Respiration, Ensoulment, and Personhood of the Human Zygote and Preimplantation Embryo

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Introduction

On February 16, 2024, the Alabama Supreme Court ruled 7-2 in *LePage v. Center for Reproductive Medicine, P.C.*, SC 2022-0515, SC-2022-0579, that extrauterine embryos in the first week of development and kept alive at subzero temperatures in the freezer of a fertility clinic are to be considered persons with legal protections under the state's Wrongful Death of a Minor Act.[1] In his concurring opinion, Chief Justice Tom Parker noted that, by their 2018 ratification of the Sanctity of Life Amendment to the state constitution, the people of Alabama had, "declared the public policy of this State to be that unborn human life is sacred. We believe that each human being, from the moment of conception, is made in the image of God, created by Him to reflect His likeness.… Carving out an exception for the people in this case, small as they were, would be unacceptable to the People of this State, who have required us to treat every human being in accordance with the fear of a holy God who made them in His image."[2]

The decision sent shockwaves through the secular medical community and the general public. In the immediate aftermath, fearing liability from the deaths of frozen embryos, fertility clinics across Alabama put their *in-vitro* fertilization (IVF) programs on hold, as Justice Gregory Carl Cook had predicted in his dissent.[3] Medical ethicist Arthur Caplan, along with Michelle Bayefsky, and Gwendolyn Quinn, warned of "real and dire" public-policy implications of the ruling, including high liability costs for providers and ultimately patients; denial to the families of the options to donate unused stored frozen embryos for research or to destroy them, thus leading to sustained and indefinite high storage costs; the end

to "preimplantation genetic testing" (PGT) which could lead to more abortions if later in pregnancy, babies tested positive for a genetic disorder; and impaired "fertility preservation" in women about to undergo treatments that could result in their infertility.[4] The American College of Obstetricians and Gynecologists (ACOG) called embryonic personhood "ideological and unscientific," and "a dangerous insertion of individual ideological beliefs into policy making about what medical care is available to all of us."[5] Other professional societies issued similar statements of concern.[6] The decision quickly made the national news, echoing the anxieties raised in the medical community.[7] Of note, and probably unknown to many, Louisiana already had a law on the books dating back to 1986 that stated, "A viable in vitro fertilized human embryo *is a juridical person* which shall not be intentionally destroyed by any natural or other juridical person or through the actions of any other person."[8]

The Alabama legislature responded by quickly adopting SB 159, which relieved fertility clinics of civil and criminal liability for the deaths of embryos, limiting potential damages to these centers to compensation "paid for the impacted in vitro cycle."[9] Nationally, pro-life Senators Ted Cruz and Katie Boyd Britt, citing the need to "protect both life and access to IVF treatments, which many families rely on to have children," introduced the IVF Protection Act in the United States Senate to ensure that IVF access is legally protected nationwide.[10] Neither the Alabama bill nor the proposed legislation in the US Senate directly questioned the personhood of the embryo. Yet at the same time, neither bill prohibited the intentional killing of unused embryos either for use in biomedical research and development, or for simply discarding them to make room for others. During his second term in office, President Donald Trump has supported expanded access to IVF.[11] At the same time, recognizing "the needs of children who already exist and are in need of a family," the Office of Population Affairs of the Department of Health and Human Services has recently announced a grant program to fund agencies to promote embryo adoption awareness and services. While previously, such funding was available to promote public awareness of embryo adoption, this represents an expansion of the scope of the program "to include medical and administrative services that make embryo adoption more attainable."[12] Notably, these grants do not allow for the destruction of embryos.[13]

Today's secular medical environment does not consider those extrauterine embryos residing within their mothers to be persons. The ACOG does not consider a woman to be pregnant until the embryo has been implanted in her uterus. Furthermore, the group does not recognize the term "conception" to be one with scientific validity. The term "fertilization" is defined by ACOG as "A multistep process that results in the formation of a zygote by the union of sperm and ovum," and a "zygote" is defined as "A single cell resulting from fertilization of an oocyte

by spermatozoa." In turn, an embryo is defined as, "The result of the division of the zygote up to 10 weeks' gestational age (eight completed weeks after fertilization)."[14] From this, one can easily see how the embryo is thus construed by many as being merely a "clump of cells" rather than a person in his/her earliest stage of development. Furthermore, the widespread use of various contraceptives, including the "emergency morning-after pill," without regard to the potential impact on an embryo already formed, underscores the lack of consideration of personhood for these individuals.[15] In a culture that permits abortion, this is hardly surprising.

