



THE UNIVERSITY *of*
MISSISSIPPI

ABORTION: DRAWING A LINE OF MORAL PERMISSIBILITY IN FETAL DEVELOPMENT

© 2018

By Madison Elizabeth Nash

A Thesis presented in fulfillment of the requirements for completion
of the Sally McDonnell Barksdale Honors College.

University, MS
March, 2018

Approved by:

Advisor: Dr. Neil Manson

Reader: Dr. Sarah Moses

Reader: Dean Douglass Sullivan-González

ACKNOWLEDGEMENTS

To Dr. Manson, for his enthusiasm and patience throughout this process.

To my family, for believing in me always.

To my girls, for making me brave and inspiring me on a daily basis.

ABSTRACT

MADISON ELIZABETH NASH: Abortion: Drawing a Line of Moral Permissibility in Fetal Development
(Under the direction of Neil Manson)

[The goals of this thesis are to first examine prominent arguments in philosophical and religious ethics regarding the morality of induced abortions, and then to create my own moral argument regarding induced abortion by drawing a line during fetal development. I will first discuss the biological stages of fetal development, the effects of pregnancy on a pregnant woman, and the mechanics of common induced abortion procedures. Next, I will present and analyze renowned philosophical arguments regarding the morality of abortion. Then, I will present and analyze arguments regarding the morality of induced abortions drawn from two religious traditions - Roman Catholicism and Reform Judaism. Finally, I will present my moral argument, which picks out a discrete stage of fetal development that determines the morality of induced abortion.]

Table of Contents

Table of Contents	4
Table of Figures	5
Introduction	6
Chapter I: Developmental Biology and the Mechanics of Abortion	8
Section (a): The Stages of Pregnancy	8
(i): The Pre-Embryonic Stage	9
(ii): The Embryonic Stage	12
(iii): The Fetal Stage	15
Section (b): The Effects of Pregnancy on the Mother.....	21
Section (c): The Mechanics of Abortion	25
Chapter II: Philosophical Ethics	29
Section (a): Ethical Theory	29
(i): Utilitarian Ethics	29
(ii): Deontological Ethics	30
(iii): The Language of Rights.....	32
Section (b): Applications to the Abortion Controversy.....	33
(i): Utilitarian Considerations	33
(ii): First View of the Moral Status of the Fetus: John Noonan and Donald Marquis	36
(iii): The Second View of the Moral Status of the Fetus: Michael Tooley.....	45
(iv): The Third View of the Moral Status of a Fetus: Judith Thomson and Jane English	48
Chapter III: Religious Ethics Concerning Abortion.....	56
Section (a): The Position of the Roman Catholic Church on the Morality of Abortion.....	57
Section (b): Alternative Positions: Roman Catholic Theologians	60
Section (c): The Position of Reform Judaism on the Morality of Abortion	65
Chapter IV: A New Moderate Position on the Morality of Abortion.....	72
Section (a): Avoiding the Extremes	72
(i): The Extreme Conservative Position	72
(ii): The Extreme Liberal Position.....	76
Section (b): A New Defense of the Viability Criterion.....	79
(i): The Problems with Other Moderate Criteria	79
(ii): The Virtues of the Viability Criterion	83
Bibliography.....	89

Table of Figures

Figure 1: Acrosomal and cortical reactions	8
Figure 2: Blastocyst Development Timeline	9
Figure 3: Trilaminar disc formation from primitive streaks.....	12
Figure 4: Feto-placental circulation	14
Figure 5: Timeline of Milestones of Fetal Development	16

Introduction

Induced abortions have been a controversial topic in political, philosophical, and religious conversations for decades. The controversial conversation of the morality and legality of induced abortions is one that takes place all over the world between all types of people. It is a conversation that considers the moral status of a developing human zygote, embryo, and fetus in comparison with that of an adult human. It is a conversation that considers the moral rights of a developing human versus those of an adult human. Finally, it is a conversation that considers the relationship between the morality and the legality of an induced abortion.

I have taken part in this conversation in a variety of settings with a variety of people with a variety of opinions regarding the morality and legality of induced abortions. I decided to research this topic to find answers in regards to the moral dimensions of this conversation. Is the option to have an induced abortion a moral right? If so, when does the induced termination of a developing human become morally impermissible?

To answer these questions, I will present research findings in three academic areas that are relevant to these questions. First, I will outline the basic developmental biology of a human fetus from conception through the optimal gestation time of 38 weeks. I will also present the effects of a pregnancy on a pregnant woman: biological, psychological, financial, social, and professional. I will conclude the first chapter by outlining the mechanics of legal abortion procedures in the United States. Second, I will present a variety of common philosophical arguments regarding the morality of abortion within the framework of major philosophical ideologies (utilitarianism and deontology).

Then, I will present two examples of how the morality of abortion is addressed within a couple of major world religions, namely Catholicism and Reform Judaism. I will end this thesis by presenting my own conclusions regarding the morality of abortion by determining a specific, quantifiable point during early human development such that abortion is morally permissible prior to it and is impermissible after it.

Chapter I: Developmental Biology and the Mechanics of Abortion

Prenatal development is the process by which a single-celled zygote, or a fertilized egg, will develop and mature into an embryo, a fetus, and then a baby. I will describe basic prenatal development, including the physical and emotional maturation of a growing fetus, and I will discuss how such development coincides with the health and metabolic upkeep of the mother. I will conclude this chapter by describing the mechanics of the methods by which a woman can induce the termination of a pregnancy legally in the United States.

Section (a): The Stages of Pregnancy

The gestation period, which is the period of time most commonly called “pregnancy,” lasts for approximately 40 weeks. It extends from the ending of the woman’s last period to the birth of the fetus. The prenatal period extends from the conception of a secondary oocyte (the egg) through the birth of a fetus, which lasts approximately 38 weeks. The stages of development will be presented as stages in prenatal development of a typical pregnancy.

Prenatal development consists of three major stages: the pre-embryonic stage, the embryonic stage, and the fetal stage. The pre-embryonic stage lasts from the fertilization of the secondary oocyte by the sperm cell to the implantation of the blastocyst, a matured fertilized egg, in the uterine wall, all of which occurs during the first two weeks of

prenatal development. The embryonic stage lasts from weeks 3-8 eight of prenatal development, during which the embryo undergoes gastrulation, which is the formation of the three distinct cell types in an early embryo, and organogenesis, which is the process by which major organs begin to form. The fetal stage of prenatal development extends from weeks 9-38, during which the fetus fully matures (Amerman, 2015:1058-1059).

(i): The Pre-Embryonic Stage

Fertilization, also known as “conception,” is the first major stage in prenatal development and involves the fusion of a secondary oocyte with a sperm cell to form a diploid zygote, an immature fertilized egg, within the ampulla of the uterine tube. Before fertilization, a secondary oocyte consists of a gonad cell surrounded by two layers of granulosa cells: the inner zona pellucida and the outer corona radiata. The head of the sperm cell pierces the

corona radiata using hyaluronidase, which is a digestive enzyme released from the acrosome of the sperm cell. The hyaluronidase digests the

barriers between the granulosa cells of the

corona radiata, which allows it access to the zona pellucida. Once it reaches the zona pellucida, the sperm cell binds to sperm binding receptors, which stimulates the

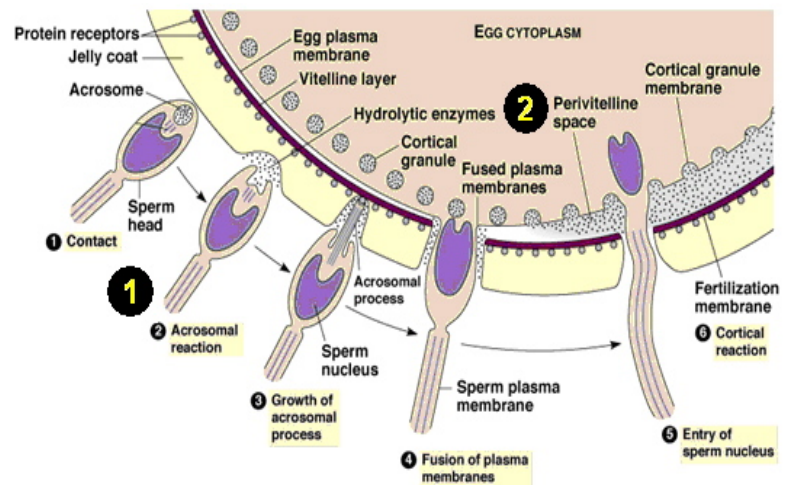


Figure 1: Acrosomal and cortical reactions (Pearson, 2002)

acrosomal reaction. The acrosomal reaction involves the acrosome releasing additional hyaluronidase along with acrosin, both of which participate in digesting the zona pellucida. The following binding of the sperm cell to the plasma membrane of the oocyte stimulates the cortical reaction, which involves the oocyte releasing its cortical granules that destroy the remaining sperm binding receptors on the zona pellucida. This reaction prevents additional sperm from fertilizing the oocyte. An error during the cortical reaction would result in the production of dizygotic twins, or fraternal twins. Following the cortical reaction, the nuclei of the sperm cell and oocyte swell and then merge to become one diploid zygote (Amerman, 2015:1060-1062).

As the zygote moves through the uterine tube into the uterine cavity, it undergoes rapid mitotic divisions, or cleavage, which produces a blastomere. The divisions occur so rapidly that the cell count of the zygote increases, but the size of the zygote remains the same. After 18 hours of mitotic divisions, the zygote consists of 16 cells covered by a zona pellucida and is now termed a morula. When the morula reaches the uterine cavity, it is nourished by uterine milk, a substance secreted by glands in the lining of the uterine wall. After it is nourished by the uterine milk, the morula is termed a blastocyst. As the blastocyst moves through the uterine cavity, it hatches from the zona pellucida, which allows the blastomere cells to reorganize around the blastocyst to form an internal, fluid-filled cavity. When the blastocyst is ready to implant, it consists of two distinct cell types: the outer trophoblast cells, which later form the placenta, and the inner embryoblast cells, which are the developing body. During an eight-day window after fertilization, the blastocyst can mutate and separate into two distinct embryoblast cell groups, which would produce monozygotic, or identical, twins (Amerman, 2015:162-163).

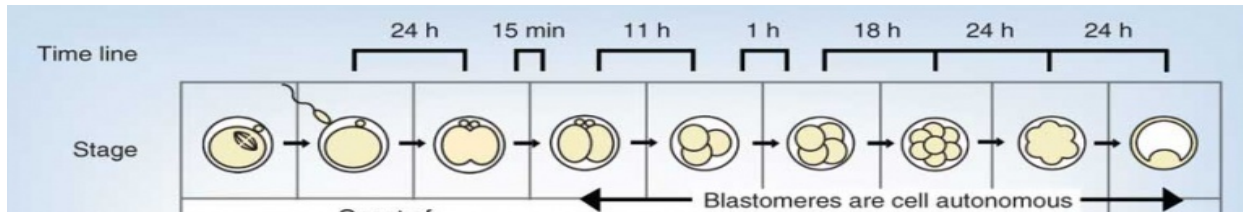


Figure 2: Blastocyst Development Timeline (Wong, et. al, 2010)

The next major stage of development during the pre-embryonic period is implantation, which begins 4-7 days after fertilization. During implantation, the trophoblast cells of the blastomere pierce the stratum functionalis layer of the uterine endometrium by secreting digestive enzymes. The trophoblast separates into two distinct layers: the cytotrophoblast, which covers the embryoblast cells, and the syncytiotrophoblast, which is the outer layer that merges with the stratum functionalis of the uterus. The blastomere progressively becomes more encased by the stratum functionalis, and by day 16, the blastocyst is completely covered by maternal epithelium and is considered fully implanted. At the end of implantation, the embryoblast cells separate into two distinct populations: the hypoblast and the epiblast, which forms the amniotic cavity. Spontaneous abortions are common during the implantation stage and result from the blastocyst implanting in places other than the uterus, resulting in an ectopic pregnancy (Amerman, 2015:1063-1066).

The last major stage of the pre-embryonic period is the initiation of the formation of the extraembryonic membranes from the embryoblast cells, which occurs on day 14 after fertilization. The yolk sac is the first to develop, and it develops from the hypoblast. It serves as the main nutritional source for the conceptus, or developing body. The amnion, which encloses the amniotic cavity, forms from the epiblast and is only pierced by the umbilical cord. The chorion, which is the outermost extraembryonic membrane,

forms from the trophoblast and grows villi to eventually form the embryonic portion of the placenta (Amerman, 2015:1066).

(ii): The Embryonic Stage

The embryonic period is the second major stage of the prenatal period and takes place during weeks 3-8 of prenatal development. During this period, the conceptus is now termed an embryo. The primary event associated with the embryonic period is organogenesis, which is the formation of mature, functional organ systems. During the embryonic period, organogenesis begins for all of the major organs, but it is not completed until the end of the fetal period of prenatal development. The end of the embryonic period marks the end of the first trimester, which is notoriously the most dangerous period of pregnancy in regards to experiencing a spontaneous abortion. The embryo is especially sensitive to teratogens (substances that cause birth defects) during the embryonic period because the embryo is undergoing initial development of all major organ systems in the body. By the end of the embryonic period, 95% of all structures within the body are developed and beginning to mature (DiPietro, 2008:605).

The first major event of the embryonic period is gastrulation, which involves the formation of the trilaminar embryonic disc. In short, the epiblast and hypoblast formed during the pre-embryonic period transform into three distinct cell groups - the ectoderm, mesoderm, and endoderm - which are then folded to form distinct regions of the embryo. The completion of gastrulation allows for the embryo to begin organogenesis (Amerman, 2015:1067-1068).

Gastrulation begins by the formation of a primitive streak, which is an indentation within the epiblast cells. The epiblast cells around the streak detach and ingress, or move into the streak. The endoderm cells replace the hypoblast cells by first moving through the

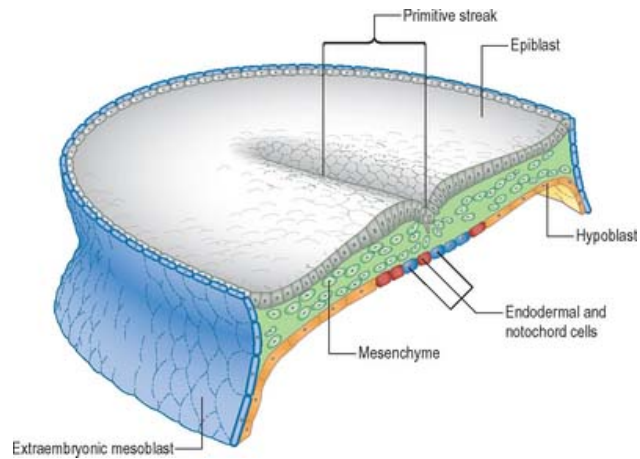


Figure 3: Trilaminar disc formation from primitive streaks

primitive streak and then the mesoderm and ectoderm cells successively replace the epiblast cells. Following the formation of the three cell groups of the trilaminar embryonic disc, folding occurs. Cephalocaudal folding involves the folding of the head and tail regions, which forms the head and buttocks regions of the developing embryo. The successive transverse foldings involves the folding of the right and left sides of the embryo, which creates the trunk region and primitive gut of the embryo. After gastrulation is complete, the different cell groups of the trilaminar embryonic disc differentiate into functional organ systems by the process of organogenesis (Amerman, 2015:1068). The first cell group to differentiate during organogenesis is the ectoderm. The ectoderm cells undergo neurulation, which involves the thickening of ectoderm cells to form a neural plate. The neural plate deepens to form a neural tube. The anterior portion of the neural tube develops into the brain and the rest of the tube develops into the spinal cord of the developing embryo. The ectoderm cells in between the cells undergoing neurulation develop into the nerves, pigment of skin, and adrenal medulla of the embryo.

The rest of the ectoderm cells develop into the epidermis of the embryo, or the hair, eye muscles, salivary glands, and melanocytes (Amerman, 2015:1069).

