted the application of torture to anyone suspected of secretive abortion or infanticide.²⁰ In 1556, King Henry III of France published an edict that

¹⁵ Catherine Crawford, “Legalizing Medicine: Early Modern Legal Systems and the Growth of Medico-Legal Knowledge,” in *Legal Medicine in History*, ed. Michael Clark and Catherine Crawford, 1st ed. (Cambridge University Press, 1994), 95.

¹⁶ Dellapenna, *Dispelling the Myths of Abortion History*, 199.

¹⁷ Dellapenna, *Dispelling the Myths of Abortion History*, 57.

¹⁸ Dellapenna, *Dispelling the Myths of Abortion History*, 57, 270.

¹⁹ Dellapenna, *Dispelling the Myths of Abortion History*, 192.

²⁰ Wolfgang P. Müller, *The Criminalization of Abortion in the West: Its Origins in Medieval Law* (Cornell University Press, 2012), 157. Kindle.

required women to disclose their pregnancies; if they failed to do so, and they miscarried, this could be taken as proof of murder for which they could be subject to execution.²¹

Catholic countries not only prosecuted abortion more severely, but the Catholic faith also raised religious issues about the unborn that did not exist in Protestant regions. These religious issues were best summarized by the book *Embriologia Sacra*, published by Sicilian Jesuit Francesco Cangiamila in 1745.²² Cangiamila used a wide range of scientific, legal, and religious writings—again mostly from continental Europe—to establish the personhood of the fetus and take that argument to its logical conclusion. He therefore advocated that all abortuses should be baptized, no matter how premature; that miscarriages should be prevented where possible; that induced abortions should be severely prosecuted; and—his best-known argument—that the unborn should be extracted through a Caesarean section if a pregnant woman died, so they could receive baptism. Early Modern Catholics believed that baptism was essential for all small children to avoid going to limbo in the afterlife. Baptism was the primary goal for this operation because fetuses were not expected to survive, given their prematurity and the circumstances surrounding their birth. However, rescuing the fetus from death was also an important goal, when feasible. Cangiamila was not completely novel in any of these statements. What *was* novel was the compilation of *all* these statements together in one forcefully argued book. The concept of “life begins at conception” and its attendant moral positions did not begin with him, but he was instrumental in popularizing it.²³

There is no English work comparable to Cangiamila’s in the Early Modern era. Protestant divines had little to say about issues related to the unborn. They did not strictly require baptism for children in order to assure their salvation, and they did not believe in limbo, therefore the question of baptizing the unborn was moot. If anything, the Catholic focus on the fetus could seem a little weird. Protestant clergy did condemn abortion, but their condemnations tended to be terse and

²¹ Müller, *The Criminalization of Abortion in the West*, 157-158, 184-186.

²² Francesco Emanuele Cangiamila, *Embriologia sacra, ovvero dell’uffizio de’ sacerdoti, medici, e superiori, circa l’eterna salute de’ bambini racchiusi nell’utero*, 1745.

²³ Ulrich L. Lehner, *The Catholic Enlightenment: The Forgotten History of a Global Movement* (Oxford University Press, 2016), 85.

perfunctory.²⁴ Abortion was an unpleasant topic that did not warrant extensive commentary. Its evil to them was self-evident and could be easily passed over. References were few and far between, especially in compared to those of Catholics. If the British public were made aware of the perceived immorality of abortion, it would often be through the writings of doctors. British physician William Buchan, author of the widely read *Domestic Medicine*, denounced abortion in 1784, calling it “an unnatural crime.”²⁵ British Physician Hugh Smith denounced couples who used abortion as “selfish and unsocial ...; those persons, who think and act thus narrowly, can neither be accounted good characters in themselves, nor worthy members with respect to society.”²⁶ The reticence of Protestant clergy on abortion and connected reproductive matters persisted through out the Antebellum period in the United States,²⁷ prompting Horatio Robinson Storer, the leader of the anti-abortion campaign, to lament that “Christianity itself, or at least Protestantism, has failed to check the increase of criminal abortion.”²⁸

Early Modern Britons, and their American cousins, had similar, though not identical, opinions to continental contemporaries. But Anglo culture did not put nearly as much stress on the fetus; the fetus was not the subject of nearly as much scientific research; the legal system was more lenient on abortion and less definite about the status of the unborn; and the Established church, as well as the dissident churches, simply did not feel the need to make extensive statements. It is not so much that the British and their American successors did not have any interest in the unborn—we see elements, here and there, of their concern. But other countries had stronger traditions of contemplating problems surrounding the unborn: scientific, legal, religious, and medical. In the absence of a major philosophical or religious problem enveloping the unborn, and being very mysterious entities, there was never a reason in British culture to devote significant attention to them.

²⁴ Beverly Wildung Harrison, “Abortion: Religious Traditions, C: Protestant Traditions,” in *Encyclopedia of Bioethics* (Macmillan Pub. Co., 1995), 35.

²⁵ William Buchan, *Domestic Medicine ... The Seventh Edition, Corrected*. (W. Strahan; T. Cadell, 1784), 588(fn).

²⁶ Hugh Smith, *Letters to Married Women on Nursing and the Management of Children* (Philadelphia: Mathew Carey, 1796), 35, Rhode Island Medical Society Collection, John Hay Library), as quoted in Simone M. Caron, *Who Chooses?: American Reproductive History since 1830* (University Press of Florida, 2008), 17.

²⁷ Caron, *Who Chooses?*, 25-26.

²⁸ Horatio Robinson Storer, *On Criminal Abortion in America* (J.B. Lippincott & Company, 1860), 33.

Today, the American public is very interested in the unborn. It could be argued that the unborn have a greater presence in American culture than in probably any other western culture. But given America's history, it would seem that there should be less interest in them, not more.

How did America develop such an interest in the unborn? How did the unborn enter American culture? This study will explore the early history of the fetus in America in the period 1800 and 1865 through an examination of medical literature of allopathic doctors in order to describe how the American medical community viewed the unborn in the Antebellum era.

This study will also examine the dichotomy between the medical community's support for abortion bans in the name of protecting fetal life, and its support for therapeutic abortions. The question of the need for therapeutic abortion was framed in terms of maternal-fetal conflict; that is, when the interests of the pregnant woman and the fetus were perceived as incompatible. How did medical perceptions of the unborn contribute to resolving this dilemma?

2. Historiography

The scholarship concerning the presence of the unborn in American culture is invariably tied to the scholarship on the history of abortion. To understand the general tendency the related historiography, it is crucial to understand how historians approached two key topics: 1) the nineteenth-century Physicians' Crusade Against Abortion; and 2) the use of fetal imagery in efforts to re-criminalize abortion in the wake of the *Roe v. Wade* decision in 1973.

When tracing the cultural presence of the fetus in America, a natural starting point might be what contemporary scholarship has termed the Physicians' Crusade Against Abortion, which sought to institutionalize concern about fetal welfare. The Physicians' Crusade was launched in 1857 by Boston gynecologist Horatio Robinson Storer, under the aegis of the American Medical Association. This crusade had a two-fold purpose: the first was to lobby all state and territorial legislatures to pass laws that would criminalize non-medically approved abortions at all stages of pregnancy. The second purpose was to develop an apologetics to explain to medical and lay audiences that the unborn were human beings from conception, and that their lives should not be

terminated except in life-threatening circumstances. The distinction between these two purposes is important; because while abortion was opposed by virtually all elite physicians, a few were doubtful about the criminalization effort, preferring to concentrate on persuasion. Among this class were Walter Channing (1786-1876) and David Humphreys Storer (1804-1891), the father of Horatio.²⁹ This distinction is important because even if they did not participate to criminalize abortion, they were nevertheless tried to persuade their audiences to adopt their views on abortion, and in that sense, they contributed to the Crusade.

Generally speaking, it was understood that the mid-nineteenth century effort to criminalize abortion was carried out in an effort to protect fetal life. This assumption persisted through to the first half of the twentieth century. It persisted as a widespread memory and not as methodologically validated thesis, because abortion was not considered an important historiographical topic in its own right before 1968.³⁰ The lack of extensive historiography on abortion allowed for the creation of a new thesis that countered the traditional understanding of the Physicians' Crusade as a campaign to protect fetal life. The two scholars most responsible for initiating this historiographical trend were Cyril Means jr. (d. 1992) and James Mohr.

Cyril Means Jr. was the General Counsel of the National Abortion Rights Action League in the late 1960s. He published two papers that were decisive in shaping the subsequent narrative on abortion history.³¹ The first paper was issued in 1968 and addressed abortions regarding the “pre-quickened fetus”, that is, the fetus whose movements could not be felt by the pregnant woman. On average, women begin to feel fetal movement at about four months gestation. Means announced to his readers that “the pre-quickened foetus is not now, and has never been, itself an object of protection by our criminal law.” The purpose of laws criminalizing the destruction of the “unquickened fetus” was to protect the pregnant woman from the perils of surgery, before the age

²⁹ Amalie M. Kass, *Midwifery and Medicine in Boston: Walter Channing, M.D., 1786-1876* (Boston: 2002), 241; D. Humphreys Storer, “Two Frequent Causes of Uterine Diseases,” *The Journal of the Gynaecological Society of Boston* VI, no. 3 (March 1872): 200-201.

³⁰ Dellapenna, *Dispelling the Myths of Abortion History*, 13-16.

³¹ Cyril C. Means, *The Law of New York Concerning Abortion and the Status of the Foetus, 1664-1968: A Case of Cessation of Constitutionality* (New York Law School, 1968), 411-515; Cyril C. Jr. Means, “The Phoenix of Abortional Freedom: Is a Penumbra or Ninth-Amendment Right About to Arise from the Nineteenth-Century Legislative Ashes of a Fourteenth-Century Common-Law Liberty,” *New York Law Forum* 17, no. 2 (1972 1971): 335-410.

of antiseptics and antibiotics.³² Means went on to create an extensive legal apologetic to demonstrate his point.

In the second paper, published in 1971, he continued this particular apologetic for abortion law reform, asserting that “concern for the life of the conceptus was foreign to the secular thinking of the Protestant legislators who passed these laws.”³³ But he also argued for what he believed to be a constitutional right to abortion, which at the time, was a novel proposal.³⁴ His argument rested on what he believed to be the true place of abortion in the Common Law. This point was central to his purpose. If the laws criminalizing abortion in the 19th century had been passed mainly to protect pregnant women, and medical advances now made these abortion laws obsolete, the striking down of these laws would mean that abortion would be governed by the Common Law. Therefore, it would be essential to know how the Common Law treated it. His position was that the Common Law had never criminalized abortion. That being the case, it would automatically be a right under the Ninth Amendment when it was adopted with the Bill of Rights in 1791.³⁵ The Ninth Amendment states that the people retain rights not specifically enumerated in the Constitution—in other words, there is a “presumption of liberty” when reading the Constitution. Whatever was legal and accepted as a right before the adoption of the Constitution was treated as such afterwards.³⁶ This Ninth Amendment right was reinforced by the passage of the Fourteenth Amendment in 1868, which specifies that liberty shall not be deprived without due process. As surgical abortions had been rendered safe through medical advances, these laws would be obsolete under the Common Law. They unfairly deprived women of their reproductive freedom and were therefore unconstitutional.³⁷ These two important historiographical arguments were adopted by the Supreme Court of the United States in the *Roe v. Wade* decision.³⁸

³² Means, “The Law of New York,” 418.

³³ Means, “The Phoenix of Abortional Freedom,” 336.

³⁴ Dellapenna, *Dispelling the Myths of Abortion History*, 237.

³⁵ Means, “The Phoenix of Abortional Freedom,” 336.

³⁶ Randy E Barnett, “The Ninth Amendment: It Means What It Says,” *Texas Law Review* 85, no. 1 (November 2006): 14.

³⁷ Dellapenna, *Dispelling the Myths of Abortion History*, 13-14.

³⁸ However, Joseph Dellapenna set out to debunk this legal argument in *Dispelling the Myths of Abortion History*, published in 2005. His argument was taken up by the *Dobbs vs. Jackson Women’s Health* decision, which overturned *Roe*. See 19-1392 *Dobbs v. Jackson Women’s Health Organization* (06/24/2022), 17, 18, 21, 23(fn), 24, 27(fn).

Historians subsequently built on Means' narrative. The next major work that was pivotal to abortion historiography was James Mohr's *Abortion in America* in 1979. It provided much of the basic data about abortion history that is still used to this day. In his book, Mohr explored the motives and actions of what are known as "allopathic" doctors. "Allopathic doctors" were credentialed physicians who subscribed to the academic-based system of medicine that focused on anatomy and physiology. In the scholarly literature they were also known as "regulars." These "regulars" come to form the backbone of "organized medicine," characterized by the creation of numerous institutions, such as medical schools, hospitals, and especially medical societies, most notably the American Medical Association.³⁹ Through their institutions, and through the literature that they produced, disseminated, reviewed, and cited, their ideas became mainstreamed and authoritative, eventually being codified into law.

Allopathic doctors took the lead in the Physicians' Crusade Against Abortion, advocating for the protection of the unborn. Mohr did not doubt that elite allopathic physicians cared about fetal life.⁴⁰ However, like Cyril Means, his analysis tended to overturn the general belief that the Physicians' Crusade was primarily about protecting life by focusing on the ulterior motives of the medical community in criminalizing abortion.

For instance, Mohr claimed that allopathic doctors used the abortion issue as a means to establish their professional dominance and eliminate medical competitors.⁴¹ The American medical system encompassed a diverse array of medical sects. Beginning in the Jacksonian era right up to the Civil War, a strong populist mindset revolted against self-appointed elites, including in medicine. As a result of this impulse, many states repealed licensing laws in the 1830s and 1840s; it was no longer necessary to have a medical diploma to call oneself a doctor.⁴² Advocates of alternative systems underscored the flaws of the allopathic system; for instance, it was powerless during the cholera epidemic of 1832, and it relied on the harsh treatments of heroic medicine, such

³⁹ Leslie J. Reagan, *When Abortion Was a Crime: Women, Medicine, and Law in the United States, 1867-1973*, ACLS Humanities E-Book. (Berkeley: University of California Press, 1997), 4.

⁴⁰ James C. Mohr, *Abortion in America: The Origins and Evolution of National Policy* (Cary, United States: Oxford University Press, 1979), 166.

⁴¹ Mohr, *Abortion in America*, 147, 160.

⁴² Mohr, *Abortion in America*, 32, 39.

as purgatives, and bloodletting.⁴³ Both sufferers and future practitioners began to opt for other approaches that, if they were not necessarily more successful than allopathic medicine, at least were more gentle. Among the most notable sects were Thomsonianism, homeopathy, eclecticism, hydropathy, not to mention sundry other herbalists, idiosyncratic healers, and outright quacks. These various sects would have distinctive features to set them apart from “regulars.” For instance, homeopathy believed in treatments mimicking the symptoms, and it had many rich patrons to help sustain its network of medical schools and other institutions. It was concentrated in urban states such as Massachusetts, New Jersey, and Illinois.⁴⁴ Thomsonianism, which believed in the principle of “every man his own doctor” relied on botanical medicine and was strong in the South.⁴⁵ Eclecticism, which evolved from Thomsonianism, largely copied allopathic medicine in its therapeutics, but instead opted for botanical treatments, instead of mineral treatments such as calomel.⁴⁶ Eclectics practiced mainly in the mid-West and in small towns, where they were often the only doctor available.⁴⁷ Hydropathy, as the name suggests, involving a lot of bathing, drinking of water, being wrapped in wet cotton sheets, as well as plenty of exercise. Special hydropathic resorts were opened all over the country, often in rustic settings, because nature itself was believed to be therapeutic.⁴⁸ For the average American, credentials and erudition did not necessarily impress. What was important was that the doctor was able to make them feel better. As long as a doctor was able to do that, he would develop a reputation for effectiveness; this was how credibility was established among the populace.

Allopathic doctors often resented these alternative systems. University-trained physicians had gone through the trouble and expense of earning a medical diploma, but they had to compete

⁴³ See Owen Whooley, *Knowledge in the Time of Cholera: The Struggle over American Medicine in the Nineteenth Century* (Chicago: University of Chicago Press, 2013), Chapter 1, 31-72 John C. Waller, *Health and Wellness in 19th-Century America* (Westport, United States.: ABC-CLIO, LLC, 2014), 16.

⁴⁴ William G. Rothstein, *American Physicians in the Nineteenth Century: From Sects to Science* (JHU Press, 1992), 235.

⁴⁵ Joseph F. Kett, *The Formation of the American Medical Profession: The Role of Institutions, 1780–1860* (New Haven, CT: Yale University Press, 1968), 5 as cited in Whooley, *Knowledge in the Time of Cholera*, 50; Rothstein, *American Physicians in the Nineteenth Century*, 226.

⁴⁶ Rothstein, *American Physicians in the Nineteenth Century*, 217, 223.

⁴⁷ Rothstein, *American Physicians in the Nineteenth Century*, 228.

⁴⁸ Marshall Scott Legan, “Hydropathy, or the Water-Cure,” in *Pseudo-Science and Society in Nineteenth-Century America*, ed. Arthur Wrobel (Lexington, KY: University Press of Kentucky, 1987), 84-87.

with irregulars in an oversaturated market.⁴⁹ As a result, some allopathic doctors at times had trouble earning a living. They often had to move from one part of the country to another, following waves of migration to the country's frontiers, in order to seek their fortune.⁵⁰ Allopathic doctors also feared one distinct advantage irregulars had in the medical market: they were more likely to perform abortions. Regulars knew that if they were solicited for an abortion and refused, their patient would turn to an irregular practitioner. They feared the patient would never return, having found a doctor who followed their wishes more closely.⁵¹ Given the saturation of the medical market between the 1820s and the 1850s, the difficulties of making a living as an allopathic physician, and the advantages irregulars held, allopathic physicians keenly desired the elimination of irregular practitioners.⁵²

Abortion opponents also wanted to use abortion laws as a means of normalizing and enforcing allopathic ethics. Though a medical society could expel an errant physician for violating its norms, it could not prevent him from practicing because of a lack of licensing laws. The criminalization of abortion provided a means by which a medical society could enforce discipline and expel irregulars from their discipline.⁵³

Physicians were also interested in shoring up the professional credentials of the allopathic medical community because physicians in general suffered from a low opinion among the American public. Many allopathic physicians had attended what were essentially diploma mills, which had very low standards for graduation.⁵⁴ Not surprisingly, doctors were often reputed to be ineffective. By appointing themselves as physiological experts on pregnancy and getting state legislatures to implement their particular abortion policy, physicians hoped to increase their authority among the American public.⁵⁵ In short, allopathic physicians wanted to create a medical

⁴⁹ James H. Cassedy, *Medicine and American Growth, 1800-1860* (Madison, Wis: University of Wisconsin Press, 1986), 67.

⁵⁰ Cassedy, *Medicine and American Growth*, 61.

⁵¹ Mohr, *Abortion in America*, 37.

⁵² Mohr, *Abortion in America*, 32-34.

⁵³ Mohr, *Abortion in America*, 162.

⁵⁴ Mohr, *Abortion in America*, 33.

⁵⁵ Mohr, *Abortion in America*, 163-164.

monopoly for their particular brand of medicine, and lobbying on abortion provided a convenient means to do this.

Mohr and Means thus cast a veil of skepticism over traditional understanding of this campaign against abortion. Historians who wrote after them sustained this skeptical tendency. They diminished the importance of the stated goals of the Physicians' Crusade, or ignored them entirely, echoing Linda Gordon's belief that "the status of the fetus was a minor theme."⁵⁶ Instead, they focused their analysis on ulterior motives of the medical community, casting doubt on the idea that their true goal was to protect the unborn. For instance, Kristin Luker echoed Mohr's arguments that the criminalization of abortion was motivated by the desire to raise the standard of professionalism and eliminate irregulars from practice.⁵⁷ Carroll Smith-Rosenberg and Janet Brodie claimed that a central motif of Crusade was the desire to control and disempower women.⁵⁸ Others, such as Simone Caron, characterized it as motivated by nativism. Physicians who argued for statutes invoked the potential eclipse of white Anglo-Saxon Protestant America by the foreign-born, particularly Catholics, as justification for them.⁵⁹

Given the doubts that many historians harboured about the true motives of these anti-abortion crusaders, they overlooked what they actually had to say about the unborn. For example, historian Janet Brodie labelled the Physicians' Crusade Against Abortion as a "struggle for power and control of reproduction." According to Brodie, between the publication of Hugh Hodge's 1839 pamphlet denouncing abortion and the 1855 lecture by D.H. Storer that sparked his son's crusade, "none of the doyens of obstetrics and gynecology evinced much concern about abortion."⁶⁰

⁵⁶ Linda Gordon, *The Moral Property of Women: A History of Birth Control Politics in America* (Urbana and Chicago: University of Illinois Press, 2002), 305.

⁵⁷ Luker, *Abortion and the Politics of Motherhood*, 18, 27-29.

⁵⁸ Carroll Smith-Rosenberg, *Disorderly Conduct: Visions of Gender in Victorian America* (New York: Oxford University Press, 1986), 238; ⁵⁸ Janet Farrell Brodie, *Contraception and Abortion in Nineteenth-Century America* (Cornell University Press, 1994), 253.

⁵⁹ Caron, *Who Chooses*, 14; Mary Ziegler, *Abortion and the Law in America: Roe v. Wade to the Present* (New York: Cambridge University Press, 2020), 12. Kindle; Nicola Beisel and Tamara Kay, "Abortion, Race, and Gender in Nineteenth-Century America," *American Sociological Review* 69, no. 4 (2004): 499; Mohr, *Abortion in America*, 167.

⁶⁰ Brodie, *Contraception and Abortion in Nineteenth-Century America*, 266.

This thesis will demonstrate that important figures in American obstetrics during the period from 1839 to 1855 (and beyond), such as Charles Delucena Meigs and Gunning S. Bedford, did exhibit significant interest in abortion.⁶¹

Lesser-known writers such as David Tucker, Edward Hartshorne, and John Barry also raised the topic.⁶² Moreover, physicians such as William Dewees and Elizabeth Blackwell wrote extensively about the unborn but did not necessarily reference clandestine abortion directly. From this, it can be concluded that there was indeed a great deal of concern about abortion and the welfare of the unborn in this period.⁶³ The academic focus on ulterior motives then possibly resulted in a lack of curiosity about what physicians really thought about abortion and the unborn. And this omission represents a historiographical gap in the history of the unborn in America.

This oversight affected works dedicated specifically to scholarship on the unborn in American history. Sara Dubow sought to write about the *modern* history of the fetus in America in *Ourselves Unborn*. She stated that legal historians trace the history of the fetus to the *Dietrich v. Northampton* case, in 1884, which established that the fetus has no separate existence from the mother.⁶⁴ But of course, other legal historians have traced the history of the fetus before that.⁶⁵ Dubow also wrote that some historians go all the way back to Aristotle to talk about the medical history of the unborn, then cited two books that deal primarily with the early modern era.⁶⁶ She went on to say that the “modern” medical history of the fetus begins in the 1880s with Franklin

⁶¹ Charles D. Meigs, *Obstetrics: The Science and the Art* (Blanchard and Lea, 1852), 276.; Gunning S. Bedford in Nicolas Charles Chailly-Honoré, *A Practical Treatise on Midwifery*, trans. Gunning S. Bedford, 5th ed. (New York :, 1847), 303-305 (fn); Gunning S. Bedford, *A Lecture, Introductory to a Course on Obstetrics and the Diseases of Women and Children: Delivered November 5, 1848* (New York: Press of the New York University, J.H. Jennings, Printer, 1848), 8.

⁶² David H. Tucker, *Elements of the Principles and Practice of Midwifery* (Lindsay and Blakiston, 1848), 395; Edward Hartshorne in Alfred Swaine Taylor, *Medical Jurisprudence*, ed. Edward Hartshorne, 3rd American Edition (Philadelphia: Blanchard & Lea, 1853), 383 (fn) John Barry, *Medico-Christian Embryology* (Louisville: Printed for the author, 1846), 30ff.

⁶³ William Dewees, *A Compendious System of Midwifery* (Philadelphia, 1843), 533 (fn); Elizabeth Blackwell, *The Laws of Life with Special Reference to the Physical Education of Girls* (G.P. Putnam, 1852), 66ff.

⁶⁴ Sara Dubow, *Ourselves Unborn: A History of the Fetus in Modern America* (Oxford, New York: Oxford University Press, 2010), 4. The ruling she cited would be upheld until 1946.

⁶⁵ E.g., Dellapenna, *Dispelling the Myths of Abortion History*; Anthony M. Joseph, “The ‘Pennsylvania Model’: The Judicial Criminalization of Abortion in Pennsylvania, 1838-1850,” *The American Journal of Legal History* 49, no. 3 (2007): 284–320; not to mention Cyril Means himself.

⁶⁶ Matthew Cobb, *Generation: The Seventeenth-Century Scientists Who Unraveled the Secrets of Sex, Life, and Growth* (Bloomsbury Publishing USA, 2008) and Pinto-Correia, *The Ovary of Eve* in Dubow, *Ourselves Unborn*, 5.

Paine Mall's embryo collection.⁶⁷ Admittedly the definition of the word “modern” is debatable—the word “modern” can refer to any period from 1500 to today. But it seems that if one's purpose is to write the history of the unborn in America, it would be relevant to focus on the medical movement to enshrine legal protection for them. In the same vein, Lynn Morgan, in *Icons of Life*, sought to explain the emergence of the “embryological view” of prenatal development, that is, the belief that our selves—biological and otherwise—originated in the womb.⁶⁸ She argued that this belief emerged through embryo collecting, which created a database of specimens from which scientists could extrapolate generalized conclusions about the unborn. And since she also focused on Franklin Paine Mall and his attempts to gather embryos, her study also begins in the 1880s.⁶⁹

The two historians who wrote directly about the emergence of the fetus in American culture—Sara Dubow and Lynn Morgan—dated the fetus' appearance in modern life to the practice of embryo collection by Franklin Paine Mall in the late 1880s.⁷⁰ There is no doubt that embryo collections had an influence on the public's understanding of embryological development. But many like-minded scholars assume that it was through the creation of fetal images and the “public fetus” that the unborn came to be perceived as “real” and “important” to the American public.⁷¹ The fetus as subject of print and speech is treated as less important by scholars, even if print was an important means of communication.

This concern for the “public [re: visualized] fetus” emerged as a response to anti-abortion efforts to display images of fetuses to sway public opinion. Beginning in the 1960s, the photos of Geraldine Lux Flanagan, a childbirth educator, published in *The First Nine Months of Life*, as well as the photos by Swedish photographer Lennart Nilsson in *Life* magazine would be deployed to that end. By the 1980s, images of mutilated fetuses, as well as ultrasounds, would also be used in anti-abortion campaigns.⁷² Scholars, particularly feminist scholars, focused on the analysis of the

⁶⁷ Dubow, *Ourselves Unborn*, 5.

⁶⁸ Morgan, *Icons of Life*, 8.

⁶⁹ Morgan, *Icons of Life*, 9.

⁷⁰ Dubow, *Ourselves Unborn*, 5.

⁷¹ Petchesky, “Fetal Images,” 264; Roth, *Making Women Pay*, 33-34.

⁷² Rachel Alpha Johnston Hurst, “Representing Abortion,” in *Representing Abortion*, ed. Rachel Alpha Johnston Hurst (Routledge, 2020), 3-5.

use of this imagery, which often serves as a metonym for the cultural presence of the fetus.⁷³ Therefore, tracing the cultural presence of the fetus to practices that helped visualize the fetus—such as the beginnings of embryo collection in the late 1880s—was a natural outgrowth of this phenomenon. But of course, the Physicians’ Crusade Against Abortion, the research and communications that led to it, as well as the apologetics that developed around it, were largely conducted in print.

3. The Problematique

Scholarly skepticism towards the Physicians’ Crusade Against Abortion led historians to challenge the general understanding of the motives behind this campaign. But it also led them to point out an important discrepancy which deserves greater scrutiny.

The medical community was adamant that the unborn were human beings from the very beginning of the pregnancy; and because of this belief, they denounced abortion as murder, or otherwise as a grave transgression. This belief was at the core of their denunciation of abortion in the name of reproductive limitation, or as this study will designate it, “clandestine abortion.”⁷⁴ And yet, even as these preached against clandestine abortion, they themselves performed abortions—therapeutic abortions—when they believed the woman’s medical situation warranted. This position has struck some contemporary scholars as somewhat contradictory.⁷⁵

Medical experts declared that the circumstances which justified abortion were exceedingly rare.⁷⁶ Nevertheless, rare or not, the decision to perform an abortion still resided with the physician, and not the patient.⁷⁷ As Horatio Robinson Storer informed his readers, only a doctor can know when an abortion is warranted.⁷⁸ And while it was *supposed* to be rare, and only done in the most

⁷³ Morgan, *Icons of Life*, 206.

⁷⁴ “Clandestine abortion” was chosen because other possible designations for such abortions, such as “criminal abortion” or “elective abortion” had their own problems.

⁷⁵ Reagan, *When Abortion Was a Crime*, 28.

⁷⁶ Mohr, *Abortion in America*, 176.

⁷⁷ As per the practice of 19th century America, in this thesis, the word “patient” refers only to the pregnant woman and not the fetus until after live birth. The designation of the fetus as a patient is a 20th century development.

⁷⁸ Storer, *On Criminal Abortion in America*, 48.

circumscribed conditions, in consultation with other doctors who were expected to give advice in order to avoid this operation, the reality was that abortions experts and lesser-known doctors varied on when abortions could be performed. For example, there was difference of opinion on whether doctors could perform abortions in cases of hyperemesis gravidarum, or excessive vomiting. William Dewees and Walter Channing believed it was justified, whereas Hugh Hodge and Horatio Robinson Storer argued against it.⁷⁹ Most experts only sanctioned abortion in extreme scenarios where all other options had failed, and death or permanent disability was foreseeable. But Hugh Hodge argued against abortion in cases of female “delicacy,” or mental weakness, which suggests that others had put it forward as an indication and that it was already being done for that reason.⁸⁰ These disagreements on treatment rarely led to any concrete repercussions for physicians who had a more relaxed standard, so long as there was a medical justification. As these choices were left to the physician’s conscience, it all seemed somewhat arbitrary.⁸¹

The issue of how the American medical community justified therapeutic abortion while denouncing clandestine abortion is at the centre of this study. It seems that if doctors condemned abortion because it was “murder” when women chose it, analogically it should have been “murder” when they did it, too. Rather than taking an absolutist stance, the physician community seemed to perform a mental calculus in the case of maternal-fetal conflict, that is, in cases when the interests of the mother—in this case, her life and health—conflicted with the interests of the unborn—namely their life. This study will seek to understand how American physicians negotiated maternal-fetal conflict in the 1800-1865 period; how they reconciled their opposition to abortion with their performance of it. In order to understand how this reconciliation took place, this study will trace the history of the medical community’s attitudes and perceptions of the unborn, and how these ideas were applied to develop the principles that led to the Physicians’ Crusade Against

⁷⁹ William Dewees, *A Treatise on the Diseases of Females* (H.C. Carey & I. Lea, 1826), 135; Walter Channing, “Effects of Criminal Abortion,” *Boston Medical and Surgical Journal* LX, no. 7 (March 17, 1859): 141; Hugh Lenox Hodge, *The Principles and Practice of Obstetrics: Illustrated with One Hundred and Fifty-Nine Lithographic Figures from Original Photographs: And with Numerous Wood-Cuts* (Henry C. Lea, 1864), 108; Horatio Robinson Storer, “Prize Essay: The Criminality and Physical Evils of Forced Abortions,” *The Transactions of the American Medical Association*: 16 (1866): 719.

⁸⁰ Hodge, *The Principles and Practice of Obstetrics*, 300.

⁸¹ Gunning S. Bedford, *The Principles and Practice of Obstetrics* (Samuel S. & William Wood, 1861), 679.

Abortion. And through this exploration of these questions, this study will trace the genesis of the presence of the fetus in American culture. Readers will come to understand why physicians fought for the legal protection of the unborn, but also, why they considered the interests of the unborn secondary to those of the pregnant woman.

4. Methodology

I have conducted a textual analysis of primarily American medical literature from 1800 to 1865, written exclusively by allopathic doctors. My goal is to understand the genesis of the public medical opposition to clandestine abortion, as well how physicians reconciled their opposition to clandestine abortion with their support of therapeutic abortion, in order to trace the history of how the fetus became a major concern in American public life.

The core of my primary sources is allopathic medical literature, especially textbooks, articles, and pamphlets. My textual analysis relies heavily on obstetric literature, particularly medical textbooks published by four obstetrics experts recognized by the medical community: William Dewees, Charles Meigs, Hugh Lenox Hodge and Gunning S. Bedford. Many other authors are also included, most notably Horatio Robinson Storer, the man who led the Physicians' Crusade Against Abortion. This study will tend to skew towards these elite physicians. Some, like Henry Miller and David Tucker, published textbooks and worked as university professors. Others, like Stephen Tracy and Elizabeth Blackwell, were M.D.'s whose works were addressed to female readers in order to give a comprehensive overview about the medical facts surrounding reproduction, reflecting back to the lay public those opinions that were prevalent in the medical community. Other physicians were less well-known; some of them were leaders in their local medical association who had their thoughts recorded in the transactions of their organization's meeting; or they just managed to make it into the public record by having published a pamphlet or an article in a medical journal. These lesser-known physicians who published tended to reproduce the ideas of university professors and journal editors who were influential in forming medical opinion. Material from related medical fields was also retained, such as physiology, and medical

jurisprudence. The bulk of these titles were gathered through a keyword search on Google Books. I used over 100 search terms, and searched individually for each term, decade by decade (e.g., 1800-1809, 1810-1819, etc.). Other titles were found either through mentions in primary or secondary source literature, or serendipitously through internet searches.

Allopathic literature presents an advantage when dealing with reproductive matters; lay people often did not discuss sexually related topics, and when they did, they were guarded, euphemistic, often telegraphing their thoughts instead of stating them plainly. Physicians were less hampered by the prevailing culture of reticence. They were expected to speak more freely, albeit in medicalized language.⁸² These sources present an advantage when trying to discern the culture's attitude towards the unborn.

Caution must be used in reading this literature, as one might be tempted to assume the body of amassed literature represents the medical community *in toto*. Readers of these materials, which included both practitioners and medical students, did not simply assimilate the opinions of the cited writers without nuance or resistance.

The opinions given in the primary source literature represent those of elite medical authors; their statements amounted to conventional medical wisdom, some of which would be codified in abortion legislation. The opinions of the mass of anonymous practitioners are not represented. They largely went along with the conventional wisdom of the profession. There is no record of any sustained opposition on their part. But this lack of opposition should not be assumed to amount to agreement. There were probably varying degrees of adherence and compliance to this medical wisdom.

The history of the presence of the fetus in American culture is intertwined with the history of obstetrics. It was chiefly practitioners of midwifery who argued for the importance of the unborn. And it was through the merging of obstetrics and embryology that interest in the unborn extended to all stages of pregnancy. But in order to give an accurate rendering of the story of American obstetrics and its relationship to the unborn, it is not possible to focus solely on

⁸² Charles Delucena Meigs, *Females and Their Diseases: A Series of Letters to His Class* (Lea and Blanchard, 1848), 53-54.

American primary sources; American obstetrics was British in origin, and American physicians who took an interest in the topic largely copied their British predecessors. Between the emergence of man midwifery in America in 1760 and the first obstetrical writings in 1800, American physicians and medical students relied almost exclusively on British literature. After 1786, all major British obstetrics works were published in America a few months after their first appearance.⁸³ Among the most cited British obstetricians were: William Smellie, Thomas Denman, John Burns, Alexander Hamilton, Samuel Merriman among many others.⁸⁴ These writings would lay the foundation for American medical thought in the early 19th century.

In the early 19th century, American obstetricians began to publish their own journal articles, and issue American editions of British medical texts with their own footnotes and additions. In the first half of the nineteenth century, American obstetrics came to be dominated by William Dewees.⁸⁵ His textbook, *A Compendious System of Midwifery*, published in 1824, ran more than a dozen editions. He was one of the first American doctors to be widely cited in European literature. It was around this time—especially after the 1830s—that obstetric and other medical literature began to flourish in America. A sufficient number of American doctors were publishing and keeping abreast of developments abroad so that they were not completely reliant on European authority. Obstetric ideas and practice were being shaped through the conversations between Americans, as opposed to simply internalizing foreign ideas.

I also found, as I read the American obstetric literature, that the French influence was pervasive, especially after 1830. As I came to realize that the medical theory of vitalism would be an important part of this story, it made sense to include the writings of French practitioners and thinkers; their point of view was consciously adopted by American physicians, particularly those who went to Paris to study medicine. Therefore, I included a few translations of French texts— notably, Xavier Bichat's *Philosophical Researches on Life and Death*, and Alfred Velpeau's

⁸³ J. Whitridge Williams, *A Sketch of the History of Obstetrics in the United States up to 1860* ([Baltimore: s.n.], 1903), 51.

⁸⁴ See for example: Samuel Bard, *A Compendium of the Theory and Practice of Midwifery* (New York: Collins and Co., 1807), 8; Williams, *A Sketch of the History of Obstetrics in the United States up to 1860*, 51; John W. Francis in Thomas Denman, *An Introduction to the Practice of Midwifery*, ed. John W. Francis (New-York: G. & C. & H. Carvill, 1829), lxviii.

⁸⁵ Williams, *A Sketch of the History of Obstetrics*, 33.

Principles of Tokology and Embryology. These two texts were especially influential in reasoning on the unborn. I retained the translations and not the original French because these would have been the texts that American many doctors would have relied on.