This essay, like others before it, will make the case for personhood of the human embryo beginning at fertilization, through the lens of Scripture and the Lutheran Confessions. Additionally, it will consider the biology of the embryo to make the argument for ensoulment from the very beginning.

Preimplantation Embryonic Development[16]

Human life begins at fertilization, namely the joining of a sperm from the father and an ovum (egg) from the mother to form a single-cell zygote. The process is complex and involves a series of physiological, biochemical, and structural changes to the sperm that take place within the mother's procreative tract[17] that allow it to enter the ovum. Of note, the ovum is surrounded by a coating called the *zona pellucida*, which will allow for the entry of a single sperm; after which it becomes impenetrable, thus preventing the entry of additional sperm and the development of an unviable zygote. The *zona pellucida* then protects the developing embryo until it hatches upon entry to the uterus and is about to be implanted into the uterine wall. Thus, even at this early stage before implantation in the uterus, one may discern the mother's provision of tender care to her child (1 Thessalonians 2:7).[18] In the current secular medical environment, it bears repeating that the zygote is a separate individual from his/her mother with his/her unique set of 46 chromosomes, half of which originated in the sperm and half of which originated in the ovum.

Fertilization most often takes place in the ampulla of the fallopian tube. The ampulla is the middle, widest, and longest part of the fallopian tube. Following fertilization, the zygote begins the process of mitosis, or cell division, to produce two daughter cells, called blastomeres. The zygote is a large cell, and the blastomeres are smaller, allowing the embryo to fit within the bounds of the *zona pellucida*. The blastomeres continue to divide, and by days 3-4, the embryo consists of a 16-32 cell spherical mass called the morula (from the Latin word for "mulberry"). With increasing number, the blastomeres become increasingly small and compacted. Abnormal cells are eliminated by the embryo, and the healthy cells begin to differentiate; those at the center will eventually develop into the body of the baby and those at the periphery will eventually develop into the fetal part of the placenta. Thus,

function is coordinated toward ongoing growth and development, the hallmark of the human organism as a whole, occurring even before the embryonic baby enters his/her mother's uterus.[19]

By 5-6 days after fertilization, the embryo has grown to 50-150 cells, with an inner cavity filled with fluid that has been pumped in by the cells at the periphery. By that time, the embryonic baby has entered his/her mother's uterus and has reached the blastocyst stage of development. It is possible that the newly conceived Jesus was at this stage of development at the time of the Visitation (Luke 1:39-55).[20] As fluid increasingly fills the cavity, the differentiation between the inner cell mass and the cells at the periphery becomes more pronounced. The embryo then hatches from the *zona pellucida* and is implanted in the wall of the uterus, which has been prepared to receive it. The implantation typically takes place during the second week of development. Ectopic pregnancies, namely implantation of the embryo outside of the uterus, can occur for a variety of reasons, including early disappearance of the *zona pellucida*, chronic inflammation and scarring of the mother's procreative tract, and defects in the fallopian tubes. These are often life-threatening emergencies, particularly if the embryo implants in the fallopian tube.

In IVF, sperm are washed in media designed in an attempt to mimic exposures in the mother that prepare them for fertilization.[21] Ova are obtained from the mother by ultrasound-guided transvaginal aspiration following stimulation of the ovaries. Fertilization then occurs either by "natural" sperm penetration of the ova, or, in the case of low numbers or poor quality of sperm, by direct injection of a sperm into an ovum. Embryos formed by IVF undergo the same stages of development as those formed through the one-flesh union of husband and wife (Genesis 2:23-24). Transfer of the embryo to the mother may take place either 3 days after fertilization, or at the blastocyst stage on day 5. Before transfer, the embryos are evaluated, at times using PGT, and those assessed as having the best chance at resulting in a healthy pregnancy are transferred, one at a time, into the mother. If more than one embryo is deemed suitable for transfer, the parents may opt for them to be kept alive at sub-zero temperatures for future use; the process of freezing involves the addition of cryopreservative chemicals which dehydrate the cells, preventing the formation of ice crystals, while maintaining the structure of the interior parts of the cells, allowing them to resume function when thawed. Once parents decide that they do not desire more children, they may opt to continue cryopreservation, to donate the embryos to others to adopt and bring to term, donate them for research, or simply to "discard" them.[22] Note that either of the latter two options amounts to the killing of the embryonic baby. Some research laboratories have kept embryos alive for up to 14 days. Various rationales for the 14-day limit have included:

1. The idea that implantation is generally completed by that time (thus marking the end of the pre-pregnancy state of the embryo).