The mesoderm of the trilaminar embryonic disc forms the notochord, which is a streak of cells located under the primitive streak. The notochord serves to ensure that the embryo develops and expands around a central axis. Around the notochord are three groups of mesoderm cells, termed somites. The somites have three regions of cells: the sclerotome, which develops into the vertebrae and ribs; the dermatome, which develops into the dermis of the skin; and the myotome, which develops into the skeletal muscles. The lateral plate is a group of mesoderm cells that is located laterally to the somites and that develops into the spleen, the cardiovascular system, the serous membranes of most organs, and the vast majority of the connective tissue of the embryo. The intermediate mesoderm cells are a group of cells located on the other lateral end of the somites and develop into the gonads and the kidneys of the embryo (Amerman, 2015:1069).

The endoderm of the trilaminar embryonic disc forms the internal epithelium of the digestive, respiratory, urinary, and reproductive tracts. It also forms the vast majority of secondary glands and accessory organs such as the thyroid gland, parathyroid gland, thymus, liver, and pancreas (Amerman, 2015:1069).

Chronologically, the first noticeable features to develop during the embryonic period are the brain, spinal cord, and heart, all of which begin to develop during week 3. During week 5, the heart begins to beat at regular rhythms, but this heartbeat cannot be heard with an ultrasound until weeks 6-8 and cannot be heard with a stethoscope until week 20. Also during week 6, the hands and feet begin to form. During week 7, the toes of the embryo can be visibly seen and all essential organs have begun to grow. By the end

of the embryonic period, the facial features of the embryo have begun to form, including the eyelids and outer ear (Sacks, 2015).

(iii): The Fetal Stage

The fetal period is the third and final stage of prenatal

development, taking place during

weeks 9-38. The first event to occur during the fetal period is the completion of placentation, or the development of the placenta. The placenta is an indirect connection between the mother and the fetus that allows the passage of oxygen and nutrients from the maternal blood to the fetal blood and the removal of wastes from the fetal blood to the maternal blood. The placenta is formed from the chorionic villi of the syncytiotrophoblast embryonic tissue and the layer of the stratum functionalis of the uterine tissue; therefore, the placenta is uniquely formed by maternal and fetal tissue. The placenta is organized in such a way that the maternal blood and fetal blood do not mix, which is dictated by the placental barrier. The placental barrier is composed of the placental sinus, which is filled with maternal blood that surrounds the chorionic villi filled with fetal blood. The barrier allows passage of gases, nutrients, and wastes, but red blood cells are not permitted to pass. Therefore, while the maternal blood is not directly circulating within the fetus, it is still required for the vitality of the fetus (Amerman, 2015:1071).

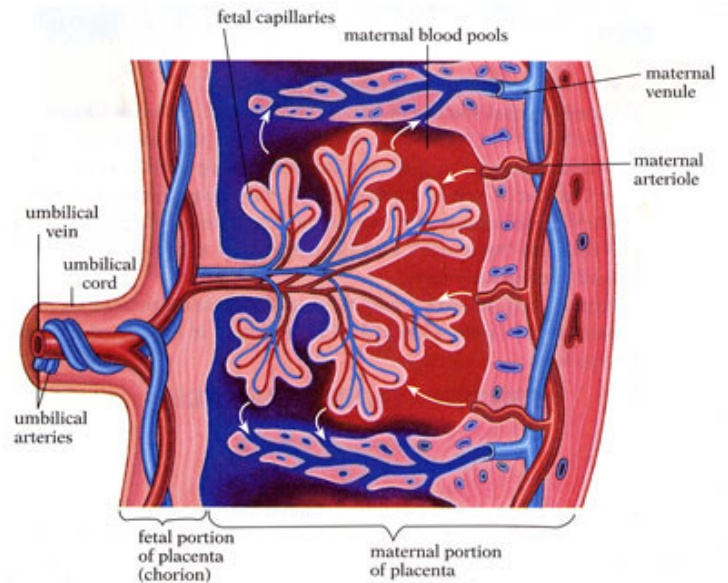


Figure 4: Feto-placental circulation (Murthi, et al., 2014)

During the first three weeks of the fetal period, weeks 9-12, the genitals appear; however, the genitals are not distinguishable by ultrasound until weeks 12-14, depending on the quality of the ultrasound. Also during these weeks, toenails and fingernails appear on the fetus, and the fetus is capable of forming a fist. The physical appearance of the fetus is not yet proportional to the ideal dimensions of a grown human; the head is half of the size of the fetus and shaped like a cylinder. Also, during the beginning of week 9, the liver is capable of making red blood cells, which then circulate and nourish the fetus via the placenta (Sacks, 2015). In regards to motor skills, the fetus is now capable of head rotation (DiPietro, 2008:608).

During weeks 13-16, the fetal bones begin to ossify (Sacks, 2015). Muscles continue to develop and become capable of moving and stretching. The fetus is also capable of the sucking motion and yawning motion with the muscles around the mouth (DiPietro, 2008:608).

The primary development of weeks 17-19 is the completion of the construction of the inner and outer ear, which allows for the ability to hear. Quickening also generally occurs during these weeks, which involves the mother feeling the fetus move inside of her uterus. Quickening indicates that the skeletal muscles are capable of contracting (Amerman, 2015:1072); however, mothers only detect an average of 16% of all fetal movement, and therefore cannot be used as a singular source to determine fetal skeletal muscle function (DiPietro, 2008:608). By the end of the 19th week, the fetus is capable of swallowing.

During week 20, the meconium, or the first bowel movement, is made in the fetal intestinal tract. The eyebrows and eyelashes become visible on the fetus's face. The

fingernails and toenails complete developing. The fetus also becomes noticeably more active during this week.

The lower respiratory tract begins to develop in between weeks 21-23. The fetal bone marrow becomes capable of synthesizing red blood cells, which increases fetal circulation.

By week 24, the fetal eyes are completely developed, but the eyelids remain closed. The primary physiological development is reflexes; the fetus will now startle to loud noises and bright lights. Also, footprints and fingerprints begin to form during this time.

The brain begins to develop most rapidly during weeks 25-28. The eyelids are now able to open and close. Also, the lungs produce surfactant, which is a chemical that helps the alveoli, or air sacs of the lungs, fill with air when the fetus breathes. Rhythmic breathing begins to occur in between weeks 29-32, but the lungs are not fully developed until later on.

The fetus begins to develop circadian rhythms during weeks 33-35. The heart and blood vessels also complete development during this time. The muscles and bones fully develop as well; however, the bones will not completely ossify until after birth.

The progression of fetal cognitive function cannot be directly traced; however, studies conducted on fetal movements can be used to indicate the maturation of fetal cognition. The movement of the fetus will become less frequent as gestation progresses, but this is due to the reduction in uterine space to move, rather than a reduction in mental capacity. Therefore, the coordination of fetal movements is tracked rather than the frequency of movement. In an ideal pregnancy, fetal movements will evolve from

uncoordinated entire-body movements to more coordinated, narrow movements, indicating neural development. For example, the fetus is capable of head rotation during weeks 10-12 and is capable of yawning and sucking motions by weeks 13-15. This development of the capacity to perform more specific movements would indicate the development of higher brain power (DiPietro, 2008:607-608). Another fetal feature that indicates higher brain capacity is the ability of the fetus to recognize an auditory stimulus such as the mother's voice, which has been discovered to begin as early as week 26 in the prenatal period. The ability to distinguish the mother's voice from the voices of other women provides evidence that the fetus is capable of prenatal learning (DiPietro, 2008:611).

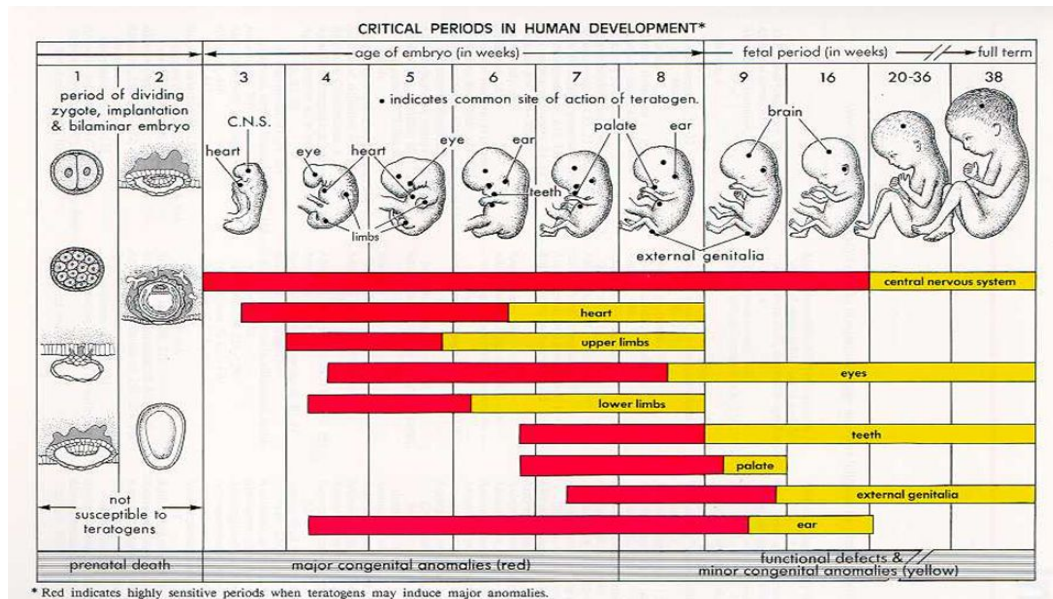


Figure 5: Timeline of Milestones in Fetal Development (National Organization of Fetal Alcohol Syndrome, 2004)

q

The question concerning whether an embryo or fetus can experience pain during an abortion is a controversial one. The experience of pain is subjective and more complex than the complete development of fetal neuroanatomy. In order to experience pain, a

fetus must fully develop the anatomic pieces that are necessary to receive stimulation from pain and transmit that signal to the cerebral cortex of the brain through the thalamus. The free nerve endings, or the nerve receptors used to detect and become activated by pain, are developed within 7.5-15 weeks of gestation, depending on the region of the body by which they are located; however, the spinal cord neural pathway that connects these nerves to the brain is not capable of transmitting this signal until week 19 of gestation. The neurons that transmit the signal from the brain through the thalamus to the cerebral cortex do not form complete synapses until week 26 of gestation. The development of the neuroanatomy is not the only component in regards to the capacity to perceive pain; the perception of pain also requires the capacity of the brain to determine the subjectivity of the pain (Derbyshire, 2006).

The International Association for the Study of Pain defines pain as the “unpleasant sensory or emotional experience associated with actual or potential tissue damage... Pain is subjective. Each individual learns the application of the word through experiences related to injury in early life.” By this definition, pain is a subjective, conscious experience that cannot be quantified until an individual experiences different degrees of pain during life experiences. Fetal developmental research on the subject does not suggest that a fetus is capable of the conscious cognition necessary to determine the subjectivity of the pain. In this regard, fetal pain is not biologically or psychologically possible (Derbyshire, 2006).

Also, fetal pain would theoretically differ dramatically from adult pain because of the environmental factors of the amniotic cavity. The placenta provides a chemical environment that promotes sleep and suppresses higher cortical activity. The womb is

also warm, buoyant, and has a buffer fluid; these depress the fetal capacity for tactile stimulation. Therefore, even if fetal pain was possible, our understanding of the degree of that pain is not possible due to the difference in environment. Studies on neonates at different developmental stages will not provide useful data because a neonate is subjected to a completely different environment than a fetus, and developmental changes occur immediately after a fetus emerges from the environmental factors of the amniotic cavity (Derbyshire, 2006).

A prominent argument for the capacity of the fetus to feel pain as early as week 20 of gestation is the ability of the fetus to perform a withdrawal reflex from sharp, prodding instruments (Minnesota Citizens Concerned for Life, 2014). However, differences exist between the withdrawal reflex and the perception of pain. For example, the hitting of the knee with a rubber mallet produces a leg extension reflex, but it does not induce pain. Many reflexes only occur within the synapses between peripheral nerves and spinal nerves, or in other words, they do not require processing by the brain. Cerebral processing is required to produce the sensation of pain, and thus, the occurrence of a reflex does not directly indicate the capacity to feel pain (Miller, 2016).

As previously stated, the mother and the fetus are not directly connected by a distinct structure, but are rather indirectly connected by the placenta (Amerman, 2015:1071). Despite the lack of direct physical connections, the fetus can affect the mother's physiological function. Fetal movement directly stimulates a sympathetic surge in the mother's autonomic nervous system, even if the mother is unaware of the movement (DiPietro, 2008:612-613). The mother can also affect the fetus as the physiological and psychological state of the mother dictates the levels of oxygen and

nutrients accessible to the fetus, which directly affects fetal function and development (DiPietro, 2008:612).

Section (b): The Effects of Pregnancy on the Mother

The mother is also affected by the physiological changes that are induced by the conception and maturation of the growing fetus. The anatomical and physiological effects of a pregnancy on the mother are extensive and evolve over the course of the pregnancy. In regards to the basic inconvenient byproducts of pregnancy, women will generally experience different symptoms based on different stages in the pregnancy. During the first trimester, or months 1-3 of the pregnancy, women will generally experience morning sickness, which is the occurrence of nausea and vomiting during the morning. They can also experience fatigue and breast tenderness. During the second trimester, or months 4-6 of pregnancy, women can experience abdominal cramps as their uterus expands quickly. The second trimester is the time period during which the fetus grows the quickest in regards to size. Women will also generally experience quickening during this period, which can become uncomfortable as the fetal skeletal muscles become stronger and contract more forcefully. The symptoms of the third trimester, or the last three months of pregnancy, can include weight gain, pressure on internal organs, difficulty breathing, increase in blood pressure, and backaches, due to the prominent asymmetric abdominal expansion (Amerman, 2015:1076).

These symptoms are explained by the physical and anatomical changes that occur as the pregnancy progresses. The tenderness of the breasts during the first trimester is due to their enlargement, which is attributed to the increased levels of estrogen and

progesterone that accumulate in breast adipose and glandular tissue. The cause of morning sickness is not yet determined; however, it is directly correlated to physiological or anatomical changes of the mother during the first trimester (Amerman, 2015:1077-1080).

A mother's blood pressure increases due to the increase in blood volume and cardiac output, which is needed to nourish the fetus with oxygen and nutrients. The increased rate of breathing of the mother is due to the increase in progesterone, which makes the respiratory center in the brainstem more sensitive to carbon dioxide. This stimulates more removal of carbon dioxide, resulting in an increase in the rate and depth of breathing. Later in pregnancy, the uterus expands enough to compress the diaphragm, which prevents the lungs from completely expanding and results in shortness of breath (Amerman, 2015:1077-1080).

During pregnancy, women need to consume an average of 300 additional calories each day, which can result in weight gain. They also need more vitamins and nutrients in order to nourish themselves and the fetus. Women will also experience greater water retention, which can result in constipation. Despite the water retention, women will experience a more frequent urge to urinate and less control over their bladder in the later months of pregnancy due to the physical compression of the uterus on the urinary bladder. This can result in stress incontinence, or unintentional urination (Amerman, 2015:1077-1080).

In regards to the integumentary system, pregnant women can experience an increase in pigmentation of the face, the areolae of the breasts, and the lower abdomen. Women can also experience stretch marks, which result from the tearing of elastic fibers

in the dermis of the skin due to the intense growth of the uterus which forces the skin to rapidly stretch (Amerman, 2015:1078).

All of these changes occur to pregnant women during pregnancy. Women are also biologically affected by a pregnancy during and after birth. The birthing process for pregnant women differs dramatically depending on the specific pregnancy. Assuming that a woman undergoes an ideal vaginal birthing process, she endures labor and dilation for a varying length of time, from as little as one hour to as many as 24 hours. After the woman reaches 10 cm dilation of the cervix, she enters the expulsion phase, which involves the expulsion of the fetus from the uterus through the vaginal orifice. An episiotomy is often performed during this time and involves making an incision to expand the vaginal orifice and reduce tearing of the vagina and surrounding tissue. This incision is sewed up after birth. After the birth of the fetus, the afterbirth is expelled from the uterus through the vagina. The afterbirth is a substance that consists of the placenta and attached extraembryonic membranes. Women commonly wear a diaper or sanitary pad after birth when the afterbirth and additional uterine blood is passing (Amerman, 2015:1081).