This study focuses on the period of 1800-1865 because this represents a period in which American medicine came into its own constructing the foundation of its authority. I used 1800 as a starting point because it corresponds broadly to the beginnings of professional medical publication in the United States; the first medical journal, *The Medical Repository*, put out its first issue in 1797, and the first midwifery text, by Valentine Seamen, was produced in 1800 (though it was not considered to be very good.)⁸⁶ The first acclaimed midwifery manual was published by Samuel Bard in 1807. Initially, I was only going to study the texts up to 1857, that is, the first year of the Physicians' Crusade Against Abortion. However, this periodization was rather limiting, as a number of texts published after that year provided a great deal of insight into the perceptions of the unborn. Many obstetric writers were often very experienced practitioners who based their published texts on articles and notes they had accumulated over the decades, so that their writings were often not the product of cutting-edge research, but of decades-old insights. Obstetrics was a fairly static field of practice from the turn of the nineteenth century until as least the 1880s, and possibly beyond.⁸⁷ Although it saw some important developments in this period, such as the adoption of ergot as an oxytocic in 1807, and the discovery of anesthesia in 1847, the methods did not evolve very much, and as a result, the education of midwifery specialists did not significantly change over the period.⁸⁸

While the study focuses on American medical opinion on the fetus in the period 1800-1865, it is necessary that I examine the origins of medicalization of childbirth in Great Britain in the 1730s, which was subsequently imported into the American colonies in the early 1760s. It is impossible to tell the story of American obstetrics in the 19th century without raising the

⁸⁶ Williams, *A Sketch of the History of Obstetrics*, 13.

⁸⁷ Irvine Loudon, "Childbirth," in *Companion Encyclopedia of the History of Medicine* (Routledge, 1994), 1053; Judith Walzer Leavitt, *Brought to Bed: Childbearing in America, 1750-1950*, 30th Anniversary Edition (Oxford University Press, 2016), 61.

⁸⁸ D. Francis Condie, in Fleetwood Churchill, *On the Theory and Practice of Midwifery*, ed. D. Francis Condie (Blanchard and Lea, 1853), 241 (fn); Leavitt, *Brought to Bed*, 128.

discussions about various obstetric practices that had already taken place in the 18th century, because they would have shaped contemporary opinion at the time.

I chose 1865 as the endpoint of the study period because some historians begin to date the rise of laboratory medicine to the late 1860s.⁸⁹ Vitalist thinking, which influenced the American perceptions of the unborn, began to fade from the American medical landscape at around then.⁹⁰ I also chose the year 1865 as my cut-off point because it marks the end of the Civil War and as such is a valuable cultural marker in American history. Thus, the year 1865 marks the end of a number of eras that make it a convenient end-date for this study. A few of the primary sources are dated a little past 1865, but they were composed or published before the cut-off, and again, they were reflective of ideas that came before.

5. Hypothesis

In this study I will demonstrate how allopathic physicians in the United States reconciled their rejection of clandestine abortion with their support for therapeutic abortion. In doing so, I will show how the fetus developed a presence in American culture.

American physicians recognized the humanity of the unborn, who, under normal circumstances, were entitled to the care and concern of the labouring woman and the wider society. However, when the woman was confronted with life-threatening medical emergencies (or even just life-altering ones) this created what has come to be known as “maternal-fetal conflict,” because both woman and fetus were considered to have a legitimate right to life and health. Since physicians saw it as their mission to save both lives, this created a dilemma, because both could not be saved.

Around the 1830s, American physicians began to emulate French medicine, and in doing so adopted the French medical ideology of vitalism. Vitalism, as we will see, provided the

⁸⁹ John Harley Warner, *The Therapeutic Perspective: Medical Practice, Knowledge, and Identity in America, 1820-1885*, Princeton Legacy Library (Princeton University Press, 2014), 80.

⁹⁰ Sebastian Normandin, "Visions of Vitalism: Medicine, Philosophy and the Soul in Nineteenth-Century France" (PhD diss., McGill University, 2005), 161.

ideological framework to evaluate the value of the fetus against that of the pregnant woman, so that the latter would be attributed greater weight, and thereby justify the sacrificing of fetal life.

The following chapters will highlight how concern for the fetus developed, and how that concern was articulated through opposition to abortion. It will also show how the adoption of vitalism led to the acceptance of therapeutic abortion.

In Chapter 1, I will show that medical concern for the unborn did not begin with the emergence of abortion as a widespread social phenomenon in the 1840s. It originated with the very beginnings of the medicalization of childbirth in the 1730s in Britain, which reached America in around 1760.⁹¹ Before this time, childbirth was exclusively handled by female midwives. Midwives could aptly handle normal birth but had a much more difficult time in emergencies. One of the most dreaded and difficult problems they had to deal with was obstructed labour, which was usually caused by the labouring woman's contracted pelvis. When all techniques and resources had been exhausted, they would call in the surgeon. It was only during emergencies that a male physician would make an appearance during childbirth. He was thus an adjunct of a female midwife—a secondary, but essential player.⁹² This call would come after the woman had been in labour for several days and was on the verge of death. The fetus was presumed deceased—a reasonable presumption given the long delay between the onset of the labour and the arrival of the physician. His only job was to save the woman by performing craniotomy—that is, collapsing the fetal skull. It was an unpleasant procedure for all concerned.

The medicalization of childbirth began when surgeons started to treat milder cases of obstructed labour with forceps in the 1730s, which were described in the first British medical midwifery text published by Edmund Chapman in 1733.⁹³ Forceps became the preferred instrument for obstructed labour because they were safer for women than the sharp instruments used in craniotomy. In the beginning, physicians expected to pull out dead fetuses, but occasionally, some would come out alive. As saving the child became a plausible outcome of

⁹¹ Leavitt, *Brought to Bed*, 264; Williams, *A Sketch of the History of Obstetrics*, 2.

⁹² Adrian Wilson, *The Making of Man-Midwifery: Childbirth in England, 1660—1770* (London: Routledge, 2018), 47.

⁹³ Edmund Chapman, *An Essay on the Improvement of Midwifery; Chiefly with Regard to the Operation, Etc* (A. Blackwell, for A. Bettesworth & C. Hitch, 1733).

medical intervention, physicians began advising midwives to call them in earlier. Patients, and other female bystanders, also began to see in this medical expertise the potential to save their own lives without the prospect of craniotomy. They would directly call upon doctors when they went into labour, even book them for their probable due date. In this way, the man-midwife began to replace the female midwife as the principal birth attendant. The expectation that the surgeon could save both mother and child became what I have deemed a new “obstetric prime directive” — that is, a new overarching objective of medical intervention in childbirth.

While the presence of a man-midwife seemed to promise greater safety, it created its own problems. When the surgeon was only an adjunct to the midwife, by the time he was called in, the fetus was presumed to have expired. But now that he was available from the beginning of labour, medical emergencies could no longer be dealt with as if the fetus was dead—indeed, that is why fetuses could be saved with the forceps. But not all cases of obstructed labour could be solved with forceps. Sometime the deformity of the pelvis was so extreme that it was physically impossible to extract the fetus. Faced with a sinking patient, physicians felt compelled to act. Following precedent they performed craniotomy, even if they believed the fetus to be alive. Indeed, some physicians report of the struggle of the fetus during this operation.⁹⁴

As physicians dreaded having to be the cause of death of an unborn child, discussions arose on different ways to circumvent the need for what they perceived to be a gruesome procedure. William Dewees, the most influential obstetrician of his time, developed an apologetic around the unborn in order to discourage recourse to craniotomy. Physicians also proposed surgical means to avoid craniotomy by proposing two alternative operations. The first was the Caesarean section, which involved extracting the child through the uterus by making an incision. The French had had some success in saving both woman and child using this procedure; but it was viewed as a hopeless alternative in Britain, because virtually all attempts at this operation ended with the death of the mother; and it was seen as evidence of Catholic preference for the fetus over the woman. The second operation was the induction of premature labour, at the seventh or eight months, when the

⁹⁴ William Dewees, “An Essay on the Rupture of the Uterus,” in *Essays on Various Subjects Connected with Midwifery* (Philadelphia: H.C. Carey & I. Lea, 1823), 225.

fetus was small enough to pass through a contracted pelvis and therefore avoid any obstruction. Both these operations showed that physicians greatly valued the lives of the unborn, even if they valued that of the mother even more.

In the initial stages of the medicalization of childbirth, the concern for the unborn was manifested mostly towards fetuses in the latter stages of pregnancy. In Chapter 2, I will show that this attention towards the unborn was extended to them from the inception of pregnancy, but this attention articulated itself in two types of discourses; one that was humanizing and one that was dehumanizing.

The humanizing discourse came as a result of breakthroughs in embryology that occurred in the 1820s and 1830s, which I call “the new embryology.” This new embryology was rooted in empirical discoveries that inched ever closer to explaining the earliest stages of reproduction. For example, in 1824, Jean-Louis Prévost and Jean-Baptiste Dumas used frogs to prove that sperm and eggs had to make contact in order to achieve fertilization.⁹⁵ These discoveries reinforced the belief that human life begins at conception. The most seminal example of this was the appearance of the American edition of Alfred Velpeau’s *Principles of Tokology and Embryology* in 1831. Before this publication, virtually all embryological research on embryos was done on animal models. Velpeau’s methodological innovation was to collect 140 human embryo specimens from early in the pregnancy, allowing for a precise description of prenatal development by direct observation and not analogical reasoning. Through his work, prenatal development, once a relatively marginal concern, now became a central preoccupation in obstetrics. Alongside this growing interest in embryology, there arose a corresponding interest in the welfare of the unborn from the earliest stages of pregnancy. Physicians became more vocal in their advice to pregnant women in order to secure the health of the unborn child. Protection and concern for the unborn became a central feature of obstetric discourse.

In parallel to this humanizing discourse on the fetus, there also developed a dehumanizing discourse. This discourse was rooted in the medical ideology of vitalism, which American

⁹⁵ Jean-Louis Prévost and Jean-Baptiste Dumas, “Deuxième Mémoire Sur La Génération,” *Annales Des Sciences Naturelles* 2 (1824): 110ff.

physicians had imported from France during what is known as the “French period” of American medicine between 1820 and 1860, when hundreds of medical students had travelled to Paris to further their education in its hospital system.⁹⁶ Vitalism, in opposition to a mechanistic view of biology, holds that life processes cannot be completely reduced to physics and chemistry, and for that reason, biology ultimately follows its own distinct laws.⁹⁷ Like many other ideologies vitalism came with its own panoply of concepts that were developed by its most prominent theorists. One of its most distinctive concepts was elaborated by Xavier Bichat (1771-1802) who is best known for having discovered tissue. In his *Physiological Researches on Life and Death*, he divided biological processes into two systems: the *animal economy*, and the *organic* (or “vegetative”) *economy*. The animal economy consisted of those organs and processes that involve volition and allow one to establish contact with others; they included the five senses, locomotion, and higher thought. The organic economy involved continuous and involuntary processes such as digestion, circulation, and respiration; these processes were held in common with plants and other vegetation. All higher animals at adulthood manifested both systems, whereas plants only showed evidence of the organic economy. Likewise, he described human fetuses as having no “animal life”; only the organic economy was operational. Of the fetus, he said that “its very existence is that of the vegetable.”⁹⁸ Bichat characterized the animal economy as being the product of cerebral function, whereas the organic economy was the result of the ganglionic system which was dominated by the spinal cord. Thus, the fetus, though affirmed to be ontologically human, was identified with its limited physiological function.

There was also another way in which vitalism played an important role in the moral evaluation of the fetus. Vitalism placed great emphasis on a being’s relationship or *rappports* with their environment, which included the people to whom one had ties. As we will see in Chapter 3, these *rappports* would become an important element in negotiating maternal-fetal conflict. Women

⁹⁶ Warner, *Against the Spirit of System*, 3,6-7; Erwin H. Ackerknecht, *Medicine at the Paris Hospital, 1794-1848*, ACLS Humanities E-Book (Series) (Baltimore: Johns Hopkins Press, 1967) as cited in Whooley, *Knowledge in the Time of Cholera*, 83.

⁹⁷ Normandin, “Visions of Vitalism,” 18.

⁹⁸ Xavier Bichat, *Physiological Researches on Life and Death*, trans. F. Gold (Richardson and Lord, 1827), 140.

were perceived to have many social ties and were valued because of them. In contrast, the fetus was thought to have none, and thus was considered to have less value compared to the woman.

This new dichotomy of both a humanizing and dehumanizing discourse would become important in the rhetoric on abortion that arose in the late 1830s and which persisted right up until the end of the study period. First, the humanizing discourse would be front and centre both in the decades lead-up to the Physicians' Crusade Against Abortion and after its launch in 1857. The issue of abortion came to the fore in the late 1830s as abortion providers began to print veiled advertisements in newspapers. Allopathic physicians reported being frequently solicited for abortions, and they also had to treat their after-effects. The "quickening doctrine" – that is, the belief that the fetus does not come alive until the woman feels the first signs of movement—also became more widespread and influenced the legal system to adopt this standard in interpreting abortion statutes and the Common Law that a woman be "quick with child." Physicians, influenced by the new embryology, rejected this interpretation. They denounced the widespread wastage of prenatal life and called for legislation that eliminated any distinction on abortion between those performed before quickening and those done after.

But while the physicians were denouncing these abortions for reproductive planning, their use of abortion would be expanding, and this would be due, in part, to the influence of Alfred Velpeau and his like-minded colleagues. They advocated for early medical abortions in cases of extremely contracted pelvises, in order to circumvent the need to perform either a C-section (which was most often fatal to the mother) or craniotomy, which could injure the mother and was psychologically difficult to accomplish. In effect, Velpeau normalized the use of early abortion in dealing with a foreseen obstructed labour. To do this, he and other French writers invoked vitalist language, comparing the fetus to "vegetative" life, influencing others to adopt that same language. The American medical community would also come to evaluate the fetus as less important than the woman due to the vitalist concept of making medical judgements through an individual's *rappports* with their environment, including their social relations. Physicians strongly esteemed the role of women in their families, and by extension, their role in society and even civilization. In contrast, the fetus was perceived to have no role to play in the world. This made it imperative to

save the mother in maternal-fetal conflict because she was the more important human being, even if this meant sacrificing the fetus.

And it is through this vitalist lens, of seeing the woman as central to her family and society, and the fetus as not central at all, that American physicians came to negotiate the problem of maternal-fetal conflict.

Chapter 2: The Medicalization of Childbirth and the Concern for Fetal Welfare

1. Introduction

Before the 18th century, childbirth was an event that was entirely conducted by women, except when medical emergencies arose.⁹⁹ By one estimate, over 98% of these deliveries occurred without any complications.¹⁰⁰ Emergencies were rare, but they did arise. Among the most dreaded was obstructed labour.

Obstructed labour was usually caused by the labouring woman's deformed pelvis, when it did not allow for the passage of a full-term fetus. It was understood that female midwives were not competent to deal with this problem.¹⁰¹ Midwives often delayed calling the surgeon, hoping the problem could resolve itself. Once the fetus was given up for dead—usually after a few days—the surgeon would be called in.¹⁰² He then acted as the midwife's adjunct.¹⁰³ His role was to save the woman from death by performing craniotomy on the fetus, that is, by collapsing the fetal skull and reducing the size of the corpse to be able to extract it. This was a gruesome operation that risked injuring the woman because sharp tools were required. The gruesomeness and pain of this operation explained, in part, why the surgeon's call was delayed.¹⁰⁴

This all changed with the proliferation of the forceps in the 1730s in Britain. The forceps were first described in a medical textbook by Edmund Chapman in 1733.¹⁰⁵ They consisted of a

⁹⁹ Wilson, *The Making of Man-Midwifery*, 1.

¹⁰⁰ Wilson, *The Making of Man-Midwifery*, 33.

¹⁰¹ Wilson, *The Making of Man-Midwifery*, 33.

¹⁰² Wilson, *The Making of Man-Midwifery*, 49.

¹⁰³ Wilson, *The Making of Man-Midwifery*, 47.

¹⁰⁴ Wilson, *The Making of Man-Midwifery*, 50.

¹⁰⁵ Chapman, *An Essay on the Improvement of Midwifery*, unpaginated.

pair of metal blades designed to clutch the fetal head inside the birth canal. If the pelvic deformity was not too severe, the physician could reduce the size of the fetal head by compression, as the bones of the fetal skull were not perfectly calcified. Thus, the surgeon would be able to save the woman without using any sharp instruments. Additionally, he was often able to save the fetus as well. As craniotomy was no longer the default operation to save the woman, midwives were more inclined to call upon the surgeon. The presence of the physician began to inspire reassurance rather than alarm. And in this way, physicians came to be invited more readily into the lying-in chamber. They would be called earlier and earlier in the labour process, until they began to replace female midwives as the primary birth attendants around 1750.¹⁰⁶ Although female midwives would continue to deliver a large percentage of the population in America well into the 19th century,¹⁰⁷ the medical field of obstetrics would be shaped by the practices and writings of physicians who specialized in childbirth.

The application of the forceps led to the creation of this new role for the physician. Whereas before he was only expected to save the woman, now the field of obstetrics was characterized by a new expectation: save the woman and the child.¹⁰⁸ This became what I deem the “obstetric prime directive”, the goal that, when achievable, directed all the physicians’ actions.

As physicians attended a greater number of deliveries, and were present at the onset of labour, they found that they could not always solve the problem of obstructed labour with the forceps. Normally, a full-term fetus required a four-inch passage for safe expulsion. Physicians still held some hope if the passage was about three inches—sometimes the fetus was very small, or the skull bones were very malleable. But if the passage was only two-and-a-half inches or less,

¹⁰⁶ Wilson, *The Making of Man-Midwifery*, 199.

¹⁰⁷ Leavitt, *Brought to Bed*, 116.

¹⁰⁸ Wilson, *The Making of Man-Midwifery*, 97.

there was little chance for a natural delivery. The deformity was too great, and the fetal head would be too large.

Whereas prior to the age of medicalization, physicians just assumed the fetus was dead, and performed craniotomy without a second thought, they could no longer make that assumption as they were now present at the earliest stages of labour and had no reason to believe the fetus had expired.

The medicalization of childbirth led to the concern for two beings.¹⁰⁹ But given the nature of the practice at the time, saving one—either the woman or the fetus—meant sacrificing the other. Thus, the medicalization of childbirth introduced the dynamic of maternal-fetal conflict, that is, the conflict between the interests of the fetus and those of the labouring woman.¹¹⁰ One contemporary definition of maternal-fetal conflict defines it as the conflict of the pregnant woman's interests as she defines them, with those of the fetus, as defined by the physician. In this study, the interests of the woman are defined by medical practitioners. In 18th century Britain, it was taken for granted that the woman had to be saved even at the expense of sacrificing the life of the fetus. Physicians were at times confronted with the prospect of having to perform craniotomy on a live fetus to save their patient's life. As we will see in this chapter, obstetricians, both in Britain and America, were willing to do the operation as a last resort, but they loathed it. This desire to avoid craniotomy on a live fetus was one of the central problems of obstetric practice in the early decades of the medicalization of childbirth. They did not want to be the cause of fetal death, nor did they want their medical colleagues to resort to it unnecessarily. Fetal life was

¹⁰⁹ Wilson, *The Making of Man-Midwifery*, 97.

¹¹⁰ See Sozos J. Fasouliotis and Joseph G. Schenker, "Maternal-Fetal Conflict," *European Journal of Obstetrics and Gynecology and Reproductive Biology* 89, no. 1 (March 1, 2000): 101.

important to respect, and preserve, but its preservation had to be done in a manner that was consistent with the well-being of the woman.

This chapter will explore how English-speaking—but especially American—physicians confronted the problem of craniotomy on a live fetus. First, there will be a brief introduction to the phenomenon of medicalization of childbirth in America, and the person of William Potts Dewees (1768-1841) who, though he was not the first male *accoucheur* in America, was a prominent example, and should be considered the founder of the American school of obstetrics because of the extent of his influence. Next, the chapter will explore the role of the forceps in maternal-fetal conflict, and how Dewees advocated for their use to save fetal lives. He also took certain pains to discredit the opinions of William Osborn (1736-1808), who denied fetal sensibility and parental love of the unborn. Dewees was worried that if physicians adopted Osborn's views, they would be more likely to perform craniotomies unnecessarily. Finally, the chapter will examine two operations that were proposed to circumvent the need for craniotomy. The first was the Caesarean section, which involved extracting the fetus through an abdominal incision. In an age that did not have a good understanding of infection control, and had no anesthetic or antibiotics to fight sepsis, it was a dangerous operation. It was a contested operation that did not have a good track record in Britain—almost all cases were fatal, although the French had encountered some success with it. The C-Section was also culturally problematic in the Anglo-Protestant world because of its association with the Catholic practice of post-mortem C-sections on dead pregnant women to baptize the fetus. It came to symbolize Catholic zealotry.¹¹¹ Nevertheless, it was seriously proposed as a means of saving both mother and child.

¹¹¹ John Blunt (pseud.), *Man-Midwifery Dissected; or, the Obstetric Family-Instructor*. (S.W. Fores, 1793), 61; Fielding Ould, *A Treatise of Midwifery*, 1767, 198.

The other operation that was proposed was induced premature labour. Fetuses were considered viable outside the womb at seven months. If labour was induced at an earlier stage of gestation, when the fetus was smaller in size, this operation held out the prospect of saving both mother and child. This operation was implemented beginning in 1756 and eventually became a standard obstetric practice in the English-speaking world. However, it was also the object of criticism. French critics saw induced labour as problematic, because the fetus was so fragile at this early stage, there was little prospect for survival.¹¹² Medical critics also saw challenges, because of the difficulties of pinpointing the date of conception, and of the dangers of laypeople coming to know the secrets of inducing premature labour, as the same techniques could be used for clandestine abortions.

Regardless of the challenges posed by these operations, medical writers were eager to find ways around having to perform craniotomy on a live fetus. They wanted to spare themselves, their patients, and the unborn children they were delivering the consequences of this procedure.

But before exploring these two alternatives to craniotomy, I will give an overview of how the medicalization of childbirth unfolded in the United States in the 18th and early 19th century, and then discuss the problem of craniotomy as experienced in the United States, and the difficulties in advocating for both mother and child.

¹¹² Samuel Merriman, "Cases of Premature Labour Artificially Induced in Women with Distorted Pelvis: To Which Are Subjoined Some Observations of This Method of Practice," *Medico-Chirurgical Transactions* 3 (1812): 131.

2. The Medicalization of Childbirth in the United States and the Forceps

The first generation of European-trained physicians specialized in midwifery began to appear in the American colonies around 1760.¹¹³ Among the first wave of these physicians was William Shippen (1736-1808), who, in 1762, graduated from the University of Edinburgh, the most important school of midwifery in the British Isles.¹¹⁴ Upon his return to America, Shippen began giving lectures, and in 1765, he helped found the medical school of the College of Philadelphia (later the University of Pennsylvania).¹¹⁵ Similarly, Samuel Bard (1742-1821) graduated from the University of Edinburgh in 1765, then helped established the medical school at King's College (later Columbia University) in 1767, and contributed to the establishment of New York City's first public hospital in 1771.¹¹⁶ T.C. James (1766-1835), though he graduated in medicine from the University of Pennsylvania in 1787, travelled to London and Edinburgh between 1790 and 1793 to further his medical instruction. By 1802, he was giving private instruction in midwifery at the Pennsylvania Almshouse.¹¹⁷ In 1807, he was appointed to the Pennsylvania Hospital.¹¹⁸

However foundational their contributions, their first efforts were considered somewhat wanting. Shippen's lectures were considered superficial,¹¹⁹ and Samuel Bard's 1807 textbook on midwifery, the first in America, was destined primarily for female midwives (though he did a more

¹¹³ Waller, *Health and Wellness in 19th-Century America*, 79.

¹¹⁴ Charles Caldwell, *Extract from the Eulogium for William Shippen* (Philadelphia, 1818), 12

¹¹⁵ Caldwell, *Extract from the Eulogium for William Shippen*, 13-14.

¹¹⁶ James Thacher, *American Medical Biography: Or, Memoirs of Eminent Physicians Who Have Flourished in America* (Richardson & Lord, 1828), 112; "New York-Presbyterian | The Story of Founder Dr. Samuel Bard," New York-Presbyterian (blog), February 8, 2017, <https://healthmatters.nyp.org/founder-samuel-bard/>.

¹¹⁷ Hugh Lenox Hodge, *A Memoir of Thomas C. James, M. D.* (Philadelphia: College of Physicians of Philadelphia, 1843), 18-19.

¹¹⁸ Hodge, *A Memoir of Thomas C. James, M. D.*, 23.

¹¹⁹ Hodge, *A Lecture Introductory to the Course on Obstetrics and Diseases of Women and Children* (1835), 7.

detailed edition in 1819 for medical students.)¹²⁰ Both of these men also taught other disciplines in medicine, meaning that their attention was divided. T.C. James became the first medical instructor to devote himself to midwifery, becoming professor of obstetrics at the University of Pennsylvania in 1810 beating out William Dewees for the job.¹²¹ Though James was a capable physician, he made few contributions to medical literature. He was also remembered as an unimpressive speaker who blushed during his lectures as he spoke about intimate female matters. Former student Samuel D. Gross recalled that his embarrassment was painful to witness.¹²²

If one wants to understand the medicalization of childbirth in the Early Republic, then one name stands head and shoulders above all the other cited authorities: William Dewees (1768-1841). Though he was mostly self-educated, he did take attend lectures given by William Shippen and earned his degree in medicine in 1806.¹²³ But he began his own lecturing career in 1797 by gathering students in an office at a time when “the science of obstetrics was hardly known in America.”¹²⁴ In contrast to T.C. James, he was an entertaining speaker who expressed himself with brash confidence, dogmatically asserting his views, making an indelible impression upon his captive audience, subjecting his contemporaries and predecessors to scorching criticism and sarcasm.¹²⁵ According to Samuel Gross, his lectures were held after dinner, often, “under the influence of vinous potations.”¹²⁶ As a result of his roughhewn background, during his lectures he

¹²⁰ Bard, *A Compendium of the Theory and Practice of Midwifery* (New York: Collins and Co., 1807), 3; Samuel Bard, *A Compendium of the Theory and Practice of Midwifery*, Fifth edition—enlarged (New-York: Printed and sold by Collins and Co, 1819), ix.

¹²¹ Hodge, *A Memoir of Thomas C. James, M. D.*, 19-20, 22 (fn).

¹²² Samuel David Gross, *Autobiography of Samuel D. Gross, M.D.*, vol. 2 (W.B. Saunders, 1893), 240

¹²³ Hodge, *An Eulogium on William P. Dewees, M.D.*, 8, 9, 20-21.

¹²⁴ Hugh Lenox Hodge, *An Eulogium on William P. Dewees, M.D.: Delivered Before the Medical Students of the University of Pennsylvania, November 5, 1842* (Philadelphia: Merrihew & Thompson, printers, 1842), 12, 18.

¹²⁵ Gross, *Autobiography of Samuel D. Gross, M.D.*, vol. 2, 250; Samuel David Gross, *History of American Medical Literature, from 1776 to the Present Time* (Collins, printer, 1876), 65; Samuel David Gross, *Autobiography of Samuel D. Gross, M.D.*, vol. 1 (G. Barrie, 1887), 166.

¹²⁶ Gross, *Autobiography of Samuel D. Gross, M.D. Vol. 1*, 165.

was prone to “coarse anecdotes and sayings which often disgusted the more cultivated members of his class.”¹²⁷ Unlike his colleague T.C. James, he was not afraid to call things by their proper names. “No blush suffused his cheek in the lecture–room.”¹²⁸

Through the decades, Dewees built up his reputation, which attained its zenith beginning in the 1820s through a series of publications. These publications were probably why he was selected adjunct professor of midwifery by the trustees of the University of Pennsylvania in 1825 when Professor James’ health began to fail, as he was in need of some assistance.¹²⁹ The most famous of these publications by far was his *A Compendious System of Midwifery*, first published in 1824. It underwent more than a dozen editions. His writing style was remembered for being “slovenly and highly inaccurate.”¹³⁰ But as was the case with his lectures, whatever he set down was taken as Gospel in the American medical community.¹³¹ Physician Samuel Gross quipped that for a third of a century, “everybody swore by Dewees, and Dewees swore by himself.”¹³² Dewees’ former student John Wiltbank, himself a lecturer in midwifery, told his class in 1848 that “no medical man in America enjoyed a more extensive celebrity, and none more truly deserved it;” his name was “everywhere inseparably associated with American midwifery.”¹³³ Writing in 1849, Professor Henry Miller recalled that Dewees had “ruled [the] obstetrical realm with an absolute sway.”¹³⁴ Though others had come before him, he really should be considered the founder of American obstetrics because of the influence he exercised over the field.

¹²⁷ Gross, *Autobiography of Samuel D. Gross, M.D. Vol. 1*, 165.

¹²⁸ Gross, *Autobiography of Samuel D. Gross, M.D. Vol.2.*, 247.

¹²⁹ Hodge, *A Memoir of Thomas C. James, M. D.*, 22; Hodge, *The Principles and Practice of Obstetrics*, x.

¹³⁰ Gross, *History of American Medical Literature*, 37.

¹³¹ Gross, *Autobiography of Samuel D. Gross, M.D. Vol.2.*, 247.

¹³² Gross, *History of American Medical Literature*, 37.

¹³³ John Wiltbank, *A Plea for Obstetrics: Introductory Lecture to the Course of Midwifery, in the Medical Department of Pennsylvania College, for the Session of 1848-49* (Philadelphia: King & Baird, 1848), 15.

¹³⁴ Miller, Henry. *A Theoretical and Practical Treatise on Human Parturition*, 1849, 431.

Dewees began his career in obstetrics in the summer of 1789 in the small Pennsylvania town of Abington,¹³⁵ moving to Philadelphia in 1793.¹³⁶ This was about sixty years after the advent of “scientific midwifery” in Britain, which was making a slow progress in the United States at around this time. But Dewees was able to deploy his skill to inspire confidence in his clientele. In his textbook, he told the story of how his use of the forceps made his reputation. In 1794, he was called by a midwife to assist a woman who had been in labour for thirty-six hours. Once he arrived, he ruptured the patient’s amniotic sac and, applied the forceps. The child he delivered began to cry. After the placenta had been expelled, he handed the child over to the midwife who, as he described it, “received it with averted face, and streaming eyes.” When he asked her about her reaction, she said “who with any feeling could help it? A poor child to be alive with its head open!” Befuddled, he asked for more explanation. She replied that she “would not have cared so much, had it been killed outright; but to be wounded and alive, was truly shocking!” He still did not understand, and she began to uncover the baby, supposing him to be hurt. She then examined him and to her astonishment the child was without injury. She explained to Dewees that she would have called him earlier, but she was horrified at the prospect of the child’s head being opened, which had been the uniform practice of the physicians of the area. Dewees concluded “the influence of this case up on many of the midwives of this city, procured me many opportunities of applying the forceps.”¹³⁷ This incident showed how skillful use of the forceps were key then in gaining acceptance for male physicians in the birthing room, and carved out his role as saviour of both woman and child.

¹³⁵ Hodge, *An Eulogium on William P. Dewees, M.D.*, 9.

¹³⁶ Hodge, *An Eulogium on William P. Dewees, M.D.*, 11.

¹³⁷ William Dewees, *A Compendious System of Midwifery* (Carey and Lea, 1832), 288-289.

2. The Physician's Dilemma in Maternal-Fetal Conflict

Dewees was a strong proponent of the *skillful* use of the forceps—the emphasis on skillful because many unskilled physicians wielded them, which caused great damage to their patients. After the rush to apply forceps in the first half of the 18th century, British obstetric authorities began to caution against “meddlesome midwifery,” that is, the tendency to intervene unnecessarily in a delivery because of the impulse to *do* something in order to accelerate the process.¹³⁸ William Smellie and Thomas Denman, while not denying the usefulness of forceps, wanted to limit their application because so many poorly trained doctors were using them to expedite deliveries that could have been resolved on their own. Samuel Bard cited William Smellie as saying that that less than 6 in 1000 women needed instrumental intervention to complete childbirth; he then went on to comment that later calculations put the figure at 4 or 5 in 2000 cases.¹³⁹ Denman wrote a treatise to guide medical students on the proper way to use these instruments in order to limit their usage.¹⁴⁰ He stated as a rule that no instruments should be employed in deliveries, and that his instructions on their application were to be treated as exceptions.¹⁴¹ The necessity of using them was to be determined by the mother's condition only, and that the rule was the forceps were to be applied once the child's head had rested in the same situation for six hours.¹⁴² Dewees decried this conservatism with the forceps. He complained the Denman's rules “reduced the cases proper for their application to so few, and so peculiar, that they are scarcely to be met with.”¹⁴³ He also criticized the notion that only the mother's condition was to determine their use; they were not to

¹³⁸ Leavitt, *Brought to Bed*, 147.

¹³⁹ Bard, *A Compendium of the Theory and Practice of Midwifery*, 141.

¹⁴⁰ Thomas Denman, *Aphorisms on the Application and Use of the Forceps and Vectis: On Preternatural Labours, on Labours Attended with Hemorrhage, and with Convulsions - Digital Collections - National Library of Medicine*, ed. James, Thomas C. and J. Church, 1st American Edition (Philadelphia, 1803), 4.

¹⁴¹ Denman, *Aphorisms*, 13.

¹⁴² Denman, *Aphorisms*, 13-14.

¹⁴³ Dewees, *A Compendious System of Midwifery (1825)*, 303.

be used to save the child. Dewees believed in the idea that the purpose of the forceps was to save *both* mother and child. “Are we to permit the child to perish because there is no ‘circumstance,’ that is, as we understand it, no danger, threatening the mother, to authorise immediate delivery by the forceps, though he has just expressly declared their ‘intention’ is to save the life of both?”¹⁴⁴ The use of forceps came with some risk to the mother: tissue could be caught between the blades and cause injury. Denman and other accoucheurs believed that women should not have to shoulder any extra risk to save the life of the child. Dewees was ready to take that risk to see the most benign outcome for all.

The disagreement on when to use the forceps illustrated one difficulty of the medicalization of childbirth. Prior to the introduction of forceps and the possibility of saving both mother and child, the physician only had to consider the welfare of the mother, the fetus being presumed dead. But now that two beings could be saved, the welfare of both had to be taken into account during childbirth. And this tension between wanting to save the woman and wanting to save the fetus is at the heart of much obstetric literature. In the age of heroic medicine (late 18th century to c. 1830) intervention was all about preserving life at all costs.¹⁴⁵ And even after 1830, when this tendency towards heroic medicine abated, physicians continue to prioritize the preservation and prolongation of life. Medical ethicist Worthington Hooker spoke about the satisfaction from relieving humanity and prolonging life.¹⁴⁶ But sometimes only one could be saved (typically the mother) but this contradicted medicine’s life-affirming ideals.

¹⁴⁴ Dewees, *A Compendious System of Midwifery* (1825), 303.

¹⁴⁵ Martin S. Pernick, “The Calculus of Suffering in Nineteenth-Century Surgery,” *The Hastings Center Report* 13, no. 2 (1983): 28; Alan I. Faden and Virginia A. Sharpe, *Medical Harm: Historical, Conceptual and Ethical Dimensions of Iatrogenic Illness* (Cambridge University Press, 1998), 41.

¹⁴⁶ Worthington Hooker, *Physician and Patient; Or, A Practical View of the Mutual Duties, Relations and Interests of the Medical Profession and the Community* (Baker and Scribner, 1849), 419-420.

This tension between wanting to save life, and not being able to, came to a head in the practice of craniotomy on a live fetus. Forceps made possible the medicalization of childbirth and the potential for maternal-fetal conflict because they could not resolve all cases of obstructed labour, as occasionally the woman's pelvis was too narrow for them to do any good. Now that physicians were already in the birthing room, as opposed to being called by a midwife on an ad hoc basis, they were compelled to act immediately. If they knew that it was physically impossible to extract a fetus through a pelvis, they had no choice but to perform craniotomy to save the mother's life. If the fetus did not die before the emergency was resolved, then they would be compelled to save the patient by performing craniotomy on a live child, as many authorities urged of the importance of performing the operation as soon as possible once it was believed to be necessary.¹⁴⁷ This warning was necessary as sometimes doctors waited a little to see if the fetus would expire spontaneously. Maternal-fetal conflict was always resolved in favour of the mother, with very few exceptions.¹⁴⁸

The prospect of having to perform this operation on a possibly living fetus fueled strongly negative emotions in practitioners. British physician Alexander Hamilton called it a “dreadful”¹⁴⁹ and “horrid”¹⁵⁰ operation. American T.C. James, in describing his application of the operation to

¹⁴⁷ Charles Delucena Meigs, *The Philadelphia Practice of Midwifery* (J. Kay, jun. & brother; Pittsburgh, J. I. Kay & Company, 1838), 338; Hodge, *The Principles and Practice of Obstetrics*, 398.

¹⁴⁸ John Hull described one scenario where the labouring woman is so ill, and so besieged with poverty and disease, that there is no reasonable prospect of quality of life that the life of the fetus should be preferred to hers. John Hull, *Observations on Mr. Simmons's Detection &c &c, ... with a Defence of the Cæsarean Operation, ... a Description of the Female Pelvis, an Examination of Dr. Osborn's Opinions Relative to Embryulcia, and an Account of the Method of Delivery by Embryotomy*, (1799), 136-138.

¹⁴⁹ Alexander Hamilton, *Outlines of the Theory and Practice of Midwifery* (Charles Elliot ... and G.G.J. & J. Robinson, London, 1787), 280.