2. The emergence at that time of the primitive streak, which establishes the head/bottom and the left/right axes of the embryo, and the beginning of the process in which the embryonic cells differentiate into the three layers of cells that will give rise to the tissues of the body, including the nervous system.
3. The end of the time period in which the embryo can split into two identical twins ("twinning").

These rationales on the part of the secular medical community thus impute a level of dignity on the embryonic baby only once he/she has reached a certain stage of development. Of course, that dignity is limited, given the acceptability of later abortion. It is thus hardly surprising that attempts are being made to eliminate the ban on embryo research beyond the 14-day limit.[23]

Personhood and Ensoulment

As noted above, the secular medical community largely denies that embryos are persons, despite the biological reality that new human life begins at fertilization. The question then naturally arises as to when human beings acquire full moral status as persons.

Scripture teaches that human beings consist of body and soul/spirit (Matthew 10:28); the soul conveying personality and spirituality.[24] Furthermore, each individual human's moral status is grounded solely on his/her being one for whom Christ died (John 3:16; Formula of Concord, Solid Declaration, Article VII, paragraphs 70-71) and in whom God ultimately desires the restoration of the fullness of His image (Genesis 1:26-28; Colossians 3:10).[25] Finally, Scripture does not differentiate moral status between individuals based on whether or not they have yet been born:

1. God forms each human from the time of fertilization (Ruth 4:13; Job 10:8-11; Psalm 139:13-16; Isaiah 49:1,5; Jeremiah 1:5).
2. Unborn babies are sinners, just as are those who have emerged from the womb (Psalm 51:5).
3. Even from before fertilization, God ultimately desires the restoration of the fullness of His image in all babies to come (Ephesians 1:4; 1 Timothy 2:4).
4. Babies may be gifted with faith regardless of whether they have yet been born (Psalm 22:9-10; Luke 1:41-44; 1 Peter 3:21).[26]
5. Scripture uses similar terminology to refer to children who are unborn as well as those already born. Examples include *ben* (son/child; compare Genesis 25:22 and Psalm 113:9); *yeled* (boy/child; compare Exodus 21:22 and 2:9); and βρέφος (*brephos*, infant; compare Luke 1:41 and 2:16).

6. Jesus Himself was fully God and fully man from the time of His conception, and sanctified the fallopian tube and womb by His presence there; furthermore, the author of Hebrews writes that "He had to be made like His brothers in every respect" (Hebrews 2:17), thus, one can conclude that unborn babies, like those who have already been born, are fully human persons, consisting of body and soul/spirit, from the time of fertilization.[27]
7. Jesus died for the unborn ("all" in Romans 5:18-19 and 1 Timothy 2:6, including the unborn).[28]

Thus, the witness of Scripture stands in stark contrast to the ethos of the secular medical community. Yet God's Word does not specifically reveal how the soul originates, nor precisely at what moment the soul enters the body to create a human being (or, for that matter, when it leaves the body at the end of one's earthly life). Thus, theologians have been left to speculate.

Origin of the Human Soul

Regarding the origin of the human soul, early Christian theologians advanced numerous theories, which Jerome (340/2–420) narrowed to three.[29] These include:

1. Pre-existentialism; namely the theory that the soul existed before the body. This theory was first advanced by Plato (c.429–347 BC), adopted by the Greek-speaking Jewish philosopher Philo of Alexandria (c.20 BC–c. AD 40), also adopted by the Essene sect per Flavius Josephus (AD 37–100), hinted at in the Old Testament Apocryphal book *The Wisdom of Solomon*, and referred to in parts of the Talmud.[30] Based on Scripture passages like Jeremiah 1:5 ("Before I formed you … I knew you, and before you came forth… I sanctified you"), Origen (c.185–c.253) argued for the pre-existence of the human soul, placed into the human body as punishment for sin in its pre-existent state.[31] Given that Origen's teaching was at odds with the Scriptural witness on Original Sin, as well as a possible lead-in to reincarnation (though Origen himself rejected reincarnation), it was condemned by the Second Council of Constantinople, which was the fifth ecumenical council of the Church, in AD 553.[32]
2. Traducianism; namely the theory that the soul is received from the seed, the sperm of the father. This was the view of Tertullian (c. 155–c. 220), and later Martin Luther (1483–1546) and other Lutheran theologians, following on the Scriptural truth on Original Sin that "… along with the nature which God still creates and makes at the present time, original sin is transmitted through our carnal conception at birth out of sinful seed from the father and the mother," and "…in the first moment of our conception the seed from

which man is formed is sinful and corrupted" (Formula of Concord, Solid Declaration, Article I, Paragraphs 7, 28; cf. Romans 5:12).[33]