Women also experience extreme symptoms of the pregnancy postpartum, or after the birth of the child. After birth, hormones produced to promote the vitality of the fetus during pregnancy abruptly and significantly decline, which psychologically affects the mother. This decline results in “postpartum blues” for 80% of women 2-3 days postpartum. Postpartum blues are defined by symptoms of irritability, insomnia, anxiety, and irrational emotional responses. These symptoms often resolve within 2 weeks postpartum as estrogen and progesterone levels return to normal (American College of

Obstetricians and Gynecologists, 2013). If the symptoms do not resolve within a few weeks postpartum, the woman is often diagnosed with postpartum depression (PPD), which affects 10% of postpartum mothers. PPD is a disease that causes anatomical and physiological changes in a woman's brain, resulting in extreme feelings of numbness, sadness, and indifference towards the newborn up to a year postpartum. In a woman with PPD, regions of the brain that process emotion and negative stimuli, such as the crying of a baby, are less active than in women without PPD. PPD is most often associated with the sharp decline in estrogen and progesterone; however, the probability of experiencing PPD increases due to certain behavioral and environmental factors. Behavioral factors that increase the occurrence of PPD include poor sleeping and eating habits, both of which are commonly experienced by new mothers (Nierenberg, 2016). Certain environmental factors can also influence the development of PPD including the lack of a support system from loved ones, a recent death in the family, or resentment towards the pregnancy due to physical, emotional, or financial complications of the mother caused by the pregnancy (American College of Obstetricians and Gynecologists, 2013). The exact ratio of biological, behavioral, and environmental factors that result in the development of PPD is relative to each mother (El-Ibiary, 2013).

Women will discharge lochia, which is a yellow vaginal discharge composed of the remnants of the amniotic fluid, for approximately 6 weeks post-birth. Aldosterone levels will also return to normal, which will increase the urinary output of women. Women will also experience lactation, which is the production and release of breast milk. The mammary glands will secrete colostrum for a few days post-birth, which is a thick yellow fluid, composed primarily of IgA antibodies. This fluid will provide the fetus with

passive immunity. Lactation from the mammary glands is stimulated by the suckling of an infant and is an involuntary response by the mothers (Amerman, 2015:1083).

Section (c): The Mechanics of Abortion

A pregnant woman can choose to terminate an unwanted pregnancy by an induced abortion. For standardization, the methods of induced abortion that will be discussed are assumed to be performed by a practicing physician in a healthcare facility. Induced abortions can be performed during different stages of pregnancy by a multitude of different methods. According to the Guttmacher Institute, approximately 19% of pregnancies in the United States were aborted in 2014, excluding miscarriages. In 2014, the Guttmacher Institute estimated that approximately 14.6 out of every 1,000 American women aged 15-44 have had at least one induced abortion, which is a historically low rate in the United States since the legalization of induced abortion in 1973 (Guttmacher Institute, 2018). I will discuss the most common legal methods performed in the United States to induce abortions during specific stages of pregnancy.

The method of induced abortion that can be performed soonest in the pregnancy is an oral emergency contraception, also known as the “Plan B Pill.” This oral pill has many versions and consists of different ratios of drugs containing high doses of certain hormones that aim to disrupt either ovulation, fertilization, or implantation. The emergency contraception pill that disrupts implantation is the only form of this method that is considered an abortion because it terminates an already fertilized ovum. This method is only effective if it is taken within 72 hours of intercourse and is thus the

earliest method of induced abortion that is available for pregnant women in the United States (Fieser, 2017).

As of 2013, approximately 89% of all abortions performed in the United States are performed during the first trimester (Gordon and Sherk, 2018). Induced abortions that take place during the first trimester, or the first 12 weeks of gestation, are generally medical abortions. Medical abortions are non-invasive procedures that do not require general anesthesia. They generally involve the multiple oral or intravenous administrations of drugs that compromise the pregnancy. The most common medical abortion in the U.S. is Mifepristone, more commonly known as RU-486. Mifepristone is a drug orally administered between weeks 7-9 of the gestation period. It functions to block progesterone, a hormone required for the sustainability of the pregnancy. The blocking of progesterone causes an increased production in prostaglandins, which stimulate uterine contractions, and also causes the uterine lining to thin, which causes the implanted embryo to detach. Mifepristone is often paired with misoprostol pills, a prostaglandin analogue that enhances uterine contractions. Two Misoprostol pills are generally administered two days after the Mifepristone pill. In an ideal outcome, an abortion will generally occur within four days of taking the misoprostol pills (Gordon and Sherk, 2018).

A pregnant woman can also choose to undergo a surgical abortion during the first trimester. A surgical abortion is a surgical procedure that generally involves general anesthesia or other methods of sedation. The only surgical abortion method commonly performed during the first trimester is a Manual Vacuum Aspiration (MVA). An MVA is performed during weeks 3-12 of the gestation period. During this procedure, a healthcare

professional will first numb and dilate the cervix. Then, he or she will insert a syringe or thin suction tube through the cervix and into the uterus to manually suck out the contents of the uterus. The entire procedure takes 5-15 minutes (Planned Parenthood, 2018).

An induced abortion during the second trimester, or between weeks 13-27 of the gestation period, is exclusively a surgical procedure. A Dilation and Curettage (D&C) procedure is a surgical method of induced abortion that is performed during weeks 6-16 of the gestation period; therefore, it can be performed during the first trimester but is more commonly performed after the first trimester. This procedure involves a physician using a suction and scraping device that is inserted through the cervix to manually remove the embryo or fetus from the uterus. The curved surgical scraping device used is called a curette (Fieser, 2017). This procedure is a one-day out patient procedure that takes 10-15 minutes (Gordon and Sherk, 2018). The D&C was performed in 6.2% of induced abortions in American in 2013 (Guttmacher Institute, 2018). A Dilation and Evacuation (D&E) procedure is a surgical method to induce abortion that is exclusively performed during the second trimester. It is performed between weeks 15-20 of the gestation period (Fieser, 2017). This procedure is mechanically similar to the D&C procedure; however, it involves a larger suction tube and more manual scraping of the uterus than that of a D&C. This procedure is generally riskier for the mother because it is performed later in the pregnancy (Gordon and Sherk, 2018). In 2013, approximately 3.8% of abortions performed in the United States were D&Es (Guttmacher Institute, 2018).

A Dilation and Extraction (D&X) is one of the only surgical methods of induced abortion that is performed after 20 weeks of gestation. The fetus is removed through the

cervix by forceps. The fetus is mostly intact upon removal with the exception of the fetal head, which has to be forcefully collapsed in order to pass through the cervix (Gordon and Sherk). This method is commonly called a “partial birth abortion” and was only performed during 1.3% of the abortions performed in the United States in 2013 (Guttmacher Institute, 2018).

Chapter II: Philosophical Ethics

Section (a): Ethical Theory

When addressing the morality of induced abortions, philosophers generally use moral principles informed by distinct ethical theories: philosophical theories used to establish ethical, or “right and wrong,” behavior. In this chapter, I will first describe two broad ethical theories: utilitarianism and deontology. Then I will describe the concept of rights and display how rights coincide with utilitarianism and deontology. I will conclude this chapter by examining an array of moral arguments concerning abortion within this framework. In my examination of the moral arguments concerning abortion, I will use terminology such as “conservative,” “moderate,” and “liberal” to broadly categorize and discuss certain positions. These labels are used by philosophers to categorize opinions on the moral spectrum but should not be construed as prejudging any particular position.

(i): Utilitarian Ethics

For utilitarians, the moral action is the one that maximizes beneficial outcomes and minimizes harmful outcomes. It is the outcome of an action rather than the intention behind the action that determines its moral quality. While these principles may sound uncontroversial, the consequences of applying them rigorously can be revolutionary, as some examples will show.

For example, a needle exchange program is a program that provides clean needles to heroin addicts who administer such drugs intravenously. These programs exist in nearly every state in the United States (Detox Local, 2018). Needle exchange programs aim to reduce the self-inflicted harms of heroin addicts such as using dirty or old needles to administer heroin. Statistically, the heroin epidemic of America is not rooted in a lack of accessibility or financially affordable addiction treatment programs. According to DetoxLocal, only 1 in 10 heroin addicts are actively seeking any type of treatment. Therefore, the strategy to mitigate the heroin epidemic has been refocused on harm reduction programs, such as the needle exchange program. In addition to providing clean syringes, these programs provide information from medical professionals regarding dangerous dosages of heroin and the effects that long-term heroin addiction has on one's body. While these programs may appear to be an enabling force superficially, they have proven to slow down transmission rates of HIV, hepatitis, and other blood-borne diseases that rapidly spread via the usage of dirty or old needles. These programs do not directly lower the rates of heroin addiction or usage; however, they do improve the overall public health by slowing the spread of blood-borne diseases. This is an example of implemented utilitarianism. The programs do not necessarily benefit the heroin addict individually, but they do benefit the heroin addict community as a whole. Utilitarians are not driven by a concern to avoid "condoning" or "legitimizing" heroin addiction. Rather, they do not make a moral judgment on it. They just want to bring about the best results in the situation as given.

(ii): Deontological Ethics

In deontological theories, the intention behind the action and the kind of the action determines its moral status – not the outcome of the action. The categorical imperative is a certain idea of deontological theory. It states that one may only act a certain way if that action can be universalized in all circumstances. The ends do not justify the means if it breaks the rule of universality. For instance, imagine a situation in which one has the option to kill a notorious terrorist, thereby potentially saving thousands of lives. However, the killing of the terrorist would compromise the lives of the terrorist's family members as collateral damage. In this situation, a deontologist would choose not to kill the terrorist because the act of killing innocent people cannot be universalized. By the laws of universality, if one has the right to kill a terrorist's family as collateral damage, then he or she has the right to kill any other innocent man or woman. Obviously a situation in which any man could kill any other man would be morally and practically problematic. Deontology mirrors this frame of thought by valuing universality, by valuing the moral rule. Immanuel Kant, who is the most notable advocate of this ethical theory, stated that humans should be treated as ends in themselves rather than as a means to an end. That is, humans should never be used to create or prevent a certain outcome. In regards to biomedical ethics, this philosophy specifically values the dignity and autonomy of individuals.

For example, the Emory University School of Medicine conducted a morally controversial experiment to determine the reliability of a patient's self-reported claim regarding drug usage (Beauchamp and Childress, 2009). This experiment was conducted in a walk-in hospital clinic in Atlanta, which predominantly serves low-income black communities. The physicians leading the study asked random outpatients in the clinic to

participate in a study concerning the spread and carriage of asymptomatic sexually transmitted diseases. The participants provided consent for the researchers to use information gathered from a urine sample in the STD study; however, they did not provide consent for the researchers to acquire additional information from the patient's urine regarding cocaine usage. Approximately 72% of the 415 men who participated in the study denied using illicit drugs within the last 72 hours; however, approximately 39% of the participants tested positive for a primary cocaine metabolite. The results of this experiment are significant and can be used to improve the way physicians treat patients. These results were gathered without requiring additional samples from the patients, and the results were anonymous, not incriminating any of the participants. Therefore, despite the lack of informed consent, this experiment did not bring any harm or discomfort to the participants. However, this experiment violates deontological theory because it uses the unknowing participants as a means to an end. This situation also violates the concept of the categorical imperative because it violates autonomy, which is a universally valued component of biomedical ethics. According to the categorical imperative, if the physicians in this situation are morally allowed to bypass the acquisition of the participant's informed consent, then all physicians would have this same right. Therefore, despite the lack of harm to the patients and the significant results of the experiment, a deontologist would not condone it.

(iii): The Language of Rights

Cutting across the distinction between utilitarian and deontological approaches is the notion of rights. A right is defined as a demand for respect and attention to a certain

privilege. Rights are thought of as trump cards, as brakes on efforts to bring about desirable outcomes. A negative right is one that obliges others to refrain from preventing a certain state or activity. An example of a negative right is the right to free speech; society does not have the responsibility to give one a microphone, but it does have the responsibility to refrain from blocking one's speech. A positive right is one that requires others to actively provide the benefit. An example of a positive right is the right to education; since children can't educate themselves, someone must provide the education.

Section (b): Applications to the Abortion Controversy

Using these theoretical guidelines, biomedical ethicists present an array of compelling arguments about abortion that come to a myriad of different conclusions. I will present four of these arguments, discuss the flaws of each position, and conclude with my favored position.

(i): Utilitarian Considerations

Philosopher Jodi Jacobson defends the legalization of induced abortions from a utilitarian perspective in her essay "Coming to Grips with Abortion." (Jacobson, 1993: 175-200). She speaks of abortion in terms of logistics, practicality, and the overall effect on public health, framing her discussion with statistical data concerning how abortion affects different aspects of public health. 50 million abortions are performed annually worldwide, approximately half of which are illegal. This shows that women will find ways to terminate an unwanted pregnancy even if the practice is not legal or medically safe. Rather than affect the number of abortions performed, associated legal restrictions on abortion tend only to affect the number of maternal deaths and physical impairments

as a result of abortion. For example, abortion was legalized in the United States in 1973 as a result of the Supreme Court decision in Roe vs. Wade. Abortion-related deaths of women in the United States fell from 30 per 100,000 births in 1970 to 5 per 100,000 births in 1976. Also, the Commission on Health and Physical Culture in Poland determined that the legalization of abortion decreased the rate of infanticide and suicide of pregnant women significantly. Furthermore, in nations with high rates of illegal abortion procedures, considerable medical resources are dedicated to fixing the complications that arise as a result of the illegal procedures. Therefore, the intended improvement or protection of public health in the form of restricting or criminalizing abortion does not actually lower the rate of abortion. It only decreases public health, specifically for women.

While a large percentage of the world's population lives in nations in which abortion is legalized, restrictions on the access to abortion can compromise the public health benefits of legalized abortion. For example, Zambia passed the Termination of Pregnancy Act in 1972, which allows for a pregnant woman to obtain a safe abortion legally; however, in order to obtain an abortion, the woman must receive approval signatures from three physicians and the abortion must be performed before 12 weeks gestation in a hospital setting. Only three qualified physicians practice in Zambia, and Zambia only contains one hospital that performs the operation; therefore, these requirements are virtually impossible to fulfill. Due to these restrictions, the rate of illegal abortions in Zambia is much higher than the rate of legal abortions. The legalization of abortion does not automatically result in accessibility to legal abortions, which is the factor that improves public health.

Abortion rates are also affected by certain social and financial pressures to make the family size smaller. In first-world nations today, the status of women is changing, along with their rates of education and their financial compensation. These major social and economic shifts have altered the desirable family size for a large percentage of the population. This shift in desire affects abortion rates most significantly in areas where access to contraceptives and family planning information is limited. Internationally, abortion currently ranks number four on the list of most common forms of contraception.

Statistically the most effective strategy to lower the abortion rate is to incorporate free informational services concerning family planning, sexual education courses, and contraceptives. According to the Guttmacher Institute, abortion rates in the United States declined to an all time low in 2014 at 14.6 abortions for every 1,000 women, a 14% drop from 2011. Despite the current movement to increase restrictions on legal abortions in the United States, the Guttmacher Institute claims that the expansion of information regarding and accessibility of contraceptive measures played the largest role in the recent decline of abortions (Guttmacher Institute, 2018). From 2012-2014, 22 states instituted 47 additional restrictions on legal abortions, and these states accounted for 38% of the reduction in abortion rates. However, among the 28 states that did not institute additional major restrictions, 10 of those states experienced a reduction of abortion rates that were larger than the national average. Therefore, no evidence clearly establishes a pattern between legal restrictions on abortion and the reduction of abortion rates (Guttmacher Institute, 2018). Alternatively, the reduction of abortion rates is attained more effectively by investing in family planning centers and sexual education programs than by putting legal restrictions on abortion. This is evident by viewing the correlation between abortion

rates and the expansion of informational programs in nations such as Sweden and Italy. Removing financial, geographical, and psychological roadblocks to a safe, legal abortion statistically decreases the rate of abortion significantly. It also reduces maternal injury that results from illegal procedures, thus improving public health.