¹⁵⁰ Hamilton, *Outlines of the Theory and Practice of Midwifery*, 285.

one of his patients called it “a *dernier* though painful *resource*;”¹⁵¹ and in another instance said he performed the operation with “extreme regret.”¹⁵² Dewees called it “repugnant.”¹⁵³

Doctors believed it was both repugnant *and* arduous. As Charles Meigs wrote “The whole difficulty in delivering a child through so contracted a pelvis can scarcely be conceived of by one who has not been engaged in such an operation.” The practitioner would be tormented with the “constant and perplexing apprehension of injuring the mother either with the instruments employed, or with the sharp and ragged edges of the bones which must be withdrawn, and sometimes violently broken off with the sharp tooth of the crotchet.” He would then be taxed with “the most painful and unremitting attention and watchfulness.”¹⁵⁴ And in spite of these efforts to save the woman, one in five patients died in the operation, as they were often depleted from labour by the time it was performed.¹⁵⁵

Given the revulsion this operation inspired, both because it could kill a live fetus and potentially kill or injure a labouring woman, there was always a stigma that hung over the practice. A small number of practitioners opposed all craniotomy, such as British accoucheur William Dease who said: “Where there are certain proofs of the child being alive, the crotchet in my opinion is not justifiable.”¹⁵⁶ These practitioners would wait for the fetus to die before performing

¹⁵¹ Thomas C. James, “Case of Premature Labour Artificially Induced,” *The Eclectic Repertory and Analytical Review* I, no. 1 (1811): 105.

¹⁵² James, “Case of Premature Labour Artificially Induced,” 106.

¹⁵³ Dewees, *A Compendious System of Midwifery* (1825), 16.

¹⁵⁴ George Fox, “Relation of a Case of Labour in a Female with Deformed Pelvis. By George Fox, M.D., of Philadelphia,” *The North American Medical and Surgical Journal* XII, no. 1 (July 1831): 489.

¹⁵⁵ Francis in Denman, *An Introduction to the Practice of Midwifery*, ed. John W. Francis (1829), 706(fn).

¹⁵⁶ William Dease, *Observations in Midwifery: Particularly on the Different Methods of Assisting Women in Tedious and Difficult Labours: To Which Are Added, Observations on the Principal Disorders Incident to Women and Children* (Dublin: J. Williams, L. White, W. Wilson, P. Byrne, and J. Cash, 1783), 166.

craniotomy.¹⁵⁷ None of these practitioners waged any kind of campaign against it, probably knowing how difficult it would be to oppose such a widely accepted practice. Other practitioners did not condemn it but used language that gave it a negative character. For instance, Thomas Cooper lamented that at times “the Practitioner must have Recourse to such Means for the Preservation of the Woman’s Life, as are in themselves disgustful, and in their Consequences, shocking to Humanity.”¹⁵⁸ In the same vein, John Hull called it a “justifiable homicide.”¹⁵⁹ James Barlow described craniotomy as a form of “cruelty inflicted upon the foetus.”¹⁶⁰

The dreadful nature of craniotomy, from both a physical and ethical point of view, weighed on the minds of Anglo-American practitioners. Adding to the pressure—and defensiveness—were criticisms from continental authors, which were transmitted through English-speaking authors. For instance, John Hull informed his readers in a footnote that “the employment of the perforator and crotchet, when the fetus is alive, is by many writers on the continent of Europe considered as criminal.” Then he cited German physician Johan Peter Weidmann (1751-1819) who wrote in Latin “it is a horrible crime to drive hooks and perforations into a living child.”¹⁶¹ In another passage, Hull quoted Jean-Louis Baudelocque with respect to craniotomy on a live child « Rien ne sauroit excuser le Praticien qui se comporteroit ainsi sans avoir la certitude de la mort de l'enfant auparavant. ”¹⁶² British practitioners often cited religious objections—specifically Catholic

¹⁵⁷ Edmund Chapman, *A Treatise on the Improvement of Midwifery: Chiefly with Regard to the Operation. To Which Are Added, Fifty-Seven Cases, Selected from Upwards of Twenty-Seven Years Practice ...* (L. Davis and C. Reymers, 1759), 234-235.

¹⁵⁸ Thomas Cooper, *A Compendium of Midwifery*, 1766, 155-156.

¹⁵⁹ John Hull, *A Defence of the Cesarean Operation* (Manchester: R and W. Dean, 1798), 153.

¹⁶⁰ James Barlow, “On the Advantages and Disadvantages of Inducing Premature Labour, with a View of Superceding Embryulcia, the Section of the Symphysis Pubis, and the Cesarean Operation.,” *The London Medical and Physical Journal* V (January 1801): 41.

¹⁶¹ Hull, *Observations on Mr. Simmons’s Detection*, 107 (fn).

¹⁶² Jean-Louis Baudelocque, *L’Art des accouchements*, § 1973 in Hull, *Observations on Mr. Simmons’s “Detection,”* 129-130 (fn).

objections— to craniotomy. There were no Protestant objections to craniotomy in that period.¹⁶³ Hull cited decisions from the theologians of the Sorbonne and of the College of the House of Navarre, condemning craniotomy.¹⁶⁴ Denman criticized that same decision of the Sorbonne, stating “true religion and the common sense of mankind appear to have nothing contradictory,” and that when it was impossible to save both lives, it was better to save one.¹⁶⁵

In the British optic, the resolution of maternal-fetal conflict in this early period of the medicalization of childbirth came down to a question of comparative value: the woman was deemed more valuable than the fetus. William Smellie wrote “Doubtless it is our duty to save both mother and child, if possible; but, if that is impracticable, to pay our chief regard to the parent.”¹⁶⁶ In the same vein, John Aitken called the mother’s life “comparatively more valuable.”¹⁶⁷ William Cooper was more firm in his opinion. “where the Life of the Mother, of the Infant, or perhaps of both, is immediately at Stake; common Reason and Humanity would prompt us to the Exertion of every probable Means; for the Preservation of either, but where one must be sacrificed, the Question will admit of no Debate.” It is so obvious, that he does not even both to finish the thought.¹⁶⁸

The belief that the woman was more important than the fetus was almost universal among Anglo-American authors; and almost all of them defended recourse to craniotomy as a last resort, as if it were plainly obvious. At times, that affirmation could project a sentiment of “protesting too

¹⁶³ Phillippa Gale, “‘A Shocking Spectacle’: A Medical and Social History of Craniotomy in Nineteenth-Century British Obstetrics” (PhD diss., Macquarie University, 2015), 222.

¹⁶⁴ Hull, *Observations on Mr. Simmons’s Detection*, 130-131 (fn). For the condemnation of the House of Navarre, Hull cites De La Motte, *Traité des Accouchemens*, 528.

¹⁶⁵ Denman, *An Introduction to the Practice of Midwifery*, Vol. 2, (1795), 172-173.

¹⁶⁶ William Smellie, *A Treatise on the Theory and Practice of Midwifery*, 5th, edited. ed., vol. 1, 3 vols. (London: D. Wilson, and T. Durham, 1766), 246.

¹⁶⁷ John Aitken, *Principles of Midwifery; or, Puerperal Medicine*, 2nd ed. (Edinburgh, 1785), 80

¹⁶⁸ Cooper, *A Compendium of Midwifery*, 126-127.

much.” If the mother was so *obviously* more valuable than the fetus, why did the authors even need to reinforce the point?

Perhaps the answer lies in the fact that while the mother was perceived to be more valuable, the child was also highly valued, and the attempt to advocate for both seemed to produce a dichotomy that was difficult to reconcile. The writings of Thomas Denman, the most prominent British obstetrician of late 18th century, illustrate the anxiety and tension inherent in this stance. In his textbook on midwifery, he stated that the patient, i.e. the woman, placed her life in the hands of the obstetrician, and that “every woman is impressed with the opinion, and the opinion is often well founded, that in difficult [labours], her life is to be preserved by the skill and judgment of the practitioner, under whose care she is placed.”¹⁶⁹

Then later he wrote that a woman in labour, particularly when the labour was especially intense, suffered distress that is “beyond all recognition.” The practitioner was supposed to make “frequent allusions to the child” in order to revive her flagging spirits. But as the woman’s energy was depleted, she could convince herself that the child was dead so that she would no longer have to keep up her efforts, and the process could be expedited. Denman warned that “the practitioner in opposition to his own feelings and against the solicitations of those who confide in him, *is often the only advocate for the child.*”¹⁷⁰ [Italics added.] He continued, “But his decision to act in cases in which the life of the child is concerned, must stand upon a better principle than conformity to the inclinations of others.”¹⁷¹

¹⁶⁹ Denman, *An Introduction to the Practice of Midwifery*, vol. 2, (1795), 112.

¹⁷⁰ Denman, *An Introduction to the Practice of Midwifery*, vol. 2, (1795), 113.

¹⁷¹ Denman, *An Introduction to the Practice of Midwifery*, vol. 2, (1795), 113-114.

The practitioner then, was placed in the middle of two competing interests—on the one hand, the woman, who expected the practitioner to act in her interest; on the other hand, a child, who, at times, had only him as an advocate in the face of bystanders pressuring him to do the operation.

Yet this “only advocate for the child,” in spite of his best efforts, could come to realize that the only recourse he has left are “such means as may be dangerous to, or even destructive of the child.”¹⁷² This was an unfortunate necessity. If he tried too strenuously to preserve the life of the child, he could “lose that of the mother also, which certainly is of more value.”¹⁷³ This assistance was to be “rendered as soon as possible.” That was Denman’s terse way of saying craniotomy had to be done sooner rather than later. He opined it would “be absurd to defer their use till the child were dead, and the mother reduced to a state, not of apprehended, but of real danger”; it would be even worse if she survived and was “rendered miserable from the consequences of mischief done before the instruments were used.”¹⁷⁴ If craniotomy were called for, he wrote that he would feel “justified in acting as if the child were already dead,” because it would be the only measure by which the life of the mother can be preserved.¹⁷⁵

So in the same event, the practitioner could go from being the “child’s only advocate” to feeling “justified in acting as if the child were already dead.” Man-midwives made their goal to save both mother and child, but confronted with their inability to achieve that primary goal, they chose one party over the other, creating a contradiction with the primary goal. The child only

¹⁷² Denman, *An Introduction to the Practice of Midwifery*, volume 2, (1795), 114.

¹⁷³ Denman, *An Introduction to the Practice of Midwifery*, volume 2, (1795), 114-115.

¹⁷⁴ Denman, *An Introduction to the Practice of Midwifery*, volume 2, (1795), 132-133.

¹⁷⁵ Denman, *An Introduction to the Practice of Midwifery*, volume 2, (1795), 170.

mattered insofar as that goal was achievable. When the child could not be saved, not only was the child's welfare neglected, but the child was also actively destroyed.

That contradiction weighed on the minds of practitioners. When confronted with a case of obstructed labour, they sometimes waited before performing craniotomy, hoping the fetus would die of natural causes and not by their hand. The tension they felt towards this operation can also be seen in how they often felt the necessity to defend the practice, even in the face of such relatively weak opposition in their midst. The only strident voices against craniotomy tended to be Catholic, and foreign voices at that. The defensiveness of these writers, in spite of this weak opposition, suggests that they understood where their critics were coming from.

3. The Excessive Recourse to Craniotomy in the American Context

Craniotomy was not only a problem considered from the individual physician's point of view, but also as a collective phenomenon. American elite physicians denounced the excessive recourse to craniotomy among their lesser known and less experienced colleagues. Among the better sort of doctors, that is, those who were experienced and university-trained in midwifery, craniotomy was a relatively rare phenomenon. For example, David R. Arnell, of Goshen, New York reported to John W. Francis that as of February 1821, he had performed 4 craniotomies in 1200 cases, or 1 in 300.¹⁷⁶ Another colleague, William Moore of New York City, who, as of June 1821, was involved in 2866 deliveries, 14 of which were craniotomy, for a proportion of 1 in 204 cases.¹⁷⁷ But these cases included both those he attended himself, and those for which he was consulted as an advisor and not just the principal surgeon. Nevertheless, they give a general

¹⁷⁶ Denman, *An Introduction to the Practice of Midwifery*, ed. John W. Francis (1829), 705. (Appendix)

¹⁷⁷ Denman, *An Introduction to the Practice of Midwifery*, ed. John W. Francis (1829), 706. (Appendix)

impression about how infrequent it was meant to be. Denunciations from medical elites suggest that craniotomy was more common among the anonymous practitioners than the ones who had a well-known reputation. Writing in 1807, Samuel Bard lamented “that that dreadful, murdering instrument, the crotchet, is among us in the country, too frequently applied in cases in which, if any instrument at all is necessary.”¹⁷⁸ T.C. James concurred, saying craniotomy “is frequently resorted to very unnecessarily at least, to make use of the mildest term.”¹⁷⁹ John W. Francis wrote that he had witnessed instances where instruments were used where none were needed, by which he implied the use of the perforator. He told the story of Mrs. H, who had been able to deliver several children at full-term with natural deliveries—proof that her pelvis was reasonably well-formed, but she been subjected to a craniotomy.¹⁸⁰ Gunning S. Bedford, in an introductory lecture published in 1833, wished that the mechanism of labour were better understood; too often a simple change in position of the fetus would have prevented a needless craniotomy.¹⁸¹ Dewees also decried the frequency of craniotomy in a footnote: “We are not alone in making a charge against such practitioners, as substitute the crotchet for the forceps.” He related two horror stories where the misuse of craniotomy resulted in children being born alive, with their brains “evacuated.”¹⁸²

It must be remembered that these “low-level” doctors who were denounced by elites were often poorly trained. Many graduated from proprietary medical schools which were known for their low standards of education.¹⁸³ These doctors could also be from non-allopathic traditions:

¹⁷⁸ Bard, *A Compendium of the Theory and Practice of Midwifery*, 9.

¹⁷⁹ T. C. James in John Burns, *The Principles of Midwifery: Including the Diseases of Women and Children*, ed. James, Thomas C., vol. 1, 2 vols. (Philadelphia, Parker, 1823), 32 (fn).

¹⁸⁰ Francis in Denman, *An Introduction to the Practice of Midwifery*, ed. John W. Francis (1829), 697-698 (fn).

¹⁸¹ Gunning S. Bedford, *An Address, Introductory to a Course of Lectures: Delivered in the Hall of the Medical College of South-Carolina, Before the Trustees and Faculty, the Students of Medicine, and the Public Generally, at the Opening of the Session of 1833-4* (Charleston: Printed by J.S. Burges, 1833), 24.

¹⁸² Dewees, *A Compendious System of Midwifery* (1832), 289.

¹⁸³ Warner, *The Therapeutic Perspective*, 38.

their training in obstetrics may have been purely ad hoc. But even newly minted physicians credentialed by reputable medical colleges often had a very summary training in obstetrics. As a result, they often entered the birthing room in relative ignorance, inadequately prepared to deal with life-threatening emergencies.¹⁸⁴ Craniotomy was probably the easiest thing for them to do when childbirth became too complicated. Physician Robert Harris recounted the story of a pair of forceps first put into use by a physician who graduated from the University of Pennsylvania and began his practice in Grand Valley, Chester County Pennsylvania in 1812. At that time, there were two main obstetricians in the region, both over sixty years old, who never used forceps; they “were in the habit of resorting to Smellie's scissors and the crotchet in all cases where the foetal head became obstructed in the pelvis.”¹⁸⁵

While all the major obstetrical writers denounced the excessive recourse to craniotomy, William Dewees, above all, made a point of trying to discourage the practice by inculcating in his readers what he believed to be the proper estimation of the unborn. This he did in a sixteen-page apologetic against the opinions of William Osborn (1736-1808) a late 18th century British accoucheur who was a contemporary of Thomas Denman. Osborn was singular even among British accoucheurs in his *advocacy* of craniotomy regardless of the status of the fetus. In his *Essay on Laborious Parturition*, he asserted that any time a woman had a pelvis under 2 and three-quarter inches at full term, the attendant should default to craniotomy, as the fetal head could not be made to fit through that passage, and it was the safest operation for the mother.¹⁸⁶ Although this criterion was not unusual, he was very *definitive* about the need for craniotomy. He also had a singular

¹⁸⁴ Leavitt, *Brought to Bed*, 42.

¹⁸⁵ Robert P. Harris, “History of a Pair of Obstetrical Forceps Sixty Years Old,” *American Journal of Obstetrics and Diseases of Women and Children* 4 (May 1871): 56.

¹⁸⁶ William Osborn, *An Essay on Laborious Parturition, in Which the Division of the Symphysis Pubis Is Particularly Considered*, 1783, 57.

reason for his choice. He affirmed that the fetus, even one about to be born, had no sensibility before birth; and did not feel pain. This conclusion he drew from making inquiries of women who had undergone the operation—they claimed not to have felt any particular struggle from the fetus at the time of the operation.¹⁸⁷ As the fetus could not feel pain, Osborn concluded, no cruelty could be inflicted on it.¹⁸⁸ Therefore, “the loss which the child sustains by the deprivation of the principle of life, is so extremely small as almost to vanish to nothing.”¹⁸⁹ Not only that, Osborn also claimed that parental affection does not take place before birth. Whatever sadness parents experience over the loss of their child is really a despondency over future loss of “expected pleasure,” not at an actual loss.¹⁹⁰

If Osborn was singular in his advocacy of craniotomy, Dewees was singular in his opposition to it, at least in the English-speaking world. Over the years, Dewees would become more negative towards craniotomy in his successive editions of his textbook, though he never completely renounced it.¹⁹¹ He took issue with several of Osborn’s claims, expending sixteen pages on these and other affirmations that Osborn made. As Dewees was the foremost obstetric writer of his time, his views almost certainly made an impression on his readers.

His defense began with stating that the sensibility of the fetus is irrelevant in judging the necessity of craniotomy—whether a fetus feels anything does not enter into the calculation, because it is the mother who must be saved, regardless of any other consideration.¹⁹² But he strongly rejected any notion that the fetus does not feel pain. Osborn’s reasoning was mistaken

¹⁸⁷ Osborn, *An Essay on Laborious Parturition*, 41-42.

¹⁸⁸ Osborn, *An Essay on Laborious Parturition*, 39.

¹⁸⁹ Osborn, *An Essay on Laborious Parturition*, 42.

¹⁹⁰ Osborn, *An Essay on Laborious Parturition*, 42-43.

¹⁹¹ Face presentations, where the fetus is locked in the pelvis, was one of the few reasons that justified craniotomy. Dewees, *A Compendious System of Midwifery* (1843), 304.

¹⁹² Dewees, *A Compendious System of Midwifery* (1825), 575-576.

because the absence of struggle does not necessarily prove the absence of pain. The uterus may have been so rigidly contracted as to prevent any fetal motion.¹⁹³

He also strongly disputed Osborn's contention that parental affection does not commence before birth: "where Dr. O. learned that parental affection did not exist before birth, is difficult to say; for we must declare, and we do this without fear of contradiction, that the affection of the parent is strong, nay, oftentimes very strong, for the child while in utero." Dewees cited the examples of pregnant animals who become a "ferocious brute," risking death in the defense of their offspring, even though they have no anticipated pleasure of birth. Nevertheless, these animals "display affection and courage, that might put to shame some who should derive delight from offspring." Then Dewees concluded the argument with a cutting remark: "Dr. O. could not have been a father."¹⁹⁴

Dewees continued the argument, citing Dr. Osborn:

Had parental affection commenced at the time of conception, or when the embryo is first formed; and had it continued increasing during gestation, as the foetus advanced in growth, by the time of birth the passion would have been mature, and its influence most powerful, and the mother's sufferings would have been greatly aggravated by the loss of a beloved child.¹⁹⁵

Dewees' exasperation at Osborn almost leaps off the page:

And is this not precisely what happens in a great proportion of cases? Who has not witnessed the joy of a mother at the first evidence she experiences that her child lives within her? Who has not witnessed the growing affection of the parent as gestation advanced? and who has not heard or observed the sorrow when all this maternal solicitude has proved unavailing? What motive governs the mother when she submits to the Caesarean operation, or yields to the section of the pubes? Love, unbounded love, for her unhappy offspring! And who that has witnessed the dreadful operation of the crotchet, cannot bear testimony to the agony of the mother for the loss of her unborn babe?

¹⁹³ Dewees, *A Compendious System of Midwifery* (1825), 580-581.

¹⁹⁴ Dewees, *A Compendious System of Midwifery* (1825), 582.

¹⁹⁵ Osborn, *An Essay on Laborious Parturition*, 43 as cited in Dewees, *A Compendious System of Midwifery* (1825), 582.

Dewees doubled down on his insult: “If these things were denied by Dr. O., *we must repeat, he is no father.*”¹⁹⁶

Osborn would have been long dead (d. 1808) by the time Dewees wrote those insults. But the point was not really to slander his memory. Rather, Dewees was concerned about what would happen if Osborn’s opinion gained any traction in the American medical community. He feared that it would “give rise to serious and often repeated mischief.”¹⁹⁷ As he explained “The crotchet has been but too often wantonly employed, even where the practitioner had not adopted Dr. Osborn's opinion on the subject of foetal sensibility: how much more frequently then, will it be had recourse to, when the wholesome restraint of the contrary opinion is removed?”¹⁹⁸ Dewees then, was trying to get his readers to take the side of the unborn child. “We are persuaded that the exercise of true feeling towards the unborn babe, has more than once saved it from a severe and painful fate.”¹⁹⁹

Osborn believed that the mother should not in the least be made to suffer any risk whatsoever for the sake of her unborn child. And this risk aversion may have influenced his opinions on the fetus. Dewees, on the other hand, had a higher opinion of the fetus, and this may have made him more amenable to the idea of the labouring woman suffering a little risk for the child. Dewees also emphasized the affection the woman had for the child in justifying a potentially risky manoeuvre.

Dewees’ emphasis on the value of the unborn and efforts to reduce the number of craniotomies speak to the repugnance that elite physicians felt towards that operation, as necessary

¹⁹⁶ Dewees, *A Compendious System of Midwifery* (1825), 582-583.

¹⁹⁷ Dewees, *A Compendious System of Midwifery* (1825), 585.

¹⁹⁸ Dewees, *A Compendious System of Midwifery* (1825), 578.

¹⁹⁹ Dewees, *A Compendious System of Midwifery* (1825), 578-579.

as they thought it was—and how much they wanted to avoid it. His efforts did attract congratulations. In the 1832 edition of his manual, he published a letter from Dr. Holcombe who said to him “your zeal in proscribing the use of the crotchet, will doubtless obtain, as it certainly merits, the plaudits of your brethren — at least of the more enlightened portion of them.”²⁰⁰

Other doctors also tried to circumvent recourse to craniotomy on a live fetus by proposing two operations that some hoped could save the woman while still giving the unborn a reasonable expectation of survival: the Caesarean section and induced premature labour.

4. The Caesarean Section

The Caesarean section consisted of an incision into the abdomen and the uterus, through which would be pulled the amniotic sac and fetus. Before the 16th century, this operation was almost never performed; it was considered technically impossible, as hemorrhaging and infection assured the patient’s demise. In 1581, François Rousset published *Traitté nouveau de l’hystérotomotokie ou enfantement caesarien*, in which he set forth the possibility of the mother and child surviving the procedure. He had never performed it, but it was attempted by a few surgeons, with little success. Throughout the 17th and early 18th century it was condemned by the most prominent names in medicine, notably François Mauriceau, considered to be the founder of modern obstetrics. In 1743, J.F. Simon published an essay in which he gathered a number of cases and suggested its prospect of success. J.L. Baudelocque then adopted his views and argued for them in *Recherches et réflexions sur l’opération césarienne*, which appeared in 1798.²⁰¹

²⁰⁰ Dewees, *A Compendious System of Midwifery* (1832), 606.

²⁰¹ For a discussion on the C-section in the Early Modern Period, see Filippini, *Pregnancy, Delivery, Childbirth*, 220-221.

When faced with potential maternal-fetal conflict, where the lives of woman and fetus seemed to oppose one another, craniotomy offered an easy solution, by simply ignoring the conflict and neglecting fetal welfare. But destruction of a human life went against the inclinations of elite physicians, and in any case, they found the operation distasteful. The C-section theoretically presented a more satisfying outcome, but it was also very dangerous and far more complicated. In order to be able to choose the Caesarean, the physician had to be satisfied of a number of conditions. First, he would have to calculate whether the operation was worth the risk. Could the woman survive the operation, after being in labour? Was the fetus still alive? For these difficult emergencies, other doctors were supposed to be consulted, but sometimes that was impossible due to distance or weather conditions. The physician would then have to obtain the consent of the patient and her advocates, which, given the danger of surgery, was not an easy task.²⁰² He would have to do a precision cut on a labouring woman as fast as possible (to preclude shock), with no real anesthesia or infection control, making sure not to injure either the child or the woman; then he had to pull out the child, and sew up the incision as fast as possible so that “air” did not enter the abdominal cavity, as it was perceived to be the source of infection. The potential complications of the C-section could create more problems than it solved. Besides infections, post-partum hemorrhage could also occur, and this was irresolvable.²⁰³ Although a C-section was always a theoretical possibility, it was only realistic for the most skilled of surgeons.²⁰⁴

All these calculations meant that the medical and ethical case for C-sections was never simple. The only time the choice for C-sections was simple was in cases where the pelvises were so contracted that craniotomy was impossible— usually under two inches diameter. But that

²⁰² Jacqueline H. Wolf, *Cesarean Section: An American History of Risk, Technology, and Consequence* (Baltimore: Johns Hopkins University Press, 2018), 23.

²⁰³ Wolf, *Cesarean Section*, 22.

²⁰⁴ Gale, “A Shocking Spectacle,” 320.

deformity was so rare, it almost never happened. Even physicians with extensive experience might never witness a Caesarean section, let alone perform one.²⁰⁵ They only met with contractions that allowed for craniotomy, and therefore that is what they chose.

The calculations made over the operation were also complicated by the fact that among Anglo-American obstetrics, it had a very poor track record of saving lives. The first recorded case of physician-performed C-section in Britain where the woman survived was in 1793.²⁰⁶ The first medical account of a successful C-section performed in the United States was published in 1827. It had been done by John L. Richmond in a small town in southeastern Ohio.²⁰⁷ The case garnered little attention.²⁰⁸ John W. Francis remarked in 1829 that almost every attempt at the operation, save one, had proven fatal.²⁰⁹ This terrible track record prompted William Osborn to warn his students that recourse to C-sections led women to “inevitable destruction.”²¹⁰ The statistics for the C-section did not improve much with time. By 1842, of the 27 recorded cases in Britain, only two women had survived.²¹¹ By 1880, there had been 131 cases, and 108 women had died.²¹² And of course, without their mothers to breastfeed these children, the prognosis for the survival of the children was quite grim.

²⁰⁵ Wolf, *Cesarean Section*, 20.

²⁰⁶ McLaren, *Reproductive Rituals*, 125.

²⁰⁷ Wolf, *Cesarean Section*, 20. A doctor name François Prévost had been known to perform several in Louisiana, but only on enslaved women. but this would not come to light until later. See Waller, *Health and Wellness in 19th-Century America*, 159-160.

²⁰⁸ Wolf, *Cesarean Section*, 19.

²⁰⁹ Francis in Denman, *An Introduction to the Practice of Midwifery*, ed. John W. Francis (1829), 498 (fn).

²¹⁰ William Osborn, *Essays on the Practice of Midwifery in Natural and Difficult Labours* (Cadell, 1792), 194.

²¹¹ Irvine Loudon, *Death in Childbirth: An International Study of Maternal Care and Maternal Mortality 1800-1950*, Illustrated edition (Oxford: Clarendon Press, 1992), 135 as cited in Filippini, *Pregnancy, Delivery, Childbirth*, 223.

²¹² J. Paul Pundel, *Histoire de l'opération césarienne: étude historique de la césarienne dans la médecine, l'art et la littérature, les religions et la législation : la prodigieuse évolution de la césarienne depuis l'Antiquité jusqu'aux temps modernes* (Bruxelles: Presses académiques européennes, 1969), 303 as cited in Filippini, *Pregnancy, Delivery, Childbirth*, 223.

In spite of this dismal statistics, the Caesarean had its Anglo-American partisans. John Hull famously engaged in a literary duel with William Simmons in its defense in the last years of the 18th century, although his purpose was not to supersede craniotomy, but merely to set the record straight on the true nature and safety of the practice.²¹³ British obstetrician John Burns wrote that if there were any obstacles to natural childbirth, he would choose the Caesarean without hesitation.²¹⁴ Among renown American practitioners of obstetrics, Dewees was probably the most prominent advocate of the C-section, stating the he preferred it to the crotchet.²¹⁵ But he never completely renounced craniotomy on a living child, considering it allowable in a few specific instances, such as when the fetal head was locked between the pelvic bones; in this case the C-section would be pointless as the fetus could not be extracted in any case.²¹⁶ Gunning S. Bedford was another American obstetrician known to favour it.²¹⁷ As Hugh Hodge commented, these endorsements of this operation rest on the premise that the woman was “bound to suffer an additional risk for the chance of preserving the life of her unborn infant.”²¹⁸

Advocates of the C-section looked to the Continent—especially France—for signs of success. As Dewees noted “the attempt to save both mother and child is sometimes crowned with the happiest result.”²¹⁹ John W. Francis, citing Baudelocque, reported that out of 230 cases performed on the continent, 139 women recovered²²⁰—a sixty per cent survival rate in the early 19th century. Physician Robert Harris had gathered information on 85 cases; 44 of the women had

²¹³ John Hull, *Observations on Mr. Simmons's Detection*, 129-130.

²¹⁴ John Burns, *The Principles of Midwifery: Including the Diseases of Women and Children VOL. I*, ed. Thomas C. James, vol. 1, 2 vols. (Philadelphia, Parker, 1817), 216.

²¹⁵ Dewees, *A Compendious System of Midwifery* (1825), 593; Dewees, *A Compendious System of Midwifery* (1843), 550.

²¹⁶ Dewees, *A Compendious System of Midwifery* (1825), 332.

²¹⁷ Gunning S. Bedford, *Clinical Lectures on the Diseases of Women and Children* (S.S. & W. Wood, 1855), 469(fn.)

²¹⁸ Hodge, *The Principles and Practice of Obstetrics*, 283.

²¹⁹ Dewees, *A Compendious System of Midwifery* (1825), 595.

²²⁰ Francis in Denman, *An Introduction to the Practice of Midwifery*, ed. John W. Francis (1829), 498(fn).

died, for a death rate of 52 per cent.²²¹ Those who defended the Caesarean operation pointed to the fact that the French were more willing to do the operation, and as a result, they were more prompt in performing it.²²² This meant that the woman was less depleted, and therefore was better able to take the shock of the incision.

In practice, the operation had probably killed more than reported, because whereas every positive outcome would be reported, not every death would be. Some French doctors reported a survival rate as low as thirty per cent.²²³ Moreover, even if the woman survived the operation, there was no report on complications or the patient's quality of life after treatment. The fact that the C-section gave both mother and child a chance at life made it very appealing to its advocates. But these declarations in favour of the C-section were almost universally theoretical. Almost nobody performed this operation in the nineteenth century.²²⁴ In comparison, the survival rate for craniotomy for women was 80 per cent.²²⁵

Not everyone agreed with the idea that the C-section should be proposed to save the child. Charles Meigs opined that the "Cesarian operation is never to be performed for the sake of the child. If a man performs the operation for the sake of the child's safety, and the mother perishes, who might have been saved by some other method, I see not how his conscience can ever recover its composure and complacency."²²⁶ He doubled down on his opinion a few years later in his midwifery manual, adding "I am not insensible of the great satisfaction to be enjoyed by that

²²¹ Wolf, *Cesarean Section*, 29.

²²² Dewees, *A Compendious System of Midwifery* (1843), 551; Francis in Denman, *An Introduction to the Practice of Midwifery*, ed. John W. Francis (1829), 498(fn).

²²³ P. Cazeaux, E. Villeneuve, and P.N. Gerdy, "Rapport : Observation d'avortement provoqué pour la troisième fois avec succès, suivie de quelques réflexions relatives à cette opération, par M. LENOIR, chirurgien de l'hôpital Necker.," *Bulletin de l'académie royale de médecine*, 10 février, 1852, 369.

²²⁴ Wolf, *Cesarean Section*, 20.

²²⁵ Tucker, *Elements of the Principles and Practice of Midwifery*, 380.

²²⁶ Meigs, *Females and Their Diseases*, 313.

surgeon who, under the distressing duress which should alone compel him to subject a living woman to the Cæsarian section, is rewarded with the happiness of rescuing both the child and its parent from the jaws of an otherwise inevitable grave. I hold that no man has a right to subject a living, breathing, human creature to so great a hazard as that attending the Cæsarian section, from views relating to any other interests than those of his patient.”²²⁷ Notwithstanding his opposition to the C-section, he did publish the case of Mrs. R, an Irish-born woman, four-and-a-half feet in stature who had suffered from rickets as a child and whose pelvis was smaller than the two inches required to perform craniotomy. Meigs’ manual gave an account of two C-sections that were performed on her to effectuate delivery, probably the first time a C-section was successfully performed on the same patient in American history.²²⁸ The author of the article who was quoted at length—George Fox—remarked that after the second operation the “patient had a better ‘getting up’ than many females after an ordinary accouchement.”²²⁹ Meigs may have opposed C-sections to by-pass craniotomy, but he was happy to publish information that would give encouragement to those who might consider C-section in desperate situations.

But antipathy towards the C-section did not arise purely from medical considerations. There were also cultural factors at play. The C-section also had a role to play in the Catholic spiritual life, as it was sometimes performed to allow the fetus to be baptized. To British physicians, it symbolized what they perceived to be an excessive concern for the unborn.

According to Tridentine theology, children who died before baptism would be deprived of the Beatific Vision, and instead be consigned to limbo. While limbo was not an unhappy place, it

²²⁷ Meigs, *Obstetrics*, 562-563.

²²⁸ Meigs, *Obstetrics*, 570ff.

²²⁹ Meigs, *Obstetrics*, 591.

represented a failure to reach humanity's supernatural destiny of being in the presence of God, and was considered a heart-rending tragedy.²³⁰

Every allowance was made to assure that a child in danger of death was baptized. Midwives and physicians in Catholic settings would be expected to know how to perform emergency baptisms in childbirth, including how to baptize in utero after labour had begun.²³¹ So eager was the Church's desire for the baptism of children in danger of death that any person—even an atheist—was permitted to baptize, so long as they intended to make the child a member of the Church. American Horatio Robinson Storer, a Unitarian, affirmed having performed intra-uterine baptisms for his Catholic patients. He recommended this practice to his medical colleagues, in the face of apparent resistance, so that Catholic patients would be more open to instrumental intervention.²³²

During the Enlightenment, the effort to spare dying babies a heavenless afterlife went even further. Now that medicine had entered the birthing room, it was perfectly feasible for a C-section to be performed on a mother who had died in labour in order to save the baby. The baby would thereby be rescued, or at least live long enough to receive baptism. The most famous proponent of this procedure was Sicilian Jesuit Francesco-Emmanuele Cangiama, who in 1745 published *Sacred Embryology*, in which he sketched out how this could be accomplished and who should do it. He even described how to do the incision. Later, the book would be translated into French by l'Abbé Dinouart as *l'Abrégé d'embryologie sacrée* in 1762.²³³ It was probably through the French version that Anglo-American readers would have heard of this practice.

²³⁰ Filippini, *Pregnancy, Delivery, Childbirth*, 138-139.

²³¹ See for example Barry, *Medico-Christian Embryology*, 45.

²³² Storer, *On Criminal Abortion in America*, 40.

²³³ Full name Joseph-Antoine-Toussaint Dinouart.

The lengths to which Catholics—especially the French—went to save the unborn from eternal life wandering in limbo was unsettling to English-speaking physicians. They feared that in the rush to baptize the fetus, incisions would be made on women who only appeared to be dead—the signs of death of being equivocal—and that the operation would then inadvertently hasten their death. The C-section symbolized how, in their Protestant eyes, Catholics preferred the unborn to the woman, and how they were ready to use this lethal operation in order to comply with their theological heresies that, from their perspective, were born in darkness and superstition.²³⁴ The controversialist John Blunt channelled this popular idea when he stated “It is lamentable, that in those parts of the continent where the superstitious prejudices of the Roman Catholic religion have prevailed, many mothers have been destroyed (by this operation) to save the child's life; when the destruction of the child might have saved the mother. It was done under the idea, that all infants dying unbaptized were damned.”²³⁵ Obstetrician Fielding Ould, who practiced in Dublin, also denounced the C-section, claiming that the French authors who promoted it believed that the mother should die rather than lose a child.²³⁶ He called the operation “detestable, barbarous, illegal Piece of Inhumanity.”²³⁷

Thus, both the medical track record and the cultural symbolism of the C-section led to its being marginalized among Anglo-American physicians, even though, when successful, it satisfied the obstetric prime directive of saving both mother and child. It may have had its handful of advocates, but as Thomas Denman remarked, “such writers have not met with general approbation” but he complained that “their influence has been too great.”²³⁸

²³⁴ McLaren, *Reproductive Rituals*, 127.

²³⁵ Blunt, *Man-Midwifery Dissected*, 61.

²³⁶ Ould, *A Treatise of Midwifery*, 198.

²³⁷ Ould, *A Treatise of Midwifery*, 199.

²³⁸ Denman, *An Introduction to the Practice of Midwifery*, ed. John W. Francis (1829), 490.

And yet, the C-section was never entirely abandoned as a theoretical possibility. This was because craniotomy was a strongly detested operation, that caused a great deal of stress. When a married woman had a contracted pelvis, unless she lived a life of celibacy, she could expect to undergo a number of full-term pregnancies. A physician could expect to meet with this same woman and his distress would then be compounded. Thomas Denman had experienced this very situation.²³⁹ He asked his reader to suppose that a woman had a contracted pelvis; and she had several pregnancies ending in the use of the crotchet. The first, one, or two, or three pregnancies, he assumed it would be normal to perform craniotomy in order to save her, even at the expense of the children's lives. He then wondered aloud whether it was ethical to perform craniotomy on such a woman countless time, knowing that she cannot bear living children, or whether "after many trials, she ought not to submit to the Cesarean operation, as the means of preserving the child at the risk of her own life." He never really answered the question, but only commented "this thing ought to be considered."²⁴⁰ It seemed that the Anglo-American preference of woman over the fetus had its limits. And judging from the fact that this proposal was re-published elsewhere, it suggests that other physicians were inclined to at least sympathize, if not agree, with him.²⁴¹ The goal, after all, was to save both mother *and* child. Attending to the same patient on multiple occasions, knowing that she cannot bear living children, then having recourse to the crotchet, defeated that purpose. Craniotomy was supposed to be an exceptional operation, a circumstantial response to an emergency, not a *carte blanche* to have a limitless number of pregnancies and children destroyed. Denman reported that he felt a sense of "melancholy" at this situation because "such women have usually a wonderful aptitude to conceive".²⁴² One might also wonder whether Denman was also

²³⁹ Denman, *An Introduction to the Practice of Midwifery*, ed. John W. Francis (1829), 479.