3. Creationism; namely the theory that God creates each soul individually at the time the body is formed. This view was championed by Jerome and others, and later by Philip Melanchthon (1497–1560), John Calvin (1509–1564), and others. According to Detlev Schulz, it is the position most commonly held by theologians today, as it avoids the materialism some see in Traducianism and reject.[34]

Timing of Human Ensoulment

Since, for the Christian, human beings, by definition, consist of body and soul, it follows that human life and personhood begin at the time of ensoulment. The specific time of ensoulment, like the origin of the soul, has long been a matter of speculation and conversation. Clement of Alexandria (c. 150–c. 215) believed that angels introduce pre-existent souls at the time of conception.[35] Holding to Traducianism in various forms, Tertullian and Gregory of Nyssa (c. 335–c. 395) taught ensoulment at fertilization/conception.[36] Over time, however, theologians who held to Creationism taught ensoulment at the moment the embryo's formation is complete. The question thus arises: when is the formation of the embryo complete? Many took their cues from the work of the ancient Greeks.

Hippocrates of Kos (c. 460–c. 375 BC) and the members of his school, based on examination of miscarried babies, and through experiments on chicken eggs (noting that chickens are not completely comparable to humans), concluded that the limbs and organs of the male embryo are formed by 30 days in males and 42 days in females, with movement beginning at 3 months for males and 4 months for females. Hippocrates did not speculate on the origin of the soul.[37] Later, Aristotle (384–322 BC) hypothesized that the male embryo was fully formed at 40 days and the female at 90. Along with this, he posited a progressive ensoulment of the growing individual, with a "nutritive soul" (nourishing itself) appearing at conception, when the seed from the father acts on the menstrual blood from the mother, just as rennet acts on milk, causing it to curdle; a "locomotive animal soul" appearing when the body is fully formed and the baby begins to kick inside the womb; and a "rational soul," coming from the seed of the father and expressed when the child starts to reason, one to two years after birth.[38] Thus, for the Greeks, a demarcation occurs between conception and birth of a time at which the growing body is considered formed.

The Greek concept of formed vs. unformed found its way into the Septuagint (LXX) translation of Exodus 21:22-25. Consider the translation of the pericope from the Hebrew in the ESV:

> When men strive together and hit a pregnant woman, so that the children come out, but there is no harm, the one who hit her shall surely be fined, as the woman's husband shall impose on him, and he shall pay as the judges determine. But if there is harm, then you shall pay life for life, eye for eye, tooth for tooth, hand for hand, foot for foot, burn for burn, wound for wound, stripe for stripe.

The Hebrew phrase for "there is no harm," *lo yihyeh ason*, is translated in the LXX with the words μὴ ἐξεικονισμένον (*me exeikonismenon*), "not completely formed." Buried in this is the term εἰκών (*eikon*, like the English term icon), suggesting that at the time of formation, the embryo possesses the image of God. The contrast is to "completely formed" in the following verse.[39]

Based on these considerations, many proponents of Creationism argued for a delayed ensoulment/humanization of the unborn child. Similar to Aristotle, Thomas Aquinas (1225–1274) proposed a progressive ensoulment of the embryo, beginning with a vegetative/nutritive soul, followed by an animal soul, and finally a human/intellectual soul at 40 days in the male and 90 days in the female. The big differences, of course, between Aquinas and Aristotle are that Aquinas taught that the human soul is created by God and infused once He has prepared the embryo sufficiently to receive it; he also taught the infusion of the rational soul *in-utero*.[40] Delayed ensoulment was widely taught by scholastic theologians and remained dominant until the times of the Reformation and the Scientific Revolution, as understanding of human embryology and genetics improved.[41] Yet, with the more recent pushes for abortion, IVF (with consequent embryo destruction), embryo research, along with the occasional embryonic twinning, the idea of delayed ensoulment/humanization, even to term, is again prominent, certainly in secular circles, but also by implication in the "Pro-Choice" Christian community.[42] One major problem with delayed ensoulment is the reality that Christ Himself had a soul at the time of His conception; thus, considering that "He had to be made like His brothers in every respect" (Hebrews 2:17), positing delayed ensoulment becomes problematic. This very issue was raised by Maximus the Confessor (580–662), himself a proponent of Creationism.[43] Indeed, while Creationism allows for the possibility of delayed ensoulment, it does not necessarily demand it; in light of the science of embryology, "formed" may simply point to the development of the zygote.