The international legalization of abortion would reduce the maternal death rate by 25% and would reduce the incidence of related complications by a similar margin. In addition, it would save billions of dollars in social and healthcare costs that result from illegal abortion procedures. Therefore, legalized, safe abortion procedures do not only improve female health, but they also improve the overall healthcare system because they save unnecessary costs that can be redirected. To put it simply, if one is opposed to abortion and wants to see the number of abortion procedures minimized, and if one cares more about what policies actually work than about the moral principles behind the policies, then one should be in favor of legalized abortion. This is the basic utilitarian argument for legalized abortion, or which the moral status of the fetus is either not relevant or is of only secondary importance.

(ii): First View of the Moral Status of the Fetus: John Noonan and Donald Marquis

John Noonan, philosopher and author of “An Almost Absolute Value in History” (Noonan, 1973: 55-61), responds to the questions concerning the morality of abortion with an objective approach. He reaches the same conclusion as most theologians, that abortion is generally morally impermissible because life begins at conception; however, he reaches this conclusion secularly. Noonan does not require the incorporation of religious principles and ideologies to argue that abortion is immoral. Rather, he uses

philosophical principles. He initially argues that the determination of the morality of abortion relies on the identification of a point during fetal development by which humanization, the process by which one can be considered a human being, occurs. Noonan argues that humanization is complete after a fertilized egg contains the full genetic makeup of a human, or 46 chromosomes. This happens during conception. Therefore, Noonan's argument relies on the notion that an entity that contains the full genetic make up of a human being is human.

Noonan identifies conception as the morally significant step during fetal development because of the sudden change in the probability of survival of the entity. He compares the probability of a fertilized egg's becoming a fully formed human to the probability of a sperm cell doing so. 200 million sperm cells are contained in one full ejaculate of a male; therefore, the probability of potential life of a single sperm cell is at most 200 million to one. The probability that a fertilized egg goes on to form into a full human being is 80%. Noonan finds this sudden and drastic increase in the probability of human life morally significant and thus equates its formation with humanization (Noonan, 1993:58-59). A potential issue with this logic is that Noonan does not specify whether the probabilities of outcomes are the only basis for determining moral distinctions. If his thinking holds universally, then adults who experience severe brain injuries that render them thoughtless would be able to be euthanized without moral consequence, as they would experience a major shift in the probability of ever having another thought (Schwartz, 1993:75.) Noonan also fails to consider the probability of the health risks to or survival rates of pregnant women, as well as fetal survival rates prior to the development of the brain. Therefore, Noonan's positive argument for this position is

incomplete, as it does not consider other probability factors involved with a pregnancy that could potentially affect the determination of the morality of an abortion (Schwartz, 1993: 78).

Noonan also rebuts common arguments for the moral permissibility of abortion during various stages of fetal development. He first addresses the “viability argument,” which claims that the abortion of a fetus that is not viable outside of the mother’s womb is a morally permissible action. Noonan states that this cannot be universally applicable, as a fetus can be artificially incubated outside of the mother’s womb and thus artificially sustained physically outside of the mother. As of 2017, a group of physicians at the Children’s Hospital of Philadelphia announced that they successfully sustained a premature lamb for 4 weeks in an artificial incubator (Cohen, 2017). This biomedical technology is developing rapidly; some physicians even suggest that premature human fetuses as early as 20 weeks gestational age will be able to be incubated to term within the next 5 years. This technology would add an additional dimension to the abortion debate as it seemingly eradicates the viability argument entirely. However, it poses entirely new ethics questions regarding the morality of inducing the birth of premature human fetuses to avoid physically carrying them to term.

Also, different racial groups have different ages at which a fetus is considered viable. For example, a fetus of African descent will mature faster and become viable sooner than a white fetus (Noonan, 1993:56). This argument suggests that the viability criterion is elastic. Also, Noonan adds that the dependence of a fetus on its mother does not end after it becomes viable, for a newborn will require physical, emotional, and financial assistance for the majority of his/her young life (Noonan, 1993:56). However,

Noonan fails to recognize that this dependence need not be on the mother of the child. A newborn merely requires that some capable human care for them physically and emotionally (Schwartz, 1993: 67).

Additionally, Noonan addresses the “experience argument,” according to which there are degrees of humanity based on the amount of human experience the human organism has had or is having. Therefore, a child is less human than an adult because he/she has not experienced as much suffering or joy as an adult. This argument relies on the notion that humanity requires human experience. As an embryo is not conscious, it is considered to be incapable of forming human experience and is thus not human, according to this argument. Noonan argues that an embryo does have human experiences because it experiences reflexes to touch and sound stimuli as soon as eight weeks into development; however, most reflexes that occur before 24 weeks of gestation do not require the input of the fetal brain and thus do not imply consciousness or feeling. Noonan also attempts to negate this argument by applying this logic to adults with memory deficits or to younger children. Noonan argues that this logic would morally permit the euthanasia of a young toddler or an adult with extreme aphasia because he/she is unable to retain memories (Noonan, 1993:56). He fails to recognize the difference between a fully developed human who has had human experiences that are unable to be remembered compared to an entity that is incapable of feeling or experiencing his surroundings at all – one has experienced and one has yet to experience. Drawing parallels between the two situations, equating their status of humanity makes the dangerous implication that one’s humanity can be revoked.

Charles Gardner, philosopher and author of “Is an Embryo a Person?” negates Noonan’s fundamental assumption by claiming that the possession of 46 chromosomes within a fertilized egg is not the only factor required to form a mature human being. Rather, the information that directs the physical development of an embryo stems from the interactions and positions of the cells and molecules of the fertilized egg during the developmental process (Gardner, 1993:142). To establish his assertion, Gardner uses an example involving the fusion of two 16-celled mouse embryos. If the two already-formed mouse embryos are physically brought together, the embryos will fuse to form one homogenous 32-celled embryo. Gardner argues that this can only occur because the embryos are unable to recognize themselves as distinctively different or individual from each other. Therefore, the individual bodily and genetic patterns have not yet begun to form, which suggests that an embryo is not an individual entity yet and is thus not an individual human (Gardner, 1993:143). The individual cells of an embryo are stem cells; they are non-specific and undifferentiated. The fate of the progeny cells of an embryo is determined by their location within the body pattern of the embryo, which is completely random and fluid. Gardner also addresses the fact that every cell of an adult human contains the full genetic makeup of a human, yet society does not regard each human skin or saliva cell as a potential form of life (Gardner, 1993:144). He concludes that, “Human beings are more than the sum of their chromosomes; DNA is not destiny” (Gardner, 1993:145). Therefore, according to Gardner, the core assumption of Noonan’s argument is false, as a fertilized egg does not contain all of the information necessary to form a fully formed human in a uterus.

Philosopher Donald Marquis reaches a conclusion similar to Noonan's; however, he defends it differently. In his essay "Why Abortion is Immoral" Marquis does not explore the morality of abortion in particular cases such as rape, incest, or the life of the mother being threatened, which are relatively infrequent cases. Rather, he makes a general argument that the overwhelming majority of induced abortions are immoral because killing other human beings is immoral. He has the same value of the fetus as Noonan; however, that value is bestowed for a different reason.

Marquis begins his argument by outlining common anti-abortion and pro-choice arguments and establishing the issues that commonly arise within each argument. The anti-abortion argument generally concludes that abortion is immoral because killing an innocent human is immoral. This conclusion includes the premise that a fertilized egg has the rights equivalent to a human being and is thus a human being. This conclusion is made through a variety of defenses including that the fertilized egg contains the full genetic make-up of a human, that the fetus physically looks like a human being, and that any living entity that is created by humans is human.

In order to understand Marquis's motive in making an alternative argument for the conservative conclusion, one must recognize the fundamental issue with the conservative argument: Its conclusion is too broad. Under this principle, ending the existence of a live culture of human cancer cells is morally equivalent to murder because the culture is both human and alive. Anti-abortionists have historically tried to avoid this issue by claiming that abortion is immoral because killing an innocent human *being* is immoral. While this proclamation avoids the inclusivity of the culture of cancer cells, it creates a different

issue. A fetus is definitively human and alive; however, a fetus is not biologically or morally considered to be a human *being*.

A common response to the conservative argument is demanding the specification of “human being” as a biological or moral attribute. If the acquisition of humanity occurs during the transfer of 46 chromosomes into a fertilized egg, then humanity would be determined on a biological level. “Why, it is asked, is it any more reasonable to base a moral conclusion on the number of chromosomes in one’s cells than on the color of one’s skin?” (Marquis, 204) This definition also excludes persons with chromosome deficiencies, such as individuals with Down Syndrome. However, if humanity is acquired morally, then it needs to be established in the argument. Some anti-abortionists really begin to fail at this point because the argument can become circular – the fetus becomes a human being when it acquires moral status, and it acquires moral status when it becomes a human being (Marquis, 204).

Alternatively, the pro-choice argument is generally framed too narrowly and excludes fetuses. This argument concludes that abortion is moral because a fetus is not a full person due to the fact that a fetus is not rational or conscious. Marquis claims that under this reasoning, killing infants or severely mentally retarded adults would be morally permissible, as these groups of people are not rational or capable of conscious thought. However, Marquis fails to recognize the moral difference between one losing his ability for conscious thought and one never having had conscious thought. The pro-choice argument bases the determination of whether a human entity is a person on the psychological capacity of the individual. A pro-choicer must establish *why* this factor is the determinant of personhood. Joel Feinberg, author of “Abortion,” defines personhood

as follows, “The characteristics that confer... personhood... are traits that make sense out of rights and duties and without which those moral attributes would have no point or function.” “It is because people are conscious; have a sense of their personal identities; have plans, goals, and projects; experience emotions; are liable to pains, anxieties, and frustrations; can reason and bargain, and so on – it is because of these attributes that people have values and interests, desires and expectations of their own, including a stake in their own futures, and a personal well-being of a sort we cannot ascribe to unconscious or nonrational beings...” (Feinberg, 1968). This claim suggests that human rights require consciousness of the mind; however, the courts suggest otherwise. The New Jersey Supreme Court upheld the right to privacy for a woman who was unconscious at the time. The legal status of a right does not determine its morality, but it does establish how elected representatives of the population feel about the morality of a right, which in theory should mirror how the population feels about the morality of a right.

After presenting the common problems with anti-abortion and pro-choice arguments, Marquis presents his argument, which does not contain any of the problems presented earlier. He begins his positive argument by establishing why killing other human beings is immoral. He claims that killing is wrong because it inflicts the epitome of loss on the victim. Killing prevents the victim from experiencing existence presently and in the future. Killing rids the victim of the opportunity to grow and evolve and live. This claim is supported by how society treats murderers – as some of the utmost criminals in existence. It is also supported by the general societal grieving process at the loss of life of a young person versus an older person. Humans generally grieve more for the younger person because of the greater loss of future experiences. This theory would

permit euthanasia of a dying or sick person, as they will not have suffered the loss of a potentially positive future. This theory applies to fetuses explicitly, as the abortion of a fetus would revoke the potential future experiences of the fetus. This argument does not rely on the moral concept that killing a person or a potential person is morally wrong; it does not rely on the qualification of one as a “person.” Rather, it implies that the killing of any living human entity with a potentially *valuable* future is immoral.

Alternatively, Marquis presents the desire account as an additional defense of why killing other human beings is morally wrong. The desire account suggests that killing other humans is immoral because it interferes with the fulfillment of the strong desire of the victim to live. A primary issue with this account is that it permits the killing of individuals who are incapable of desiring to live due to physical or mental circumstances. For example, it would permit the killing of an unconscious person or a mentally ill, suicidal person on the grounds that these individuals do not actively desire to live. In the same regard, the desire account would not protect the right to life of the fetus, as a fetus is not capable of desiring anything. Marquis concludes that the desire account provides a sufficient condition for the immorality of killing, but not a necessary one.

Marquis applies these concepts to a fetus to conclude that killing a fetus is immoral because it rids the fetus, a human entity, of a potentially valuable future. He argues that the future of a fetus can be valuable, even if the fetus does not value it directly. Instead, a life can be deemed valuable based on the value that others give it. For example, the life of a suicidal individual may not be directly valued by the individual, but his or her life is still considered valuable because others value it. Therefore, the life of a fetus can be considered valuable if others value it, which would imply that killing it is immoral. An

issue arises here with the lack of specification of *who* has to value a life to deem it valuable – do the mother *and* the father have to value the life of the fetus to deem it valuable? If the value of the life of a fetus only requires one person to value it, issues arise. For example, if a woman wants to have an abortion, then she is implying that she at least does not value the life of the fetus as much as she values her own life. If the woman does not tell anyone else about the pregnancy, then no one else would be given the opportunity to value the life of the fetus. In this situation, the fetus would not be considered valuable.

(iii): The Second View of the Moral Status of the Fetus: Michael Tooley

Noonan's argument concerning the moral status of a fetus is objective and resides firmly on the conservative side of the spectrum. Michael Tooley, author of "In Defense of Abortion and Infanticide," argues his similarly absolute opinion concerning the morality of abortion, or an opinion that consists of clear-cut criterion that is used to make a definitive answer. His absolute perspective falls on the liberal side of the moral spectrum. Tooley's philosophy concludes that not only is abortion morally permissible, but so is infanticide up to four weeks post-birth. Despite their obvious differences of opinion, Noonan and Tooley agree that moderate positions on this issue are elastic and indefensible. They both argue that one must defend an absolute position: fertilized eggs and fetuses either have the right to life, or they do not. Fetal development from conception to birth is continuous; no point during fetal development alters the moral significance of the fetus. Tooley argues that conservatives assert the conservative position because they cannot live with the conclusion of the moral permissibility of infanticide as

well as abortion during all stages, which he asserts is the only conclusion to be made after approaching this issue with an open mind.

Tooley approaches this issue with a different organizing question than Noonan. Rather than ask, “When does an unborn fetus undergo humanization?” he asks, “Does an unborn entity have the right to life?” Tooley’s entire argument aims to determine which entities do not have the right to life; it does not aim to determine which entities do have the right to life. In order to make this determination, Tooley uses Joel Feinberg’s Interest Principle, which states that an entity cannot have any rights unless he or she is capable of having interests. Interests are a necessary component for one to possess the right to life, but it is not sufficient for one to possess the right to life. One must be capable of possessing desires for one to be capable of possessing interests. Desires differ from interests by relying on personal feelings – interests transcend personal feelings and aim to benefit the individual overall. Desires and interests can inherently conflict. For example, a child can desire to not go to school, but that is not in his or her interest, as he or she attending school will further the overall satisfaction of the child. Tooley argues that without desires, one cannot be better or worse off, is therefore unable to have interests, and, consequently, does not possess rights.

Fertilized eggs are not capable of having present desires; however, their potential indicates that they have “future desires,” which could imply that fertilized eggs have interests. However, Tooley asserts that in order for one to have future desires, he or she must be capable of having present desires, which a fertilized egg is not. He defends this position by claiming that an entity which has interests based on future desires must also have an interest in maintaining its own continued existence. Fertilized eggs are not able

to possess an interest in their own continued existence and thus are unable to have any interests or rights.

Fetuses and neonates, however, are capable of having desires, as they are capable of experiencing pain after week 28 of gestation. They are capable of desiring to avoid pain. However, they are not capable of having the desire for continued existence; therefore, they are not capable of having interests in such and do not satisfy the interest principle. To defend this conclusion, Tooley introduces the Particular-Interests Principle, which states that an entity can have a particular right only if it is capable of having an interest in that right. In order to establish this principle, he uses an example of cats receiving a college education. While cats are capable of having desires, they do not have the capacity to desire a college education and thus do not have a right to it. Cats do have the present desire, and thus interest, to avoid pain and therefore have the right to not be tortured or inflicted with pain; however, cats do not have an interest in their continued biological existence. Consequently, they do not have the right to life. Therefore, they can be destroyed, but this destruction must be painless. In a similar regard, because fetuses do have some desires and thus have some interests, they do have some rights; however, the right to life is not one of these rights because they do not have present desires for such.