²⁴⁰ Denman, *An Introduction to the Practice of Midwifery*, ed. John W. Francis (1829), 494-495.

²⁴¹ Dewees, *A Compendious System of Midwifery* (1843), 552; Storer, *On Criminal Abortion in America*, 65.

²⁴² Denman, *An Introduction to the Practice of Midwifery*, volume 2, (1795), 213-214.

putting forward this proposal in the name of protecting the mental health of the physician, and not only to save the child's life. Evacuating a fetal cranium on a child suspected to be alive was probably horrendous and even traumatic.

5. Induced Premature Labour

So far, the solutions for maternal-fetal conflict have focused on operations that either meant death to the fetus—through craniotomy—or death to the woman—through the Caesarean section. Another method was proposed that had the potential to save both lives in cases of contracted pelvises: induced premature labour.

When a physician confirmed that a woman had a contracted pelvis, he would advise the woman to visit him early in her next pregnancy. He could then assess how far gone she was so that he could induce labour at period of gestation when the fetus would be smaller and therefore better able to clear the pelvic threshold. The earliest most physicians would allow for this procedure was at seven completed months of pregnancy. Any earlier, and the child was not expected to survive. The principal method of inducing premature labour was to rupture the amniotic sac.²⁴³ This could be accomplished with either a fingernail, a stiletto or any pointy instrument. It should be borne in mind that labour did not necessarily occur soon after. Denman commented that the length of time it took for labour to begin could vary widely; it could start in twelve hours, or it could start in fifteen days.²⁴⁴

²⁴³ Denman, *An Introduction to the Practice of Midwifery*, vol. 2, (1795), 220.

²⁴⁴ Denman, *An Introduction to the Practice of Midwifery*, vol. 2, (1795), 220. Other methods would be invented, for example, Dr. Alexander Hamilton proposed the separation of the decidua from the cervix in 1795. For this and other methods developed see Horatio Robinson Storer and James Young Simpson, "On the Induction of Premature Labor - Modes of Effecting It.," *Boston Medical and Surgical Journal* LII, no. 17 (May 31, 1855): 329–35.

The first medically approved attempts at induced premature labour occurred in 1756 in London. The city's eminent man-midwives gathered together in a special meeting to discuss this proposed solution to the problem of obstructed labour in order to circumvent recourse to craniotomy.²⁴⁵ The proposal met with approval. Soon after, George Macaulay, the husband of Catharine Macaulay, the 18th century historian and feminist, became the first obstetrician to resort to this method. The operation was a success.²⁴⁶

Induced premature labour came to be one of the distinctive marks of Anglo-American obstetrics, and its practitioners in the 18th and 19th centuries were ever grateful for this option. Hugh Hodge, writing in 1864, declared “We are exceedingly indebted, in modern times, to the English accoucheurs, for suggesting the idea.”²⁴⁷ Gunning S. Bedford described premature labour as “one of the most precious boons which science has yet bequeathed to suffering woman.”²⁴⁸

Although induced premature labour was considered a valuable resource, it nevertheless presented with two major hazards.

The first major difficulty was that the reality of achieving the goal of saving both mother and child was actually more challenging in practice than in theory. British accoucheur James Barlow pointed out some of the problems in an article in 1801. Calculating the length of gestation could prove difficult because the date of conception was often unknown. Without an accurate date of conception, it would be difficult to estimate the size of the fetal head. Arriving at a date for the operation could be a matter of guesswork. This guesswork carried the risk of delivering a child

²⁴⁵ Denman, *An Introduction to the Practice of Midwifery* (1829), ed. John W. Francis, 479.

²⁴⁶ James Wyatt Cook and Barbara Collier Cook, “Man-Midwife, Male Feminist: The Life and Times of George Macaulay, M.D., Ph.D. (1716-1766),” *SPO Scholarly Monograph Series*, 2006, 2; Denman, *An Introduction to the Practice of Midwifery*, vol. 2 (1795), 215.

²⁴⁷ Hodge, *The Principles and Practice of Obstetrics*, 289.

²⁴⁸ Bedford, *The Principles and Practice of Obstetrics*, 665.

completely unable to survive, or who would be so premature that they would develop all kinds of physical complications that would hamper quality of life and may even lead to early death, thereby defeating the purpose of the operation.²⁴⁹ There was also the risk that the labour would be induced too late, and craniotomy would be required.

In his paper on premature delivery, British physician Samuel Merriman (1771-1852) named three prominent French critiques of the practice: Pierre Sue, Jean-Louis Baudelocque and C.M. Gardien.²⁵⁰ They raised a number of objections, but their main criticism was that the process of premature labour in effect did not give the child a strong chance at survival, thereby effectively amounting to an abortion. For instance, Baudelocque pointed out that an artificially induced labour would take place while the cervix was still very rigid. He stated that only artificially produced contractions could overcome that rigidity, and they would only occur through a constant mechanical irritation. When the cervix was fully dilated, the membranes could be pierced, but the child, premature and relatively feeble, would be deprived the amniotic fluid that provided some protection from the power of the contractions. As a result, the labour produced by premature induction was often long, tedious and did not necessarily end in live birth, which defeated the purpose of the exercise.²⁵¹ It was estimated that only half the children who were delivered early survived childbirth.²⁵² This might have seemed like an atrocious slaughter to the French, who probably foresaw the use of C-sections to save both mother and child at term. However, to Anglo-American physicians, the fifty per cent survival rate was probably a stellar record, given that, from

²⁴⁹ Barlow, "On the Advantages and Disadvantages of Inducing Premature Labour," 47.

²⁵⁰ Samuel Merriman, "Cases of Premature Labour," 131. Merriman calls Gardien "Gardieu." I tracked down Gardien's quotation that Merriman cited to Volume 3 of the *Traité complet des accouchemens*, p. 17 in the 1816 edition (cited as p. 18 in Merriman's article) to make sure that I had the correct author. I do not understand why such a typo was made or why it was not corrected. This typo appears elsewhere in other publications.

²⁵¹ Baudelocque, *An Abridgment of Mr. Heath's Translation of Baudelocque's Midwifery*, 524.

²⁵² Hodge, *The Principles and Practice of Obstetrics*, 293.

their point of view, the totality of these children would have been sacrificed to the crotchet had they not been delivered prematurely. Premature labour also had the distinct advantage of avoiding the hazards of incisions from sharp implements.

The second drawback to induced premature labour was that it resembled induced abortion. Practitioners were keen to preserve the secrecy of their methods. The details of the first premature labour in 1756 would have merited a journal article, but it was never written. Only decades later did Thomas Denman publicize the account for the first time in his textbook on midwifery. He reported receiving the information orally from Dr. Christopher Kelly. Denman tersely remarked that “some have doubted the morality of the practice.”²⁵³ As mentioned above, French writers expressed skepticism that the method would actually achieve its stated goals. But there was also the problem that it would be abused. Writing in 1801, James Barlow stated that “if ever the method should be divulged amongst a certain class of individuals, it will soon become too generally known, and the abortive attempts will be innumerable; this will doubtless defeat the intention of the operation, and lead to a crime of a most cruel and inhuman nature.”²⁵⁴ For this reason, Denman would not publish the method of accomplishing the act; neither would Dewees, (although others did.)²⁵⁵ By 1820, Samuel Merriman confirmed that Barlow’s fears had come true, writing “It ought not to be concealed, that it has been had recourse to, by wicked and unprincipled persons, for the atrocious and criminal purpose of procuring abortion: and some times has been unnecessarily adopted by the ignorant or incautious.”²⁵⁶

²⁵³ Denman, *An Introduction to the Practice of Midwifery*, vol.2 (1795), 215.

²⁵⁴ Barlow, “On the Advantages and Disadvantages of Inducing Premature Labour,” 53.

²⁵⁵ Denman, *An Introduction to the Practice of Midwifery*, vol.2 (1795), 220; Dewees, *A Compendious System of Midwifery* (1825), 610; Hamilton, *Outlines of the Theory and Practice of Midwifery*, 158; James, “Case of Premature Labour Artificially Induced,” 106-107.

²⁵⁶ Samuel Merriman, *A Synopsis of the Various Kinds of Difficult Parturition with Practical Remarks on the Management of Labours*, 3rd. (London, 1820), 172-173.

To limit recourse to premature delivery, and its potential abuse, Merriman devised a series of rules for determining whether this operation was appropriate, which was reproduced elsewhere.²⁵⁷ Among those rules was that premature labour should not be induced when a woman was labouring under a disease, otherwise the woman might be too weak to effectuate delivery. Another rule was that it should only be performed after seven completed months of pregnancy.²⁵⁸ The whole point was to give the child a chance at life.

The implied exception was if the child's life was going to be lost *anyway*.²⁵⁹ Anglo-American practitioners used premature labour in three circumstances to save the woman's life. The first, was severe hyperemesis gravidarum, where the pregnant woman vomits throughout the pregnancy, and cannot keep down any food, becoming so emaciated that she could die. Premature labour for this condition was first proposed by Thomas Denman.²⁶⁰ The second circumstance where premature labour was proposed was obstetric convulsions, what would be today considered "eclampsia." Convulsions were among the most feared symptoms, because their etiology was unknown and they were considered highly untreatable.²⁶¹ They usually occurred during labour, but they could occur before as well. A third scenario was obstetric severe hemorrhage, where only delivery could stop the flooding. What these scenarios had in common was that they tended to occur in the second half of the pregnancy, often when the fetus was past the point of viability. There was also a sense that without premature delivery, the fetus was going to be lost in any case, therefore they considered inducing labour much less morally problematic.

²⁵⁷ For example, Francis in Denman, *An Introduction to the Practice of Midwifery*, ed. John W. Francis (1829), 583(fn); Dewees, *A Compendious System of Midwifery* (1843), 572.

²⁵⁸ Merriman, "Cases of Premature Labour," 142-145.

²⁵⁹ Merriman, "Cases of Premature Labour," 141.

²⁶⁰ Denman, *An Introduction to the Practice of Midwifery*. ed. John W. Francis (1829), 483.

²⁶¹ Amalie M. Kass, "'Called to Her at Three O'Clock AM': Obstetrical Practice in Physician Case Notes," in *Midwifery Theory and Practice* (Routledge, 2018), 262.

Another means of premature delivery that was singular in its requirements and performance was the case of retroverted uterus. A uterus that is positioned correctly leans forward (i.e., anterior). A retroverted uterus is one that has fallen backwards (i.e., posterior). A retroverted uterus containing a fetus will squeeze the bladder and the rectum. As the pregnancy progresses, the weight of the fetus will gradually make urination and defecation difficult and then impossible. The woman's bladder, being overloaded with urine, might then rupture, cause untold suffering, and develop an infection.²⁶² Moreover, as the weight of fetus pushes the uterus backwards, it is no longer positioned on top of the cervix. The uterus reclines so far back that a natural blockage is created, and the fetus has no natural means of escape when labour begins. If there was no surgical intervention, the mother risked dying undelivered.

If caught early in the pregnancy—before the fourth month—it was possible, though tedious, to reposition the uterus.²⁶³ Occasionally, such attempts met with failure. Abortion, by piercing the membranes through the vagina or rectum, would be the solution.²⁶⁴ This indication was unique in that it had to be accomplished as soon as possible; it could not wait until the fetus was viable. But this particular condition was very rare. First it had to be detected, and then it could be remediated without surgical intervention and only when the gestation was quite advanced that it became pressing to resolve the issue.

Nevertheless, it created the precedent. Sacrificing a pre-viable fetus to save a woman's life was a permissible option even when the woman's death was not imminent. The precedent, combined with the methods of premature delivery, allowed for an expansion of indications for

²⁶² William Dewees, "Observations on the Retroversion of the Uterus," in *Essays on Various Subjects Connected with Midwifery* (Philadelphia: H.C. Carey & I. Lea, 1823), 262.

²⁶³ Hamilton, *Outlines of the Theory and Practice of Midwifery*, 157-158. Dewees, *A Compendious System of Midwifery* (1825), 82ff.

²⁶⁴ Dewees, "Observations on the Retroversion of the Uterus," 287.

which it was allowable. This would lay the groundwork for modern medicalized abortion techniques.

6. Conclusion

In this chapter, we explored the early years of the medicalization of childbirth in Britain and by extension the United States. Medicalization occurred through the application of the forceps in cases of obstructed labour after the 1730s in Britain, and after the 1760s in America. When midwives were the principal attendants in childbirth, and a pregnant woman suffered from obstructed labour, a male surgeon was called in to perform craniotomy to remove the fetus and save her life. The use of sharp instruments during the operation held the serious risk of injury from sharp instruments, and neither physician, patient, nor bystanders wanted the experience of dealing with a mutilated fetus. The forceps improved this outcome for the woman.

But improvement to the woman's outcome was accompanied by improvement to the child's outcome. As physicians were present earlier and earlier in the delivery process, to the point that they became the primary attendant, they were able to intervene early enough and save fetuses in cases where the obstruction was not so severe.

The ability to save both woman and fetus is at the crux of the maternal-fetal conflict; because whereas before the advent of forceps, physicians only tried to save one party, now that they could save both, they felt obligated to do so, creating an "obstetric prime directive." They tried to direct their actions towards that particular goal as much as possible.

But at times it was not possible. Physicians realized that some pelvic deformities were so severe that the forceps were useless. And, as they were now present from soon after the onset of labour, they came to realize that they would have to perform craniotomy on a live fetus if they wanted to save the mother. Maternal-fetal conflict was resolved in favour of the labouring woman because she was seen as the more valuable partner in the maternal-fetal dyad.

Anglo-American physicians went to some lengths to defend their choices to themselves, to their medical students, and to their foreign critics. They understood the awfulness of the practice of collapsing the skull of a live fetus, even if it was to save their patient. It went against their personal instincts, and only the cold logic of “necessity” made them do it.

They also disapproved of the way craniotomy was practice on a collective scale. Too often, it was carried out by poorly trained and inexperienced medical doctors as the simplest way to resolve obstructed labour. Application of the forceps took some skill, practice and a knowledge of the mechanics of parturition, whereas craniotomy did not.

While Anglo-American physicians never completely renounced the practice of craniotomy on a live fetus, they made some effort to discourage the practice. William Dewees, the most prominent obstetrician of his age, tried to instill a certain sympathy for the unborn by denouncing the opinions of William Osborn, who denied any sensibility in the unborn, and denied that parents had any feelings for the unborn before birth. Dewees feared that should that sympathy be wanting, future doctors would be too ready to practice craniotomy instead of thinking of fetal welfare.

Besides instilling a feeling for the unborn, physicians also tried to think of mechanical solutions to the problem of having to perform craniotomy on a live fetus. The first proposal was the Caesarean section. But it never caught on, as it was too difficult for the average doctor to perform, and it never had a good track record among Anglo-American practitioners. Most of the patients who underwent this operation in English-speaking countries died. It was also a stigmatized practice because of its Catholic associations. America and Britain, being Protestant-based societies, looked askance at the use of post-mortem C-sections to perform fetal baptisms. Some imagined that Catholic doctors finished off labouring women who were not quite dead in order to be able to baptize a fetus. But in spite of all these problems with the C-section—its poor track

record, its physical complexity, and its stigmatized associations, it continued to be proposed because the medical community did long for alternatives to having to deliver by the crotchet. The C-section was proposed more with the *hope* it could somehow be useful, than the *expectation* it would be.

The other operation, which met with more success, was induced premature labour, consisting of inducing delivery at an earlier period of gestation so that a small fetus would be able to cross the pelvic threshold. First practiced in 1756, it became a distinctive feature of Anglo-American obstetrics, celebrated by a number of practitioners. It was usually done on a repeat patient who had undergone craniotomy in a previous delivery and was known to have a deformed pelvis. It could be done as early as seven months into the pregnancy, considered the threshold of viability.

But this procedure also had its problems, many of them having to do with the fact that the process of inducing premature labour could lead to abortion—either intentionally or unintentionally. As James Barlow and other French critics pointed out, any miscalculation regarding the conception date could result in expelling a fetus that is too weak to survive or too big to pass through the pelvis, thereby defeating the purpose of the operation. This, in effect, would have the same effect as an abortion. It was also pointed out by Baudelocque that early delivery could be long and tedious, as the cervix was unnaturally dilated and often rigid. When the amniotic sac was broken, the fragile fetus would not be protected from the strong contractions needed to overcome this obstacle. Barlow and Merriman were also concerned about the knowledge of the methods becoming known to the public and leading to widespread clandestine abortions. Merriman devised a set of rules to avoid these problems, but these were only guidelines.

The premature termination of labour began to be widely used as a therapeutic means of solving obstetric emergencies, such as hemorrhaging, convulsions or hyperemesis gravidarum. These were scenarios in which the fetus was going to be lost whether or not delivery was undertaken, and they often occurred in the second half of the pregnancy, when it was thought the fetus might have a chance at survival. The only scenario where early abortion might be produced was in a case of retroversion of the uterus, as a last resort. The combination of these precedents with the methods of induced premature labour set the stage for future use of abortion as a therapeutic means for other medical problems.

Nevertheless, physicians strongly preferred premature delivery because it offered a chance at life for the fetus, was much safer for the mother, and did not involve sharp implements or mutilated fetal corpses. All these points in its favour made it one of the highly appreciated developments in the history of obstetric medicine.

Even if Anglo-American physicians believed that a labouring woman could be saved even at the expense of the life of her fetus, they were also eager to avoid this outcome, and they directed their efforts towards that end: by instilling a concern for the unborn, and by proposing theoretical and practical alternatives to having to perform a craniotomy on a live fetus.

As we will see in the following chapters, the concern for the unborn would extend to all stages of pregnancy, not just the final months.

Chapter 3: The Influence of the New Embryology and Vitalism on Discourses Regarding the Fetus

1. Introduction

The first chapter explored the medicalization of childbirth primarily in the Anglo-American world in the 18th and early 19th century and how this led to a concern for the unborn in the latter stages of gestation. Until the 1820s, concern for the unborn in the first weeks of pregnancy was minimal. The topic of prenatal development instilled a sense of wonder in English-speaking physicians, and abortion was denounced, but on the whole, the topic of prenatal development was irrelevant to obstetrics.

Attitudes toward the unborn and embryology would undergo a major shift after 1830, in part as a result of what has been termed the “French impulse” in American medicine, or the adoption of the ideas and methods of the Paris Clinical School.²⁶⁵ The term “Paris Clinical School” broadly describes a system of medical institutions, clinical techniques and educational practices that characterized French medicine in the first half of the nineteenth century.²⁶⁶ So pervasive was its influence in decades leading up to the Civil War that it is known “the French period” in American Medicine.²⁶⁷

The Paris Clinical School adopted a strongly empirical approach to medicine, as opposed to the more rationalistic methods of the previous generations. Instead of relying on the patients to describe their symptoms to come to a diagnosis, the doctor visited patients at their bedside, and personally gathered data to determine their condition. In the event of patient death, an autopsy would be performed. Thousands of corpses were examined every year, making possible the detection of patterns in diseases. Medical information no longer relied solely on anecdotal evidence; information drawn from many dozens or hundreds of cases could give a more

²⁶⁵ Discussed at length in Warner, *Against the Spirit of System: The French Impulse in Nineteenth-Century American Medicine*.

²⁶⁶ Warner, *Against the Spirit of System*, 3.

²⁶⁷ Warner, *Against the Spirit of System*, 3.

statistically valid description of the cause of a disease, its possible symptoms, and various presentations. Increasingly, instruments, such as the stethoscope, would be used to examine the live, inner workings of the body, allowing for examination of symptoms while the patient was alive, so that the progress of a condition could be observed in real time, as opposed to waiting for the autopsy to get confirmation. The combination of bedside examination, instrumental observation, and post-mortem dissection—all practices with a strong empirical emphasis—along with high patient volume, made the Paris Clinical School a centre of knowledge production, and not just a place to learn the methods of treating disease.²⁶⁸

In order to further their medical education, many American doctors travelled to Paris to listen to lectures by famous professors and work in their hospital system. When they returned home, they would disseminate the French ideas that they had learned.²⁶⁹ Some doctors who could not cross the Atlantic internalized these French ideas, made them their own, and became enthusiastic disciples.²⁷⁰

This French impulse in American medicine would be seminal because it introduced two developments that influenced American ideas about the unborn. The first development was the creation of a new, empirically based embryology. As we will see in this chapter, before the first two decades of the nineteenth century, embryology in the Western world was often the product of rationalist systems that deduced scientific truths about prenatal development, which in effect made embryology dependent on speculation, and not direct verification. In the early decades of the nineteenth century, this slowly began to change as European researchers discerned some of the mechanics of embryogenesis by using animal models. This new embryology was not entirely French in origin, though some embryologists were. But even more influential was Charles Meigs' 1831 translation of Alfred Velpeau's *An Elementary Treatise on Midwifery*, which is better known by its subtitle: *Principles of Tokology and Embryology*. This manual had a ground-breaking

²⁶⁸ For a description of the Paris Clinical School see Roy Porter, *The Greatest Benefit to Mankind: A Medical History of Humanity* (New York: W.W. Norton, 1997), 306-314.

²⁶⁹ Warner, *Against the Spirit of System*, 12.

²⁷⁰ Warner, *Against the Spirit of System*, 11.

embryological study that gave detailed morphological detail of the early embryo by using human specimens.

This new focus on embryogenesis confirmed doctors in their belief that life begins at conception; and as a result, there developed a humanizing discourse surrounding the unborn at all stages of pregnancy. American physicians were not simply content to think about the unborn at the latter stages of pregnancy; they began to consider the welfare of the unborn from pregnancy's inception. As a result of this focus on the unborn, physicians began to think of themselves as guardians of the infant, born and unborn, and therefore passed on medical advice to women to modify behaviour in the name of fetal welfare.

The second way in which French influence modified the discourse on the unborn was through the proliferation of the medical theory of vitalism. Vitalism, reduced to its simplest premise, posited that physics and chemistry alone could not explain biological phenomena; it also had to be explained by the existence of an intangible force. But vitalism was more than just that one principle: like many other “-isms,” it was an elaborate ideology, which rested on a constellation of concepts recognizable to its adherents. One of its most significant theorists with respect to embryology was Xavier Bichat, who is today best remembered for having discovered that the body was made up of twenty-one types of tissue. In 1800 he published his *Physiological Researches on Life and Death*, in which he proposed that higher animals were governed by two biological systems: the animal economy, or the higher faculties of animals, and the organic economy, that is those processes that animals held in common with plants. As the unborn only manifested the processes of the organic economy, they were said to have a “vegetative life.” There developed surrounding the unborn a discourse that was characterized by their physiological functions, or lack thereof, comparing them to vegetation and other lower organisms.

This chapter will show how embryology, once the realm of naturalists, slowly became a medical concern. The discoveries regarding the mechanics of embryogenesis tended to reinforce a humanizing discourse on the fetus, whereas vitalism, with its comparison of fetal physiology to plant physiology, produced a more dehumanizing discourse.

2. Embryology Before 1830

The physicians who specialized in questions of childbirth slowly became the culture's experts on pregnancy because of their knowledge of anatomy and physiology. Given their role as pregnancy experts, it was only natural that they held some ideas about the nature of prenatal development. In the 18th century, some of their expertise was put on display through the creation of anatomical atlases that presented embryological illustrations, the images of which would be reproduced in other works. William Smellie, Thomas Denman, and especially, William Hunter²⁷¹ were among the first to put forward relatively accurate drawings of the unborn in their natural state. These drawings would help students visualize important anatomical information. But some of the images, especially those dealing with early embryology, were thought to be relatively unserviceable for any medical purpose. Of the embryological specimens in his book, Thomas Denman wrote “the generality of these things are preserved for their beauty, or as matters of curiosity, rather than of use.”²⁷²

Embryology inspired a sense of wonder in the Anglo-American medical community; many like John Aitken believed it to be “the most astonishing fact in natural history,” and “a darling subject of philosophical research.”²⁷³ But it was mostly a topic of curiosity in the 18th century, and not one that was thought to have any direct medical purpose. Most images and information presented in medical textbooks were conveyed with the goal of teaching how to conduct the mother and child safely through childbirth. The topic of early prenatal development was largely thought of as an ancillary subject. Smellie claimed that it was completely unnecessary for the practice of midwifery.²⁷⁴ Denman characterized this knowledge as the least important for his profession.²⁷⁵ He even claimed that there was nothing to be gained by knowing the weight, length, and

²⁷¹ William Smellie, *A Set of Anatomical Tables: With Explanations, and an Abridgment of the Practice of Midwifery: With a View to Illustrate a Treatise on That Subject, and Collection of Cases* (Edinburgh: Printed for William Creech, 1792); Thomas Denman, *A Collection of Engravings, Tending to Illustrate the Generation and Parturition of Animals, and of the Human Species* (J. Johnson, 1787); William Hunter, *An Anatomical Description of the Human Gravid Uterus, and Its Contents. By the Late William Hunter, M.D.* (J. Johnson; and G. Nicol, 1794).

²⁷² Denman, *A Collection of Engravings*, n.p.

²⁷³ John Aitken, *Principles of Midwifery; or, Puerperal Medicine*, 2nd ed. (Edinburgh, 1785), 41.

²⁷⁴ Smellie, *A Treatise on the Theory and Practice of Midwifery*, vol. 1, 112.

²⁷⁵ Denman, *An Introduction to the Practice of Midwifery*, vol. I, (1794), 207.

dimensions of the fetus, even if that information could be discovered.²⁷⁶ William Dewees devoted about twelve pages in his 1825 textbook to the topic of conception and early pregnancy,²⁷⁷ but much of what he had to say was speculative, and often did not directly address the fetus; instead he went on at some length about the fetal appendages: the amniotic sac, the chorion, and the placenta. The only topic that did touch upon the fetus was that of fetal circulation, which had been relatively well-known for many decades.²⁷⁸

Prior to the 19th century, advancements in embryological research were minimal. The 18th century saw the rise of preformationist theories, which proposed that the germ of a human being was contained in either the egg (ovism) or sperm (spermatism). Fecundation was believed to result in an unfolding of biological systems, as opposed to their creation. Some ovists advanced the theory of *emboîtementt*, or encasement, which posited that generations of human beings were encapsulated one inside the other; the germs of female embryos already had the eggs of future generations; and in those eggs were females with even more eggs. They were imagined to be encased inside one another, just like Russian dolls, so that every female carried inside her all the human beings who could ever potentially exist.²⁷⁹ Many objections were raised about these theories. How could children inherit the appearance and traits of their fathers, if the germ was in the ovum? Similarly, how could children resemble their mothers, if the germ was in the spermatozoa? To skeptics, these theories were speculative and had a fantastical air about them. Some thinkers tried to offer alternatives; the Comte de Buffon (1707-1788) developed a theory of organic particles, whereby particles were contributed by both mother and father during coition.²⁸⁰ But these alternatives were not entirely convincing because of their lack of empirical support. This led many to conclude along with Thomas Cooper in 1766 that “after a thousand experiments, the conjectures, probabilities, and hypotheses of different authors, on the generation of the foetus, have been hitherto, too defective to build any satisfactory system.”²⁸¹ In the same spirit, after a prompt

²⁷⁶ Denman, *An Introduction to the Practice of Midwifery*, vol. I, (1794), 200.

²⁷⁷ Dewees, *A Compendious System of Midwifery* (1825), 54-66.

²⁷⁸ Dewees, *A Compendious System of Midwifery* (1825), 64-66.

²⁷⁹ Pinto-Correia, *The Ovary of Eve*, 3,6.

²⁸⁰ Lois N. Magner, *A History of the Life Sciences, Revised and Expanded* (CRC Press, 2002), 163.

²⁸¹ Thomas Cooper, *A Compendium of Midwifery*, 1766, 42.

dismissal of the question of generation on page 2 of his treatise, William Dease bid his readers to ignore these “fruitless enquiries” and turn their attention to “the progress of gestation” because such subjects were “beyond the reach of human understanding.”²⁸² Decades later, the state of affairs was not much better. The American John W. Francis observed in 1829 that “frustrate [*sic*] are the attempts which hitherto have been made to draw aside the veil with which modest nature has concealed the mysteries of generation. There is no generally received theory on the subject, and recent experiments have rather tended to subvert preceding hypotheses, than to establish one in their stead.”²⁸³ Numerous American obstetricians would lament the secretive nature of reproduction. William Dewees thought that it would probably “remain among the inscrutable arcana of nature.”²⁸⁴ Similarly, John Stearns commented “notwithstanding, however, the labour which has been lavished on the inquiry during this long succession of time, we have still to regret the obscurity in which the subject is involved.”²⁸⁵

One of the reasons why the state of embryological knowledge was considered so poor was that it was often approached using rationalistic, as opposed to empirical methods. William Dewees commented in the 1825 edition of his textbook that “the whole process of generation is involved in such complete obscurity, that conjecture is constantly made to supply the place of facts.”²⁸⁶ Similarly, Charles Meigs remarked that “previous to the year 1825” – that is until a series of key embryological discoveries— “all notions and opinions on the mammal ovum may be set down as naught.”²⁸⁷ Some physicians, such as Americans Nathan Chapman and John Stearns, did attempt to conduct research into the topic. Stearns advocated for a form of preformationism in his 1819 article presenting his theory of conception.²⁸⁸ Chapman attempted to explain how fetuses drew nutrition.²⁸⁹ William Dewees revealed that he had tried his hand at dissecting embryos to see what

²⁸² Dease, *Observations in Midwifery*, 1-2.

²⁸³ Francis in Denman, *An Introduction to the Practice of Midwifery*, ed. John W. Francis, (1829), 256(fn).

²⁸⁴ William Dewees, *A Compendious System of Midwifery* (1825), 397.

²⁸⁵ John Stearns, “An Essay on Conception and Superfoetation,” *Philadelphia Journal of the Medical and Physical Sciences* II, no. III (1825): 142.

²⁸⁶ Dewees, *A Compendious System of Midwifery* (1825), 397.

²⁸⁷ Meigs, *Obstetrics*, 124-125.

²⁸⁸ John Stearns, “Theory of Conception,” *The New-England Journal of Medicine and Surgery* VIII, no. 2 (April 1819): 117.

²⁸⁹ N. Chapman, “On the Nourishment of the Foetus,” *The Philadelphia Journal of the Medical and Physical Sciences* I, no. 1 (1820): 1–17.

he could derive from such studies, but he confessed to having little ability in this matter.²⁹⁰ Embryology lay largely outside the purview of early 19th century medicine. When suggesting further reading on the topic, John W. Francis in 1829 recommended Wolfe, Buffon, Spallanzani, Haller, Swammerdam, Leeuwenhoek, Harvey, Blumenbach and Sprengel.²⁹¹ Almost all of them were continental naturalists from the 17th or 18th century, with the exception of Blumenbach and Sprengel, who survived into the 19th century. The widespread ignorance of embryology hampered Charles Meigs' efforts at research. He complained: "I have had clots of blood sent to me from very good doctors, for dissection and for preparation for my museum, under the supposition that they were the organized products of a regular fecundation."²⁹²

3. The New Embryology

The situation gradually began to shift at the beginning of the nineteenth century. The new writings on embryology put a great deal of emphasis on empirical research, as opposed to the theorizing that characterized much of the 18th century. Preformationism was progressively abandoned. The main question engaged researchers continued to be the nature of embryogenesis; that is how an embryo—particularly a human embryo—is produced. Many scientists worked on that problem, and related issues, such as the mechanics of embryonic development and the differentiation of organs.²⁹³

The early nineteenth century, especially starting around 1820, saw a series of breakthroughs that offered the promise that scientists would finally make some headway into fundamental questions of biological development: In 1817, Christian Pander discovered embryonic germ layers.²⁹⁴ In 1821, Swiss physiologist Jean-Louis Prévost and French chemist Jean-Baptiste Dumas observed fertilization in frog eggs, thereby confirming that contact between

²⁹⁰ Dewees, *A Compendious System of Midwifery* (1832), 1832.

²⁹¹ Francis in Denman, *An Introduction to the Practice of Midwifery*, (1829), 249(fn).

²⁹² Meigs, *Females and Their Diseases*, 534.

²⁹³ Magner, *A History of the Life Sciences, Revised and Expanded*, 147, 148, 164.

²⁹⁴ Renato G. Mazzolini, "Embryology," in *The Oxford Companion to the History of Modern Science* (Oxford University Press, 2003).

sperm and ova were essential in producing an embryo. In 1825, Jan Purkinje isolated the avian ovum.²⁹⁵ In 1827, German embryologist Karl Ernst van Bayer isolated the mammalian ovum in a dog.²⁹⁶ In 1839, Theodor Schwann applied cell theory to mammalian development,²⁹⁷ revolutionizing the scientific understanding of reproduction.

As these developments accumulated, embryology was shedding a lot of its speculative character, so that gradually it could no longer be dismissed as a “fruitless enquiry.” However, embryological knowledge was largely the work of those who specialized in natural philosophy, and it largely relied on animal models; generalizations about human embryology were made through analogical reasoning. There was always some uncertainty about these generalizations. For instance, take Prévost and Dumas’ observation about fertilization in frog eggs: how could one be certain that sperm and ova had to achieve contact in *humans*? Analogical reasoning from animal models always left open room for doubt.

The embryological research of French physician Alfred Velpeau (1795-1867) would represent a major change. Today, he is principally remembered as a surgeon. But Velpeau was one of the foremost medical authorities of his time, who excelled in many fields of medicine. He was recognized for his erudition, as his texts abound in references. His bibliography is said to include over 340 titles and 10 000 pages of text, covering a wide array of medical subjects.²⁹⁸ In 1830, he published *An Elementary Treatise on Midwifery: or Principles of Tokology and Embryology* which was translated into English soon after by American Charles Meigs in 1831. (The embryological portion of his book would be reissued in 1833 under the title *Embryologie ou ovologie humaine*. In this edition, the study was expanded to 200 embryos.)

Velpeau collected his specimens over the course of six years during the 1820s while he was still in the early phase of his medical career and worked as an aide during anatomy lessons.²⁹⁹

²⁹⁵ William F. Bynum, Janet Browne, and Roy Porter, “Eggs,” in *Dictionary of the History of Science* (Princeton University Press, July 14, 2014), 111.

²⁹⁶ Magner, *A History of the Life Sciences, Revised and Expanded*, 165.

²⁹⁷ Magner, *A History of the Life Sciences, Revised and Expanded*, 155-159.

²⁹⁸ P. M. Dunn, “Dr Alfred Velpeau (1795–1867) of Tours: The Umbilical Cord and Birth Asphyxia,” *Archives of Disease in Childhood - Fetal and Neonatal Edition* 90, no. 2 (March 1, 2005): F185.

²⁹⁹ Alfred Velpeau, *An Elementary Treatise on Midwifery: Or Principles of Tokology and Embryology*, trans. Charles Delucena Meigs (Philadelphia: J. Grigg, 1831), page ix; Émile Aron, “Alfred Velpeau (1795-1867) Une Carrière Exceptionnelle,” *Histoire Des Sciences Médicales* XXVIII, no. 2 (1994): 103.

As he worked his way up through the echelons of the Parisian hospital system, he was able to use his medical connections to gather specimens of miscarried embryos, obtaining nearly 140 products of conception up to the third month of gestation.³⁰⁰ The size of the collection was quite astonishing for the period, as no one had come even close to obtaining that many human specimens. Miscarriages, from which these specimens would have been taken, were still a largely private female event. Although medical treatment was sometimes sought for miscarriage in the early stages of pregnancy, as in of a retained placenta, it did not usually warrant medical attention.³⁰¹ But given that Velpeau worked in a hospital system that treated thousands of patients every year, he was able to solicit a number of doctors and midwives to preserve embryos if they caught them; so the patient volume was able to compensate for the problem of the rarity of the need for treatment in miscarriage.

Having overcome the barrier to obtaining human embryos, Velpeau derived his conclusions from empirical observations, as opposed to analogies derived from animal models. Thus, for instance, he was able to talk about the features of the embryonic face, and what they looked like early in the pregnancy and how they evolved over time: at the beginning, the embryo has no face, but it is distinguishable by the fifth week.³⁰² Another important discovery that he made, based on empirical observation, was that miscarriages were typically caused by disease in the embryo, as opposed to external, mechanical factors.³⁰³ Some American physicians would adopt this point of view; others would be skeptical.³⁰⁴ The significance of his study was that now embryological concerns were entering into the medical purview. Embryology was no longer the work of “naturalists” presenting their research at “philosophical societies.” It was now the province of the physician.

³⁰⁰ Velpeau, *An Elementary Treatise on Midwifery*, page ix.

³⁰¹ Bedford, *The Principles and Practice of Obstetrics*, 281; Tucker, *Elements of the Principles and Practice of Midwifery*, 399; Thomas Cock, *A Manual of Obstetrics* (Wood, 1853), 107; Meigs, *The Philadelphia Practice of Midwifery*, 130.

³⁰² Velpeau, *An Elementary Treatise on Midwifery*, 192.

³⁰³ Velpeau, *An Elementary Treatise on Midwifery*, 232.