Soul, Spirit, and the Language of Breathing in Scripture

In both the Old Testament Hebrew and New Testament Greek, one finds a common terminology for soul/spirit and breathing/respiration. These terms include:

1. *nephesh*: that which breathes, the soul[44]
2. *neshama*: breath, spirit[45]
3. *ruach*: breath, wind, spirit[46]
4. πνεῦμα (*pneuma*): wind, breath, spirit[47]
5. πνοή (*pnoe*): breath, wind;[48] soul/spirit[49]
6. ψυχή (*psuche*): (breath of) life, soul[50]

Furthermore, God's Word suggests that the two are intimately linked. Consider God's creation of Adam: "And the LORD God formed man of the dust (*aphar*) of the ground, and breathed into his nostrils the breath of life (*nishmat hayyim*), and man became a living soul (*nephesh hayyah*)" (Genesis 2:7, KJV). While there are various ways in which this Hebrew verse may be translated,[51] one can discern a link between breathing/respiration and ensoulment. Consider also, from Job's reply to Zophar, "In whose (YHWH's) hand is the soul (*nephesh*) of every living thing and the breath (*ruach*) of all mankind" (Job 12:10, KJV).[52] Again, the connection between breathing/respiration and ensoulment. The angel tells Zechariah that his son will receive the Holy Spirit (πνεύματος ἁγίου, *Pneumatos Hagiou*) "even from his mother's womb" (Luke 1:15, ESV/KJV). This of necessity implies that John the Baptizer has been ensouled *in-utero*. Scripture likewise documents the departure of the soul from the body at the end of life, when a person stops breathing (e.g., Genesis 35:18; Ecclesiastes 3:19-21, 12:7; Luke 23:46; James 2:26a).[53] John Kleinig summarizes, "Just as the human mind is associated with the heart of a person in the Scriptures, so human souls are connected with the throat and its breath."[54] The question remains at what point in human development does breathing/respiration begin?

Embryonic Breathing/Respiration and Ensoulment

The *telos* of breathing/respiration is simply to enable the conversion of nutrients into energy in the body's cells, fueling the body's functions. This is most efficiently done utilizing oxygen, a process called aerobic respiration. Aerobic respiration yields carbon dioxide, water, and the energy-capturing adenosine triphosphate (ATP). As oxygen levels drop, the body initially tries to compensate, but as they continue to fall, body systems begin to fail. Cells of the body eventually shift to anaerobic respiration, namely, nutrient conversion utilizing chemicals other than oxygen. Anaerobic respiration is much less efficient than aerobic respiration at producing energy; less ATP is generated, and in animals, lactic acid is produced. Humans cannot survive without oxygen. Of note, some single-celled organisms, most of which are bacteria, are "anaerobes," meaning that they do not use oxygen (and may in fact be damaged by it).

In the extrauterine environment, the breathing/respiration of the human organism consists of:

1. Inhalation of air containing about 21% oxygen (or more if an individual requires supplemental oxygen) into the lungs
2. Uptake of the oxygen into the bloodstream, where it is pumped by the heart to the tissues
3. Aerobic respiration in the cells of the tissues
4. Uptake of carbon dioxide from the tissues into the bloodstream to be pumped by the heart back to the lungs
5. Exhalation of the carbon dioxide-enriched air (about 4%) from the lungs

As noted above, at the beginning of his or her life, the human consists of a single-cell zygote, who is very much alive and in whom respiration is taking place. The ambient oxygen in the environment of the female procreative tract, and which the embryonic baby is taking in, is well below that of the outside air; namely about 8.7% in the fallopian tube, decreasing to about 2% in the uterus. These lower oxygen levels are designed to protect the embryo, foster his or her normal development prior to (and post) implantation via heterodimer (2 protein subunits bound together) mediators known as hypoxia-inducible factors, and facilitate implantation itself. Attempts are made to replicate these low-oxygen environments when culturing embryos in the IVF facility.[55] Also in the IVF facility, measurement of a 3-day-old embryo's oxygen consumption rate is a factor that can be used to predict its development into a "good quality" blastocyst.[56] Once the placenta develops, the gas exchange takes place through it by diffusion from the mother's blood, and respiration continues.