Tooley defines the right to life as the right to continued consciousness. For example, if an adult individual experiences extreme brain trauma that results in the loss of all brain function, he is considered to be dead by the vast majority of society, even if his heart is still beating. Therefore, Tooley argues that the right to life incorporates this societal value of having the mental capacity for consciousness. He argues in concurrence with the widely accepted opinion of psychologists and neurologists that the development

of the brain does not parallel the development of consciousness, and thus concludes that fetuses and neonates are not capable of conscious thought. The development of consciousness is the line during human development which Tooley finds morally significant, and therefore, it is the line which he determines to be the line of moral impermissibility. When one is capable of having continued conscious thought, he is able to have present and future desires and interests and thus rights. While the point by which consciousness arises during neonatal development is undetermined, the medical community cannot objectively conclude that it occurs within the first few weeks post-birth. Therefore, Tooley is comfortable making his moral distinction at four weeks post-birth because the entity is not determined to have the right to life and the four-week time frame gives the adults time to make a thoughtful decision.

(iv): The Third View of the Moral Status of a Fetus: Judith Thomson and Jane English

Judith Thomson, author of “A Defense of Abortion,” is a philosopher who negates the conservative claim that a fetus is a person. The equation of fetal and adult human rights does not mean that abortion is morally impermissible in all circumstances. She approaches this discussion by assuming that a fertilized egg has the same rights as a human and identifying the conflicts between fetal and maternal rights within this frame of thought. She does not seek to determine when a fetus becomes a human in this essay; she only concludes that even if a fertilized egg is a human with the same rights as an adult, it does not necessarily possess a right to life that overrides the rights of the mother.

First, she addresses what she calls the “extreme conservative position,” which claims that abortion is impermissible even to preserve the mother’s life. In situations in

which a pregnancy is determined to threaten the life of the mother, extreme antiabortionists suggest that actively killing an innocent life to preserve another life is less permissible than letting someone die to preserve the life of another. However, Thomson argues that extreme antiabortionists would have a more difficult time defending this position in a different circumstance. For example, suppose a child and a mother are both quarantined in a house, and the child grows exponentially. If the growth of this child is not prevented, the mother will be crushed to death in the house. In this situation, Thomson argues that extreme antiabortionists would be unable to argue that the mother killing the child to preserve her life violates a moral code.

Thomson defines a human's right to life as a negative right rather than a positive right. In other words, an individual with the right to life imposes an obligation on others to not impinge on that right. However, in order for a fetus to live, it requires biological resources from a mother, which it has no right to demand. The preservation of the fetus's right to life would compromise the mother's rights, as she also has the right to life, a right to privacy, and a right to pursue happiness, all of which are compromised by a fetus's utilization of her body to survive. Therefore, unless a mother grants permission to utilize her body, a fetus has no right to utilize those resources, even if those resources would preserve its life.

This is an example of a primary issue with Rights-Based Ethics. Positive and negative rights of individuals often conflict and cannot coexist. Thomson applies this frame of thought to the morality of forcing a woman to carry a fetus conceived by rape. If a woman is raped, she has not given consent for the sexual intercourse, much less for the fetus to use her body to survive; however, if a woman enters into consensual sexual

intercourse, knowing that she may conceive a fetus, then she has theoretically consented to the use of her bodily resources by the fetus. However, Thomson does recognize a difference between recklessness and consent. For example, if a burglar climbs through a previously opened window, the residents of the home have not consented to the burglar's presence, even though they did enable his entry. If the residents installed bars on their windows to prevent the entry of burglars, then they have not consented to the burglar's entry. Therefore, the question regarding the fetus' right to utilize the woman's body does not have an absolute answer; it is relative.

Even if the fetus does not have the right to utilize a woman's body, Thomson does not conclude that an abortion is a just action. For example, if one of two siblings is gifted a box of chocolates and does not share with the other sibling, he is greedy, but he is not unjust. Thomson references the biblical story of the Good Samaritan, in which a man sacrifices more than what is morally required. "Minimally Decent" Samaritans in this story, who did not sacrifice what the "Good" Samaritan did, may be greedy but not unjust, as these actions were not morally required by any of these individuals. Therefore, Thomson draws a line between moral requirement and what one "ought" to do. She applies this thought to abortion by saying that legally requiring a woman to carry a fetus, which does not have the right to utilize the woman's resources, is not morally defensible. While a woman should carry a fetus to term in some situations, she is never morally obligated to do so.

Thomson concludes her argument by refuting the thought that parents have a special responsibility for a conceived child that surpasses all other responsibilities. If parents take no precautions when having sexual intercourse and do not attempt to find an

alternative home for the child post-birth, then the parents have assumed all responsibility for the child. However, if parents take all precautions against pregnancy, then they have no moral responsibility for this entity due to their biological relationship. In the latter situation, if the sacrifice required to house, birth, and raise the child is extreme, then Thomson asserts that the mother has no moral obligation to continue with the pregnancy. While a woman “ought” to continue with the pregnancy, she is not morally required to do so.

The primary issue with Thomson’s conclusion is that the criterion for the moral permissibility of abortion is not absolute, but relative. It is relative to a set of factors that need to be balanced; it is subjective, as the determination of the moral permissibility of abortion relies on an individual’s opinion about whether the sacrifice of the mother is great or not. Thereby, her conclusion is that the morality of an abortion depends on the moral status of the fetus as well as the size of the sacrifice of the mother. She does not provide concrete, objective distinctions to determine how much potential maternal sacrifice is required to outweigh the fetal right to life. Thomson fails to incorporate an actual example in which abortion would be impermissible. She rather uses broad, theoretical circumstances to defend her conclusion. For example, in a scenario that a pregnant woman’s health is threatened by a pregnancy, Thomson says, “I am not claiming that people have a right to do anything whatever to save their lives. I think... that there are drastic limits to the right of self-defense (Thomson, 2014: 117).” She does not use any quantifiable means to determine the morality of an abortion in a certain situation. What constitutes “drastic” limits? What constitutes self-defense? These terms are left to be defined by the reader, which makes her argument fundamentally subjective.

Jane English, author of “Abortion and the Concept of a Person,” is a philosopher who takes a similar approach to Thomson to determine the morality of abortion. She finds the conservative and liberal arguments similarly flawed because they are absolute. Like Thomson, she argues that the morality of abortion is inherently relative; however, she does not base her position on the determination of whether a fetus is or is not a human.

She begins her paper by listing certain features that are said to constitute a person: biological, psychological, rational, social, and legal features. While most people possess these features, they are not all necessary to label one as a person. For example, mentally compromised humans may lose certain psychological, rational, and social features of their existence, but they are still considered people. Alternatively, something could possess almost all of those traits and not be considered a person, such as an advanced robot. English does argue for the existence of necessary conditions for one to be considered a human, such as being alive. A fetus does not lack the necessary conditions or possess the sufficient ones, but it rather lies in this in-between space of current definitions of personhood. Therefore, English argues that the determination of whether a fetus is a person is largely indeterminable and thus irrelevant to the discussion of the morality of abortion.

Therefore, she approaches this question differently than the other philosophers discussed. Rather than determine when a fetus can be considered a person, English argues for two denials. The first is that a fetus’s being a person does not mean abortion is impermissible. The second is that a fetus’s not being a person does not mean that abortion is permissible.

English denies the conservative argument first by paralleling the abortion discussion with the self-defense argument. She uses an example involving a mad scientist that hypnotizes an innocent man to attack a woman. The woman has the right to kill the man in the name of self-defense even though the man is considered innocent in this circumstance. For example, English claims that the Canadian legal system determines that one may even inflict more harm than is threatened in an instance of self-defense. For example, one is permitted to shoot an assailant if he or she is threatened with rape or severe beating. However, one is only permitted to deter an attacker; the permit to defend oneself is aimed to minimize harm rather than equalize it. Therefore, if a woman can prevent the assailant from attacking her without killing him, then she is legally required to do so. English parallels her philosophy of abortion to this legal concept. Applying this thought to a situation of abortion, a woman may abort if her life will be compromised in a significant way, such as a loss of livelihood.

Then, she denies the “liberal” conclusion by claiming that the reason that abortion is permissible in some instances and infanticide is never permissible is because of the self-defense model. After a fetus is born, a mother may take different measures to defend aspects of her life, while her only option to avoid those compromises during pregnancy is abortion. She negates Tooley’s assertion that infanticide is justifiable because a fetus does not satisfy all of the conditions of personhood. She does not focus on the personhood of the fetus at all. Rather, she determines that a woman has different options to rid herself of the newborn without taking the life of the newborn.

English then assumes that a fetus is not a person, and under this assumption, she argues that abortion is still not permissible in every instance. Non-persons do have some

rights in society's moral code, but they do not have all of the rights of human persons; therefore, the interests of humans can override the interests of non-persons, but persons cannot do whatever they please to non-persons.

English uses an example of animal rights. People cannot kill birds or torture dogs for no reason at all. These actions are considered immoral. The rights of non-persons are unrelated to how other persons feel about it. For example, torturing a dog on a desert island is wrong, even though no other humans are aware of the act. She presents Rawls's theory, which suggests that humans protect human-like animals through the moral code because humans are able to empathize with such animals due to certain similarities. Therefore, the psychological attachment of humans to an entity can determine how humans treat that entity morally. In this regard, a fetus is much like a newborn. Psychologically, abortion is rarely considered murder in the first few weeks of gestation because of the lack of human-like characteristics of the fetus. However, an abortion that takes place later in the pregnancy is likely to be considered murder because the fetus resembles a newborn much more. English also draws bodily parallels between the fetus and an adult, which she finds significant. After an adult has died, humans generally take great care of the human body of the dead individual, even though most agree that this body is not a person. Therefore, English argues that society must respect the fetal body as it does an adult body because it resembles one.

English concludes by determining quantifiable time periods during gestation that correlate with the moral permissibility of abortion. During the first few months of pregnancy, an abortion is generally permissible because the fetal body does not resemble that of a fully formed human. The reasons for the abortion would merely need to

outweigh the inconvenience of the abortion itself. During the middle months of pregnancy, abortion is only justifiable when the continuation of the pregnancy would greatly compromise the life of the mother. In the later months of pregnancy, abortion is unjustifiable except to save the mother from death.

Chapter III: Religious Ethics Concerning Abortion

At this point in this thesis, I am still searching for a position on the moral permissibility of abortion that is not significantly flawed. I have presented the basic developmental biology of a maturing fetus, the effects of a pregnancy on the mother, and the basic outline of legal induced abortion procedures in the United States. I have also analyzed common philosophical arguments regarding the moral permissibility of abortion. This chapter will function to illustrate a variety of religious positions concerning abortion – official religious doctrines as well as reinterpretations of religious texts and practices. Similarly to the previous chapter, I will use terminology such as “conservative,” “liberal,” and “feminist,” to describe religious thinkers and positions. These terms are used by these thinkers to distinguish their position on the moral spectrum and should not be used to prejudge them.

In this chapter, I will present the official Roman Catholic and Reform Judaism positions on the morality of abortion. Then, I will present the positions of certain feminist theologians, who reinterpret sacred texts and traditions to support their position. In the discussion of Roman Catholic views, the position of feminist theologians is completely different than the official doctrine of the Roman Catholic Church; therefore, I will present the Roman Catholic position and the position of feminist Catholic scholars in two different sections. The position of feminist theologians of Reform Judaism more closely

parallels the official doctrine of Reform Judaism; therefore, I will present these discussions in a single section.

I am using this chapter to show that religious scholars can have conservative, moderate, and liberal positions on abortion, similarly to philosophers. The difference between these theologians and the philosophers previously mentioned is that they defend their moral arguments using religious texts and thought rather than philosophical concepts. I will use examples of official religious doctrine and reinterpretation of such to show that religion can be used to determine the moral permissibility of abortion outside of a philosophical context.

Section (a): The Position of the Roman Catholic Church on the Morality of Abortion

The official position of The Roman Catholic Church has been consistent since the founding of the Church in the first century: induced abortion is morally impermissible in all circumstances. Therefore, having an abortion is a sin. Since the founding of the Catholic Church, Catholic doctrine has maintained that induced abortions are sinful; however, their defense for the sinfulness of abortions has changed over time (O'Brien, 2017).

According to the Catechism of the Catholic Church, the fundamental defense of the sinful nature of abortion derives from the Ten Commandments, which consists of ten absolute rules that were revealed to the Prophet Moses by God on Mount Sinai. The Fifth Commandment reads, "Thou shall not kill." In accordance with contemporary Catholic thought, humanization begins at conception because human creation involves the intervention of God, which makes human life inherently sacred. As God divinely creates

human beings, one does not have the right to directly destroy an innocent human being. This idea of divine intervention during conception originates in the story of the conception of Jesus Christ. According to scripture, the Holy Spirit impregnated Mary and Jesus Christ – the second part of the Holy Trinity – became a man through her. Jesus Christ was a man, but his conception was holy. His holiness was bestowed upon him at the moment of conception. Modern Catholics uphold the sacredness of a fetus in the same light: human life is sacred and holy beginning at conception, just as Jesus Christ’s life was (Saunders, 2016). The Old Testament reinforces the sacred value of a fetus in multiple scriptures by claiming that God bestows certain roles on certain individuals while in the womb: “Beloved of his people, dear to his Maker, dedicated from his mother’s womb, consecrated to the Lord as a prophet, was Samuel, the judge and priest (Sir 46:13).” Father William Saunders notes that modern rabbinic interpretations of this scripture as well as the other similar references in the Old Testament make exceptions for inducing abortion, but he does not think that any of those reinterpretations are textually justified (Saunders, 2016). The Old Testament makes similar assertions a significant number of times and is thus used as a primary defense for the sacredness of the fetus, in accordance with the incarnation doctrine.

The Fifth Commandment is not absolute in all circumstances under Catholic doctrine; however, the intentional killing of what is deemed *innocent* life is morally impermissible in all circumstances. This specification is supported by Biblical scripture such as “Do not slay the innocent and the righteous” (Catholic Church, 2000). However, in a situation of legitimate self-defense in which death is the only way to render the aggressor incapable of causing additional harm, Catholic doctrine permits the act of

killing. In these circumstances, killing is only morally permissible if the act of killing the aggressor is the minimal amount of harm that needs to be administered to render the aggressor unable to cause more harm (Catholic Church, 2000). However, this frame of thought does not apply to a situation in which a pregnant woman's life is threatened by the development of a fetus. One is not permitted to directly terminate the life of a fetus under any circumstance. One may be permitted to not administer life-saving treatment to a fetus in a situation in which the pregnant woman's life is compromised, but abortion, even in the case of the endangerment of the mother's life, is always morally impermissible.

Medical science and man's understanding of fetal development has advanced astronomically since the Catholic Church proclaimed in the first century that a fetus has the paralleled protective rights as a person. The Catholic Church has historically respected scientific advancements by altering certain aspects of the Catholic doctrine to acknowledge the validity of scientific theory. For example, they have respected and integrated evolutionary theory into the doctrine concerning God's creation of the world. Thereby, in the most recent statement from the Vatican, the 1974 Declaration on Procured Abortion, the Vatican deviated from the original proclamation that a fetus has the same religious and protective rights of a person by acknowledging that it does not know when the fetus becomes a person. The Vatican cannot unanimously agree on the moral status of a fetus (Catholic Church, 1974). St. Augustine and St. Thomas, two integral Catholic theologians, have independently concluded that a fetus does not have the moral status of a person in the early stages of pregnancy (O'Brien, 2017). However, this Declaration still claims that abortion is morally impermissible by stating, "Even if a

doubt existed concerning whether the fruit of conception is already a human person, it is objectively a grave sin to dare to risk murder. ‘The one who will be a man is already one’” (Catholic Church, 1974). Therefore, the Catholic Church still deems that abortion is impermissible, but the defense for this position is based on the *risk* of killing an innocent person, thus violating the Fifth Commandment, rather than the definitive notion that a fetus is morally and spiritually equivalent to a person.