³⁰⁴ Stephen Tracy, *The Mother and Her Offspring* (New York: Harper & Bros., 1860), 305; *A Manual of Obstetrics*, 107; Meigs, *Obstetrics*, 244.; Hodge, *The Principles and Practice of Obstetrics*, 462.

Velpeau's influence would be felt very soon after his book's appearance in America; as a work of obstetrics, one reviewer in 1831 remarked that this treatise was "unsurpassed."³⁰⁵ The book would become so standard that Charles Meigs wrote in the preface of his 1838 manual on midwifery that his translation of Velpeau had virtually become a textbook.³⁰⁶ But one can see this manual's influence in the way that American obstetricians began to devote space to embryology.³⁰⁷ Previously, obstetrics textbooks gave a summary description of conception and some facts about prenatal development, but the information in it was schematic. After the publication of Velpeau's research, American obstetricians became far more interested in the unfolding of prenatal development.

The most striking example of this can be seen in the textbooks of William Dewees. His 1825 edition contained relatively little on the topic of generation. But his 1832 contained an extensive amount of information. He wrote:

A strong and certainly a laudable curiosity is almost always felt by the student, to ascertain the progress of developement [sic] of the foetus from the conception, up to the full term of gestation. And though our knowledge upon this subject must necessarily be both limited and uncertain, yet enough is known, to enable us to form a tolerably correct estimate of the progress; the embryo or foetus makes, up to the last period of utero-gestation.³⁰⁸

This passage signaled a strong about-face from his remark about conjecture constantly being made to "supply facts." But Dewees, though he mentioned Velpeau several times in his 1832 edition of his textbook, did not cite Velpeau's embryological findings; moreover, he disputed a number of his claims, both embryological and obstetric.³⁰⁹ Instead of using any of the information Velpeau provided on prenatal development, he used T. Romeyn Beck's embryological descriptions, which date from 1823.³¹⁰ Many of these facts originate from an earlier time, as Beck

³⁰⁵ John J. Graves, "An Elementary Treatise on Midwifery; or Principles of Tokology and Embryology (Review)," *The New York Medical Journal* II, no. 1 (May 1831): 111.

³⁰⁶ Meigs, *The Philadelphia Practice of Midwifery*, iv.

³⁰⁷ For example: Thomas Cock, *A Manual of Obstetrics*, 60ff; Meigs, *Obstetrics*, 100ff; Tucker, *Elements of the Principles and Practice of Midwifery*, 59ff; Bedford, *The Principles and Practice of Obstetrics*, 109ff; Hodge, *The Principles and Practice of Obstetrics*, 94ff.

³⁰⁸ Dewees, *A Compendious System of Midwifery* (1832), 89

³⁰⁹ Dewees, *A Compendious System of Midwifery* (1832), 18 (fn), 45 (fn), 70 (fn), 75, 81-82 (fn), 94(fn), 191 (fn), 192 (fn).

³¹⁰ Dewees, *A Compendious System of Midwifery* (1832), 90-95.

lists as authorities Aristotle, Riolan, and Haller. One supposes that Dewees used Beck's description of prenatal development because it was a convenient summary.

The American obstetrical writers who came after Dewees would follow his lead and focus on prenatal development. Some, like Henry Miller, still believed that extensive knowledge of embryology was not necessary in order to be a competent obstetrician. Nevertheless, unlike his 18th century forebears, he believed that a minimal knowledge about prenatal development was “indispensible.”³¹¹ The topic could no longer be neglected. Writers would continue to wonder at the mysteriousness of reproduction—it would remain, in the words of Waldo Burnett, “ultimatissimum of physiology.”³¹² And yet, they underscored how new discoveries had enriched the field. American D. Francis Condie chose to quote British physician Edward Rigby: “There is, perhaps, no department of physiology which has been so remarkably enriched by recent discoveries, as that which relates to the primitive development of the ovum and its embryo.”³¹³ Physicians would increasingly invest more importance into prenatal development. Meigs would tell his students that “whoever should really desire to accomplish himself as an Obstetrician, must first become well versed in the various classes of the medical sciences, particularly embryology”³¹⁴ and come to regard embryology as “more profound” than astronomy itself.³¹⁵

These new embryological discoveries prompted the medical community to look at pregnancy from all stages. Obstetrics did not just concern itself with conducting a woman safely through childbirth. Hugh Hodge wrote that the medical practitioner must now “regard the infant as well as the mother, from the period of conception to delivery” because they were a human being from conception.³¹⁶

³¹¹ Henry Miller, *The Principles and Practice of Obstetrics: Including the Treatment of Chronic Inflammation of the Uterus, Considered as a Frequent Cause of Abortion* (Blanchard and Lea, 1858), 138.

³¹² Waldo I. Burnett, “On the Modus Operandi of Fecundation,” *The Virginia Medical and Surgical Journal* II, no. II (December 1853): 190.

³¹³ D. Francis Condie in Fleetwood Churchill, *On the Theory and Practice of Midwifery*, 127(fn).

³¹⁴ Charles Delucena Meigs, *Introductory Lecture to the Class of Midwifery, &c., in the Jefferson Medical College: Delivered Wednesday, October 9, 1854* (T.K. and P.G. Collins, printers, 1854), 6.

³¹⁵ Charles Delucena Meigs and Robert Mendenhall Huston, *An Introductory Lecture: Delivered Before the Class of Jefferson Medical College, November 5, 1846*, (Merrihew and Thompson, printers, 1846), 13.

³¹⁶ Hodge, *An Introductory Lecture to the Course on Obstetrics* (1839), 8, 15.

It is worth underscoring this idea that the new embryological discoveries reinforced the idea that “life begins at conception,” because that idea did not have deep roots in the English-speaking world. It first began to circulate in the English-speaking world in 1788, when Samuel Farr published his *Elements of Medical Jurisprudence*, which was an abridged translation of *Elementa Medicinae Forensis* (1767) by Johann Friedrich Faselius.³¹⁷ English physicians would have encountered the idea by reading continental authors; but just as they never took preformationism seriously, they did not firmly adopt the idea of animation or vivification taking place at the beginning of pregnancy—though they may have suspected it. As we saw above, there was a certain skepticism or agnosticism about the beginnings of prenatal development among English-speaking physicians. This is not to say that they necessarily approved of contraception and abortion—tampering with reproductive processes was still problematic. When English-speaking physicians affirmed that life began at conception, they did so based on a deduction. For instance, Dewees affirmed the life began at fertilization in his 1825 textbook; but the basis for his conclusion was deductive; the “plain and simple” reason that the embryo was considered alive from fecundation was that “if it were not alive it must be dead ; and if dead it must be cast off by the womb, as an extraneous substance.”³¹⁸ As embryology took an empirical turn, each discovery tended to reinforce what, to the English-speaking world, was a relatively novel idea. Novel as it was, it was widely, if not universally, adopted by the medical elites.³¹⁹

In our contemporary moment, we tend to associate the affirmation “life begins at conception,” with opposition to abortion, and this idea will be explored in the next chapter. But this new emphasis on embryology in obstetrics also had other effects that transcended opposition to abortion. Physician began to think of themselves as not only concerned with two beings at childbirth, as was the case in previous decades, but concerned with two beings during the whole

³¹⁷ John Keown, *Abortion, Doctors and the Law: Some Aspects of the Legal Regulation of Abortion in England from 1803 to 1982* (Cambridge University Press, 2002), 23.

³¹⁸ Dewees, *A Compendious System of Midwifery* (1825), 108.

³¹⁹ For example, it was affirmed by the following: Stephen West Williams, *A Catechism of Medical Jurisprudence* (J.H. Butler, 1835), 79; Tracy, *The Mother and Her Offspring*, 74, 96; Hodge, *The Principles and Practice of Obstetrics*, 176; Joseph Warrington, *The Obstetric Catechism* (Philadelphia: J.G. Auner, 1853), 111.

of the woman's pregnancy. The most vocal proponent of this idea was Hugh Hodge, who wrote that...

Obstetrics, [...], is distinguished by the interesting fact that the welfare of two individuals is involved in every case of pregnancy and parturition. Hence the practitioner of Obstetrics has his duties and responsibilities necessarily enlarged. He must regard the infant as well as the mother, from the period of conception to delivery; and generally, is called upon to be its medical attendant during the first few weeks or months of its independent existence.³²⁰

Stephen Tracy, professor of midwifery at the Pennsylvania Women's Medical College, echoed the same sentiment, telling his female readers (in all-caps) that "In respect to the CARE PROPER TO BE TAKEN OF YOUR SELF DURING PREGNANCY, you will expect me to say something."³²¹

As guardians of the unborn, physicians were expected to instruct pregnant women on what was necessary to achieve a successful pregnancy and advance the welfare of their children. "From the moment, therefore, that conception has taken place," continued Stephen Tracy, "a new and most sacred duty devolves upon the female. She is bound by all the ties of maternal sentiment, of humanity, of moral and religious obligation, to protect, so far as it may be in her power, the nascent being in her womb, against every circumstance which may have an unfavorable influence upon its delicate organization."³²² In an introductory lecture, Hugh Hodge shared a similar idea: "The medical attendant must here also, frequently exert all his authority to enforce rules which are, by most females, deemed unnecessary or altogether useless. He must bear in mind the rights of the foetus and urge upon the mother the importance of this regimen, for its healthy constitution as well as for its life."³²³

But giving one's child a healthy start was not only about eating right and keeping healthy; it was also about attitude. Physician Edward Warren wrote of the pregnant woman that since "mental impressions are so easily transmitted and reproduced, it is as important that she should cultivate kindly feelings and elevated sentiments, during the existence of her pregnancy, as to

³²⁰ Hodge, *An Introductory Lecture to the Course on Obstetrics* (1839), 8.

³²¹ Tracy, *The Mother and Her Offspring*, 43

³²² Tracy, *The Mother and Her Offspring*, 43

³²³ Hugh Lenox Hodge, *An Introductory Lecture to the Course on Obstetrics* (Philadelphia: T. K. & P. G. Collins, Printers, 1840), 13.

adorn herself with the noblest and loveliest virtues for the imitation and improvement of her living child.”³²⁴ Elizabeth Blackwell, the first woman to receive a medical diploma in the United States, was not part of the medical elite in any degree; but she also echoed the predominant sentiment about how pregnant women should conduct themselves during pregnancy. She informed her female readers in *Laws of Life* that the pregnant woman’s influence on the embryo is indirect, but nevertheless, imperative: “the state of her health, the disposition of her mind, her habits of life, will materially affect the growth and influence the future constitution of the child.” She wrote that the pregnant woman should exhibit “the cheerful sunshine of the spirit that should so naturally enfold the new centre of many hopes [i.e her unborn child]” and observe “those important rules of hygiene, regular habits, early hours, periodic exercise, cold bathing, plain wholesome food, and loose comfortable clothing.” Though these rules were simple and easy to observe, they were (in the original italics) “of *immense importance*” and that “they are *our part* in the work of creation.” And in case her message was not clear, she doubled down: “No frivolous pleasure, no petty cares, no serious sorrow even, will induce the true mother to neglect the healthy rule of life, or disturb the cheerful serenity of her spirit, when she is thus directly the handmaid of the Creator.”³²⁵

³²⁴ Edward Warren, “On Uterine Sympathy,” *American Medical Monthly* I, no. II (May 1854): 349.

³²⁵ Blackwell, *The Laws of Life*, 72-73.

3. The Vitalist Discourse

The appearance of new empirically-based embryology did not occur in a theoretical vacuum. This new embryology was often discussed using the terminology of a conceptual framework that today we label “vitalism.” Vitalism had many points of origin and diffusion, such as Scotland and Germany.³²⁶ But the variety that concerns us most is the discourse that originated at Montpellier, France in the 18th century, was adopted in Paris, and which saw its zenith around the turn of the 19th century. It began to decline after 1830 in France and disappeared altogether after 1865.³²⁷ Conventionally defined, vitalism is rooted in the belief that the phenomenon of life cannot be explained solely by referring to physics or chemistry. Life is ultimately caused by some type of occult, immaterial force, which was ascribed many names, such as *vis essentialis*, *vis materiae*, *Bildungstrieb*,³²⁸ or simply life principle or life force. This force is ultimately mysterious, and, like gravity, unknowable except through its effects. This dictionary definition of vitalism is true enough; but it does not encompass the panoply of concepts that underpinned it, nor the various strains.

Vitalism arose in opposition to the mechanistic approach to biology, which was popularized by René Descartes (1596-1650) in the 17th century and has dominated biology for most of the last three-and-a-half centuries.³²⁹ Mechanism tends to see nature as a “mosaic of separate parts.”³³⁰ Whatever is studied is approached from the bottom up, starting from the simplest element—a secretion or an organ—or, later in the 19th century, a cell—and uses chemistry and physics to understand these processes step by step.³³¹ Mechanists also tended to compare the human body to machines, and body parts to machine components. Vitalism developed in the late 18th century as a protest against what was perceived as an oversimplification of the human

³²⁶ François Duchesneau, “Vitalism,” in *Encyclopedia of the Enlightenment* (Oxford University Press, 2002).

³²⁷ Elizabeth A. Williams, *The Physical and the Moral: Anthropology, Physiology, and Philosophical Medicine in France, 1750-1850* (Cambridge University Press, 1994), 178; Normandin, “Visions of Vitalism,” 161.

³²⁸ Magner, *A History of the Life Sciences, Revised and Expanded*, 146-147.

³²⁹ Garland E. Allen, “Mechanism, Organicism and Vitalism,” in *The Routledge Handbook of Mechanisms and Mechanical Philosophy*, ed. Stuart Glennan and Phyllis Illari (Taylor & Francis, 2017), 60.

³³⁰ Allen, “Mechanism, Organicism and Vitalism,” 60-61.

³³¹ Allen, “Mechanism, Organicism and Vitalism,” 61.

organism. Committed vitalists argued that body parts were not like machines: the laws of life were different than those of physics and chemistry. Matter at the time was perceived to be inert and could not account for motion; a materialist view was inadequate to understand the nature of life or the organism as a whole.³³²

Vitalism is best thought of as a paradigm or a discourse.³³³ Like many *-isms* today, such as feminism or socialism, it embodies a set of interconnected ideas that are mutually intelligible to its adherents. In the late 18th and early 19th centuries, it came to dominate French medical discourse so that as one practitioner put it, “it is scarcely possible not to be vitalist.”³³⁴ It was so predominant that even those who rejected vitalism continued to use its vocabulary.³³⁵

The vitalist-mechanism debates were not debates between two well-defined parties trying to uphold one system over another, the way communists and capitalists might argue with one another over the Cold War, for instance. Rather they tended to be arguments that led either in a more vitalist direction or a more mechanist one. The reality was that the line between vitalism and mechanism was blurred.³³⁶ In the mid 19th century, most medical practitioners harbored a position somewhere between vitalism and positivism.³³⁷ For this reason, it is best to think of mechanism and vitalism in this period as co-existing with one another, as opposed to succeeding each other. French practitioners who seemed committed to a vitalist worldview nevertheless advocated for approaches that led towards a more mechanistic direction because of their commitment to empiricism. For instance, Bichat accepted a chemical physiology and François Magendie called for greater use of experimentation on animals, so that physiological processes could be witnessed in real time, making deductions from dissections.³³⁸ The invention of instruments also led to a

³³² Elizabeth A. Williams, *A Cultural History of Medical Vitalism in Enlightenment Montpellier* (Routledge, 2017), 3.

³³³ Normandin, “Visions of Vitalism,” 2.; Elizabeth A. Williams, *The Physical and the Moral*, 2.

³³⁴ Jacalyn Duffin, “Vitalism and Organicism in the Philosophy of R.-T.-H. Laennec,” *Bulletin of the History of Medicine* 62, no. 4 (1988): 536.

³³⁵ Williams, *The Physical and the Moral*, 196.

³³⁶ Shirley Roe, “The Life Sciences,” in *The Cambridge History of Science: Volume 4: Eighteenth-Century Science*, ed. Roy Porter, vol. 4, The Cambridge History of Science (Cambridge: Cambridge University Press, 2003), 404.

³³⁷ Positivism being one important manifestation of mechanism; Normandin, “Visions of Vitalism,” 74.

³³⁸ Geoffrey Sutton, “The Physical and Chemical Path to Vitalism: Xavier Bichat’s ‘Physiological Researches on Life and Death,’” *Bulletin of the History of Medicine* 58, no. 1 (1984): 68; J. V. Pickstone, “Vital Actions and

more mechanistic worldview. Rene Laënnec invented the stethoscope and was able to diagnose the various stages of tuberculosis according to the types of sounds emitted from the lungs. However, he opposed materialist science.³³⁹ Mechanist researchers were more interested in mechanism as a heuristic device to ask useful questions, as opposed as a means of engaging in ontological debates.³⁴⁰ This is why vitalists could drift towards a more mechanistic approach it did not necessarily challenge vitalism head on. Vitalists subordinated mechanism to their vitalism, and thereby retain their belief in a vital force.³⁴¹ Mechanistic approaches were adopted as a means to attain greater knowledge; and as these means proved fruitful, scientists would discard the need to appeal to vitalist forces, because their experiments would provide explanations empirically, while much of vitalism rested on rationalistic and untestable deductions.

Vitalism was at the root of what can be termed an “anthropological medicine” or what was known as “la science de l’homme.”³⁴² Although vitalism dealt with biology writ large, it was principally concerned with humans.³⁴³ It presented a vision of the human person, rooted in medicine—that is, biology—that encompassed the *whole* person, at all stages of life, and their relationship with their environment, and their environment’s relationship with them. Because of this multifarious view of humanity, vitalists were interested in different “types” of people—different races, different ages of life, the different sexes. “Healthy” and “unhealthy” states could only be known by studying various kinds of human beings in their various states. For example, François Broussais (1772-1838) recommended the study of “fetuses, infants, the young, and the aged; women; ‘savages’ and ‘barbarians’; monsters; amputees; ‘idiots’ and the blind and deaf.”³⁴⁴ In knowing how all these people “functioned,” one could understand how to recognize when they enjoyed health, and when they suffered from a pathological condition. “Health” was not something that expressed itself uniformly across various kinds of people; it depended on a variety of factors

Organic Physics: Henri Dutochet and French Physiology During the 1820s,” *Bulletin of the History of Medicine* 50, no. 2 (1976): 193

³³⁹ Allen, “Mechanism, Organicism and Vitalism,” 60

³⁴⁰ Allen, “Mechanism, Organicism and Vitalism,” 60.

³⁴¹ Normandin, “Visions of Vitalism,” 36.

³⁴² Williams, *The Physical and the Moral*, 1.

³⁴³ Williams, *The Physical and the Moral*, 12.

³⁴⁴ Williams, *The Physical and the Moral*, 169.

that defied easy categorization. Environment and stages of life are two factors mentioned; but really anything having to do with human existence, even intangibles like emotions and spirituality, could be cited as part of “health.”

The difference between “vitalism” and “anthropological medicine” was almost non-existent. The subtle difference was that vitalism was a theoretical framework, and anthropological medicine was its practical expression, through writing, research, and therapeutics. Historian Elizabeth Williams discerned four main characteristics of anthropological medicine, what she called “nodes of reference” – that is, prominent recurring themes:

First was that it was holistic: anthropological medicine treated the whole person, as opposed to a symptom or a specific body part in isolation. This led to the examination of what Williams called *les rapports* between the person and their surroundings. These *rapports* are conceived of as mutual; how the person affects their surroundings, including their social relations, and how their surroundings affect them. Secondly, it was concerned with what was called “the moral,” that is, those intangible aspects of human existence that were mediated through the human mind, especially emotional and mental states, but it could include philosophy, and thus morality and spirituality. Third, as this anthropological medicine was concerned with the whole person and their relationship with their surroundings, it was also concerned by the individual’s relationship with society, and vice-versa. Thus, by its nature, anthropological medicine was concerned about social issues. Lastly, anthropological medicine tended to typologize human beings in a variety of ways. The most famous example would be how it used climate and morphological characteristics to categorize humans into racialized groups, sorted into a hierarchy of “civilized” and “uncivilized.”³⁴⁵

This anthropological medicine would come to be adopted by the American medical community in the middle third of the 19th century, in conjunction with its adoption of French medicine.³⁴⁶ The American medical community viewed Paris as a mecca of medicine, first, because of its extensive hospital network, and therefore easy access to patients and cadavers;

³⁴⁵ Williams, *The Physical and the Moral*, 8-9.

³⁴⁶ Warner, *The Therapeutic Perspective*, 185.

second, because its empirical approach to medicine, where knowledge was derived from the bedside and the dissecting table, was perceived to be superior; third because the French were seen as excellent theoreticians.³⁴⁷ The French, however, were not well-regarded for their therapeutics, that is, their ability to actually treat patients;³⁴⁸ they were admired for being able to find their research into the origins of medical problems. Nevertheless, Paris then was perceived as the centre of medical innovation. Between 1815 and 1860, over 1000 American doctors were known to have travelled to Paris to receive instruction.³⁴⁹ Many of these physicians would go on to become professors, lead medical societies, edit journals, and occupy other positions of influence, thereby disseminating French ideas.³⁵⁰ One prominent example of this was Gunning S. Bedford, who travelled to Paris in the early 1830s and upon his return in 1833, at the age of 26, he became a professor at Charleston Medical College; eventually he would become Professor of Obstetrics and Diseases of Women at the New York University Medical College.³⁵¹ But among those who did not make it to Paris, many were Francophiles such as Charles Meigs and William Dewees.

Vitalism had a number of theoreticians and defenders. Of its many proponents, the one who had the most influence on the field of embryology was Xavier Bichat (1771-1802), the scientist best known for having discovered tissue. He considered it the fundamental unit of the body, and the prime locus for disease, and believed the life-force lay within it.³⁵² In 1800, he published *Physiological Researches on Life and Death*, which attempted to explore the quintessentially vitalist problem of the differences between the living and non-living entities, as well as describe the physiological basis for life, that is, how organisms—especially human beings— kept themselves alive, how the life force manifested itself in the body. Bichat theorized that human beings and other higher animals were maintained by two organ systems.

The first and most rudimentary system was what he deemed the “organic economy,” or “organic life” but which American physicians often called “vegetative” instead. The organic

³⁴⁷ Waller, *Health and Wellness in 19th-Century America*, 14; Warner, *Against the Spirit of System*, 7,8

³⁴⁸ Warner, *The Therapeutic Perspective*. 185, 192.

³⁴⁹ Warner, *Against the Spirit of System*, 3.

³⁵⁰ Warner, *Against the Spirit of System*, 12.

³⁵¹ “Bedford, Gunning S.,” in *The National Cyclopaedia of American Biography* (New York: J.T. White, 1899), 361.

³⁵² William E. Burns, “Bichat, Marie-François-Xavier,” in *Science in the Enlightenment: An Encyclopedia* (ABC-CLIO, 2003), 26; Normandin, “Visions of Vitalism,” 20.

economy was made of those organs that were thought to be held in common with plants, and that produced physiological actions that were not dependent on volition, and were essentially continuous, such as digestion, respiration, and circulation (the movement of sap and juices in plants was considered to be analogical to the circulation of the blood.) Organic life was operational from the first moment of its existence, and only organic life was necessary for an organism to exist.³⁵³

The second system—the animal economy—was superadded to higher animals. It consisted of those organs that controlled physical functions that required volition, and that gave humans the ability to establish relations with others and their environment, such as the five senses, speech, and locomotion. This system was said to be functional only at birth.³⁵⁴ As a result of establishing this division of biological processes, Bichat believed that the fetal senses were inactive; that the unborn had no intellectual faculties; that the motion that is ascribed to the fetus is not the product of volition, but of “sympathy,” that is an involuntary reaction, which one might today characterize as reflexive or biochemical.³⁵⁵ Bichat even thought that fetuses did not really sleep. Sleep, according to Bichat, involves the suspension of the functions of the animal economy; if the animal economy is not functional, then none can be suspended, and sleep cannot be said to exist.³⁵⁶

Vitalism attempted to explain how these two systems worked by locating their origins in the nervous system. The nervous system was the fundamental explanatory framework of biological processes, the same way that we consider DNA and genetic biology to be the prime driver of physical development. In the vitalist framework, the new embryo was described as essentially liquid; the nervous system developed from fetal nervous filaments, that originated in the embryo’s “primordial fiber.”³⁵⁷ Embryologist Jean-Baptiste Dumas, who was one half of the duo credited with first observing fertilization in frogs, believed that spermatozoa were nothing more than the rudiments of the nervous system.³⁵⁸ Thomas Cock wrote in his midwifery manual that the sperm

³⁵³ Bichat, *Physiological Researches on Life and Death*, 13, 132.

³⁵⁴ Bichat, *Physiological Researches on Life and Death*, 133

³⁵⁵ Bichat, *Physiological Researches on Life and Death*, 58, 136, 138.

³⁵⁶ Bichat, *Physiological Researches on Life and Death*, 133.

³⁵⁷ Daniel Oliver, *First Lines of Physiology: Designed for the Use of Students of Medicine*, vol. 2 (Ticknor, 1844), 433; Duchesneau, “Vitalism.”

³⁵⁸ Prévost and Dumas, ‘Mémoire sur le développement,’ 452 as cited in Florence Vienne, “Eggs and Sperm as Germ Cells,” in *Reproduction: Antiquity to the Present Day*, ed. Lauren Kassell, Nick Hopwood, and Rebecca Flemming (Cambridge: Cambridge University Press, 2018), 417.

at fertilization formed part of the cerebro-spinal system.³⁵⁹ This primordial nervous matter was the “nerve mass” which was the locus of the “nerve force”—the occult force that was at the centre of vitalist theory.³⁶⁰ The existence of this nervous matter was considered so essential to biological thought that some biologists believed even invertebrates and plants had a rudimentary nervous system.³⁶¹ The nervous system was believed to be made of tissue called neurine.³⁶² Charles Meigs explained the brain and nerve are “the creature; the animal; the perceptive being.” By this, he was signaling that the two were synonymous. He then explained that oxygen, when in contact with neurine would “extricate the power” or life force. When the brain was fed oxygen, the force was present; when the oxygen was diminished, the force would lessen; and if the oxygen were eliminated, the force would disappear as well, and death would ensue.³⁶³ This nervous mass was inseparable from the life force; the life force was effectively “spiritual.”³⁶⁴

Not all physicians subscribed to the idea of a “vital force.” Physiologist Robley Dunglison rejected the concept of an “occult force.” Making this force synonymous with physical processes does not explain its nature.³⁶⁵ He noted that the term “vital” was applied to processes which cannot be explained by physical facts or arguments.³⁶⁶ Similarly, Waldo Burnett considered that science should limit itself to physical phenomenon, even if he did not deny any “suprasensible” explanations.³⁶⁷ But even if they did not subscribe to the central tenet of vitalism—the existence of a non-physical force to explain biological development—these writers did use the vitalist framework to describe biological processes. They could also modify the framework as they realized that it was not perfectly correct. For instance, Dunglison believed that the fetus expressed voluntary motion, changing position when it had become “irksome.”³⁶⁸ He also believed that the fetus was capable of suffering pain, based on the convulsive movements sometimes made prior to

³⁵⁹ Cock, *A Manual of Obstetrics*, 58.

³⁶⁰ Meigs, *Obstetrics*, 636; Blackwell, *The Laws of Life*, 103.

³⁶¹ Meigs, *Obstetrics*, 665-666; Robley Dunglison, *Human Physiology*, 4th ed., vol. I (Lea and Blanchard, 1841), 20; Robley Dunglison, *Human Physiology*, vol. II (Lea and Blanchard, 1841), 604.

³⁶² Robley Dunglison, *Medical Lexicon* (3rd ed., 1842), 478.

³⁶³ Meigs, *Females and Their Diseases*, 169.

³⁶⁴ Meigs and Huston, *An Introductory Lecture: Delivered Before the Class of Jefferson Medical College (1846)*, 22.

³⁶⁵ Dunglison, *Human Physiology*, vol. II, 390.

³⁶⁶ Dunglison, *Human Physiology*, vol. II, 558.

³⁶⁷ Waldo I. Burnett, “On the Modus Operandi of Fecundation,” 194.

³⁶⁸ Dunglison, *Human Physiology*, vol. II, 483.

death.³⁶⁹ Nevertheless, he largely followed Bichat's model of animal/organic economies in his physiology textbook.³⁷⁰ Vitalism was a lingua franca, that helped convey medical ideas, and its concepts were used even by its opponents; it was not simply an ideology that was strictly adhered to.³⁷¹

This framework of two distinct “economies” or systems to describe an organism led many, like Gunning S. Bedford, to believe that “Man enjoys two lives— one is animal and the other organic.”³⁷² The newborn infant “is altogether a different being from the adult”³⁷³ because the spinal cord “is the essential nervous center of the infant.”³⁷⁴ In earlier periods—before birth, “the infant enjoys but one existence — the animal functions are yet in slumber,” and “the intellectual faculties undeveloped”³⁷⁵ therefore “the infant before birth may be regarded as enjoying an existence purely vegetative” because “the ganglionic system, which (...) presides over the functions of organic life,” is “the only portion of the nervous mass called into active display.”³⁷⁶ This labelling of the fetus as “vegetative life” or as having “vegetative existence” was frequent in medical literature.³⁷⁷ The functions of the brain, by contrast were said to be of “little account” at birth, and even throughout the first year the brain is “almost without function.”³⁷⁸ In Joseph Warrington's *Obstetric Catechism*, the question is put to the reader “Does the brain appear to be of any physiological importance to the fetus?” And the firm answer to that is “No,” —the evidence of that being “some children have been born without any brain, and yet had all the other organs developed.” That said, Warrington does admit that the child in utero probably exhibits the sense of touch and can suffer in utero.³⁷⁹

³⁶⁹ Dunglison, *Human Physiology*, vol. II, 482.

³⁷⁰ Dunglison, *Human Physiology*, vol. I, 49-50.

³⁷¹ Williams, *The Physical and the Moral*, 196.

³⁷² Bedford, *Clinical Lectures on the Diseases of Women and Children*, 210

³⁷³ Bedford, *Clinical Lectures on the Diseases of Women and Children*, 288.

³⁷⁴ Bedford, *Clinical Lectures on the Diseases of Women and Children*, 451.

³⁷⁵ Bedford, *Clinical Lectures on the Diseases of Women and Children*, 288

³⁷⁶ Bedford, *Clinical Lectures on the Diseases of Women and Children*, 451.

³⁷⁷ Bedford, *Clinical Lectures on the Diseases of Women and Children*, 451; Tracy, *The Mother and Her Offspring*, 154; Warrington, *The Obstetric Catechism*, 430; Hodge, *The Principles and Practice of Obstetrics*, 399

³⁷⁸ Bedford, *Clinical Lectures on the Diseases of Women and Children*, 91, 173, 195.

³⁷⁹ Warrington, *The Obstetric Catechism*, 100.

Vitalism then, put forward a specific vision of life before birth. There was no question that the unborn were human beings. However, they were a different *type* of human being. Just like other types of human beings, they had characteristics not found at other stages. The unborn were their own category. Virtually no American physician denied their ontological status as human beings. But the discourse that American physicians disseminated regarding the unborn tended to emphasize their physiological resemblance to plants, that is, lower life forms, rather than their semblance to humans as rational, sensitive, and autonomous beings.

4. Conclusion

At the turn of the nineteenth century, embryology was not an important topic to obstetricians; the focus of obstetric medicine was to conduct the woman safely through childbirth. Whatever information medical authorities had to convey about conception and embryological development was often theoretical, based on rationalistic deductions, and was so very often plain wrong, as the history of preformation theories show. Around the 1820s European researchers finally made important advances into explaining the mechanics of embryogenesis and embryonic development; for instance, Prévost and Dumas confirmed that fertilization in frogs required the contact between sperm and ova. These earlier discoveries were often made by natural philosophers using animal models; their conclusions were generalized to humans.

The publication of Alfred Velpeau's *Principles of Tokology and Embryology*, which appeared in English in 1831, represented a revolutionary development in obstetrics: First because Velpeau's was one of the earliest studies to involve a large sample of human embryo specimens; second, because Velpeau conducted his study in the context of obstetrics and not natural history. Velpeau's work then represents the beginnings of the union of embryology and obstetrics that today we deem "maternal-fetal medicine." His study solidified the idea that an obstetrician should have an interest in, and knowledge of, prenatal development at all stages of pregnancy.

The combination of these new advances in embryology, along with the integration of embryology into obstetrics, resulted in American physicians affirming with certainty that life

begins with conception. As they recognized the humanity of the unborn, they began seeing themselves as their guardians. In the name of promoting fetal welfare, they gave advice to women on how to optimize the health and well-being of their unborn child, through exercise, nutrition, and by being cheerful, to avoid strong shocks to the nervous system that could negatively affect the health of the fetus.

This humanizing discourse surrounding the fetus was also accompanied by a vitalist discourse which American physicians adopted from France, which was widely perceived to have the most advanced medical system. The vitalist discourse described the fetus as having a “vegetative existence,” subsisting off the biological processes of the organic economy—digestion, circulation, and respiration. The fetus was generally perceived to have no higher faculties—no thought, no senses, and no locomotion—though some physicians attenuated the absoluteness of that belief by giving counterexamples. Nevertheless, the fetus was thought to exist in a state of mental inertia; most of its biological processes believed to originate from the “ganglionic system,” which was associated with the spine. The brain, and by extension the higher faculties, were considered inactive. These higher faculties were regarded as unnecessary to the fetus; hence they were thought not to exist.

Xavier Bichat, in his *Researches on Philosophy of Life and Death*, concluded that the fetus has “nothing of the especial character of the animal” and that “its very existence is that of the vegetable.” Many American physicians agreed with this premise. However, Bichat believed that the destruction of a fetus amounted to the destruction of a mere “living body” because the fetus was not an “animated being.” American physicians never went so far as to state that abortion was “only” the “mere” killing of a body. But they did agree with Bichat, that in cases of maternal-fetal conflict, where there existed the “cruel alternative” of sacrificing either the life of the mother or that of the fetus, “the choice cannot be doubtful.”³⁸⁰ In the next chapter, I will examine how the humanizing and dehumanizing discourses on the fetus influenced ethical reasoning in discussions surrounding abortion, both clandestine and therapeutic.

³⁸⁰ Bichat, *Physiological Researches on Life and Death*, 140-141

Chapter 4: Abortion and the Medical Perceptions of the Unborn

1. Introduction

In the preceding chapter, I showed that after 1830, new research in prenatal development led to the union between obstetrics and embryology. This fusion led American physicians to increasingly affirm that human life existed from the first moment of conception, and this in turn generated concern for fetal welfare from the earliest stages of pregnancy. But as we will see in this chapter, as the medical community showed greater interest in the unborn, there also arose a new social phenomenon in the late 1830s that would seize their interest: the emergence of widespread clandestine abortion to limit reproduction. There were many channels through which this phenomenon would claim their attention: through press coverage and thinly veiled advertisements; through the solicitations of women seeking abortions, and through their treatment of women who suffered grievous injury from terminations. The numerous medical editorials and commentaries on the matter point to the degree to which doctors were concerned about the dangers posed to both pregnant women and prenatal life.

Physicians believed that one of the reasons why abortion was so widespread was due to the general population adopting what they termed the “quickening doctrine,” the belief that fetal life began once the woman “quickened,” that is, when she felt fetal movement. These movements were usually felt at four months of gestation, but the timing varied with every woman.³⁸¹ So pervasive was the influence of this doctrine that it affected the interpretation of the law. Abortions before quickening were, in many cases, perceived not to be indictable under the Common Law because the fetus was not believed to be alive in the legal sense. And should prosecutors manage to obtain a conviction, such abortions were often only lightly punished.³⁸²

³⁸¹ Mohr, *Abortion in America*, 3.

³⁸² E.P. Christian, “Report to the State Medical Society on Criminal Abortions,” *Peninsular and Independent Medical Journal* II, no. 3 (June 1859): 137.

Reacting to this perceived ignorance of prenatal development, doctors also began to create an apologetics for the unborn. They declared to medical students, and to laypeople, that life begins at conception, and that the suppression of human life was wrong at all stages pregnancy because it was an act comparable to murder. Doctors also noted the legal system's powerlessness in repressing abortion. It was often undetectable, making it very difficult to prosecute, especially as the quickening doctrine came to influence the interpretation of the law. And even when sentences were meted out, they were so meagre that they did not provide significant deterrence to abortion providers.

In 1857, a Massachusetts gynecologist by the name of Horatio Robinson Storer launched a campaign to suppress clandestine abortion. Under the aegis of the American Medical Association, he launched what came to be known as the *Physicians' Crusade Against Abortion*. This crusade is typically characterized as a political effort to lobby state legislatures to pass statutes making clandestine abortion a crime at all stages of pregnancy; and this was its most salient aspect.³⁸³ However, it also encompassed an apologetical effort to affirm that life begins at conception, and by extension, denounce what he deemed to be the evils of abortion and the absurdity of quickening doctrine.

The distinction between the political activity and the literary activity of the crusade is important. Not every doctor who spoke out against clandestine abortion necessarily aspired to modify legislation; some were even skeptical of the need for it. Two notable examples of such skeptics are Walter Channing and D.H. Storer, the father of Horatio.³⁸⁴ These two important voices, though not part of the legislative effort, contributed to the culture of denunciation surrounding clandestine abortion, and in this sense, they contributed to the Physicians' Crusade.

But as the medical community denounced the widespread suppression of prenatal life through clandestine abortion, another phenomenon emerged that complicated the issue of the perceptions of the unborn. Abortions were increasingly performed for medical reasons. To be sure, these abortions were rare; they would constitute an infinitely small number of the total cases

³⁸³ Mohr, *Abortion in America*, 147; Simone M. Caron, *Who Chooses?*, 14.