Many use the terms "breathing" and "respiration" interchangeably when describing the activity of the lungs, but distinguish respiration at the cellular and tissue levels as separate processes. Consider the United States National Library of Medicine description of the Medical Subject Heading (MeSH) "Respiration":

> The act of breathing with the LUNGS, consisting of INHALATION, or the taking into the lungs of the ambient air, and of EXHALATION, or the expelling of the modified air which contains more CARBON DIOXIDE than the air taken in (*Blakiston's Gould Medical Dictionary*, 4th ed.). This does not include tissue respiration (=OXYGEN CONSUMPTION) or cell respiration (=CELL RESPIRATION).[57]

This differentiation applies better to a developed individual after birth than to one at the zygote or embryonic stage of development, in which cell respiration (zygote) and tissue respiration (after first cell division) apply to the organism as a whole. Once the placenta develops, it serves as the lungs for the growing baby. It thus seems fair to say that indeed the human zygote and embryo breathes/respires in a

manner appropriate to his or her developmental stage. If this were not the case, he/she would not survive. Furthermore, cellular respiration was not well described until the late 19th and into the 20th century,[58] and, to the knowledge of this author, has not yet entered the conversation on ensoulment. It is reasonable, though, to consider that beginning at fertilization, whether in the fallopian tube or in the laboratory, a human is a breathing and ensouled person, one for whom Jesus died, and whom God desires to be born, baptized, and saved. As an aside, while this adds science to the argument for immediate ensoulment, it does not adjudicate the debate between Traducianism and Creationism.

Objections

One might raise a number of objections to the concept of immediate ensoulment in general, and more specifically to the idea that embryonic breathing/respiration testify to it. These will now be considered and addressed.

The first objection addresses the situation considered in *LePage v. Center for Reproductive Medicine, P.C.*; namely, given that the embryos in question were in a state of cryopreservation, in which respiration and all biological activity are completely stopped, were they in fact still alive and ensouled? The Roman Catholic bioethicist Nicholas Tonti-Filippini(†), drawing on Aquinas ("…Now it is clear that the first thing by which the body lives is the soul…"), argued that a cryopreserved embryo, while no longer "integrated or dynamic in the way in which we normally consider to be essential to being a living organism," retains the capacity to be reintegrated and is therefore not dead. Thus, it is fair to give the benefit of the doubt to the cryopreserved embryo, and to treat him/her as a living human person in suspended *animation* (italics his; *anima* being the Latin term for "soul").[59] Jason Eberl, also Roman Catholic, agrees, arguing also from a Thomistic framework that the zygote and embryo have a rational soul and that the cryopreserved embryo retains "intrinsic active potentiality to engage in (life functions) again and develop into a more fully actualized person…."[60] One does not need to rely on Aquinas to conclude that, given that the embryo's basic infrastructure is preserved during the deep freezing process, it is reasonable to posit that he/she remains ensouled, although not actively breathing, as he/she retains the capacity to resume once carefully thawed. In contrast, when Jesus raised Lazarus (John 11:38-44), decay had already set in; thus, one could posit that Lazarus' soul had departed and was reunified with his body when he rose again.[61] In the opinion of this author, Justice Parker and the Alabama Supreme Court were correct in their assessment of the moral status of the cryopreserved embryonic babies who had died. In the case of embryonic babies that do not survive the freeze/thaw process, the soul has clearly departed the body at some point in the sequence of events.

Second, as noted above, some are hesitant to declare personhood during the first 14 days, when twinning is possible. Gilbert Meilaender responds:

> The claim that there can be no individual human organism before the time at which twinning either has or has not taken place seems to rest on the notion that if twinning occurs the developing blastocyst has split into two (which is the sort of thing that can happen to a clump of cells but not, except in science fiction, to a living human being). The philosophical difficulty with this claim, however, is that it seems impossible to know that this would be the right way to describe what happens if twinning occurs. The argument supposes that where once there was simply *X*, a collection of cells, there is now *Tom* and *Tim*. But, metaphysically, it is just as possible that where once there was *Tom* there are now *Tom* and *Tim*, and it seems unlikely that science can tell us why this should not be the case. The capacity to twin may simply be one of the characteristic capacities of a developing human organism at a particular (early) stage of its development.[62]

Given the presence, though, of a living, breathing embryo at the start, there is no obvious reason to posit a delay in ensoulment. Rather, one may trust the process to God's perfect will.