Section (b): Alternative Positions: Roman Catholic Theologians

Feminist, Christian theologian Tina Beattie says, “Abortion is first and foremost a human dilemma rather than a scientific one and it is best viewed not through the lens of a microscope but through the lens of the human condition and the dilemmas we face in an imperfect world in which our lives are shot through with complexity and ambiguity, and our capacity for making reasoned decisions about the good is often dependent upon circumstances over which we have little control” (Beattie, 2010:53). Many feminist scholars turned to philosophical and religious definitions of morality and personhood to address the questions concerning the moral permissibility of abortion. In particular, feminist religious scholars defend the morality of an abortion by revisiting traditional sacred sources and general themes of religious traditions and by reinterpreting them in a feminist perspective (Gross, 1996:70).

The Roman Catholic Church has consistently pronounced its moral intolerance towards abortion under all circumstances. However, certain Catholic feminist scholars have provided analyses of Catholic law and tradition that suggest otherwise.

The Catholic Church's position values the life of the mother and the fetus equally, which is problematic as it relates to major themes of the Catholic tradition. For example, the Catholic Church has historically made an official commitment to social and economic justice, as humanitarian work is a primary practice in the Catholic tradition. However, in predominantly Catholic nations, where abortion is widely prohibited, abortion occurs more often than in liberalized nations in which abortion is a legal practice. In these countries, the legal prohibition of abortion also statistically threatens the safety of the pregnant woman compared to European nations with liberal abortion policies (Beattie, 2010:55). The Church's dedication to service and justice is undermined by this notion that the Church's position in these nations plays a role in the injury and death of numbers of women. The Church's call for justice is further challenged by the fact that the medical threats of having an abortion primarily affect women in poor, developing nations, which is the demographic that the Church claims to primarily focus on protecting (Beattie, 2010:55). With this said, the official Catholic position was also developed during a period of incomplete biological understanding: the ovum was not discovered or understood until the 19th century (Maguire, 1983:805). However, the Church has not altered its position of absolutism in regards to abortion, not even since the scientific advances that suggest that abortion is a safer option than continuing with a pregnancy in a number of circumstances, such as ectopic pregnancies. In theory, the Catholic Church is equally protecting and preserving the lives of the pregnant woman and the fetus; however, in practice, the Church is compromising the lives of pregnant women in order to sustain the life of the fetus, which implies an unequal distribution of value.

The argument given by the Catholic Church against the moral permissibility of abortion is in terms of the protection of the life of the fetus, which is protected under the Fifth Commandment. This position is absolute, as the Vatican has claimed on multiple occasions that this position is “unchangeable.” However, the Church fails to pronounce an official, absolute position against deliberate human death due to economic disparity, the consequences of war, or political criminality (Beattie, 2010:75). Also, the Catholic Church has historically recorded incidences of the Church refusing to “baptize an aborted fetus that showed no human shape or outline” (Maguire, 1983:805). These inconsistencies suggest that the Church’s intolerance of abortion is not derived from its commitment to protecting the dignity and sanctity of life, as it fails to defend and even sometimes violates the sanctity of life to preserve the notion that abortion is impermissible.

Beattie argues that the Church’s position is rather derived from the belief that “reproductive suffering is a form of divine punishment for Eve’s sin... that cannot be avoided or prevented” (Beattie, 2010:55). The official Catholic doctrine, including that pertaining to abortion, was established by interpretations of the Bible made by only men. While the male-established position of the Catholic Church persists, American Catholic women are statistically just as likely to use emergency contraception or terminate pregnancies as non-Catholic women in America (Catholics for Choice, 2014). According to a study done in 2010, 28% of American Catholic women have had abortions compared to the rate of women in the general public at 27% (Catholics for Choice, 2014). 84% of Catholics answered in a survey conducted in 2010 that they believe that abortion is morally permissible when the pregnancy poses a threat to the mother’s life, and 50%

answered that abortion is morally permissible when the woman and her doctor decide that it is appropriate (Catholics for Choice, 2014). Additionally, 48% of Catholics answered that they believe that abortion should be legalized in all or most cases in a survey conducted by the Pew Research Institute in 2014 (Masci, 2018). While supporting the legalization of abortion does not equate with the moral permissibility of abortion, this statistic is significantly different from the official doctrine of the Church by which these participants claim. These statistics suggests that the official Catholic position on abortion is not the only position held within the Catholic laity; specifically, it suggests that the official Catholic position does not encompass the thought of the majority of Catholics. The doctrine of the Roman Catholic Church has never claimed to be derived from the popular beliefs of the congregation; however, these statistics model a certain inconsistency between what the congregation supposedly believes and what it practices.

Daniel Maguire, a feminist Catholic theologian, interprets such bias as inherent sexism (Maguire, 1983:806). To defend this position, Maguire presents the modern Catholic Code of Canon Law, which states that a woman can be excommunicated from the Church for terminating a five-week-old fetus, but she would not get excommunicated for killing the fully developed child post-birth (Maguire, 1983:806). In 1983 a California Bishop even threatened to excommunicate a lawmaker who supported the right of a woman to terminate her pregnancy (Maguire, 1983:807). Also, Sister Agnes Mansour was forced to leave her position as a Sister of Mercy because she performed service work at a clinic that helped underprivileged women fund their abortions (Maguire, 1983:807). The policy embedded in the official position of the Catholic Church and these instances of abuse of this policy further suggest that the position of the Church is more concerned

with the sexual immorality of the female than the life of the fetus (Maguire, 1983:806). Using these inconsistencies and the historical theme of the Catholic Church's commitment to social justice and service, these scholars argue that Catholic thought should theoretically support the woman's right to abort; however, the Catholic tradition has historically practiced otherwise. These theologians argue that this tradition is rooted in the misogyny of the Church rather than authentic Catholic thought.

Theologically, human personhood refers to an individual "made in the image of God, endowed with freedom, rationality, and intrinsic dignity, and called into relationship with God" (Beattie, 2010:61). The Christian Bible specifies this definition by claiming that personhood is relational; it models the love held in the Trinity. A relationship is defined as an interdependence between two individuals and consciousness of such interdependence (Beattie, 2010:62); therefore, the sacred value of a fetus requires conscious interdependence with God and the human community. The mother must initiate such interdependence because the mother is the only individual on whom the fetus is biologically dependent until birth. Using this argument, Marjorie Maguire, a Christian feminist scholar, claims that personhood begins when the mother makes a covenant of love with the fetus, or "when the mother accepts the pregnancy," for personhood cannot exist without the initiation of conscious interdependence according to the theological definition of a person (Beattie, 2010:67). Therefore, despite traditional Catholic practice, this definition of personhood suggests that a woman has a certain authority in deciding whether to bestow humanity on the fetus, and this takes precedence over the potential moral status of the fetus (Beattie, 2010:70).

To further establish this argument, Beattie reanalyzes Mary's story in the New Testament. The Catholic Church traditionally defines the beginning of Christ's life as when Mary accepts the responsibility of the role of the mother of Christ rather than as the moment of his physical conception; therefore, the incarnation "begins with the awakening of maternal consciousness in Mary" (Beattie, 2010:73). Mary's acceptance of motherhood is considered a *gift* in the Catholic Church and is celebrated as such. Her acceptance allows the integration of Christ in the human community, which allows Him to be considered a fully divine *person* (Beattie, 2010:73). In other words, the beginning of the life of Christ, the fundamental figure in Christian thought, requires maternal consciousness for His personification. Mary, also, serves as a redemptive figure in the Christian faith and is said to "embody God's promise of redemption for women" (Beattie, 2010:73). Such redemption would exempt women from the obligatory metaphysical suffering of reproduction that was a result of Eve's disobedience; therefore, the Catholic Church should not theoretically argue that women cannot use abortion to "escape" their punishment in the form of reproductive suffering, which is an implied undertone in the Church's argument against abortion, as interpreted by scholars such as Beattie.

Section (c): The Position of Reform Judaism on the Morality of Abortion

In Jewish tradition, the moral permissibility of abortion is directly and indirectly discussed and regulated in Halakha, which is the official Jewish law that is derived from the oral and written Torah, and virtue ethics, which is defined by the Talmud.

The Talmud directly addresses the definition of personhood in Nidda 43b-44a on Lev 24:17, where it concludes that one does not have a "soul" until he/she is born

(Barilin, 2009: 125). The Talmud later elaborates on this verse by claiming that the embryo is biologically and spiritually dependent on the mother and thus does not have a separate identity from the mother (Rosner, 1986:56). The Halakha uses these verses in the Talmud to establish that legal protections and rights in Judaism begin post-birth; therefore, one is not considered a whole, legal person until he/she is born (Barilin, 2009:114). A fetus has limited legal rights because of its dependence on and potential role in the harm of the mother. Therefore, in other terms, the Halakha determines that a fetus has an “independent claim on human life... after it cannot endanger the life and well being of the mother,” which is most often defined by birth (Barilin, 2009:129).

Under Jewish law and tradition, a fetus is still valued in some respects, despite its not being considered an individual with total legal and protective rights. This partial-value is demonstrated by the rituals that a mother must perform post-abortion or post-miscarriage. For example, the mother must observe the ritual of uncleanness if the fetus was older than 40 days, and the mother must also bring an offering to the synagogue, which is a ritual that is observed if a new child is born (Rosner, 1986:57). Mothers are also expected to observe common Jewish rituals and practice to maintain the purity of the embryo, such as refusal to consume non-kosher products (Barilin, 2009:102). However, mothers are permitted to refuse to observe certain Jewish rituals such as fasting in order to preserve the life of the fetus (Barilin, 2009:102). Such practices imply the sacred value of the fetus in Jewish thought. The fetus is metaphysically valued in Jewish tradition, but its value is inherently inferior to the mother’s because a fetus is not considered a fully developed, separate individual. Furthermore, the fetus is not considered a soul in the context of killing, especially when it is compromising the well-being of the mother;

however, it is considered a partial-soul as pertaining to saving its life on the Sabbath (Barilin, 2009:125).

As previously noted, the fetus has an inferior ethical status in Jewish tradition, and this status is determined by its inherent dependence on the mother (Barilin, 2009:131). Michael Barilin writes that the physical and emotional well-being of the mother is valued more than the survival of the fetus (Barilin, 2009:102). Spanish Rabbi Meir Halevi Abulafia also writes that the Torah does not have any compassion for a fetus if it threatens the life of the mother during pregnancy or childbirth, which further establishes the non-absolute value of the fetus in relation to the mother (Barilin, 2009:125). Therefore, in Jewish tradition the value of the life of the fetus is often relative to the health of the mother; however, it is never valued as an equal form of life in comparison with the mother.

The moral value of the fetus in Jewish tradition falls under “virtue ethics,” and the legal value of the fetus falls under “Halakhic ethics.” While Halakha primarily draws from Jewish virtue ethics to create legal policy, it does not recognize every breach of virtue ethics as a legally punishable offense (Barilin, 2009:113). Virtue ethics play a primary role in determining the permissibility of abortion: “In Judaism, abortion is a matter of virtue and personal judgment and is subjectively unexposed to direct legal regulation” (Barilin, 2009:98). For example, a fundamental message of the Talmud is “Do not destroy” (Barilin, 2009:113). “Do not destroy” serves as an ethical obligation of the Jewish community to protect sacred entities, which have no ability to protect themselves; this includes the life of a fetus. Therefore, every morally unjustified abortion as defined by Jewish law breaches this virtue. However, this thought can also be applied

to a circumstance in which the fetus is compromising the life or well being of the mother. If a fetus is compromising the life of the mother, it is breaching the “do not destroy” virtue, which justifies its termination. Therefore, the Halakha draws from this virtue of the Talmud to establish the legal permissibility of abortion in the circumstance of the mother’s life being compromised, but it does not consider the destruction of the fetus in this circumstance as a legal breach of the “do not destroy” proclamation of the Talmud.

The value of the health of the mother in comparison with the value of the fetus depends on which rabbi is consulted when a Jewish woman is making the decision about terminating the pregnancy. Maimonides argued that the woman can succumb to any cravings she has, regardless of how such actions would affect the fetus, because “her pain prevails over the life of the fetus” (Barilin, 2009:134). In other words, he argues that a woman’s subjective suffering takes precedence over the life of the fetus (Barilin, 2009:134). This suffering can be as simple as craving food or alcoholic substances that could physically or spiritually harm the fetus. Rabbi Avraham further establishes Maimonides’ thought by claiming that a woman has no moral obligation to undergo surgery or other extreme measures to preserve the life of the fetus if she has a phobia of medical treatment or could potentially be harmed from the procedure (Barilin, 2009:135). While this thought does not represent the absolute position of modern Jewish tradition, this strand of Jewish thought emphasizes the common theme of Judaism that protects the autonomy of Jewish women in regards to reproduction: under Jewish law, a woman is not obligated to sacrifice herself in an extreme way to preserve the life of the fetus. Again, this modern thought is subjective in the Jewish community. Few definite lines are drawn concerning what is determined to be “sacrifice” and “suffering.”

Despite its subjective nature, Halakha does have specific procedural functions that help a woman make the most moral decision in her specific pregnancy. A Jewish woman who is considering abortion can consult with a rabbi about the morality of the decision, which is identified as the “advisory function” of the Halakha (Barilin 2009:137). During this advisement, the rabbi will counsel the woman by presenting all considerations that the woman must include in her decision, including the value of the life of the fetus according to Jewish law. In these cases, the consulted rabbis value modern medical knowledge and input to this decision; however, they also emphasize “its limited applicability in the assessment of the risks and benefits to individual cases” (Barilin, 2009:117). If the rabbi determines that the woman is experiencing enough physical and mental strife to morally permit the termination of the fetus, then he/she will help the woman determine if the abortion is legal under Halakha. The determination of the legality of abortion is called the “decisive function” of Halakha. These two functions of Halakha attempt to universalize the circumstances of moral and legal permissibility in regards to abortion in the Jewish community, despite a rabbi’s potential bias in the decision. For example, when a woman who carried with a fetus with Down Syndrome consulted with Rabbi Auerbach, who is known to outwardly reject the permissibility of abortion, he sent her to consult with a rabbi who was much more lenient with permissibility (Barilin, 2009:138).

Also, in some circumstances, an abortion is considered a more virtuous decision than proceeding with the pregnancy. In instances in which the mother knows that the fetus will be born with extreme physical or mental disabilities, the Talmud demands that she terminate the pregnancy in the name of mercy (Barilin, 2009:141). This *religious*

duty is drawn from “thou shalt love thy neighbor as thyself” in the Torah. The Talmud also applies this religious duty in circumstances in which the fetus is actively compromising the physical life of the mother. The Talmud demands that a fetus be terminated if its termination will prevent the mother from dying (Barilin, 2009:101).

Section (d): Concluding Thoughts

The feminist Catholic and Jewish defenses of the moral permissibility of abortion are rooted in completely separate ideas; the feminist Catholic scholars defend the woman’s right to abort by asserting the woman’s autonomy, while feminist Jewish scholars defend the woman’s right to abort by asserting the absolute value of the life of the mother. These two religious arguments demonstrate a substantive insight into ethical reasoning – most moral dilemmas involve a conflict between “goods.” One’s ethical position is determined by the weight bestowed on such goods. In this case, the goods in question are the value of the life of the fetus and the value of the life of the mother, and these two positions offer different ways by which the values of these goods are balanced. The Catholic Church defends their official position on abortion by claiming to protect the sanctity of life of the fetus and the mother equally; however, in practice, the Catholic tradition compromises the quality of the mother’s life in order to preserve the fetal life. Feminist Catholic scholars consider the Catholic position to be inconsistent with other core values and themes called for in the Christian Bible and traditional Catholic thought. Using the sacred texts and traditional values of Catholicism, feminist Catholic scholars rather conclude that abortion *can* be interpreted as morally permissible in this religious tradition. The Reform Jewish position on abortion is generally not absolutist, but it is

consistent in valuing the life of the mother more than the partial-life of the fetus.