³⁸⁴ Kass, *Midwifery and Medicine in Boston*, 241, 242; Frederick N. Dyer, *The Physicians' Crusade Against Abortion* (Science History Publications, 2005), 25.

a practitioner would see over the course of his career.³⁸⁵ However, discussions about medicalized abortion took up a significant amount of space and energy. Key in the evolution of the discussion was the American translation of Alfred Velpeau's *Principles of Tokology and Embryology* in 1831. As we saw in the last Chapter, Velpeau's book was instrumental in fusing the fields of obstetrics and embryology. But his book also sparked discussion on medicalized abortion by advocating for it in cases of extremely contracted pelvises in the beginning stages of pregnancy.³⁸⁶

Scholars have pointed out this apparent double standard in the medical community's approach to abortion: if the woman was barred from choosing abortion, it seems logical to also bar doctors from making that choice.³⁸⁷ But as this chapter will show, medicalized abortion was only justified where there was a perceived maternal-fetal conflict, that is, where the life or health of the pregnant woman came into conflict with the life of the fetus. Once a conflict was detected, the solution was framed in terms of comparisons, comparing the worth of the woman versus the worth of the fetus. As we saw in the last chapter, the discourse on the fetus was heavily influenced by the theory of vitalism. American physicians affirmed the ontological humanity of the unborn, but they also believed that the fetus was a "vegetative life." It only had a primitive nervous system that only allowed for limited physical activity, while its mental activity was non-existent. This chapter will expand on the discourse on the unborn and show how Alfred Velpeau and like-minded colleagues emphasized the vegetative qualities of the fetus to justify medicalized abortion and influenced the adoption of this discourse in the American medical community.

But what was also different about abortions that solved maternal-fetal conflict was that the fetal life was not evaluated in isolation from the pregnant woman, as was the case with clandestine abortion. The denunciation of clandestine abortion was done without reference to the pregnant woman's value. In maternal-fetal conflict, the value of the fetus was evaluated *in tandem with* her. Thus, the value of the fetus was evaluated *in light of the value of the woman*. Therefore, to understand the justification for medicalized abortion, it is necessary to understand the value placed on the pregnant woman. That value was of an ideological nature, because women were icons of

³⁸⁵ Hodge, *The Principles and Practice of Obstetrics*, 299.

³⁸⁶ Velpeau, *An Elementary Treatise on Midwifery*, 491.

³⁸⁷ Luker, *Abortion and the Politics of Motherhood*, 31-32; Reagan, *When Abortion Was a Crime*, 13.

the Cult of True Womanhood—a vision which vitalism helped construct—and that value was also strictly practical, as women, in their roles of wife and mother, were the lynchpins of their domestic circles, holding everything together. They simply had to be saved to prevent catastrophe.

But to explore the ways in which American physicians reasoned about the unborn, and by extension, how they reasoned about clandestine and therapeutic abortion, it would be useful to delve into some background history to understand how abortion emerged as a social phenomenon in the 1830s and how physicians reacted against it. Then the chapter will discuss the impact of Alfred Velpeau on the extension of therapeutic abortion, and how vitalism affected the perceptions of the unborn as well as women in reasoning about maternal fetal conflict to arrive at a justification for medicalized terminations.

2. The Rise of Abortion in Early 19th Century America

It can be taken as axiomatic that there have always been those who sought to unburden themselves of an unwanted child.³⁸⁸ Although infanticide was often the primary means to deal with this reproductive burden, women did at times seek to terminate their pregnancies, even if it was dangerous.³⁸⁹ Given the secretive nature of the abortion process, the true extent of the phenomenon cannot be determined. Historian Angus McLaren concludes that, based on the number of references to the topic, in 18th century Europe, abortion attempts were not uncommon.³⁹⁰ In his chapter on abortion in *Reproductive Rituals*, he cites many examples of women using herbal concoctions to induce abortion. However, there is no record of the success of these attempts, and whether any subsequent miscarriage was caused by that specific product. Given the high rate of miscarriage in early pregnancy, and the reports of failed abortion attempts, there is reason to believe that these products were not very effective.

In contrast to the European experience, the evidence points to abortion being relatively infrequent in America's Early Republic (1776-1830). One indication was that America had a high

³⁸⁸ Dellapenna, *Dispelling the Myths of Abortion History*, 57.

³⁸⁹ Dellapenna, *Dispelling the Myths of Abortion History*, 113.

³⁹⁰ McLaren, *Reproductive Rituals*, 111.

birth rate. As of 1800, the average American couple gave birth to seven children.³⁹¹ This suggests that family limitation was not practiced to any great extent. Another indication was physician testimony to that effect. Older physicians of the mid nineteenth century, looking back to their early careers, spoke of how rare it was to encounter the phenomenon right through the 1820s and early 1830s. In an editorial published in 1851, John Preston Leonard wrote: “I have heard some of the older members of the profession say that abortions are of more frequent occurrence now than formerly.”³⁹² Dr. Thomas Blatchford was quoted in 1860 expressing a similar sentiment, stating that forty years before, when he was a young practitioner, it was a “rare and secret occurrence.”³⁹³ The dearth of medical case histories or anecdotes by physicians concerning abortion-related injuries also points to its marginality. The most prominent obstetrician of the 1820s and 1830s, William Dewees, had nothing to say about clandestine abortion in any of his publications, despite being a voluminous writer on obstetric topics, described as “dogmatical”³⁹⁴ and as a person with “strong and decided opinions”³⁹⁵ who was at the height of his popularity during the publication of his numerous compendia.³⁹⁶ As was seen in previous chapters, Dewees was a strong advocate for unborn life. If anyone would have had anything to say about it, it would have certainly come from him. The fact that he had nothing to say in any of his manuals tends to confirm that it was not a common occurrence. Perhaps it took place, but, as historian James Mohr has concluded, it was not a widespread method of reproductive control in the first third of the century.³⁹⁷

But this began to change. The United States underwent a profound social reorganization in the early 19th century that influenced sexual practices, and increased demand for pregnancy termination. During the Early Republic, land was the basis for the family economic unit. But as the population grew in the Northeast, where most of the population was concentrated, families

³⁹¹ Table 3.1 Daniel Scott Smith, “Family Limitation, Sexual Control, and Domestic Feminism,” in *Clio’s Consciousness Raised*, ed. Mary S. Hartman and Lois Banner (New York, 1974), 123 as cited in John D’Emilio and Estelle B. Freedman, *Intimate Matters: A History of Sexuality in America, Third Edition* (University of Chicago Press, 2012), 58.

³⁹² John Preston Leonard, “Quackery and Abortion,” *Boston Medical and Surgical Journal* 43 (January 15, 1851): 480.

³⁹³ Dr. Thomas Blatchford as quoted in Horatio Robinson Storer, *On Criminal Abortion in America*, 30.

³⁹⁴ Gross, *Autobiography of Samuel D. Gross, M.D.*, vol. 1., 165

³⁹⁵ Hodge, *An Eulogium on William P. Dewees, M.D.*, 45.

³⁹⁶ Hodge, *The Principles and Practice of Obstetrics*, x.

³⁹⁷ Mohr, *Abortion in America*, 17.

could no longer rely on land purchase or inheritance as a means of starting a household. Fertility decline began to correlate with this inability to acquire property.³⁹⁸

The inability to acquire land created a more urban landscape, which modified the relationship between home and work. Men used to work on the farm, or in their own shop. Now, they had to leave home to earn a living, either in an office, a workshop, a factory, or some other locus of economic activity which scholars have deemed “the public sphere.” Meanwhile, married women stayed home to take care of the private domestic sphere.³⁹⁹ The rise of these separate spheres made children less necessary and possibly less desirable, as women were often left to themselves to carry a great burden of parenting and performing household chores. Men may have also desired fewer children because they represented an economic burden, and having fewer children helped middle class families remain solvent.⁴⁰⁰ In 1800, the American family had an average of seven children. By 1825, the fertility rate had fallen to six children. By 1850, it was five children. These statistics are only averages. They mask the wide variation between different racial and socio-economic groups. The decline was steeper among northern white middle class families, whereas other groups were still relatively prolific. Fertility decline in these groups would come later.⁴⁰¹

Urbanization and industrialization also gave rise to a significant influx of unmarried women migrating seeking employment outside the home. They could engage in courtship, far from family supervision.⁴⁰² But the lack of supervision could also mean greater risk for sexual violence, including from employers.⁴⁰³ In the earlier decades of the century, it was extramarital intercourse that created the demand for abortion.⁴⁰⁴ Only in the late 1830s did married women begin to seek abortions in large numbers.

³⁹⁸ D’Emilio and Freedman, *Intimate Matters*, 59.

³⁹⁹ D’Emilio and Freedman, *Intimate Matters*, 57.

⁴⁰⁰ D’Emilio and Freedman, *Intimate Matters*, 58-59.

⁴⁰¹ Smith, “Family Limitation, Sexual Control, and Domestic Feminism,” in Mary S. Hartman and Lois Banner, eds., *Clio’s Consciousness Raised* (New York, 1974), table 3.1, 123 as cited in D’Emilio and Freedman, *Intimate Matters: A History of Sexuality in America*, 58.

⁴⁰² D’Emilio and Freedman, *Intimate Matters*, 74.

⁴⁰³ D’Emilio and Freedman, *Intimate Matters*, 64, 74-75.

⁴⁰⁴ Theodric Romeyn Beck, *Elements of Medical Jurisprudence* (John Anderson et al., 1825), 142.

Though women increasingly opted to terminate their pregnancies, they often preferred to handle it themselves instead of searching for an abortionist. They would often obtain abortifacient substances through an apothecary.⁴⁰⁵ Some of these substances were cathartics (provoking defecation) or emetics (provoking vomiting) or emmenagogues (provoking menstruation.) In the case of cathartics and emetics, it was believed that the expulsive action of the body would have an analogical effect on the uterus. Emmenagogues—which were believed to provoke menstruation—were especially prized because they could be sought under the pretext of “restoring menses,” the absence of which was seen as a source of ill health. Physicians did not seem to think that these products, whether emetics, cathartics or emmenagogues were very effective in achieving their desired end.⁴⁰⁶ However, sometimes women misjudged whether they were pregnant, or their pregnancies terminated on their own, in spite of these products, hence they developed a reputation for being abortifacient.⁴⁰⁷ Women were also able to terminate their pregnancies on their own without poisoning or injuring themselves, but their success in their attempts surprised doctors, who sometimes had trouble provoking premature labour, in spite of all their knowledge and experience.⁴⁰⁸

This widespread failure of substances to terminate pregnancy probably explains in part the emergence of an abortion underground in the early part of the nineteenth century. Women wanted the help of experienced abortionists to increase the likelihood of success. Through the medium of news coverage and especially newspaper advertisements, women would learn of the existence of abortionists.⁴⁰⁹

⁴⁰⁵ Barry, *Medico-Christian Embryology*, 36; Meigs, *Females and Their Diseases*, 522.

⁴⁰⁶ On emetics see Bedford, *The Principles and Practice of Obstetrics*, 219; on cathartics see Hodge, *The Principles and Practice of Obstetrics*, 462; for emmenagogues see Storer, *On Criminal Abortion in America*, 67.

⁴⁰⁷ Carl N. Degler, *At Odds: Women and the Family in America from the Revolution to the Present* (Oxford University Press, 1981), 230.

⁴⁰⁸ Charles Buckingham, “Two Cases of Labor in the Same Patient,” *The Boston Medical and Surgical Journal* LXIII, no. 11 (October 18, 1860): 212-213; Channing, “Effects of Criminal Abortion,” 136.

⁴⁰⁹ Degler, *At Odds*, 231; Caron, *Who Chooses?*, 15.

3. Growing Legal Attention to Abortion

As abortion was slowly becoming more common and a recognized social issue in the early decades of the 19th century, it drew a certain amount of notice from the medical and legal community; and this attention would also contribute to the spotlight that would be placed on it later on during the Physicians' Crusade Against Abortion. The British began to tackle the issue in 1803 when Lord Ellenborough sponsored a bill that came to be known as "the Malicious Shooting Act" or "The Maiming and Wounding Bill" because it legislated on a number of violent offenses as well as abortion. The passage of this act represented the first time that a Common Law country directly addressed the topic of clandestine abortion, and recognized that life begins at conception.⁴¹⁰ The law made it a capital crime to procure abortion after quickening, while pre-quickening abortions were punishable by fourteen years' transportation overseas.⁴¹¹ It was unanimously approved in both the House of Commons and the House of Lords.⁴¹² The existence of this bill suggests that abortion was not perceived to be a right under the Common Law, nor that it enjoyed widespread acceptance. The bill would undergo a number of reforms to close remaining loopholes. It was modified in 1828 through *Lord Lansdowne's Act* and in 1837 as through the *Offenses Against the Person Act*.⁴¹³ Some American authors noticed this existence of this legislation and wrote approvingly. For instance, Hugh Hodge lamented that when abortion was considered criminal in America, it was only a misdemeanour, whereas in England it was a capital crime.⁴¹⁴

English legal interest in abortion spurred American interest. In 1817, American John Brodhead Beck published a medical dissertation on infanticide, including the prenatal variety. He would come to be recognized as an expert on the subject when his brother, T. Romeyn Beck, incorporated this research into his major work, *Medical Jurisprudence* (1823). This book became

⁴¹⁰ Keown, *Abortion, Doctors and the Law*, 18-20 as cited in Gale, "'A Shocking Spectacle,' 204.

⁴¹¹ Dellapenna, *Dispelling the Myths of Abortion History*, 249, 250.

⁴¹² Dellapenna, *Dispelling the Myths of Abortion History*, 253.

⁴¹³ Dellapenna, *Dispelling the Myths of Abortion History*, 251, 254.

⁴¹⁴ Hodge, *An Introductory Lecture to the Course on Obstetrics* (1839), 15.

one of most important references in the English-speaking world, dominating its field for the next three decades.⁴¹⁵

Throughout the 1820s, a few states began to legislate statutes against abortion. In 1821, Connecticut became the first state to do so, modeling itself in part on Lord Ellenborough's Act.⁴¹⁶ Missouri would follow suit with a law in 1825, and Illinois in 1827.⁴¹⁷ In 1829, New York would pass its own legislation to restrict abortion as part of a comprehensive overhaul of criminal law. The passages relating to abortion would be drafted by none other than T. Romeyn Beck, who would go on to be elected President of the Medical Society of the State of New York that same year.⁴¹⁸ This testifies to the prominence he enjoyed, and the fact that he used his stature in opposition to clandestine abortion.

The spread of clandestine abortion in the late 1830s was accompanied by the sustained attention of the medical community. Physicians began to comment more frequently about it and spoke of their direct experiences of patients seeking to obtain abortions. Charles Meigs, in his first midwifery textbook, published in 1838 wrote that “physicians are frequently applied to by the unfortunate or guilty for relief from ‘*obstructions*,’” and that the women knowing full well that respectable doctors would not help them terminate their pregnancy, sought emmenagogues or similar products to induce abortion.⁴¹⁹ Hugh Hodge made a similar lament in 1839: “Perhaps there are few individuals, in extensive practice as obstetricians, who have not had frequent applications made to them by the fathers or mothers of unborn children, (respectable and polite in their general appearance and manners), to destroy the fruit of illicit pleasure, under the vain hope of preserving their reputation, by this unnatural and guilty sacrifice of their own offspring.”⁴²⁰ That same trend would continue throughout the Antebellum period. Gunning S. Bedford wrote in 1861 of pregnant women who used “every art and subterfuge” in order to “delude the judgement” of physicians in

⁴¹⁵ Beck, *Elements of Medical Jurisprudence*, 127(fn); James C. Mohr, *Doctors and the Law: Medical Jurisprudence in Nineteenth-Century America* (Johns Hopkins University Press, 1996), 20.

⁴¹⁶ Dellapenna, *Dispelling the Myths of Abortion History*, 269.

⁴¹⁷ Michael Grossberg, *Governing the Hearth: Law and the Family in Nineteenth-Century America*, vol. 1 (Chapel Hill: University of North Carolina Press, 1985), 161.

⁴¹⁸ Mohr, *Doctors and the Law*, 283; E. H. Van Deusen, *A Biographical Notice of T. Romeyn Beck* (State lunatic asylum, 1855), 10.

⁴¹⁹ Meigs, *The Philadelphia Practice of Midwifery*, 124

⁴²⁰ Hodge, *An Introductory Lecture to the Course on Obstetrics* (1839), 17-18.

order to obtain an abortion. He warned his students that they would be frequently “consulted by persons of this description.”⁴²¹

There were feeble attempts to use legal means to combat this problem, but there were many barriers to obtaining arrests and convictions. The principal barrier, as physician E.P. Christian noted, was that abortions could easily go undetected.⁴²² Single women who were pregnant had a more difficult time to find the privacy needed to go through the abortion process. But if the pregnant woman was married, she could obtain abortifacient products, consume them in private and then miscarry, and none would be the wiser. The visit to an abortionist could also occur under the cover of a medical consultation. The rupture of the amniotic sac by the abortionist might only bring on a miscarriage several hours later while the woman was at home.

Another important barrier to arrest and conviction was the uncertainty surrounding the legal status of abortion. Before 1830, it was generally understood that under the Common Law, all abortions were illegal, regardless of the stage of development.⁴²³ But abortions before the “quickening” stage were deemed “misprisions” or what we would today call “misdemeanours,”⁴²⁴ and many physicians post 1830 also held this opinion.⁴²⁵ Quickening was the period at which women discerned fetal movement. Normally this occurred at the fourth month, but there could be great variation—some women can feel movement in the third month, and some never feel any fetal movement at all. In the popular mind, the fetus was not considered to be alive before these movements. Quickening was the surest sign that the fetus was alive, and that the pregnancy was progressing as normal. However, the “quickening doctrine” began to influence the interpretation of the law. When lawyers read that a woman must be “quick with child” in order for her abortion to be indictable, they assumed that “quick,” i.e., “alive” meant that the woman must have achieved the “quickening” stage. Two state Supreme Court rulings confirmed this interpretation: that of Massachusetts in *Commonwealth v. Luceba Parker* in 1845, and New Jersey in *State vs. Eliakim*

⁴²¹ Bedford, *The Principles and Practice of Obstetrics*, 137.

⁴²² Christian, “Report to the State Medical Society on Criminal Abortions,” 132

⁴²³ Joseph, “The ‘Pennsylvania Model,’ 286.

⁴²⁴ Beck, *Elements of Medical Jurisprudence*, 189.

⁴²⁵ William McCollom, “Criminal Abortion,” *Transactions of the Vermont Medical Society: Proceedings of the Annual Meeting*, October 18, 1865, 41; Barry, *Medico-Christian Embryology*, 34-35.

Cooper in 1849.⁴²⁶ These courts ruled that the child had to have given proof of life in order for abortion to be an indictable offense. The Pennsylvania Supreme Court ruled that abortion was an indictable offense at Common Law, not because it killed a child, but because it was a crime against nature.⁴²⁷

What these indictments and rulings show is that in the mid nineteenth century, there were a variety of perceptions regarding the legality of pre-quickening abortion; the lack of consensus weakened the ability of the legal community to act against it. Compounding the problem was the tendency of nineteenth century jurists to avoid enforcing *any* Common Law crimes that had no clear precedent.⁴²⁸ Given the lack of prosecutions for abortion cases, the judges did not have many precedents upon which to base their rulings. This lack of clarity regarding Common Law crimes in general explains why several states undertook the codification of their criminal laws, including abortion.⁴²⁹

By 1841, ten states had already legislated against abortion, including the state of New York.⁴³⁰ Even with these statutes, prosecutions nevertheless rarely led to convictions. In 1844 Massachusetts passed legislation that covered abortion at all stages. Between 1849 and 1857, there were 32 abortion cases; all were acquitted.⁴³¹ Even when there was a conviction, the punishment was often not very severe, so that it had almost no deterrent effect on clandestine abortionists. The famous Madame Restell was convicted in 1847 through the efforts of Gunning S. Bedford. After a series of appeals she ended up serving a one-year sentence in the city penitentiary beginning in June 1848.⁴³² E.P. Christian noted that this one-year sentence was identical to the sentence for simple assault and battery, and less severe for crimes against property.⁴³³

As the legal system seemed powerless to curtail the spread of clandestine abortion, consternation grew in the medical community. “Men and women are arrested and tried for this

⁴²⁶ Joseph, “The ‘Pennsylvania Model,’” 304-5.

⁴²⁷ Joseph, “The ‘Pennsylvania Model,’” 314.

⁴²⁸ Joseph, “The ‘Pennsylvania Model,’” 285-286, 306, 316; Grossberg, *Grossberg, Governing the Hearth*, 168-169.

⁴²⁹ Joseph, “The ‘Pennsylvania Model,’” 306.

⁴³⁰ Dellapenna, *Dispelling the Myths of Abortion History*, 315.

⁴³¹ Mohr, *Abortion in America*, 122.

⁴³² Dyer, *The Physicians’ Crusade Against Abortion*, 16-17.

⁴³³ Christian, “Report to the State Medical Society on Criminal Abortions,” 137.

infamous crime,” commented Walter Channing, “but you can get no convictions. I believe there has never been one in this State [Massachusetts], this moral State by eminence, and perhaps in none is this crime more rife.”⁴³⁴ The lack of punishment was noted especially in cases involving married women, who could easily evade detection. E.P. Christian wondered aloud “Where is the memory, and where the records of punishment of such a case?”⁴³⁵

As was seen in the last chapter, the new embryology had brought greater focus on the early embryo and led many physicians to attribute great importance to the fact that life begins at conception. Hugh Hodge, in his pamphlet addressing abortion, noted that offspring resemble their parents in all the essential points. He wrote: “the human embryo is to be regarded, not merely as representing the animal existence of its parents, but as possessing an intellectual and moral nature.” He continued “still more mysterious is the transmission of a moral or spiritual nature from parent to child. The child imbibes, in some way altogether inexplicable, a spiritual existence from its parents.”⁴³⁶ Professor Stephen Tracy, in his advice book to women, speaking of a three-week old embryo stated, “here, then, is a new individual being in an early, although not its earliest, stage of its existence. It is a Human Being. It is one of the human family as really and truly as if it had lived six months or six years; consequently, its life should be as carefully and tenderly cherished.”⁴³⁷ As a result of this preoccupation with fetal welfare, physicians denounced abortion as a form of murder or at least as a grave transgression.⁴³⁸ Abortion providers were decried as “executioners of babies in utero;”⁴³⁹ abortion was described as “the slaughter of countless children.”⁴⁴⁰ Charles

⁴³⁴ Channing, “Effects of Criminal Abortion,” 135. It should be understood that Channing did not participate in the crusade against abortion. According to his biographer, he believed that the medical community should dissuade women from seeking abortion, but he did not have any confidence in legal remedies to end the practice. See Kass, *Midwifery and Medicine in Boston*, 241, 245.

⁴³⁵ Christian, “Report to the State Medical Society on Criminal Abortions,” 133.

⁴³⁶ Hodge, *An Introductory Lecture to the Course on Obstetrics* (1839), 11.

⁴³⁷ Tracy, *The Mother and Her Offspring*, 108.

⁴³⁸ Beck, *Elements of Medical Jurisprudence*, 130; Meigs, *The Philadelphia Practice of Midwifery*, 126; Bedford, *The Principles and Practice of Obstetrics*, 176-177; Hodge, *An Introductory Lecture to the Course on Obstetrics* (1839), 15; Storer, *On Criminal Abortion in America*, 5; McCollom, “Criminal Abortion,” 76; Tracy, *The Mother and Her Offspring*, 109; Leonard, “Quackery and Abortion,” 478; Christian, “Report to the State Medical Society on Criminal Abortions,” 134; Austin Flint as quoted in J.K. Johnson, “Bible Argument against Criminal Abortions,” ed. Austin Flint, *Buffalo Medical Journal* 14, no. 11 (April 1859): 697–98; Drs. Mayburry and Nebinger as cited in “Philadelphia County Medical Society— Abortion: Its Causes, Dangers and Treatment,” *The Medical and Surgical Reporter*, 4, no. 26 (September 29, 1860): 540-541.

⁴³⁹ Leonard, “Quackery and Abortion,” 478

⁴⁴⁰ McCollom, “Criminal Abortion,” 76

Meigs told his students that should any female patients solicit them to procure abortion, “no occasion ought to be missed to urge them not to add a new crime to what was probably a misfortune, or a grievous error” because abortion was by the law of God “murder.”⁴⁴¹ Horatio Robinson Storer was even more emphatic, stating, in capital letters “*By the Moral Law, THE WILFUL KILLING OF A HUMAN BEING AT ANY STAGE OF ITS EXISTENCE IS MURDER.*”⁴⁴² The logical outcome of this belief was that abortion should be punished. As Hugh Hodge concluded: “Every protection, therefore, which is extended by human legislation to the young infant or even to the adult, should be equally effectual in securing the life of the embryo from the earliest period of its existence.”⁴⁴³

4. The Physicians’ Crusade Against Abortion

As clandestine abortion led to ever greater suppression of prenatal life, physicians complained ever more loudly, publishing editorials in medical journals and generally deprecating the situation, creating a mounting sense in the medical community that *something* should be done. Denouncing the ills of the day, and mobilizing against them, were all part of the 19th century zeitgeist of moral reform. To elite physicians, abortion represented an attack on human dignity that needed to be eliminated, consonant with other movements that, as historian Carl Degler noted, sought to

...reduce cruelty and to expand the concept of the sanctity of life. The reduction, in the course of the 19th century, in the use, or elimination of the death penalty, the peace movement, the abolition of torture and whipping in connection with crimes all represented steps in that centuries-long movement. The prohibiting of abortion was but the most recent effort in that larger concern.⁴⁴⁴

The movement to criminalize abortion was spearheaded by Horatio Robinson Storer, who, in 1857, convinced the delegates of the American Medical Association convention in Nashville to

⁴⁴¹ Meigs, *The Philadelphia Practice of Midwifery*, 126.

⁴⁴² Storer, *On Criminal Abortion in America*, 5.

⁴⁴³ Hodge, *The Principles and Practice of Obstetrics*, 78.

⁴⁴⁴ Degler, *At Odds*, 247.

form a committee—with himself at the helm—to study the issue and make recommendations. In 1859, the report was presented to the American Medical Association. A resolution was adopted as a result: the AMA would lobby state legislatures for more stringent abortion laws, and it called on the cooperation of State medical societies on this matter.⁴⁴⁵

Storer devoted considerable energy in the next several years detailing in writing the nature of the phenomenon to his medical brethren, as well as writing works targeted to laypeople explaining why he believed abortion was wrong. In his mind, an anti-abortion campaign was needed because the law was too lenient, and because public opinion was ignorant about prenatal development. As he explained in his pamphlet *On Criminal Abortion*: “*By the Common Law and by many of our State Codes, foetal life, per se, is almost wholly ignored and its destruction unpunished; abortion in every case being considered an offence mainly against the mother, and as such, unless fatal to her, a mere misdemeanor, or wholly disregarded.*” [Italics in the original.]

The main target of the campaign was to eliminate the notion of “quickening”⁴⁴⁶ in law. Laws on abortion would be based on the idea that human life begins at conception, and that prenatal life should be legally recognized at all stages of pregnancy. The campaign to implement and enforce statutes would also be accompanied by an effort to educate the public about prenatal development, so that they no longer consider “quickening” to mark the beginning of life.

The Physicians’ Crusade Against Abortion can be considered a success on the legislative front. Between 1860 and 1880, 40 anti-abortion statutes were passed by state and territorial legislatures.⁴⁴⁷ By 1900, virtually every American jurisdiction had criminalized abortion at all stages of pregnancy.⁴⁴⁸ There was also an attempt to educate medical colleagues and the public about the nature of abortion. Horatio Robinson Storer wrote *On Criminal Abortion* for the benefit of his professional peers; he would go on to write: *Abortion Why Not?* A pamphlet aimed at a female audience. He also wrote *Is it I?* an anti-abortion pamphlet aimed at men. Clandestine abortion was never suppressed; it persisted, and enforcement of abortion laws were uneven and ad

⁴⁴⁵ Horatio Robinson Storer et al., “Report on Criminal Abortion,” *Transactions of the American Medical Association* XII (May 1859): 77-78.

⁴⁴⁶ Reagan, *When Abortion Was a Crime*.12.

⁴⁴⁷ Mohr, *Abortion in America*, 200.

⁴⁴⁸ Joseph, “The ‘Pennsylvania Model,’” 284.

hoc. But the crusaders had successfully transformed institutions to adopt their point of view and stigmatized abortion in the public consciousness.

5. The Proliferation of Therapeutic Abortion

But even as the American medical community affirmed the humanity of the unborn and denounced the growth of clandestine abortion, it nevertheless continued to practice abortions for medical reasons. Traditionally, in Anglo-American obstetrics, the life of the mother had always been upheld above that of the child. For this reason, fetocidal procedures, such as craniotomy and abortion were sanctioned when necessary. But prior to 1830, the number of scenarios where a pre-viable fetus might be expelled was very limited. They included hyperemesis gravidarum, obstetric convulsions and retroversion of the uterus.⁴⁴⁹ But as obstetric practice expanded, physicians began seeing their patients earlier in pregnancy and became more familiar with them, instead of only being introduced to them while they were in labour. The opportunity to induce abortion correspondingly increased. Abortion began to be performed in other potentially life-threatening or life-altering conditions such as uterine hernia; diseases of the heart, lungs, or brain; extra-uterine pregnancy; fetal malformation, dropsies, varix of the labia (swollen veins) and aneurism; and abdominal tumours.⁴⁵⁰ Hugh Hodge argued against abortion in cases of “delicacy” physical and mental—which suggests that there were practitioners who were performing abortions for this very reason.⁴⁵¹

Practitioners seemed to disagree about the rules for allowing medical abortions. For instance, as cited above, Charles Meigs would perform an abortion for a pelvis measuring less than one-and-a-half inch; but Tucker would perform one for one less than two-and-a-half.⁴⁵² Hugh

⁴⁴⁹ Dewees, *A Treatise on the Diseases of Females*, 135; Denman argues against abortion in convulsions, suggesting that this was commonly done. Denman, *An Introduction to the Practice of Midwifery*, ed. John W. Francis (1829), 606; Dewees, “Observations on the Retroversion of the Uterus,” 287.

⁴⁵⁰ Tucker, *Elements of the Principles and Practice of Midwifery*, 387; Hodge, *The Principles and Practice of Obstetrics*, 298, 412, 534; Storer, *On Criminal Abortion in America*, 65; Bedford, *The Principles and Practice of Obstetrics*, 669.

⁴⁵¹ Hodge, *The Principles and Practice of Obstetrics*, 301.

⁴⁵² Meigs, *Obstetrics*, 511; Tucker, *Elements of the Principles and Practice of Midwifery*, 391.

Hodge would induce a miscarriage if the death of the mother was inevitable, and the disease was caused by pregnancy.⁴⁵³ In contrast, physician E.P. Christian wrote that abortion was acceptable when either the life *or* the health of the pregnant woman was at stake.⁴⁵⁴ Gunning S. Bedford recognized that on this matter there was a “difference of opinion,” that he could not “undertake to determine this question for others,” and that this question was one “which must be left to conscience and a sincere desire, as far as may be, to do what is right.” The main procedure to be observed was to consult “wise consults.”⁴⁵⁵

To be sure, the scenarios where abortion could be acceptable, at least among the most eminent voices of the obstetric community, involved rare conditions, and it was supposed to be the last resort. Charles Meigs made the point emphatically, stating to his students that they had “no right to bring on anybody’s labor, but upon the strongest and most clearly understood motives of necessity, and of indispensable necessity, to do so.”⁴⁵⁶ And the fact that doctors were urged to consult other practitioners followed that logic.⁴⁵⁷ Though unstated, the purpose of these consultations was to suggest other possible avenues, or otherwise confirm that no other alternative existed and that abortion was necessary. But the urgent nature of the situation, geographic isolation, or unavailability of other doctors could make such consultations unfeasible. So long as a practitioner had a medical reason justifying an abortion, he was an authority unto himself, especially in areas with a limited number of doctors.

In light of the willingness of physicians to perform abortions for medical reasons, all the while condemning abortions for family limitation, some scholars have cast doubt on the motives of anti-abortion crusaders. The existence of this double standard prompted sociologist Kristin Luker to underscore that the right to life of the embryo in the 19th century seemed both “absolute” and “conditional.” She believed that “if these regular doctors were as actively opposed to abortion as their public rhetoric suggested, we would expect the result of their efforts to be laws that either forbade abortions entirely or, at the very least, carefully defined the few kinds of abortions that

⁴⁵³ Hodge, *The Principles and Practice of Obstetrics*, 301.

⁴⁵⁴ Christian, “Report to the State Medical Society on Criminal Abortions,” 130.

⁴⁵⁵ Bedford, *The Principles and Practice of Obstetrics*, 679

⁴⁵⁶ Meigs, *Females and Their Diseases*, 299.

⁴⁵⁷ Meigs, *Females and Their Diseases*, 299.

could take place.⁴⁵⁸ She also wrote that in order for anti-abortion physicians to be consistent on questions of obstetric emergencies, they would have had to adopt the point of view of the Catholic bishop of Philadelphia, Francis Kenrick (1796-1863): it is better to allow two deaths than one murder.⁴⁵⁹

Historian Angus McLaren, in examining the British context, noted what seemed to be an inconsistency in the British context in the 19th century which probably overlapped with American attitudes, given that these two medical communities influenced one another. McLaren compared the attitude of British physicians on abortion, with that of French Catholic physicians and stated:

Whatever one might think of French Catholic physicians' condemnations of both criminal and therapeutic abortion, one has at least to recognize the consistency of their arguments. In contrast English doctors vaunted a foetal vitality when condemning the notion of quickening which they tended to dismiss when discussing therapeutic abortion.⁴⁶⁰

It is tempting to dismiss this double standard as a lack of sincerity, and to assume that it is evidence of an ulterior motive. If their point was really about sexually controlling women, or nativism, or ejecting midwives from practice, as some historians have suggested, why not just lobby for those specific points directly?⁴⁶¹ Medical professionals were developing the authority and expertise to be persuasive, and they were often community leaders in their own right.⁴⁶² They did not need to hide their motives: they had the education and influence to persuade the public of their opinions.

Nevertheless, the discrepancy of their belief remains. It does seem somewhat anomalous, as Leslie Reagan pointed out, that “physicians had won the criminalization of abortion and retained to themselves alone the right to induce abortions when they determined it necessary.”⁴⁶³ What can explain that physicians advocated for the unborn, and, at times, approved of therapeutic abortion?

⁴⁵⁸ Luker, *Abortion and the Politics of Motherhood*, 31-32.

⁴⁵⁹ Francis Patrick Kenrick, *Theologiae moralis*., vol. 1, (Apud Eugenium Cummiskey, 1841), 110-113 as cited in Luker, *Abortion and the Politics of Motherhood*, 31.

⁴⁶⁰ McLaren, *Reproductive Rituals*, 142.

⁴⁶¹ Brodie, *Contraception and Abortion in Nineteenth-Century America*, 253, 272; Smith-Rosenberg, *Disorderly Conduct: Visions of Gender in Victorian America*, 238; Caron, *Who Chooses*, 14; *Lost*, 20.

⁴⁶² Cassedy, *Medicine and American Growth, 1800-1860*, 63.

⁴⁶³ Reagan, *When Abortion Was a Crime*, 13.

There are two important components to this question. The first is the evolving vitalist discourse surrounding the unborn which tended to diminish their importance in the maternal-fetal dyad. This component will be explored later in the chapter. The second component is the value that American obstetrics placed on womanhood and the ideology surrounding it. Traditionally, Anglo-American obstetrics favoured the life of the mother over the fetus. Feticidal procedures, like craniotomy, to save the life of the mother, did not “need” any explanation to American practitioners. It was just asserted. What was new in the American medical discourse was the extent to which physicians went on to *exalt* the woman, using a vitalist framework. Women were viewed as the centre of their family by virtue of their biological make-up. But their role as the centre of the family was not based solely on ideological considerations. Women were also valued because of the practical role they played in the domestic sphere, a role that was reinforced by the ambient ideas about women. A household could not afford to lose the woman because her work was too essential in domestic upkeep and child rearing.

6. How Physicians Viewed Women

Obstetrics, as a profession, suffered from a poor reputation.⁴⁶⁴ Childbirth was perceived to be a natural process that did not require a great deal of intervention. For this reason, medical attendance was often considered superfluous.⁴⁶⁵ When doctors saved women’s lives, the measures they took were often hidden from view.⁴⁶⁶ In order to promote their speciality to medical students and raise the profile of their discipline, obstetricians tried to emphasize what was special about their field. The most salient aspect of their specialty was that they dealt with women. Throughout introductory lectures and other medical texts, they spoke about what women represented to them—

⁴⁶⁴ Dewees, *A Compendious System of Midwifery* (1843), 531; Hodge, *A Lecture Introductory to the Course on Obstetrics and Diseases of Women and Children* (1835), 11; Wiltbank, *A Plea for Obstetrics*, 5.

⁴⁶⁵ Dewees, *A Compendious System of Midwifery* (1832), 544; Wiltbank, *A Plea for Obstetrics*, 5; Graves, “An Elementary Treatise on Midwifery; or Principles of Tokology and Embryology (Review),” 109; Gunning S. Bedford, *An Address, Introductory to a Course of Lectures: Delivered in the Hall of the Medical College of South-Carolina, Before the Trustees and Faculty, the Students of Medicine, and the Public Generally, at the Opening of the Session of 1833-4* (Charleston: Printed by J.S. Burges, 1833), 33

⁴⁶⁶ Dewees, *A Compendious System of Midwifery* (1832), 544.

often referring to them archetypically as “Woman.” Their discourse was completely consonant with what scholars today called the Cult of True Womanhood, which promoted an idealized vision of women that emphasized their domesticity.⁴⁶⁷ This Cult of True Womanhood, just like the physicians’ discourse, referenced primarily white middle-class women.⁴⁶⁸ But the physician discourse on women had the added feature of focusing on their biological make-up. Women were construed as having great sensibility—that is, a heightened physical ability to feel emotion. This sensibility generated great empathy and compelled her to exude warmth and tenderness to those around her, making her into a paragon of morality. This sentimentalist discourse regarding women permeated a wide span of literature relating to femininity in the 19th century, whether it be women’s magazines or medical texts.⁴⁶⁹ By highlighting the vital role of women in the family and society, and underscoring how obstetricians helped women, they aimed to persuade their audience to recognize the importance of this specialty and potentially adopt as their own.