Therefore, regardless of the official, modern positions of these religions on abortion, Catholicism and Reform Judaism are similar in the way that their sacred texts, values, and themes can be interpreted to religiously determine that abortion is morally permissible.

Chapter IV: A New Moderate Position on the Morality of Abortion

In this chapter, I will develop my own position concerning the morality of abortion, which will fall among the moderate portion of the moral spectrum. I want to avoid the more extreme positions concerning the morality of abortion but still defend a well-motivated moderate position on the ethics of abortion. I will first discuss the issues with the extreme positions, and then I will sort through the moderate positions to develop one that I believe to be the most morally sound.

Section (a): Avoiding the Extremes

(i): The Extreme Conservative Position

John Noonan's position is considered to be extreme and conservative. He argues that abortion is immoral at any point after an egg has been fertilized for two primary reasons. He first claims that inducing an abortion of a fertilized egg is immoral because it contains the full genetic makeup of a human. Additionally, he argues that aborting a fertilized egg is immoral because the probability that a fertilized egg will develop into a human is astronomically higher than that of a sperm or unfertilized egg; he deems this sudden spike of potential to develop into a human being to be significant and consequently equates it with the humanization step. This position maintains that a human embryo has the same legal and moral rights as an adult human because humanization occurs during conception.

Noonan is not the only philosophical thinker who draws this conclusion. Robert P. George, a renowned proponent of Noonan's position, defends his claim that abortion is morally impermissible after conception. He does so by reiterating Noonan's claim that a fertilized egg contains all of the genetic information required to distinguish itself from the pregnant woman. He defends this by explaining that the way in which a zygote divides and interacts with progeny cells, even as early as the two-cell stage of development, is coordinated and predictable after it divides the first time. Therefore, the embryo is self-developing in a cohesive, distinguishable way, which deems it an entity separate from the pregnant woman (George and Lee, 2009: 301-306).

In his argument, George refutes the position of Michael Sandel, who claims that humanization is a gradual process that is not determined by one step in embryonic or fetal development but rather over a period of time during gestation. George rather says, "Whether a new human organism exists is a yes or no question – there is no in between." He does not believe that one organism deserves more moral respect because it has more of something than the other organism; in the situation of a fetus, a fetus cannot be granted less moral respect because it does not have the same cognition or physiological development as an adult human. In short, George asserts that a fertilized egg is human and thus deserves the same moral respect and rights as an adult human (George and Lee, 2009: 301-306).

The extreme conservative position falls victim to moral inconsistencies, which I will illustrate using three examples. First, according to the positions of Noonan and George, the moral statuses of a fertilized egg and a five-year old child are paralleled. If this is true, then if one were faced with the choice to save two five-year old children or a

crate of embryos, one would be forced to save the crate of embryos. George actually addresses this exact situation in a blog post after he was prompted with the question (George and Tollefsen, 2017). George agrees that most adults would choose to save the five-year old children; however, he claims that this does not indicate that the embryos are any less human than the five-year old children. He says that because they are equally morally valued, certain factors need to be considered to determine who should be saved or how to allocate resources. He defends the saving of the five-year old children because they are capable of feeling pain and fear in the face of a threat. Additionally, five-year old children most likely have family members that have an emotional attachment to them, which embryos in a box most likely don't have. George argues that the emotional or empathetic connection between a random adult and two five-year olds, rather than their moral status, is the reason that one would choose the five-year olds.

This example highlights an issue with extremism - universality. The idea that all independent entities hold the same moral status is not practical or true when applied to certain situations. If one were faced with the choice to save two children or two embryos, then one would theoretically not be able to decide morally. The emotional connection between the individual and children or embryos should not affect the moral status of these entities or morally permit their passive death. For example, suppose there is a 5-year-old, Ashley. Ashley has multiple siblings and both parents still alive, who deeply love her. She also has other little 5-year-old friends, as well as aunts and uncles and grandparents, and they all love Ashley. Suppose there is another 5-year-old, Brennan. Brennan is an only child, who was recently orphaned. Brennan has no aunts or uncles or grandparents or 5-year-old friends. Now suppose that somehow, one is in a position of

only being able to save one 5-year-old. Clearly, more people have powerful emotional connections to Ashley than to Brennan. Is this a reason to save Ashley rather than Brennan? Would Robert P. George - a devout Christian - really accept that as a reason to prefer Ashley to Brennan? If not, then how can he use emotional connection as a reason to prefer saving two 5-year-olds over a crate of frozen embryos? George's defense of an individual's choosing to save the *two* children in comparison with the *dozens* of embryos refutes his extreme position, as it allows for one to choose to save the two individuals rather than dozens of individuals, which apparently hold the same moral status.

Second, if an embryo has the same moral status and respect as an adult human, then we would be morally obligated to save and preserve frozen embryos. However, the preservation of frozen embryos has been put on the backburner for more conservative political groups, who invest a significant portion of their resources to lower the national abortion rates via implementing federal and state restrictions (Kaplan, 2015). While legal policies do not always directly reflect moral attitudes or respect, they do reflect the value of certain controversial issues over others. When a woman undergoes in vitro fertilization, dozens of her eggs are fertilized and then screened to choose the most genetically fit one(s) to implant. The woman is then given a choice regarding what to do with the rest of her embryos: implant, dispose, or donate to research or other women. The choice is legal in the United States and faced with little condemnation or restriction. Legal abortions, however, are saturated with restrictions based on the proclaimed value of the embryo as an equal moral being to the pregnant woman. If value was universal and absolute, then women with extra embryos after IVF treatment should be met with the same resistance as women seeking legal abortions; however, this is not the case in the

United States, which implies that the value of an embryo is not absolute but rather circumstantial.

Finally, while not morally obligatory, humans would experience a great moral need to unfreeze frozen embryos and implant them to allow them to develop to term, if a human embryo had the same moral status as an adult human. The child resulting from this process is termed a “snowflake” baby. Some embryo adoption awareness organizations suggest that adopting an embryo is parallel to adopting, or “saving,” an abandoned child, such as Snowflake Embryo Adoption Agency, which is a division of Nightlight Christian Adoptions. For the same reason that individuals adopt human children, individuals should similarly feel morally inclined to adopt donated embryos. The issue with this idea is that it is impractical and poses ethical issues of its own. An estimated 500,000 embryos have been frozen and preserved since the 1970s as a result of IVF. The current ethical issue is that if an embryo is a full person, then it has the right to develop into a full person. The fulfillment of this moral right would require all 500,000 embryos to be implanted and carried to term because perpetuating their frozen status would prevent them from developing into full persons. This poses practical and ethical issues. Who will carry these embryos to term? Who will care for the children that result from implantation? How is this moral requirement at all feasible?

(ii): The Extreme Liberal Position

Michael Tooley’s position is an example of an extreme liberal position, as he defends the moral permissibility of abortion during all stages of pregnancy and after-birth abortions, or infanticide, up to a certain point during early child development. He does

not defend this position by denying that a fetus is a human, but rather by denying that a developing fetus or infant has the right to life. He says that having a right to life requires conscious thought. According to Tooley, an entity does not have the right to life unless it is capable of having interests and desires. Interests transcend emotional attachment and benefit the individual overall, while desires are motivated by personal feelings. Without desires, an individual cannot be better or worse off, which would prevent one from having interests and thus rights. If an entity only possesses future desires (as in the case of a fetus) then it must have the current interest in continued existence in order for it to fulfill the interest clause. While a fetus or neonate is capable of current desires such as avoiding pain, it is not capable of having the current desire to continue its existence because it is not capable of conscious thought, which prevents it from having the parallel interest or right to do so. Modern medical science cannot conclusively support that a neonate develops conscious thought within the first few weeks post-birth; therefore, Tooley permits infanticide up until four weeks post-birth.

Tooley's moral defense for late-term abortions and infanticide is not unsupported. *The Journal of Medical Ethics* published an article by Alberto Giubilini and Francesca Minerva that also argues for the moral permissibility of late-term abortions and infanticide. Giubilini and Minerva defend their argument by applying the criteria that permits a late-term abortion to a situation in which the neonate is born (Giubilini and Minerva, 2012). Such criteria include a neonate born with extreme abnormalities that were not detected during pregnancy or the undue burden on the family and society to raise a child that is affected by an undetected physical, mental, or physiological abnormality (e.g. severe Down's Syndrome). Some medical professionals do support the

implementation of euthanasia regulations in a situation in which living is not in the best interest of the child.

However, few studies conclusively determine that individuals with extreme genetic abnormalities live an unhappy life (Steinbock and McClamrock, 1994). Furthermore, these authors include the familial, societal, and economic burden that these children induce by being born. They equate the moral status of a neonate with a fetus, which would imply that any situations in which a late-term abortion is morally permissible applies to after-birth abortions as well. They defend their equating the moral status of a fetus and a neonate by claiming that neither entity attributes any value to their own existence and thus both are merely potential persons instead of persons, which is a similar position to that of Tooley. Assuming that criteria such as financial, psychological, or social burden is sufficient to permit aborting a fetus, the same applies to a neonate.

Both of these arguments fail to find a moral difference between aborting a fetus and killing a newborn child. They imply that such a “geographical” difference between a fetus and a neonate is insignificant. Instead, they define one’s personhood by their cognitive abilities. However, this criterion denies personhood to those who are mentally compromised. Their umbrella of personhood excludes living persons who are mentally retarded or experience brain damage as a result of an accident. Tooley draws the line of permissibility of infanticide at four weeks post-birth, but Giubilini and Minerva fail to draw a line. At which point during human development does euthanasia become morally impermissible? Can one morally choose to euthanize their teenaged child with Down’s Syndrome because the burden is suddenly overwhelming? Can a doctor morally choose to euthanize a patient who has become comatose? In neither of these examples do the

individuals actively desire their continued existence, so they would not meet the criterion of these thinkers to be termed a person with the right to life. Yet clearly, teenagers with Down's Syndrome and comatose patients ought to be considered humans with a right to life, regardless of their mental capacities.

Tooley, Giubiliini and Minerva also fail to recognize a clear difference between a fetus and a neonate: independent viability. Before birth, a fetus depends for its nutrition on the mother through the physical connection of an umbilical cord. After birth, an infant independently exists as a separate entity from the mother. The infant does not explicitly require one specific person (the mother) to provide nutrition and protection; any individual or group of individuals can fill this role. The infant does require help to acquire food, protection, and education, but that burden is not explicitly placed on one person. It is one that can be shared amongst an entire family or group. It is one that can be voluntarily acquired via adoption or foster care. In short, the criterion of these thinkers for one to be considered an entire person is too narrow and does not consider the significance of birth, which establishes distinguishable moral differences such as viability.

Section (b): A New Defense of the Viability Criterion

(i): The Problems with Other Moderate Criteria

Philosophers such as Judith Thomson and Jane English defend more moderate positions on the moral permissibility of abortion. Thomson's position is based on the balance between the fetal right to life and the pregnant woman's right to life, privacy, and the pursuit of happiness. English takes a similar approach by concluding that abortion is

morally permissible in cases in which a woman's burdens outweigh the rights of the potential person. The issue with both of these thinkers is that the determination of whether an abortion is or is not morally permissible is subjective to the individual judging the situation. Neither thinker offers a quantifiable method to determine the level of a pregnant woman's burden that would theoretically outweigh the fetal right to life. Both women agree that if a woman's life is directly compromised by the pregnancy, then an abortion is permissible in all cases; however, neither addresses the grey area. Does extreme morning sickness morally excuse an abortion? Does a financial burden excuse an abortion? If so, how much of a financial burden?

Neither of these thinkers determines a specific point during gestation at which abortion is permissible prior to it and not permissible after it; the subjectivity of these positions is their fatal flaw. I will present a moderate position as well; however, I will address the grey area. I will determine a specific point during fetal development at which abortion is morally permissible prior to it and not permissible after it. I will present the viability criterion as the point during fetal development that results in the most significant change of the moral status of the fetus. In this section, I will present other commonly used developmental stages to defend moderate positions on the morality of abortion and discuss why I do not think that they are by themselves significant enough to grant a fetus a right to life that surpasses the rights of the pregnant woman to life, privacy, and the pursuit of happiness.

The acquisition by a fetus of the ability to feel and experience pain is a developmental step commonly used in conservative arguments, and it is a developmental stage that I find morally significant. As I covered in the first chapter, the presence of

nerves and a brain does not mean that a fetus is able to experience pain. Rather, the experience of pain arises from the connection between these anatomical structures and the environment of the individual. The amniotic environment of a fetus during gestation is designed to protect and cushion potential threats to a fetus via its buoyancy, warm buffer fluid, and chemical composition. Therefore, studies suggest that a stimulus that might be harmful outside of the amniotic sac would not be harmful inside of the amniotic sac. Additionally, pain is a cognitive and emotional experience. The connection between the central and peripheral nervous system structures does occur at 26 weeks gestation; however, this connection does not imply that a fetus is capable of cognition or emotionally experiencing pain. In the same regard, a fetus is capable of basic withdrawal reflexes as early as 20 weeks gestation. However, the ability to perform a withdrawal reflex from a potentially harmful stimulus does not indicate cognition or the ability to feel pain. These reflexes only exhibit the development and connection of peripheral nerves. The few scientific studies that have attempted to determine if a fetus can feel pain have concluded that the experience of pain during gestation is biologically and physiologically impossible.

Regardless, even if a fetus were capable of experiencing pain, this criterion could not by itself determine the moral status of the fetus because it implies that the anatomical and physiological connections within the nervous system determine one's right to life. It is too narrow of a criterion as it excludes individuals with genetic diseases that render them insensitive to pain, such as congenital insensitivity to pain with anhidrosis (CIPA). This criterion is also too broad, as many non-human animals are not granted the right to life regardless of their ability to experience pain. These include animals such as deer,

which are hunted regularly in the United States. This consideration is morally significant, but it cannot be the singular determining factor of the morality of abortion.

The ability of a fetus to learn and remember distinct stimuli during gestation is also a commonly presented developmental stage when discussing the moral permissibility of abortion. As discussed in the first chapter, studies have been conducted that exhibit the fetal capacity to recognize and coordinate responses to the voice of the pregnant woman during later stages of gestation. These studies have determined that a fetus can even distinguish the voice of the woman carrying it from other female voices. This suggests that a fetus is capable of learning, which indicates higher brain activity, but the presence of higher brain activity does not by itself grant a fetus the right to life because it excludes fetuses with mental deficits. If this criterion were the sole criterion, a 40 week old fetus with a genetic condition that prevents fetal cognitive thought would be excluded. This developmental stage is morally relevant, but it is not the only piece of the puzzle of moral status.

Few studies have actually been conducted to measure the level of fetal cognition during gestation. This is mostly due to the complex environment within the amniotic sac of the uterus. It is an environment that is nearly impossible to simulate in a laboratory. The conclusive determination of the levels of fetal cognition during gestation would require fetal testing that introduces additional major ethical dilemmas. Furthermore, if one were to conclude that the ability of a fetus to feel pain was the sole criterion to determine the moral permissibility of abortion, certain tests would be morally obligatory to be performed to determine if or when during gestation a fetus is able to experience pain. These tests would be morally questionable, as they would require researchers to

introduce a potentially harmful stimulus to the fetus at different points during gestation. Therefore, the previously discussed criteria are insufficient not only because they are too broad and/or narrow, but also because they could require morally controversial tests to be done to conduct additional research.

Unlike the ability of a fetus to feel pain and learn, the viability criterion is all-encompassing and can stand as the singular criterion to determine the moral status of a fetus. Any fetus that would merit protection by the criteria of being able to feel pain or being able to learn would also be protected by the viability criterion, as it occurs earlier in development than any other morally significant developmental step that has been mentioned. Other commonly used criteria in moderate positions such as the development of a heart beat, a face, and brain waves, are all met when the viability criterion is met, but they are morally insignificant on their own. All of these other criteria suffer from being too broad and too narrow to sufficiently establish the moral status of a fetus on their own.

(ii): The Virtues of the Viability Criterion

Merriam-Webster dictionary defines viability as, “The ability to live, grow, and develop.” The viability criterion that I will present meets this definition, and my argument using this criterion will conclude that an abortion is morally impermissible after the point during fetal development at which a fetus is capable of survival *independently* of the mother. I will defend this position by presenting its biological and ethical universality and discussing the change in balance of maternal and fetal rights during this stage.

The point of viability during gestation is concrete and able to be determined, unlike the criterion presented by moderate thinkers English and Thomson; however, the exact point of viability is going to be different for each fetus. Viability is relative but not subjective. The youngest fetus to survive a premature birth was one born at 21 weeks gestation. Noonan presented data that suggested that fetuses of African descent mature faster than those of European descent. Gender is also a significant factor, for premature female neonates have a higher survival rate than males. The age of human fetal viability is fluid. Fetuses develop at different rates and thus reach the point of viability at different rates. The National Center for Biotechnology Information determines the point of human viability to be the point during gestation at which a fetus has 50% chance of survival. In the United States, a fetus reaches this point at 23-24 weeks gestation. However, in low-income, underdeveloped countries, the gestational age at which a human fetus is viable is closer to 34 weeks. This major difference in viability ages is predominantly due to a lack of medical advancements in underdeveloped nations. To maintain the alignment of the majority of statistics presented in this paper, I will use the United States statistic as the general average in this discussion. (Glass, Costarino... 2015)

The viability criterion is the most morally sound criterion to determine the morality of abortion for two primary reasons. Firstly, it protects fetuses that can physically and emotionally feel pain and those that have developed basic higher mental capacities as byproducts, which are factors that I find morally significant. These factors are significant because they all contribute to the abilities that make us human – the ability to feel and think freely. However, they exclude living humans who do not have those abilities. Therefore, using viability as the morally significant step during fetal gestation

allows for the protection of fetuses, which meet this criterion without excluding fetuses, which experience abnormal development.

Secondly, viability marks a distinct shift in regards to the balance of maternal and fetal rights. The pregnant woman's rights to life, privacy and pursuit of happiness are all directly compromised by a fetus inhabiting her body and using her resources to survive. The fetus also has rights in this equation, namely the right to life. Most moderate thinkers, including English and Thomson, attempt to balance these rights to determine the morality of abortion at different gestational ages. I will not attempt to determine when humanization happens. Rather, I will argue for my position under the assumption that a fetus is a potential human – a living entity with rights that become more parallel to those of adult humans over time. A fetus will not acquire the right to life until it is viable, and it will not possess a right to life identical in degree to that of an adult human until it is born. The maternal right to life will always outweigh the fetal right to life, but the maternal rights to privacy and the pursuit of happiness will not always outweigh the fetal rights. Therefore, with the exception of a situation in which the life of the pregnant woman is compromised, I will argue that the fetal right to life outweighs the maternal burden to her right to privacy and the pursuit of happiness at the point of fetal viability because the fetus theoretically no longer requires the mother to survive.

The capacity of a fetus to survive outside of the mother is morally significant because it is the first point in fetal development that establishes the fetus as an independent living entity. Until the point of viability, a fetus biologically requires maternal bodily resources to survive. The medical, financial, social, and professional burdens of early pregnancy are specifically placed on the pregnant woman, for the fetus

specifically requires the mother's biological machinery. Therefore, until the fetus is separate or capable of separating from the pregnant woman, it cannot be considered independent of the pregnant woman. Despite the difference of fetal genetic and physical composition, the fetus could not biologically survive independent of the maternal resources, and is thus a part of the pregnant woman's body. Under this assumption, a fetus does not have a right to life because it is not an independent living entity. Therefore, the maternal burdens incited by pregnancy will always permit induced abortion until the point of viability because the fetus does not possess the right to life until that point.

A common objection to this argument is the presentation of the continued burden of raising and caring for a neonate or young child. A neonate or young child cannot take care of itself; most humans cannot sustain their own life until they are teenagers or even young adults. The difference between the burden of raising a young person and the burden of a pregnant woman is consent and exclusivity. While a pregnant woman may have conceived a child during consensual sexual intercourse, this does not imply that she consented to carrying and birthing a human fetus. In the words of Judith Thomson, if a burglar climbs through a previously opened window, the residents of the home have not consented to the burglar's presence, even though they did enable his entry. Whether the pregnancy is planned or unplanned, the pregnant woman has the chance to consensually choose to carry the fetus in the window of fetal development before viability. If a woman does not choose to terminate the pregnancy prior to the point of fetal viability, then she has implied her consent to carry the human fetus to term. Additionally the maternal burdens of a pregnancy are exclusive and specific to the mother, while the burden of raising a young child can be placed on anyone or any group of peoples; it is not required

to be experienced by one particular person, but rather placed on people who theoretically sought out the experience of raising a child.

Noonan also presented an additional issue with the viability argument: the point of viability is theoretically fluid. As medical biotechnology advances, the point of viability will become earlier and earlier in fetal development. Theoretically, medical biotechnology could develop an artificial womb that can carry a developing human embryo to term. In this scenario, the viability criterion would be rendered useless and irrelevant. Artificial wombs are already being developed for large mammals, such as lambs - this issue is relevant (Hamzelou, 2017). Noonan's objection ignores one major aspect of the rights-based ethics of fetal life: the right to life is negative, which means that one is obligated to refrain from preventing a certain state or activity. Therefore, in the situation of the right to life, one is required not to actively kill, but one is not morally required to preserve one's life. Thus, a woman removing a fetus does not hinder the fetus's right to life, but still does something that will result in its termination. In short, according to rights-based ethics, one could never be morally required to sustain another's life, as the right to life is negative. Therefore, a woman could never be required to artificially implant her fertilized embryo in an artificial womb, and thus could not be morally required to sustain the burden of raising a child after the fetus is born. Additionally, the logistics of extracting a human embryo or fetus from a woman's uterus can pose ethical controversies in regards to the rights of the mother. Forcing a woman to undergo a surgical procedure to remove an implanted embryo is problematic, as it could potentially compromise the maternal rights of autonomy, privacy, and life.

Despite the technical fluidity of the viability criterion, it is the best quantifiable point during fetal development that can be used to determine the morality of abortions. This criterion protects fetuses that fall under the umbrella of other significant developmental criteria, namely the ability to experience pain and the ability of higher brain function, without excluding those who experience abnormal development. It marks a distinguishing point during fetal development at which the fetal right to life outweighs the burdens of the pregnant woman because it is the point at which the fetus can theoretically survive independently of the pregnant woman. The viability criterion protects the rights of the pregnant woman to consent to her pregnancy, while also protecting the fetal right to life, after it is acquired. For these reasons, the viability argument is the most morally sound position when distinguishing a specific stage during fetal development that determines the morality of abortion.

Bibliography

- American College of Obstetricians and Gynecologists. "Postpartum Depression." *The American College of Obstetricians and Gynecologists* (2013) [https://www.acog.org/-/media/for-patients/faq091.pdf?dmc=1&ts=20150601t1433194067]
- Amerman, Erin. *Human Anatomy & Physiology*. Pearson 2015. 1058-1083
- Anatomy (2016). *Transverse section through the embryonic plate at the level of the primary streak to show the early movement of mesoblast between the epiblast and the underlying hypoblast*. [Figure]. Retrieved at <https://basicmedicalkey.com/cell-populations-at-gastrulation/>
- Barilin, Y. "Her Pain Prevails and Her Judgment Respected – Abortion and Judaism." *Journal of Law and Religion*, 25 no 1, 1 Jan. 2009, pp 97-186.
- Beattie, T. "Catholicism, Choice, and Consciousness: A Feminist Theological Perspective on Abortion." *International Journal of Public Theology*, 4, 2010, pp. 51-75.
- Beauchamp, T. and James Childress. *Principles of Biomedical Ethics*. New York: Oxford University Press, 2009.
- Catholic Church. "Catechism of the Catholic Church." 2nd ed. Vatican: Libreria Editrice Vaticana. (2000)
- Catholic Church. "Declaration of Procured Abortion." Vatican: Libreria Editrice Vaticana. (1974)
- Catholics For Choice. "The Facts that Tell the Story: Catholics for Choice." (2014) Available online at <http://www.catholicsforchoice.org/wp-content/uploads/2014/12/FactsTelltheStory2014.pdf>
- Cohen, Glen. "Artificial Wombs are coming. They could completely change the debate over abortion." Vox Media (2017). [<https://www.vox.com/the-big-idea/2017/8/23/16186468/artificial-wombs-radically-transform-abortion-debate>]
- Derbyshire, Stuart. "Can Fetuses Feel Pain?" *British Medical Journal* 332 (2006): 909-912.
- Detox Local. "Needle Exchanges." (2018) Available online at <http://www.detoxlocal.com/needle-exchanges/>

- DiPietro, J A. "Prenatal Development." *Encyclopedia of Infant and Early Childhood Development* 2 (2008): 604-614.
- El-Ibiary, Shareen. "A Pilot Study Evaluating Genetic and Environmental Factors for Postpartum Depression." *Innovations in Clinical Neuroscience* 10 (2013): 15-22.
- English, Jane. "Abortion and the Concept of a Person." *Arguing About Abortion*. Ed. Lewis Schwartz. Belmont, California: Wadsworth, Inc, 1993. 159-168.
- Feinberg, Joel. "Abortion" in Tom Regan, *Matters of Life and Death*. 1986: Edition 2.
- Fieser, James. "Abortion." *Moral Issues That Divide Us*. (2017) [<https://www.utm.edu/staff/jfieser/class/160/5-abortion.htm>]
- Gardner, Charles. "Is an Embryo a Person?" *Arguing About Abortion*. Ed. Lewis Schwartz. California: Wadsworth, Inc, 1993. 141-145.
- George, Robert and Lee, Patrick. "Embryonic Human Persons. Talking Point on Morality and Human Embryo Research." *EMBO Rep*, 10 no 4, 2009, pp. 301-306. [<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2672893/>]
- George, Robert and Tollefsen, Christopher. "Embryos and Five-Year Olds: Whom to Rescue." *Public Discourse*. (2017)
- Giubilini, Alberto and Minerva, Francesca. "After-Birth Abortion: Why Should the Baby Live?" *Journal of Medical Ethics*. (2012) [<http://jme.bmj.com/content/early/2012/03/01/medethics-2011-100411>]
- Glass, H., A. Costarino, S. Stayer, C. Brett, F. Cladis, and P. Davis. "Outcomes for Extremely Premature Infants." *National Center for Biotechnological Information*. 2015 June, 120(6): 1337-1351.
- Gordon, Debra and Stephane Dianne Sherk, "Abortion, Induced." *Encyclopedia of Surgery*. (2018) [<http://www.surgeryencyclopedia.com/A-Ce/Abortion-Induced.html>]
- Gross, R. "Feminism and Religion: An Introduction." Beacon Press, Boston. 1996. pp 65-89.
- Guttmacher Institute. "Induced Abortion in the United States: Fact Sheet." (2018) Available online at <https://www.guttmacher.org/fact-sheet/induced-abortion-united-states>

- Hamzelou, Jessica. "Artificial Womb Helps Premaure Lamb Fetuses Grow for 4 Weeks." *New Science*. (2017)
[<https://www.newscientist.com/article/2128851-artificial-womb-helps-premature-lamb-fetuses-grow-for-4-weeks/>]
- Jacobson, Jodi. "Coming to Grips with Abortion." *Arguing About Abortion*. Ed. Lewis Schwartz. Belmont, California: Wadsworth, Inc, 1993. 175-200.
- Kaplan, Margo. "Fertility Clinics Destroy Embryos all of the time. Why aren't conservatives after them?" *Washington Post*. (2015)
[https://www.washingtonpost.com/opinions/fertility-clinics-destroy-embryos-all-the-time-why-arent-conservatives-after-them/2015/08/13/be06e852-4128-11e5-8e7d-9c033e6745d8_story.html?utm_term=.df9d302ab713]
- Maguire, D. "Abortion: A Question of Catholic Honesty." *The Christian Century*, 100 no 26, 1983, pp 803-807.
- Marquis, Donald. "Why Abortion is Immoral." *Arguing About Abortion*. Ed. Lewis Schwartz. Belmont, California: Wadsworth, Inc, 1993. 201-217.
- Masci, David. "American Religious Groups Vary Widely in Their Views of Abortion." *Pew Research Center* (2018).
[<http://www.pewresearch.org/fact-tank/2018/01/22/american-religious-groups-vary-widely-in-their-views-of-abortion/>]
- Miller, Sara. "Do Fetuses Feel Pain? What the Science Says." *Live Science*. (2016) [<https://www.livescience.com/54774-fetal-pain-anesthesia.html>]
- Minnesota Citizens Concerned for Life. "Unborn Babies Can Feel Pain." (2014)
Available online at <http://secure.mccl.org/unborn-babies-can-feel-pain.html>
- Murthi, P., Mohamed Abumaree, Bill Kalionis (2014). *Feto-placental circulation*. [Figure]. Retrieved at https://www.researchgate.net/figure/Schematic-representation-of-a-human-placenta-A-A-representative-drawing-of-the-fetal_fig1_263100561
- National Organization of Fetal Alcohol Syndrome (2004). *Development of a Baby*. [Figure]. Retrieved from <http://mn.abedisabilities.org/abe-disability-manual/fasd/overview>
- Nierenberg, Cari. "Mood Swings & Mommy Brain: The Emotional Challenges of Pregnancy." *Live Science*. (2016) [<https://www.livescience.com/51043-pregnancy-emotions.html>]

- Noonan, John. "An Almost Absolute Value in History." *Arguing About Abortion*. Ed. Lewis Schwartz. Belmont, California: Wadsworth, Inc, 1993. 55-61.
- O'Brien, Jon. "The Catholic Case for Abortion Rights." *Time Inc.* (2017) [<http://time.com/4045227/the-catholic-case-for-abortion-rights/>]
- Pearson Education (2002). *Acrosomal and cortical reactions*. [Infograph]. Retrieved at <http://slideplayer.com/slide/8589086/>
- Planned Parenthood. "What Happens During an In-Clinic Abortion?" Available online at <https://www.plannedparenthood.org/learn/abortion/in-clinic-abortion-procedures/what-happens-during-an-in-clinic-abortion>
- Rosner, F. "Jewish Attitude Toward Abortion." *Tradition*, 10 no 2, 1968, pp. 48-71.
- Sacks, Daniel N. (MP), "Fetal Development." The University of Maryland Medical Center Medical Encyclopedia. (2015) [<http://www.umm.edu/health/medical/ency/articles/fetal-development>]
- Saunders, William Fr. "Church Has Always Condemned Abortion." *Arlington Catholic Herald*. (2016) [<https://www.catholicnewsagency.com/resources/abortion/catholic-teaching/the-catholic-church-and-abortion>]
- Schwartz, Lewis (Editor) (1993). *Arguing About Abortion*. Belmont, California: Wadsworth, Inc.
- Steinbock, B., McClamrock, R. "When is Birth Unfair to the Child?" *Hastings Center Report*. (1994) [<https://www.albany.edu/~ron/papers/badbirth.html>]
- Tooley, Michael. "In Defense of Abortion and Infanticide." *Arguing About Abortion*. Ed. Lewis Schwartz. Belmont, California: Wadsworth, Inc, 1993. 83-96.
- Wong, C., Kevin Loewke, Nancy Bossert, Bary Behr, Christopher De Jong, Thomas Baer, Renee Pera. (2010). *Non-invasive imaging of human embryos before embryonic genome activation predicts development to the blastocyst stage*. [Infograph]. Retrieved at https://embryology.med.unsw.edu.au/embryology/index.php/File:Model_human_blastocyst_development.jpg