Medical writers often spoke about women using sacralizing language, reminiscent of sentimentalist literature of the age, almost as if they were trying to enrol their audience into a special veneration of her. For example, Gunning S. Bedford wrote of Woman that “she is the *idol* of all hearts,” and “a ministering *angel*,” and that “her history is but the narrative of good deeds”⁴⁷⁰ [Emphasis added]. Hugh Hodge spoke of woman being “presented for our contemplation” as if she were a religious icon.⁴⁷¹ Physician John Wiltbank described how Christianity tended “to *exalt* her virtues, to *consecrate* and *hallow* her affections, “and “to shed a *halo* of light about her path, and thus add dignity to her nature, and influence to her sway.”⁴⁷² [Emphasis added] Charles Meigs spoke of the horror of losing a patient in childbirth. He called it a “desecration.”⁴⁷³

⁴⁶⁷ Barbara Welter, “The Cult of True Womanhood: 1820-1860,” *American Quarterly* 18, no. 2 (1966): 152.

⁴⁶⁸ Nancy F. Cott, *The Bonds of Womanhood: “Woman’s Sphere” in New England, 1780-1835*, 2nd ed. (New Haven: Yale University Press, 1997), 10

⁴⁶⁹ Many literary examples are extant in Barbara Welter, “The Cult of True Womanhood: 1820-1860,” *American Quarterly* 18, no. 2 (1966): 151–74.

⁴⁷⁰ Gunning S. Bedford, *Lecture Introductory to a Course on Obstetrics and the Diseases of Women and Children: Delivered October 30th, 1846* (Press of the New York University, 1846), 7.

⁴⁷¹ Hugh Lenox Hodge, *Lecture Introductory to the Course on Obstetrics, and Diseases of Women and Children: In the University of Pennsylvania, for the Session of 1836-7* (Philadelphia: Printed by T.B. Town, 1836), 18.

⁴⁷² Wiltbank, *A Plea for Obstetrics*, 6-7.

⁴⁷³ Meigs, *Females and Their Diseases*, 576.

Women were considered to have the greatest impact in the domestic sphere, where they were deemed essential in the creation of successful homes and families. They became the “presiding spirit” of the home,⁴⁷⁴ creating a “heavenly haven,”⁴⁷⁵ an oasis where children could be raised in an emotionally warm and safe environment, free from the outside world’s moral pollution. The home was where men, who increasingly worked outside the household, could retreat to escape the seemingly cruel and competitive world of the public sphere, and find a reassuring and loving presence. Women were the “custodians of cheerfulness” who would make “all things conjugal, cozy, and comfortable.”⁴⁷⁶ In an introductory lecture, John Wiltbank described a woman’s home as her “empire,” stating:

Here her influence is unbounded. It is *here* that the husband, after the toils and anxieties of the day, finds rest, and peace, and comfort. *Here* the children assemble to bask in the sunshine of a mother's love. It is *here* that joyful tidings are brought that they may be enjoyed by being shared *here* that pain and sickness are relieved by affectionate care and attention—*here* that distress and anguish of spirit are assuaged and comforted.⁴⁷⁷

Meigs conveyed the same flowery language about women: “She reigns in the heart; her seat and throne are by the hearth stone. —The household altar is her place of worship and service.”⁴⁷⁸

Given that women were perceived to be the source of warmth and comfort, and that they were central to the loving environment of the household, they were often referred to by the roles they played in the family. For example, Edward Delafield, in a journal article trying to promote the practice of obstetrics to the wider medical community, asked his reader to consider a dire case of protracted labour, and “the value of the life which is at stake—the *wife* of a devoted husband, the *daughter* of affectionate parents, the *mother* of children, whose loss can never be supplied to

⁴⁷⁴ Cott, *The Bonds of Womanhood*, 67.

⁴⁷⁵ Kara B. Clevinger, “Sentimentalizing Children and Fashioning Maternal Authority in Godey’s Lady Book,” in *Sentimentalism in Nineteenth-Century America: Literary and Cultural Practices*, ed. Mary De Jong and Paula Bennett (Madison [New Jersey: Fairleigh Dickinson University Press, 2013), 18.

⁴⁷⁶ Clevinger, “Sentimentalizing Children,” 18, 20.

⁴⁷⁷ John Wiltbank, “The Peculiarities of the Female: Lecture Introductory to the Course on Obstetrics in the Medical Department of Pennsylvania College, for the Session of 1845-46.,” in *Addresses and Lectures Before the Philadelphia County Medical Society, the Pennsylvania College Medical Department and the University of Pennsylvania Department of Medicine, and Other Medical Pamphlets* (Philadelphia County Medical Society, 1857), 7.

⁴⁷⁸ Meigs, *Females and Their Diseases*, 41.

them.”⁴⁷⁹ [Emphasis added] In another article, speaking of puerperal fever, J.G.F. Holston said that it

singles out the teeming *mother*, perhaps the *bride* of less than a year's matrimonial experience, just having given to the world her first born. Or the honored *matron*, the loving and faithful *companion* and *friend* of a quarter of a century; concentrating in herself, all the dear relations of *daughter*, *sister*, *wife*, *mother*, and *grandmother*, but in either case, the very Cynosure, the life and light of her household. ⁴⁸⁰

In these passages we can see that women were often thought of in a nexus of relationships. Their value was derived, in part, from the sentimentally charged connections they developed with others.

But Woman's influence was not confined to her circle of family and acquaintances. Her virtue served as inspiration for great endeavours in the public sphere. Gunning S. Bedford wrote about how women's character and activity in the home had repercussions on society. He described the mothers' self-sacrificial devotion to their children, and how wives offered consolation to their husbands in the face of “crushed fortunes.” He asked, “in her character of wife, is not woman an object worthy of our holiest love?” It was the love of women that would “animate the sunken heart, rekindle and bring into active exercise the slumbering energies of him, to whom she has pledged eternal fidelity.” This awakening of “slumbering energies” was considered among “the beautiful results of the influence which woman exercises on society.” ⁴⁸¹

In the same vein, Hugh Hodge also believed that women had influence in society because they “govern through the medium of those indescribable sentiments and passions, which are universally excited in the breast of man by her physical and moral excellencies.”⁴⁸² He went on to describe how, in their many roles, women exercised their influence and concluded that “by a combined influence, directly and indirectly exercised, females exert a control, always and powerfully operating, over the character of the domestic circle, of society, and of nations. She indeed constituted, ‘the last, best gift of Heaven to man.’”⁴⁸³

⁴⁷⁹ Edward Delafield, “The Practice of Midwifery,” *The Boston Medical and Surgical Journal* XVIII, no. 4 (February 28, 1838): 59.

⁴⁸⁰ J.G.F. Holston, “Report of Committee on Obstetrics,” *Transactions of the First-Fifty-Ninth Annual Meeting of the Ohio State Medical Society*, 1857, 59.

⁴⁸¹ Bedford, *A Lecture, Introductory to a Course on Obstetrics and the Diseases of Women and Children* (1848), 7

⁴⁸² Hodge, *Lecture Introductory to the Course on Obstetrics* (1836-7), 17.

⁴⁸³ Hodge, *Lecture Introductory to the Course on Obstetrics, and Diseases of Women and Children* (1836-7), 18-19.

Charles Meigs described Woman as “a great and predominant force in the world;” because she repays male homage and love with the “perpetual provocation she offers to noble endeavor.”⁴⁸⁴ He was convinced that were it not for woman, civilization would collapse. Speaking to his students he asked “But for the power of that influence, which one of you would doubt the rapid relapse of society into the violence and chaos of the earliest barbarism?”⁴⁸⁵ Elsewhere he explained the basis of such a sentiment: “Everything that man is and hath, except his brute force and brutal inclinations—are of her, and for her.”⁴⁸⁶ She compensated male material support with “the humanizing, softening, meliorating influence which she carries into his public as well as his domestic life.”⁴⁸⁷

Women then represented order and civilization; women made the world right through, what today, we would term “soft power”—her ability to persuade and generate positive emotional response.

This discourse, so far, was not that different from what was transmitted in 19th century American popular literature.⁴⁸⁸ But the medical discourse was heavily influenced by French vitalism. Montpellier vitalists were considered the “premier theoreticians of women's sensibility.”⁴⁸⁹ American physicians carried on that tradition. As we saw in the last chapter, vitalism placed a great emphasis on the neurological system as the fundamental driver of biological processes, and was in effect, synonymous with the being itself. As Charles Meigs to his students, “the brain and nerve are the creature; the animal; the perceptive being.”⁴⁹⁰ They are virtually one and the same. Whatever response the nervous system compelled a being to adopt, that characterized who they were.

⁴⁸⁴ Meigs, *Females and Their Diseases*, 52.

⁴⁸⁵ Meigs, *Females and Their Diseases*, 38.

⁴⁸⁶ Meigs, *Females and Their Diseases*, 50.

⁴⁸⁷ Meigs, *Females and Their Diseases*, 52.

⁴⁸⁸ Amanda Fehlbaum, “The Cult of Domesticity,” in *The Wiley Blackwell Encyclopedia of Family Studies*, ed. Constance L. Shehan (John Wiley & Sons, February 29, 2016); See also Cott, *The Bonds of Womanhood*, 2; For sample quotations from *Godey's Lady Book*, a popular magazine of the era: Sarah Mitchell, “A Wonderful Duty: A Study of Motherhood in Godey's Magazine,” in *Seeking a Voice: Images of Race and Gender in the 19th Century Press*, ed. David B. Sachsman, S. Kittrell Rushing, and Roy Morris (Purdue University Press, 2009), 174, 175;

⁴⁸⁹ Williams, *A Cultural History of Medical Vitalism*, 8.

⁴⁹⁰ Meigs, *Females and Their Diseases*, 169.

In 1836, Hugh Hodge spoke at length about the relationship between women, their nervous systems, and their moral excellence. He concluded that the “temperament, therefore, of females, is almost universally *nervous*,”⁴⁹¹ because their cerebrospinal system of nerves “is endowed with a wonderful sensibility.” As their feelings are easily moved, women cultivate with “warmth and enthusiasm” all “the domestic and social affections.”⁴⁹² That ability was of utmost importance in a society where sentimentalism was at the heart of the culture.⁴⁹³ The superior ability to feel and empathize made women by default, more moral. Because women were perceived to have a greater capacity to feel and discern emotion, they were better able to anticipate and meet the needs of their family; this in turn helped them to cultivate close and warm relationships, creating the *rapports* that were so essential to the vitalist worldview. Being nervous, she was more sensible; being more sensible, she was more emotional and by extension, more empathetic, understanding, and capable of greater tenderness. Thus, the biological make-up of woman was inseparable from her moral make-up; they were identified one with the other. In this way, the discourse of the Cult of True Womanhood was transmitted and bolstered with medical authority, treated as factual as any empirically derived medical data.

But the preference of woman over fetus in the maternal-fetal conflict was not solely based on ideological or emotional considerations. Physicians had very practical reasons for doing so. The death of the mother did not solely signify the loss of a cherished individual; the death of the mother inaugurated a family crisis. The mother played an essential, practical role in the maintenance of family and household. She cooked, cleaned, gardened, shopped, did the laundry, made all the clothes and linens. If she had young children, she breastfed and changed diapers.⁴⁹⁴ If she died in childbirth, the surviving father was left to pick up the pieces to care for the family in an age when men were untrained in the domestic arts because it was viewed as unmanly. He could not be expected to care for the household and work outside the home for an extended period of time.

⁴⁹¹ Hodge, *Lecture Introductory to the Course on Obstetrics, and Diseases of Women and Children (1836-7)*, 15.

⁴⁹² Hodge, *Lecture Introductory to the Course on Obstetrics (1836-7)*, 14.

⁴⁹³ Shirley Samuels, *The Culture of Sentiment Race, Gender, and Sentimentality in Nineteenth-Century America* (New York: Oxford University Press, 1992), 4.

⁴⁹⁴ For a description of the many tasks women performed, see Chapter IV in Jeanne Boydston, *Home and Work: Housework, Wages, and the Ideology of Labor in the Early Republic*, ACLS Humanities E-Book. (New York: Oxford University Press, 1994), 75-98.

Sometimes another female figure could make a suitable replacement, such as a relative or hired nurse.⁴⁹⁵ This was considered a temporary solution. The only permanent solution to the loss of a mother was remarriage. And if there was no prospect of marriage in the near future, he might be forced to farm out his other children to relatives or friends, or worse—strangers. In other words, the death of the mother could very well mean the break-up of the family.⁴⁹⁶ On a symbolic level, in the discourse of the Cult of True Womanhood, this represented a gargantuan catastrophe, the very worst that could happen. The emotional investment into this worldview thereby intensified the prospect of maternal death. It was bad enough that the mother was gone; but it was depicted as all the more unbearable through its sentimentalist depictions.

7. The Fetus Compared to the Woman

Traditionally, the medical class simply asserted that the “comparative” value of the woman versus the fetus was greater, and that “necessity” justified feticidal procedures.⁴⁹⁷ It was taken to be self-evident, and therefore, attempts to elaborate on it at length were not deemed necessary.

But a new discourse evolved surrounding the fetus in American medicine after the 1830s. It coincided with the American adoption of French models of medicine, including the ideology of vitalism and vitalist embryology. It also coincided with the acceptance of induced premature labour in early pregnancy in cases of extremely contracted pelvises. The problem of extremely contracted pelvises—those that would not allow the delivery of a living child even at the threshold of viability at seven months of pregnancy—was one of the thorniest problems in obstetrics. Usually such a pelvis had a diameter of about two inches; some practitioners calculated that a slightly smaller pelvis could allow a live birth, and some judged that it required a slightly

⁴⁹⁵ Shawn Johansen, *Family Men: Middle-Class Fatherhood in Industrializing America* (New York: Routledge, 2013), 73.

⁴⁹⁶ Lisa Wilson, *History of Stepfamilies in Early America* (University of North Carolina Press, 2014), 3; also see Steven Mintz, *Huck's Raft: A History of American Childhood* (Harvard University Press, 2006) Chapter 8, where he speaks of the shuffling of children from household to household as the result of the death of a parent.

⁴⁹⁷ Dewees, *A Compendious System of Midwifery* (1825), 575-577; Denman, *An Introduction to the Practice of Midwifery*, ed. John W. Francis (1829), 430.; Merriman, *A Synopsis of the Various Kinds of Difficult Parturition With Practical Remarks on the Management of Labours*, 49.

larger passage. Such a deformity was very rare, but one that created the most difficult dilemmas. If a woman with an extremely contracted pelvis reached full term, the only possible mode of delivery was the Caesarean section. The C-section had been almost uniformly fatal to women when performed by Anglo-American physicians. If the woman was known to have a severely contracted pelvis before term, premature delivery in the early months—in effect an abortion—was possible. American physicians never *liked* sacrificing fetal life. And there was always the prospect that if they successfully performed a Caesarean section, the obstetric prime directive would be fulfilled. So, they could be pulled in two directions.

With the adoption of vitalist embryology in American medicine, the discourse regarding the fetus, in regard to maternal-fetal conflict, underwent a shift in the 1830s. Vitalist embryology led to the fetus being depreciated. The fetus was always regarded as a human being, but a *lesser* human being, who only had “vegetative life.” This new discourse then helped temper any scruples with regards to medicalized abortion.

This trend in the depreciation of fetal life in maternal-fetal conflict can be traced to the appearance of the American edition of Alfred Velpeau’s *Principles of Tokology and Embryology* in 1831. In the last chapter, Velpeau’s book was cited because of its pioneering embryological study of 140 specimens. But it should also not be forgotten that it was primarily a book about obstetrics, and it is for this that the American medical community valued this book. Hugh Hodge said of Velpeau’s book that it was a “work of the highest authority” and that at the time it was published it represented “the state of obstetric science in France during the first quarter of the present century.”⁴⁹⁸

Velpeau was the first French physician to openly propose abortion in cases of extremely contracted pelvises— although earlier British physicians had proposed it as well.⁴⁹⁹ This proposal

⁴⁹⁸ Hodge, *The Principles and Practice of Obstetrics*, ix.

⁴⁹⁹ Charles Claude Brillaud-Laujardière, *De l’avortement provoqué considéré au point de vue médical, théologique et médico-légal* (Durand, 1862), 7; William Cooper, “A Case of the Caesarean Section; by William Cooper, M. D. Communicated by Dr. Hunter. Read 1769.,” *Medical Observations and Inquiries* IV (1771): 271; Hull, *Observations on Mr. Simmons’s Detection*, 454-455; John Barlow, “An Account of a Mode of Practice Which Has Been Successfully Adopted in Cases of Distortion of the Pelvis in Pregnant Woman,” *Medical Facts and Observations* VIII (1800): 92; Barlow, “On the Advantages and Disadvantages of Inducing Premature Labour”, 51; John Burns, *The Principles of Midwifery: Including the Diseases of Women and Children*, ed. Nathaniel Chapman and Thomas

for medicalized abortion was fairly revolutionary for French medicine on a number of fronts. In the French tradition, having to choose between mother and child in an obstetric emergency was unthinkable.⁵⁰⁰ For this reason, the French had always rejected craniotomy on a live child, and had preferred the Caesarean section when the deformity of the pelvis made delivery at full term impossible. The French had also rejected premature delivery in order to save a live child, for a host of reasons. Jean-Louis Baudelocque (1745-1810), the foremost obstetrician of his time, likened premature deliveries of viable fetuses to abortion because he believed the normal outcome of these operations was death for the child.⁵⁰¹ The dating of conception could never be certain; therefore, it was possible that the child may be more developed than expected and be too big to cross the pelvis, and the purpose of the operation be thwarted.⁵⁰² He also believed that provoking labour before the cervix was ready led to extended labours that endangered the fetus. Premature labour was often provoked by piercing the amniotic sac. The fetus would then be deprived the protective bubble of the sac which resisted the force of contractions. Once broken, the sac and the uterus would eventually collapse around the fetus, subjecting it to the force of the contractions that, at length, could kill it.⁵⁰³ Velpeau echoed a similar concern, stating that the premature fetus was too feeble to withstand the force of the contractions.⁵⁰⁴ He was also wary of the potential damage done to the woman brought on by obstetric hemorrhages, inflammations and other problems associated with childbirth.⁵⁰⁵ And he was also against craniotomy on a live child in cases where the pelvis was more than two-and-a-half inches, as there was a possibility that the child may be born alive.

Thus, for Velpeau to reject craniotomy on a live child and premature delivery to save the fetus yet propose abortion in the early months of gestation seemed counter-intuitive. He understood that, in proposing this procedure, he was going against the grain of French medicine.

C. James, 3rd American Edition, vol. 2, 2 vols. (Philadelphia: Johnson and Warner, Benjamin and Thomas Kit [and 7 others]; Joseph Rakestraw, printer, 1813), 37.

⁵⁰⁰ Jean-Yves Le Naour and Catherine Valenti, *Histoire de l'avortement: XIXe-XXe siècle* (Seuil, 2003), 19.

⁵⁰¹ Le Naour and Valenti, *Histoire de l'avortement: XIXe-XXe siècle*, 20.

⁵⁰² Jean Louis Baudelocque, *L'art des accouchemens*, vol. 2 (chez Méquignon l'aîné, 1789), 454-455.

⁵⁰³ Baudelocque, *L'art des accouchemens*, 456.

⁵⁰⁴ Velpeau, *An Elementary Treatise on Midwifery*, 492.

⁵⁰⁵ Velpeau, *An Elementary Treatise on Midwifery*, 491.

The thinking went: if craniotomy on a live child was unethical, and premature delivery on a viable fetus was unethical, then early abortion should likewise be rejected.

Velpeau adopted a completely different apologetic. He wrote:

It has been said that no one has a right to destroy a living foetus, even in the first months of its existence. But delivery, when provoked previously to the seventh month, kills it inevitably, and rarely fails to cause its death in the seventh and eighth. Besides, if it must be destroyed, why not wait for the term of labour; by so doing we shall at least not destroy the few chances we have of seeing the labour come to a favourable conclusion.

In Velpeau's mind, if early abortion was not chosen, the fetus was going to die no matter what alternative was chosen. The fetus could not be delivered alive either at full-term or at the threshold of viability. If either of these options were out of the question, then why bother with continuing to term? An abortion would expedite the process, be safer for the mother, and spare everyone the trouble of a lengthy pregnancy and troublesome delivery.

One might object that a C-section was still possible at full term, so why not choose that option? Velpeau never directly addressed that question. However, he did believe that this operation was fatal for the woman in at least half the cases.⁵⁰⁶ But the way he did address the question of why abortion was appropriate, seemed to by-pass all considerations, by suggesting that the fetus was not worth the trouble. He wrote:

For my own part, I confess I cannot possibly balance the life of a foetus of three, four, five, or six months, a being which so far scarcely differs from a plant, and is bound by no tie to the external world, against that of an adult woman whom a thousand social ties engage us to save ; so that in a case of extreme contraction, if it were mathematically demonstrated that delivery at full term would be impossible, I would not hesitate to recommend abortion in the first months of gestation.⁵⁰⁷

To suggest that the woman was more valuable than the fetus was not new. But to suggest that fetus was *less important as a human being* in cases of maternal-fetal conflict represented a new shift in medical discourse. William Osborn had attempted to justify feticidal procedures on the premise that the fetus was completely deprived of all sensibility, and the deprivation suffered by the fetus

⁵⁰⁶ Velpeau, *An Elementary Treatise on Midwifery*, 509.

⁵⁰⁷ Velpeau, *An Elementary Treatise on Midwifery*, 491.

in a craniotomy was “so extremely small as almost to vanish to nothing.”⁵⁰⁸ But almost no writer took up that particular point of view, and it did sustain noticeable opposition from John Hull and William Dewees.⁵⁰⁹ The fetus, especially in French medicine, had been considered of equal value to the woman in all circumstances. But now, vitalist discourse on the fetus was being harnessed in order to justify medicalized abortion. The fetus was a “vegetative life”⁵¹⁰ and that in itself justified the sacrifice.

Velpeau’s vitalist discourse on the fetus, would echo in American obstetric literature in a number of ways, and come to influence how American physicians viewed the fetus and, by extension, how they resolved maternal-fetal conflict. Either Velpeau himself would be cited, or like-minded French colleagues, who adopted Velpeau’s discourse, would be quoted, thereby amplifying Velpeau’s opinion.

After the publication of his book in America, practitioners began to recommend abortion for extremely contracted pelvises in order to prevent recourse to the C-section.⁵¹¹ The most striking example of Velpeau’s influence on medicalized abortion is David Tucker’s obstetric textbook. Velpeau had only used his vitalist embryology to justify medicalized abortion in cases of extremely contracted pelvises, that is, in cases where all possibility of live birth at any stage of pregnancy was excluded. Tucker made a similar argument. He maintained that premature delivery was allowable in any situation where the C-section or craniotomy was the foreseeable outcome, as both were horrific to patient and physician alike. Premature delivery often resulted in a dead fetus—thereby effectuating an abortion. In that sense, it was usually just as fatal as craniotomy, and therefore morally equivalent. But sometimes, if it was performed in the latter stages of pregnancy, it did hold out the slight chance the fetus could survive birth.⁵¹² For all these reasons, it was more desirable than craniotomy. Tucker excluded the possibility of performing C-sections

⁵⁰⁸ Dewees, *A Compendious System of Midwifery* (1825), 581.

⁵⁰⁹ Hull, *Observations on Mr. Simmons’s Detection*, 134; Dewees, *A Compendious System of Midwifery* (1825), 584.

⁵¹⁰ Velpeau would make the same type of argument at the Académie de Médecine in the debate on therapeutic abortion in 1852 stating that the fetus was “barely” a human being. See *Bulletin de l’Académie de médecine*, séance du 23 mars 1852, 546 as cited in Le Naour and Valenti, *Histoire de l’avortement*, 28.

⁵¹¹ Tucker, *Elements of the Principles and Practice of Midwifery*, 391; Meigs, *Obstetrics*, 511; Bedford, *The Principles and Practice of Obstetrics*, 668-669.

⁵¹² Tucker, *Elements of the Principles and Practice of Midwifery*, 391.

because he cited Velpeau's claim that it killed one mother in two, while saving only one child in three.⁵¹³ Then, anticipating the objection that abortion involves the killing of the fetus, Tucker rhetorically asked,

Can any one compare in importance the life of the infant with that of the mother? Will society sanction such a comparison? Would the husband decide otherwise than in favour of that operation which would most likely insure[sic] the safety of his wife, regardless of the unborn child? And in view of this universal verdict, shall medical men adopt a counter-opinion?

So far, his argument resembled the traditional Anglo-American perspective that the woman was more important than the child. Then he directly quoted Velpeau's famous words:

On this point I will quote the language of Velpeau, who says, "As regards myself, I avow I cannot put in comparison the precious life of a foetus of three, four, five, or six months, a being scarcely differing from a plant, one that is bound by no ties to the external world, with that of the adult woman, whom a thousand social relations interest us to save; therefore, in a case of extreme narrowness of the pelvis, and where it was mathematically demonstrated that delivery at the full period was impossible, I would not hesitate to recommend producing abortion in the first months of gestation."

Tucker concluded, in response to potential critics:

This is the true, the humane, the moral view to be taken of this case, and we avow our preference, in extreme pelvic contraction, for the production of abortion over either perforation or the Cesarian section. ⁵¹⁴

In Tucker's text, the indications for medicalized abortion are expanded using Velpeau's reasoning. The early abortion, being safer than either craniotomy or C-sections, was from that moment onward the preferred method of dealing with *any* contracted pelvis.

Velpeau's influence can also be seen in his American student, Daniel Brainard, the founder of Rush Medical College in Chicago. Brainard had learned from his mentor that "the fetus has no independent life and no claims upon our consideration on any such account—that it is, in short, nothing more than a vegetable."⁵¹⁵ Historian Frederick Dyer concluded that Brainard heard this

⁵¹³ Tucker, *Elements of the Principles and Practice of Midwifery*, 392.

⁵¹⁴ Tucker, *Elements of the Principles and Practice of Midwifery*, 392.

⁵¹⁵ Dyer, *The Physicians' Crusade Against Abortion*, 47.

and similar views while studying in Paris, and that this led him to adopt a less hardline stance on abortion. His influence at the Rush Medical College could in part explain how Chicago became a centre of clandestine abortion.⁵¹⁶

Velpeau's vitalist attitude toward the fetus was amplified by other French writers who came after him, who were introduced in obstetric literature through translation or citation. For instance, Hugh Hodge cited Pierre Cazeaux, who opposed recourse to the C-section in cases where the pelvis was extremely narrow. Hodge quoted Cazeaux as saying:

The feeble and uncertain life of an infant, who is connected with the external world only through its mother, who, as yet, has neither thought nor affection, hope nor fear, can it be compared to that of a young woman associated with those around her by a thousand social and religious ties?⁵¹⁷

In this passage, the vitalist concern for *rappports* is underscored. The fetus is diminished because of the lack of social connections and the inert mental world, thereby underscoring the vitalist theme of *rappports* between the subject and the environment. Though Hodge does not use Cazeaux's quotation as a justification for abortion, his readers may have taken note of that opinion about the full-term fetus and applied it to a case of a lesser- developed fetus.

The opinions of Cazeaux and other French obstetric specialists in regard to the fetus and therapeutic abortion would have gained circulation due to an abortion debate that took place in France in the 1840's and 1850's, which produced a significant amount of French commentary, and which generated significant interest in the States and the English-speaking world.⁵¹⁸ American medical audiences would have had access to the thoughts of physicians like Velpeau worked towards the acceptance of therapeutic abortion, in part by the perception of the fetus as a less important being.

⁵¹⁶ Dyer, *The Physicians' Crusade Against Abortion*, 47.

⁵¹⁷ Hodge, *The Principles and Practice of Obstetrics*, 283.

⁵¹⁸ For example, an article from the September 1852 issue of *The London Lancet* was reproduced in "Discussion in the Academy of Medicine of Paris, on Induction of Premature Labor," *The Medical Examiner*, October 1852, 670–71; Bedford, *The Principles and Practice of Obstetrics*, 671; "Is the Physician Authorised to Provoke Premature Artificial Abortion to Save the Mother?," *Northwestern Medical and Surgical Journal* I, no. 8 (December 1852): 406–7; A.J. Semmes, "Letter from Paris," *The Stethoscope and Virginia Medical Gazette* II, no. V (May 1852): 280.

The French debate centred around the case of Julie Gros, a thirty-year-old woman who was three feet one inches tall and had a very contracted pelvis.⁵¹⁹ In 1846, she found herself pregnant and underwent an abortion at four-and-a-half months under the supervision of Cazeaux. In 1847, she obtained another abortion from Paul Dubois at two months and twelve days.⁵²⁰ In 1850, she sought a third abortion from Adolphe Lenoir (1802-1860), a well-respected surgeon.⁵²¹ The problem was that this practice was technically illegal according to Section 317 of the French penal code. Doctors performed these premature deliveries with the impression that they were doing something illegal. The Academy of Medicine—the medical regulatory body that set standards in France—had sidestepped the issue many times before to avoid this thorny problem. Cazeaux wanted to force the Academy’s hand. In 1852, he submitted a resolution to be debated at a meeting of the Academy, to express gratitude—in effect approve—Lenoir’s performance of abortion on Julie Gros, which he described in a report to the same body. The debate over this question would extend over six sessions through February and March of 1852, with many interventions for and against. The Academy approved his action but did not emit any firm rule on abortion.⁵²²

American students in Paris would write reports to medical journals as foreign correspondents, and helped readers keep abreast of developments in France. David Yandell left for Europe in 1846 and sent a series of letters to *The Western Journal of Medicine and Surgery* where his father, Lundsford P. Yandell, worked as an editor.⁵²³ In 1847, he wrote about Julie Gros’ second abortion under Paul Dubois. By way of introduction to the case, he reproduced a substantial portion of an article that Dubois had published in 1843 in *La Gazette médicale*, justifying recourse to therapeutic abortion.⁵²⁴ In his article—which had also been presented as a lecture—Dubois focused on debunking the religious, moral and legal arguments against therapeutic abortion, as opposed to medical ones. He knew that once the moral arguments were overcome, the medical

⁵¹⁹ David W. Yandell, “Notes on Medical Matters and Medical Men in Paris,” *The Western Journal of Medicine and Surgery*, March 1848, 217.

⁵²⁰ Yandell, “Notes on Medical Matters and Medical Men in Paris,” 217.

⁵²¹ Le Naour and Valenti, *Histoire de l’avortement*, 17-18.

⁵²² Le Naour and Valenti, *Histoire de l’avortement*, 28.

⁵²³ Warner, *The Therapeutic Perspective*, 136

⁵²⁴ Paul Dubois, “De l’avortement provoqué dans les cas de rétrécissement du bassin,” *Gazette médicale de Paris* XI (March 4, 1843): 135–39.

argument was easy to make.⁵²⁵ He introduced the topic of therapeutic abortion by presenting the points of view of opponents and supporters. Opponents, he said, preferred to deliver by C-section, because they believed therapeutic abortion to be dangerous, and they rejected the premise that doctors had the right of life and death over the fetus. Supporters emphasized that “in so serious an alternative” between the death of two beings and the death of only one,

the imperfect or puny organization and existence of a fetus scarcely endowed with any physical sensibility, enjoying no moral faculty, unconnected as yet with the world by any external tie, cannot be compared with the existence of the mother whose faculties are developed, who is bound to society by numerous ties, and whose preservation, for all these reasons, is assuredly the most precious [sic] to be taken into consideration.

Dubois, like Velpeau, justified recourse to therapeutic abortion by adopting a vitalist perspective, which emphasized that the unborn have no sensibility, no social ties and minimal physiological function. In Yandell’s version of Dubois’ article, he attributed the statement about the fetus solely to Francois-Emmanuel Foderé (1764-1835), a specialist in French medical jurisprudence.⁵²⁶ But in the original article in French, Dubois had attributed this idea to Foderé *as well as* Velpeau’s *Principles Tokology and Embryology*.⁵²⁷ Once again, Velpeau’s influence on therapeutic abortion infiltrated the American medical community through a covert reference.

Velpeau’s influence was not only felt on his adopters, but on his critics. In the 1832 edition of his midwifery textbook, William Dewees criticized the vitalist language of comparing the unborn to vegetation. In a footnote, he picked an argument with Alphonse LeRoy (1742-1816) for stating in his *Médecine Maternelle* (reissued in 1830) “that the child, while in utero, lives after the same manner as a vegetable.”⁵²⁸

Dewees expressed his skepticism about this term by asking aloud:

Is it not a dispute about terms, to call the life of the foetus while in utero vegetable life; and that which maintains its existence after birth animal life? Has any one demonstrated that there is any difference in the quality of that principle, which we term life in these two

⁵²⁵ Le Naour and Valenti, *Histoire de l’avortement*, 22.

⁵²⁶ Yandell, “Notes on Medical Matters and Medical Men in Paris,” 214.

⁵²⁷ Foderé, *Médecine légale*, 2:63, 61, and Alfred Velpeau, *Traité d’Accouchement*, 1re éd., vol. 2, 2 vols. (Paris: J.-B. Baillière, 1829), 2:807, and 2e éd., 2:403, 404 as cited in Dubois, “Gazette médicale de Paris,” 137, n. 5.

⁵²⁸ Dewees, *A Compendious System of Midwifery* (1832), 546(fn).

conditions of the animal? Does not the difference consist simply in the manner in which this principle is maintained? or in other words, are not precisely the same principles essential to the child both before and after delivery? Certainly they are.⁵²⁹

Dewees went on to denounce the labeling of the unborn as a “vegetable life,” stating that from “a moral point of view, the turpitude of destroying the life of the foetus by design,” whatever label one ascribed to it. He told his readers that it was wrong “to undervalue it, or be seduced to destroy it wantonly, by employing terms which have no definite meaning; or, if they have a definite meaning, the destruction of the principle called life must, in a moral light, be viewed as a crime.”⁵³⁰

One wonders whether Dewees had been influenced by Velpeau in that particular edition, given that the translation came out in 1831, and he does cite Velpeau on several pages.⁵³¹ Nevertheless, by the publication of the last edition of his manual that he revised himself, in 1843, Dewees added to that same passage, right after his denunciation of LeRoy, “Velpeau has adopted these sentiments, with no additional value to the profession.”⁵³² Dewees felt Velpeau’s influence was sufficient to add that point and discourage his readers from adopting that same point of view.

Dewees was virtually alone among major American obstetric writers in his denunciation of both Velpeau and the vitalist language that characterized the unborn in vegetative terms. The only other writer that I was able to find who objected to the “vegetative” label was Catholic physician John Barry, former secretary of the Medical Society of Louisville. In 1846, he self-published a pamphlet entitled *Medico-Christian Embryology*, in which he presents bioethics from a Catholic perspective, in the tradition of “sacred embryology”⁵³³ of Jesuit Francesco Cangiamila and his disciples, the Jansenist priest Abbé Dinouart, the Carthusian monk and doctor Pierre Debreyne, and French doctor. J. J. Rosiau. The last two Barry cited as direct inspirations, stating that he was only translating what they said.⁵³⁴ As can be expected from a Catholic physician, Barry argued that the child should never be destroyed under any circumstances. In the section on

⁵²⁹ Dewees, *A Compendious System of Midwifery* (1832), 546(fn).

⁵³⁰ Dewees, *A Compendious System of Midwifery* (1832), 546(fn).

⁵³¹ Dewees, *A Compendious System of Midwifery* (1832), 18(fn), 39, 45(fn), 49(fn), 50, 70(fn), 76(fn), 79, 81(fn), 94(fn), 191(fn), 192(fn), 308(fn).

⁵³² Dewees, *A Compendious System of Midwifery* (1843), 533 (fn).

⁵³³ Barry, *Medico-Christian Embryology*, 7.

⁵³⁴ Barry, *Medico-Christian Embryology*, 9.

embryotomy, he answered several arguments used to justify it, and one of them was that the unborn child was considered to be a “vegetative life.”⁵³⁵ To refute this point, he cited the very footnote that Dewees wrote against this notion. Dewees would have been a major authority, but it was the only American authority he could cite.

As we saw in the previous section, the woman was reduced biologically to her nervous system. The same evaluation was made about the fetus. Gunning S. Bedford affirmed that the “infant before birth may be regarded as enjoying an existence purely vegetative” because only the ganglionic system, which “presides over the functions of organic life” was “the only portion of the nervous mass called into active display.”⁵³⁶ In other words, the nervous system was hardly functioning at all. Hugh Hodge concurred in this assertion: “the brain exercises no important function in the economy; the foetal life is essentially vegetable or organic; its animal life is very imperfectly developed.”⁵³⁷ When one considers that these doctors made the nervous system synonymous with the organism, one can see how an adult woman might be viewed as a superior being to the fetus.⁵³⁸ The fetus was virtually inert as a human being; whereas the woman was superior in her sensibility, her morality and played a multitude of important roles.

The crusaders against abortion did not eliminate the sentimental value of the unborn. In his pamphlet denouncing abortion, Horatio Robinson Storer wrote that the fact that medical exceptions were allowed to save the life of the mother should not be interpreted to mean that physicians attributed a “trifling value” to the child itself.⁵³⁹ When a physician performs an abortion “he suffers, if he is a man of any sensibility and feeling, an amount of mental anguish not easily to be described, and that none of us, who have been compelled to so terrible a duty, need feel ashamed to confess.”⁵⁴⁰

Likewise, Hugh Hodge, in spite of his defense of the mother in maternal-fetal conflict, often emphasized the metaphysical qualities of the fetus, stating that the child “must, and does

⁵³⁵ Barry, *Medico-Christian Embryology*, 48.

⁵³⁶ Bedford, *Clinical Lectures on the Diseases of Women and Children*, 451.

⁵³⁷ Hodge, *The Principles and Practice of Obstetrics*, 399.

⁵³⁸ Meigs, *Females and Their Diseases*, 169.

⁵³⁹ Horatio Robinson Storer, *Why Not?: A Book for Every Woman* (Boston: Lee and Shepard, 1868), 23.

⁵⁴⁰ Storer, *Why Not?*, 24.

receive an intellectual, a spiritual existence from its parents—from both parents.”⁵⁴¹ He reinforced this point in his 1864 textbook on obstetrics. On conception, he wrote that it produces a new “vesicle” to which are endowed “mysterious vital powers” from which develop all “the changes of its physical, animal, intellectual, and spiritual condition, during the whole period of its existence.”⁵⁴² He was adamant about underscoring this point because he believed that the community at large believed “quickening” to impart spiritual nature.⁵⁴³ It could also be speculated that, given the predominant model of the fetus living a “vegetative existence” he was perhaps keen to emphasize the spiritual kinship between the unborn child and the parents to combat criminal abortion in the wider community.

8. Conclusion

This chapter has sought to explain the effect of new discourses regarding the unborn on medical reasoning surrounding abortion in Antebellum America. One discourse, rooted in embryological discoveries of the 1820s and 1830s, emphasized that life begins at conception. In light of this, by the 1830s, physicians began viewing themselves as guardians of the unborn at all stages of pregnancy. Meanwhile, clandestine abortion emerged in the public eye as an important social issue. Physicians responded by denouncing the widespread destruction of prenatal life. However, the legal system proved unwilling and unable to suppress this practice. The “quickening doctrine” which made detection of fetal movement the marker of fetal life, was widely adopted by the public and it influenced the interpretation of the Common Law so that in many states, only abortions after this stage of pregnancy were indictable. But even in jurisdictions where statutes were adopted to regulate abortion at all stages of pregnancy, prosecutions were rare, and convictions even rarer. The punishments that were issued were so meager they did not represent any significant deterrent.

Horatio Robinson Storer launched the Physicians’ Crusade Against Abortion in 1857 to correct these erroneous ideas about fetal life. In effect, he and his allies wanted to institutionalize

⁵⁴¹ Hodge, *On Criminal Abortion. a Lecture*, 11.

⁵⁴² Hodge, *The Principles and Practice of Obstetrics*, 49.

⁵⁴³ Hugh Lenox Hodge, *On Criminal Abortion. a Lecture* (T.K. & P.G. Collins, 1854), 12.

the idea that life begins at conception, based on empirical fact. Backed by the allopathic community, this crusade was eventually successful in obtaining abortion statutes in every state and territory of the Union by the turn of the twentieth century. Storer and his like-minded allies complemented this legislative effort by creating an apologetic of the unborn, which enlightened the public on the beginning of human life, justifying their conception that abortion is murder.

That physicians believed in the humanity of the fetus is clear from the numerous statements they made to that effect, and the fact that they were adamant that abortion was murder. What is notable about these declarations about the humanity of the fetus and the perceived criminality of abortion is that they went unchallenged in the allopathic community. If there were physicians who disagreed with these ideas, their voices went unheard.

The humanity of the fetus is central in understanding both how allopathic physicians reasoned about clandestine abortion but also about how they approached maternal-fetal conflict. Physicians reasoned that if they could not save both lives, they could try to save at least one, thereby arriving at the second-best outcome possible. But as the woman and the fetus were both human, both were entitled to the same right to life. Another line of thinking emerged in order to by-pass the difficulty of how to justify the sacrifice of human life, as both were entitled to live.

The ideology of vitalism, adopted by the American medical community in the pre-Civil War era, provided another way to think about the pregnant woman and the fetus in order to rationalize feticidal procedures in the face of medical emergencies. It presented three interrelated lines of evaluation to argue that women were more valuable than fetuses.

The first was physiological function in general. Fetuses were said to only have “vegetative life,” that is, only those continuous biological processes that did not rely on consciousness, such as circulation and respiration. Referring to the fact that they supposedly had less biological activity made them seem “less alive.” Their ontological status as human beings was never denied; however, their lack of biological activity made them seem as if they were of a lower order. Secondly the fetus and the woman were also compared regarding their neurological activity; in fact, they were highly identified with it. Fetuses had what might be termed a “primitive” neurological function, with no brain activity, with physiological functions being governed by ganglia and the spinal cord.

The woman's system was very "nervous," that is, highly receptive and responsive to outside stimuli. The medical community believed this neurological reactivity made women more emotionally intelligent, and by extension more moral. This emotional intelligence was behind their allegedly natural impetus to create a loving and comfortable domestic life that men so prized. This love and nurture were also seen as a civilizing force, as men were inspired to live moral lives and do great deeds because of it.

The third line of evaluation was the social relations of women and fetuses, upon which vitalism placed a great deal of emphasis. In this worldview, human beings were not atomized entities; they exist in a social and environmental nexus. Fetuses were construed as having very few social ties by virtue of their seclusion; women, however, had numerous ties. As wives and mothers, they created relationships through marriage and childbearing; but they were also connected to others through blood relations, as daughters and sisters. The woman was also more important because her death would augur domestic catastrophe for her husband, especially if they already had children. If the husband could not soon remarry, the children would be raised by others. Thus, the death of the mother then represented the potential break-up of the family, which was a disaster both in concrete and ideological terms. When weighed in these terms, the choice to save the woman at the expense of the fetus was obvious.

This adoption of vitalist embryology by the American community coincided with the appearance of the translation of Alfred Velpeau's *Principles of Tokology and Embryology* in 1831. He was the first French doctor to propose that abortion be produced when the pelvis was too contracted to produce a live birth before viability. Therapeutic abortion had existed before as a possibility for a series of very rare situations; in some of these situations, such as with convulsions or hyperemesis gravidarum, there was often a possibility of producing live birth because premature delivery was induced in the latter stages of pregnancy. Velpeau normalized recourse to abortion when there was no foreseen possibility of live birth, and his vitalist comparisons between mother and fetus were further extended to other indications, so that abortion became a logical proposal in other scenarios where the woman's life was not in immediate danger but risked serious adverse outcomes if the pregnancy continued.

The unborn then, while valued as human beings, were not always viewed in isolation from the pregnant woman. When there was no medical emergency, their right to life was upheld, and physicians pursued the obstetric prime directive of saving both mother and child. However, when maternal-fetal conflict arose because of a medical crisis, and that obstetric prime directive was no longer achievable, the moral worth of the child was evaluated in comparison to that of the woman. The value of the woman was so outsized in comparison to that of child, that it seemed self-evident to sacrifice the child. The value of the unborn then was not judged simply ontologically, but physiologically and relationally.

Chapter 5: Conclusion

In an essay published in 1806, William Dewees wrote of the unborn: “there are few things less perfectly understood than the anatomy of the human ovum before the third month of pregnancy.”⁵⁴⁴ When he republished this piece in a collection in 1823, that statement seemed as true as ever.⁵⁴⁵ Although obstetricians like Dewees dealt with the unborn on a regular basis, they remained mysterious beings. Even after the discovery of the basics of embryogenesis in the 1820s and 1830s, the unborn continued to seem inaccessible and esoteric. This did not deter the medical community from being intrigued by them. In fact, the mysterious nature of the fetus only heightened their interest and fascination.

This interest in the unborn persisted through the decades, in spite of the fact that images of the unborn were rare before the 20th century. In the wake of the 1973 *Roe v. Wade* Supreme Court decision that struck down all abortion laws, opponents of abortion disseminated images of the unborn. Pregnancy ultrasound also became familiar. Scholars took notice. Rosalind Petchesky developed the concept of the “public fetus” to describe this new, image-based cultural presence of this formerly obscure entity.⁵⁴⁶ This “public fetus” contrasted with the private and hidden—one might even say unimagined—fetus that historians believed to have predominated in the previous century.⁵⁴⁷ The analysis of these images, particularly of Lennart Nilsson’s fetal photos became what Rachel Roth described as a “cottage industry.”⁵⁴⁸ This focus on fetal imagery led scholars

⁵⁴⁴ William P. Dewees, “Observations on Parts of Burns’ History of the Gravid Uterus,” *The SurficaSurgi Museum* III, no. III (1806): 176.

⁵⁴⁵ Dewees, “Observations on Parts of Burns’ History of the Gravid Uterus,” 92.

⁵⁴⁶ Petchesky, “Fetal Images,” 281.

⁵⁴⁷ Morgan, *Icons of Life*, 4; Hopwood, “Producing Development,” 39 as cited in Morgan, *Icons of Life*, 4; Maienschein, *Embryos under the Microscope* (Harvard University Press, 2014), 24.

⁵⁴⁸ Roth, *Making Women Pay*, 33.

such as Sara Dubow and Lynn Morgan, to conceive of the cultural presence of the fetus primarily in visual terms.⁵⁴⁹ As a result of this focus, the cultural presence of the fetus was traced to the practice of embryo collecting, first undertaken by Franklin Paine Mall's in the 1880s. This collection provided the earliest real-life medical depictions of the unborn to a wider American public.⁵⁵⁰

But, as this study has shown, the presence of the fetus in American culture did not emerge through images, but through print. It is true, as scholars have pointed out, that women in the 19th century did not think of their pregnancies in embryological terms, and probably could not imagine with accuracy what a fetus looked like.⁵⁵¹ Visual culture can sometimes make more of an impact in transmitting an idea than text or speech. But the inability to visualize a fetus did not preclude communication about the fetus. The fetus did achieve a certain presence in American culture in the 19th century through print.

The cultural presence of the fetus was mediated by discussions surrounding pregnancy, childbirth, and abortion that developed in the wake of the medicalization of midwifery that began in the American colonies in the 1760s and which burgeoned in the early 19th century. It was because of a body of allopathic medical writing about fetal life that the development of widespread clandestine abortion in the 1840s became a subject of discussion and controversy.

There has been a certain amount of scholarly amnesia regarding this particular topic, fueled in part by skepticism towards the stated intentions of the men who led the Physicians' Crusade Against Abortion. As mentioned in the opening chapter, it was generally understood that abortion was not the subject of historiographical investigation before 1968, and the general public

⁵⁴⁹ Dubow, *Ourselves Unborn*, 5; Morgan, *Icons of Life*, 10.

⁵⁵⁰ Morgan, *Icons of Life*, 9-10.

⁵⁵¹ Morgan, *Icons of Life*, 4; Hopwood, "Producing Development," 39; Maienschein, *Embryos under the Microscope*, 24.

harboured the assumption that abortion statutes passed in the 19th century were legislated in the name of protecting fetal life.⁵⁵² The absence of historiography amounted to a vacuum that allowed certain historians to challenge the received understanding of why abortion legislation existed. The first historian to overturn the traditional understanding of the reasons behind the 19th century abortion statutes was Cyril Means Jr., general counsel of the National Abortion Rights Action League. He published two articles—one in 1968 and one in 1971, which posited that the statutes on abortion were passed in the name of protecting women and not in the name of protecting fetal life; and that abortion was a Common Law right.⁵⁵³ The second historian to challenge the traditional understanding of the reasons behind the Physicians Crusade Against Abortion was James Mohr. Although Mohr admitted that the physicians who sought legislation sincerely believed in protecting fetal life, he looked to ulterior motives as the driving force behind the campaign. He believed that ultimately that American Physicians conducted the campaign as a means to establish a medical monopoly for allopathic doctors. Historians sustained that skeptical tendency towards the idea that abortion laws were passed to protect fetal life. For instance, historian Linda Gordon stated that in the campaigns against abortion “the status of the fetus was a minor theme.”⁵⁵⁴ Other historians focused on other reasons to explain the motives for the campaign, such as the desire to control women, or nativism.⁵⁵⁵

That skepticism appeared to be all the more valid because the physicians who spearheaded the campaign seemed to be applying a double standard. They cast themselves as the guardians of fetal life; and yet they allowed abortion when they deemed it “medically necessary.” This seemed

⁵⁵² Dellapenna, *Dispelling the Myths of Abortion History*, 13-16.

⁵⁵³ Means, “The Law of New York,” 418; Means, “The Phoenix of Abortional Freedom,” 336.

⁵⁵⁴ Gordon, *The Moral Property of Women*, 305.

⁵⁵⁵ Smith-Rosenberg, *Disorderly Conduct: Visions of Gender in Victorian America*, 238; Janet Farrell Brodie, *Contraception and Abortion in Nineteenth-Century America*, 253; Caron, *Who Chooses*, 14.

to discredit their intentions. If abortion truly was tantamount to murder, scholars reasoned, then it should be murder in all cases.⁵⁵⁶ No exceptions would exist. That physicians allowed it when it served their purposes, but not those of their female patients, smacked of hypocrisy, that suggested concealed or unconscious motives.

This is somewhat of a presentist take on the matter. The contemporary mainstream anti-abortion movement may take the stance that all abortion is wrong, but it does not follow that this had to be the stance of 19th century physicians for their belief to be sincere. Nevertheless, there is an apparent incongruity between permitting abortion in some cases and opposing it in others. On the surface, it can seem like their rationalization for the acceptance of therapeutic abortion was rooted in their own power—in other words, that they allowed themselves to do abortions because they were able to.

But reducing the issue to a question of malicious intentions is of limited explanatory power and impedes further exploration. That doctors had the power to allow or limit abortion is no surprise. The enigma is how they rationalized its denunciation while making exceptions. Most people who earnestly seek to do what they think is right, like these doctors, try to make their actions align with their principles. How did these abortion exceptions, then, coincide with their tenets?

The medicalization of childbirth is central to this question and is one reason why this study devotes a considerable amount of space to it. Before medicalization, physicians would only intervene in emergencies to save the woman, as the fetus was generally considered to have been lost by the time medical intervention occurred. The implementation of the forceps in the 1730s transformed the relationship between medicine and childbirth. By carefully extracting the fetus, instead of performing craniotomy which was lethal to the fetus and injurious to the mother, a new

⁵⁵⁶ Reagan, *When Abortion Was a Crime*, 13; Luker, *Abortion and the Politics of Motherhood*, 28.

medical expectation was created, one which I deem the “obstetric prime directive,” that is, of saving both mother and child. This new expectation guided the medical community. Obstetric knowledge was now pursued by physicians to fulfill that end, and physicians such as William Smellie, William Hunter, and their British and American students, gradually displaced female midwives as the primary childbirth attendants in normal deliveries.

Thus, the care of both woman and fetus was intrinsic to the medicalization of childbirth. But now that both were the focus, and not just the labouring woman, it laid the foundation for a clash of interests. Not all cases of obstructed labour could be solved by simply deploying the forceps or using some other obstetric manoeuvre to save both lives. Sometimes pelvic deformities or other obstructions could impede live birth. Both beings could not survive the ordeal and the obstetric prime directive could not be fulfilled.

The prediction that *both could not survive* childbirth was key in how Anglo-American physicians thought about these emergencies. Unable to fulfill the obstetric prime directive, they sought the next best outcome: save at least one life. It then prompted the question of choosing which life to save, establishing a dynamic where the value of two beings and their interests were weighed against one another. In other words, it created a situation of maternal-fetal conflict. The rationale to favour the mother was perhaps not at first arrived at in such a systematic and discursive fashion. British and American doctors were probably acting upon ideas that were self-evident to them. However logical it seemed, the conclusion to choose one life over another was not inevitable: The British, and later Americans were aware of the French tendency to reject choosing one life over another; they therefore had an alternative model.⁵⁵⁷ But they rejected that model, favouring what seemed to them a more pragmatic approach.

⁵⁵⁷ Le Naour and Valenti, *Histoire de l'avortement*, 19.

As physicians displaced midwives as the principal birth attendants, and they realized that craniotomy was the only outcome of the delivery, they would make the choice for craniotomy in the labouring process, when they strongly suspected that the fetus was still alive. Virtually all of these leading practitioners at one time or another had to extinguish fetal life in the name of saving women. But they did not relish this role. Medicine in the first decades of the 19th century valued the preservation of life at all costs.⁵⁵⁸ Violating that norm could produce intense distress. “Perhaps there is nothing to be met with in the very troublesome and anxious profession of an obstetrician,” wrote Charles Meigs, “that is more painful to his feelings, than the management of a case of labour, in which it is required to mutilate the child, in order to extract it from the maternal organs.”⁵⁵⁹ It was one thing to lose a child to infirmity, disease, or accident; quite another to be the catalyst of death. Elite physicians also decried the fact that it was practiced far more frequently than necessary by lesser-skilled doctors, leading to significant loss of life.⁵⁶⁰ The problem of craniotomy on live fetuses, it could be argued, was the first major bioethical issue involving prenatal life that physicians had to face.

William Dewees, the most famous American obstetrician of the first decades of the 19th century, tried to instil in his readers an appreciation for the value of fetal life by denouncing the views of British obstetrician William Osborn, who considered the value of the fetus compared to the mother to be “diminished almost to nothing” and therefore justified recourse to craniotomy. Dewees refuted Osborn’s argument that the fetus had no feeling and no mental activity, and therefore could not experience pain. He also opposed Osborn’s idea that there was no parental love

⁵⁵⁸ Pernick, “The Calculus of Suffering in Nineteenth-Century Surgery,” 28.

⁵⁵⁹ Meigs, *The Philadelphia Practice of Midwifery*, 317.

⁵⁶⁰ Bard, *A Compendium of the Theory and Practice of Midwifery*, 9; TC James in Burns, *The Principles of Midwifery*, vol. 1, 32(fn); Francis in Denman, *An Introduction to the Practice of Midwifery*, ed. John W. Francis (1829), 697-698 (fn); Bedford, *An Address, Introductory to a Course of Lectures (1833)*, 24; Dewees, *A Compendious System of Midwifery* (1832), 289.

for the unborn during a woman's pregnancy. "The crotchet has been but too often wantonly employed, even where the practitioner had not adopted Dr. Osborn's opinion on the subject of foetal sensibility," Dewees explained; "how much more frequently then, will it be had recourse to, when the wholesome restraint of the contrary opinion is removed?"⁵⁶¹

Writers also tried to circumvent recourse to craniotomy by proposing two operations. The first was the Caesarean Section, which was advanced by William Dewees and Gunning S. Bedford.⁵⁶² The French were already using the Caesarean Section in the 18th century because, as Catholics, they opposed craniotomy on live fetuses, and they had some success saving both mother and child. British and American physicians, when they attempted C-sections, were almost always unsuccessful. The first successful recorded C-section was performed in 1793 in Britain and 1827 in the United States. That poor track record was partially due to the unwillingness to subject women to a surgical operation, which before the age of proper infection control and anesthetic, was dangerous in any situation. The terrible outcomes were also due to the fact that it was taken up as a last resort, and typically done on women who were already exhausted by hours or even days of labour. Continental Europeans had had more success because they performed it early in the labouring process.⁵⁶³ In Anglo-American obstetrics, the C-section was only indicated when the pelvis was less than two inches and there was no possibility of a full-term or even late-term fetus emerging alive from childbirth, and the small space made craniotomy impractical. This indication was very rare, and thus made C-sections very rare. Practitioners with extensive obstetric practice might never perform one or even see one being done, and therefore were never able to develop

⁵⁶¹ Dewees, *A Compendious System of Midwifery* (1825), 578.

⁵⁶² Dewees, *A Compendious System of Midwifery* (1843), 550; Bedford, *Clinical Lectures on the Diseases of Women and Children*, 469 (fn).

⁵⁶³ Dewees, *A Compendious System of Midwifery* (1825), 595.

their skill at this operation.⁵⁶⁴ The C-section also suffered from stigma because of its association with the Catholic practice of cutting open women who had died in pregnancy in order to baptize the fetus and assure the child's afterlife in heaven. For all these reasons, the proposal of the C-section instead of craniotomy was something of a theoretical suggestion, and not a practical one.

The second operation that was put forward to avoid recourse to craniotomy was the induction of premature labour at a stage in the pregnancy when the lesser developed fetus could cross the pelvic threshold, after seven months gestation, the age of fetal viability. When it was ascertained that a woman had a contracted pelvis from an earlier pregnancy, physicians opted for this operation, and it became a mark of distinction of British obstetrics, because it was the British who developed the technique in 1756.⁵⁶⁵ Although it was praised as a precious "boon," it nevertheless carried with it certain difficulties and even stigma.⁵⁶⁶ While it was possible for it to fulfill the obstetric prime directive, knowing the exact date of conception was problematic, and getting it wrong could lead to expelling a fetus either too immature or too large to survive birth. It was also believed that many of the fetuses expelled were so fragile that in effect, it had the same outcome as an abortion. Practitioners were also well aware that the methods of this operation could provide quacks with the means of conducting clandestine abortions. Nevertheless, in spite of these problems, premature labour was considered to be a blessing for obstetrics in the English-speaking world.

The proposal of these two operations, with all their attendant problems and stigmatizing associations, speaks to the desire for physicians to preserve fetal life. The welfare of the woman may have been uppermost in their minds, but English-speaking obstetricians were also keen on

⁵⁶⁴ Wolf, *Cesarean Section*, 20.

⁵⁶⁵ Hodge, *The Principles and Practice of Obstetrics*, 289; Bedford, *The Principles and Practice of Obstetrics*, 665.

⁵⁶⁶ Bedford, *The Principles and Practice of Obstetrics*, 665-66.

saving the unborn. They did not view their work solely as saving women from the hazards of childbirth; concern for the fetus was an inherent part of their practice, and an intrinsic part of the medicalization of childbirth. While they were ready to extinguish fetal life as a last resort, it did cause them a great deal of anguish, both on a moral and a psychological level.⁵⁶⁷ Their willingness to propose these two operations, with their potential problems and stigma, suggests how far they were willing to go to avoid having to perform craniotomy.

In the late 18th and early 19th century, concern for the unborn encompassed late-term fetuses on the verge of being born. Embryology was a subject that fascinated doctors, especially those who specialized in obstetrics, but it was not required knowledge. No less an authority than Thomas Denman, the most eminent accoucheur his day, reproducing a well-detailed drawing of a three-month-old fetus said of it that they were preserved as a matter “of curiosity, rather than of use.”⁵⁶⁸ The focus of the accoucheur was guiding woman and fetus through the process of childbirth; the concern of the fetus being an extension of the concern for the newborn. After all, the whole point of giving birth was bringing new life into the world.

That locus of concern would evolve in the early decades of the 19th century with the emergence of what I deemed “the new embryology,” that is, a series of embryological discoveries that explained the mechanics of embryogenesis and prenatal development, such as the isolation of the mammalian ovum by Karl Ernst von Baer and the observation of frog fertilization by Prévost and Dumas in the 1820s. Alfred Velpeau’s *Principles of Tokology and Embryology* was seminal in this development. His research into 140 human embryos—as opposed to animal models—made possible empirical knowledge about early prenatal development. It also established embryology as

⁵⁶⁷ Meigs, *The Philadelphia Practice of Midwifery*, 317; Tucker, *Elements of the Principles and Practice of Midwifery*, 378; David Humphreys Storer, *An Introductory Lecture Before the Medical Class of 1855-56 of Harvard University*, 28.

⁵⁶⁸ Denman, *A Collection of Engravings*, n.p.

an important component of the field of obstetrics. Prior to the 1831 translation of his work, specialists in midwifery devoted relatively little discussion to embryology. But afterwards, authors such as William Dewees, Charles Meigs and others began to write at length about it, discussing the milestones of prenatal development and normalizing awareness of the unborn at earlier stages of gestation.⁵⁶⁹

As physicians and their students became more familiar with prenatal developmental in the period following 1830, they started to consider the unborn at earlier stages of pregnancy and devoted greater attention to the welfare of the fetus during early gestation. Obstetricians such as Hugh Hodge began to think of themselves as guardians of women and the unborn.⁵⁷⁰ Because of this new role they devised for themselves, they began to dispense advice to pregnant women to ensure the health of their newborn child. “From the moment, therefore, that conception has taken place,” opined John Eberle, “a new and most sacred duty devolves upon the female. She is bound by all the ties of maternal sentiment, of humanity and of moral and religious obligations to protect the nascent being in her womb, against every circumstance under her control, which may have an unfavourable influence on its delicate and uninured organization.”⁵⁷¹ The pregnant woman was expected to eat nutritious food, to engage in moderate exercise, and to maintain a cheery disposition and avoid all strong reactions, as strong emotions were thought to leave a negative impression on the child.⁵⁷²

American physicians over time asserted the humanity of the fetus and developed a concern for them outside of ethical controversies. In effect, they thought of the newly conceived embryo

⁵⁶⁹ Dewees, *A Compendious System of Midwifery* (1832), 89ff; Thomas Cock, *A Manual of Obstetrics*, 60ff; Meigs, *Obstetrics: The Science and the Art*, 100ff; Tucker, *Elements of the Principles and Practice of Midwifery*, 59ff; Bedford, *The Principles and Practice of Obstetrics*, 109ff; Hodge, *The Principles and Practice of Obstetrics*, 94ff.

⁵⁷⁰ Hugh Lenox Hodge, *An Introductory Lecture to the Course on Obstetrics* (Philadelphia: T. K. & P. G. Collins, Printers, 1840), 6.

⁵⁷¹ John Eberle, *A Treatise on the Diseases and Physical Education of Children*, 4th ed. (Lippincott, 1857), 1

⁵⁷² Warren, “On Uterine Sympathy,” 349; Blackwell, *The Laws of Life*, 72-73.

as identical to the newborn. Therefore, when clandestine abortion emerged as a social issue in the late 1830s, their denunciation of this phenomenon did not arise *sui generis*, prompted by primarily about concerns regarding demographic decline or women's neglect of their child-bearing role. To be sure, arguments regarding these matters did colour their discourse; but they were not the prime drivers of their censure. Their concern for the unborn manifested itself in other contexts, and it was only a natural progression for them to condemn abortion when it became a major social issue.

Meanwhile, as the American medical community increasingly affirmed the humanity of the fetus, feticidal measures continued. Craniotomy remained a topic of ethical deliberation, but the issue of abortion became important as American physicians became more familiar with induced premature delivery and saw its potential to deal with various conditions in pregnancy. In the 18th century and early 19th century, abortion was only conducted in a limited number of indications—such as convulsions, and hyperemesis gravidarum.⁵⁷³ Normally these conditions would compel physicians to induce labour in the second half of pregnancy in life-threatening emergencies—at times before viability, but also afterwards. Only abortions in retroversion of the uterus involved the extraction of an early-stage fetuses through an incision—a truly exceptional measure.⁵⁷⁴

But the appearance of Alfred Velpeau's *Principles of Tokology and Embryology* in 1831 introduced a new tendency. He advocated for the production of early abortion in cases where the pelvis could not accommodate a live birth—in other words, when the death of the pregnant woman was only predicted and not imminent. Consequently, the woman would be spared the trouble of

⁵⁷³ Dewees, *A Treatise on the Diseases of Females*, 135; Denman, *An Introduction to the Practice of Midwifery*, ed. John W. Francis (1829), 606.

⁵⁷⁴ Dewees, "Observations on the Retroversion of the Uterus," 287.

going through pregnancy and childbirth. This new approach occasioned an expansion of the use of abortion for diseases and conditions that were not immediately lethal.⁵⁷⁵

In the 18th century, the choice to save the woman in medical emergency was merely self-evident—no elaborate apologetic was required. Yet American physicians were not satisfied with glib rationalizations. They were the ones who bore the onus of causing the death of a fetus, all the while trying to avoid further injury to the woman. Simplistic answers did not speak to the gravity of their principles and actions. Obstetric authorities often spoke of the need to satisfy one's conscience when contemplating a fetical procedure.⁵⁷⁶ If they were compelled to kill a defenseless child, they had to be certain it was for the most humane of reasons.

The medical ideology of vitalism provided a foundation for the rationale that made abortion acceptable. American physicians adopted vitalism as a framework for understanding biological processes during the “French period” in American medicine (1820-1860) when they looked to the French healthcare system as a source of research and upon which they modelled their own practices. The French had developed the theory of vitalism to describe the mechanism of physiological phenomena. One of its most prominent theoreticians, Xavier Bichat, created a binary system to categorize biological functions. All “higher” functions that involved consciousness and volition, such as locomotion and the use of the senses, were said to be of the “animal economy,” whereas all the “lower” functions that were involuntary and continuous, such as digestion and respiration, were said to be of the “organic economy.” Bichat considered that the fetus only

⁵⁷⁵ Tucker, *Elements of the Principles and Practice of Midwifery*, 387; Bedford, *The Principles and Practice of Obstetrics*, 669; Hodge, *The Principles and Practice of Obstetrics*, 298, 412, 534; Storer, *On Criminal Abortion in America*, 65.

⁵⁷⁶ Hodge, *An Introductory Lecture to the Course on Obstetrics (1840)*, 6; Cock, *A Manual of Obstetrics*, 233; Meigs, *Obstetrics*, 599.

manifested those processes of the “organic economy,” and lacked all evidence of higher mental faculties of the “animal economy,” with the possible exception of touch and movement.⁵⁷⁷

Vitalism also placed a great deal of importance on neurological processes. The processes of the “animal economy” associated with consciousness and volition were thought to emanate from the brain, whereas those automatic processes that formed the “organic economy” were believed to be controlled by the ganglia and the spinal cord. The fetus was thought to be mentally inert, possessing only a primitive nervous system before birth. In effect, the fetus was characterized as a being of a lower order. Some American writers would somewhat temper this extreme denial of mental activity of the fetus. For instance, they pointed out that fetuses did move, and did so at the sound of stimuli and thus had the sense of hearing. They were also believed to have the sense of tact, and they seemed to react to poking and prodding, whether inside the womb or through the pregnant woman’s abdomen.⁵⁷⁸ But in general, the rigidly dualistic system was adhered to.

As a result of the adoption of this particular system, the unborn were described as having a “vegetative existence.”⁵⁷⁹ Alfred Velpeau, when he proposed early abortion for contracted pelvises, anticipated his critics and saying that he could not “balance the life of a foetus of three, four, five, or six months, a being which so far scarcely differs from a plant, and is bound by no tie to the external world, against that of an adult woman whom a thousand social ties engage us to save.” Likewise, French physicians, including Pierre Cazeaux, whose ideas were translated into English and disseminated in America, expressed similar viewpoints. American doctors would subsequently adopt this discourse. The indications for abortion would eventually be extended to a host of medical issues, including diseases of the lungs, heart, or brain, cancer of the womb,

⁵⁷⁷ Bichat, *Physiological Researches on Life and Death*, 11-14, 22, 40, 138, 139.

⁵⁷⁸ Duglison, *Human Physiology*, Vol. II, 293.

⁵⁷⁹ Bedford, *Clinical Lectures on the Diseases of Women and Children*, 451; Tracy, *The Mother and Her Offspring*, 154; Warrington, *The Obstetric Catechism*, 430; Hodge, *The Principles and Practice of Obstetrics*, 399.

epilepsy, or any disease that could cause a lifelong handicap, although the prominent practitioners tried to limit its use as much as possible.⁵⁸⁰

This characterization of the fetus as a “vegetative existence” went virtually unchallenged. The only notable exception was that of William Dewees, the most prominent obstetrician of the 1820s and 1830s. He could see that this discourse would be used to justify abortion, just as he feared the discourse of William Osborn would be used to justify craniotomy. Despite his prominence in the field of obstetrics, it seems that his objections to the vitalist discourse on the fetus were not widely adopted, as only one writer—John Barry—felt the same way. Barry was a Catholic, and therefore predisposed to rejecting all feticidal procedures and by extension the discourses that justified them.

Vitalism not only provided perspective on the unborn. Vitalism also provided a lens through which to view women, and with that view weigh the woman’s value versus that of the unborn. In contrast to the fetus, the woman’s physiological systems were entirely operational, making her a “fully functional” human being. Her central nervous system in particular was appreciated in medical discourse as it was endowed with a wonderful sensibility⁵⁸¹ and allowed her to exude warmth and comfort to all around her, to the point of inspiring great deeds of men in the public sphere, so that women were, in effect, the lynchpins of civilization. Women were also the centre of the household, both in an emotional sense, and a practical sense. Their marriages and reproductive lives created ties of kinship; this, coupled with their warmth, made them treasured members of their families, not to say their social circles. In addition, women ran their households, raising their children and performing or supervising just about every essential household chore. They were irreplaceable. When married women died, this spelled the eventual break-up of the

⁵⁸⁰ Hodge, *The Principles and Practice of Obstetrics*, 298.’ Storer, “Prize Essay,” 719, 739.

⁵⁸¹ Hodge, *Lecture Introductory to the Course on Obstetrics, 1836-7*, 14.

domestic household unless the father of the house remarried soon after her death. From a vitalist standpoint, the woman had all the advantages. She displayed the higher functions of the animal economy; her mental functioning was lively; her *rappports* with her environment were numerous; her social ties abundant; and she occupied several practical functions, most notably as wife and mother. The fetus could not rival her in any way, even if his humanity and right to life was affirmed. In short, the woman and fetus may have been two human beings, but they were two different *types* of human beings.

Anti-abortion crusaders emphasized that their preference for the woman did not diminish their respect for the unborn. The “vegetative existence” of the unborn, then, did not disqualify them from recognition as human beings; they were believed to be endowed with a spiritual nature. When there was no danger to the mother, their value was evaluated in isolation. They were entitled, like any other child, to be free from assault and to be cared for by their mother and the wider society in general. Their destruction was a source of regret. As Horatio Robinson Storer informed his readers, if a physician is a man of feeling, when he performs an abortion, he suffers “an amount of mental anguish not easily to be described.”⁵⁸²

But the fact that the unborn were considered human beings did not confer on them rights identical to those of other human beings. And it is quite anachronistic to expect otherwise. Antebellum America is replete with examples of human beings having a different set of rights according to circumstance. For example, legal capacity, the ability to engage with the law as a contractor, juror, witness or other legal actor, was automatically accorded to white, able-bodied men; but other groups such as women, racialized minorities, the physically and mentally disabled

⁵⁸² Storer, *Why Not?*, 24.

were accorded and denied legal capacity according to circumstance.⁵⁸³ These marginalized groups were not necessarily conceived of in the same socio-political terms as adult able-bodied white men. Therefore, it should be no surprise that fetuses were thought of as human beings but ascribed different rights according to circumstance, because that is exactly how other groups of human beings were treated. The concept of equality in the 19th century did not preclude these forms of hierarchy based on social or biological distinctions.⁵⁸⁴

This study has shown that within the American allopathic community, there were at least two different discourses on the fetus that were deployed according to context. While relatively few doctors outright denied either of these discourses, the degree of commitment towards them could vary significantly. The elites of organized medicine, especially those in obstetrics, widely approved the idea that the unborn were human beings who deserved legal protection. But this does not mean that the many thousands of faceless doctors working anonymously across America were equally committed. If anything, the denunciation of allopathic doctors conducting unapproved abortions and craniotomies suggests a range of belief. The same can be said with the vitalist discourse of “fetus as vegetative existence.” This discourse was frequently raised within the medical literature, but I could only find two physicians—William Dewees and John Barry—who repudiated it completely. The absence of any response towards this repudiation suggests that few took their objections seriously. Nevertheless, prominent doctors did challenge some aspects of the vitalist discourse. For instance, Robley Dunglison denied the existence of a vitalist force, and rejected the notion that fetuses had no sensory operations.

⁵⁸³ Yvonne Pitts, “Civic Capacity and Participatory Citizenship in Nineteenth-Century United States,” in *The Routledge Research Companion to Law and Humanities in Nineteenth-Century America* (Routledge, 2016), 311–22.

⁵⁸⁴ Pitts, “Civic Capacity,” 317, 319.

When examining the reasons behind opposition to abortion, then, it is important to consider the medical perceptions of the unborn. The medical community was not absolutist in its support for legal protection for the unborn. Neither were its members universally committed to any one discourse on the fetus. These points are important to make because when examining the past through the lens of our current reproductive politics, one might get the impression that organized medicine was either in favour of the woman, or in favour of the fetus. The sources seem to lead to a more complicated picture. Opponents of abortion, particularly those who worked in the obstetric field, seemed to care a great deal for women—one would have to, to enter such a stigmatized medical field, and work at all hours to save women's lives and health. But their desire for their welfare did not preclude them believing that women had an onus to carry their child to term in the name of fetal welfare.

This study has also uncovered the importance of the French influence on the allopathic community's approach to reproductive medicine. Before the 1830s, embryology occupied a relatively minor place in the field of midwifery. After the discoveries of the new embryology, and especially, Alfred Velpeau's study of 140 human products of conception, embryology took on a great deal of importance. Embryology, as a field of study, contributed to both the humanization and the dehumanization of the embryo. Velpeau, and like-minded physicians, concluded that the low level of development of the human embryo made it more like a plant than a human being. This dehumanizing aspect was rooted in vitalism. Vitalist discourse was omnipresent in the Antebellum period regarding all aspects of physiology. And yet, vitalism, as a medical ideology, is understudied in historiography.⁵⁸⁵ But it is key in understanding how physicians theorized about the anthropological make-up of human beings, and in turn, how people should be treated.

⁵⁸⁵ Williams, *The Physical and the Moral*, 3.

These conclusions about the discourses on the fetus only apply to the Antebellum period. Vitalism would linger on into the 1860s and 1870s, but as its adherents aged out of practice, it would eventually be surpassed by positivism, an epistemological framework that is more familiar to contemporary minds because of its rejection of metaphysical claims in science. In the future, it would be interesting to learn how positivism affected the discourse on the fetus and contrasted with the vitalist discourse that accompanied the initial stages of the Physicians' Crusade Against Abortion.

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