Third is the rare occurrence of natural human chimerism, in which two zygotes fuse, resulting in an individual who originated from two sperm and two ova and whose cells contain two distinct sets of DNA.[63] This would not negate the ensoulment status of the two original zygotes; how God brings them together is unrevealed in His Word, and a matter on which one can only speculate. Certainly, individuals with chimerism are ensouled persons for whom Jesus died.

Fourth, many point out that spontaneous abortions, otherwise known as miscarriages, occur in up to 50 percent of pregnancies, with many occurring in the early first trimester, before the mother knows she is pregnant. Genetic anomalies are undoubtedly common among these babies. Consider the following from Lindsey Disney and Larry Poston (†) in an Episcopalian journal:

> This statistic becomes extremely problematic if all of those miscarriages are deemed actual human beings…. Consider that the cumulative population of the earth throughout history is estimated to be approximately 60 billion persons. If that number represents the 50 percent that survived pregnancy, then there are at least 60 billion souls that did *not* survive and who never lived a day on earth. If these souls are innately evil, as Christianity teaches on the basis of such passages as Psalm 58:3 ("The wicked are estranged from the womb, they go astray as soon as they are born, speaking lies," ASV), then more than 60 billion human beings were essentially born into hell. How disturbing to think of souls being eternally tormented without

> ever having the chance of living an earthly life. Some, of course, would argue that infants are innocent, and therefore those 60 billion souls are "in heaven." But this claim is theologically problematic, for would it not imply that "heaven" is overwhelmingly populated by fetuses that were spontaneously or intentionally aborted? Is this a heaven that … Christians … would be satisfied to be a part of?[64]

From the perspective of Scripture and the Lutheran Confessions, this statement raises issues. Akin to secular humanism, the authors deny original sin. Furthermore, accepting that God can work outside of nature, it is reasonable to suggest that at least some of these babies may have heard God's Word in the fallopian tube and/or womb and believed. Regarding the argument that it is counterintuitive to think that heaven will be heavily populated by human beings who have lived only a few days, David Jones writes:

> Though this argument has been much repeated, it is very weak. It amounts to saying that because many embryos do not survive, they are not valuable in the eyes of God…. As Christians are required to say that there are very many newborn infants in the life of the world to come then they should remain open to the possibility that there will be many human embryos. If they are human and they have died, then they will be raised from the dead, though we cannot say what that will be like.[65]

Christians can die in the certain hope of the Resurrection on the Last Day, with the body glorified and reunited with the soul (1 Corinthians 15:50-57), and can confidently entrust these embryonic babies to God's mercy. And yes, rejoice over any who are in heaven.

Fifth, some may ask whether all individual human cells and/or tissues, in isolation from the rest of the body, should be considered ensouled. After all, they are exhibiting respiration as well; otherwise, they would die. Yet, while they are part of the person, they are not in themselves a person.[66] Still, isolated cells and tissues come from ensouled and baptized (in the case of those who have received the sacrament) bodies, and deserve to be treated with respect.[67]

Sixth, some may raise the issue of hydatidiform moles, which result when a sperm enters an ovum that has lost its chromosomes, producing a cell containing only paternal DNA that can form only the placenta and amnion (the protective sac around the baby), but not the body of the baby. The resulting tumor is able to implant in the uterus, grow into a large mass, mimic pregnancy, and endanger the life of a woman.[68] The index cell is breathing. Are we to say that it too is ensouled? Although the initial cell mimics a zygote, the absence of maternal DNA means God has not granted conception (Ruth 4:13), and the cell is not ensouled. The same can be said for the parthenote, which arises when an immature oocyte begins dividing either

spontaneously or after being stimulated in a laboratory setting.[69] These manifestations of Adam's fall, though, are no reason to question the ensoulment of the true zygote.

Finally, we return to the objections raised by the secular medical community and others to the *LePage v. Center for Reproductive Medicine, P.C.* decision:

1. The declaration of personhood at fertilization threatens the availability of IVF for families who rely on it to have children of their own, including women hoping for fertility preservation. Yet IVF is fraught with ethical issues for the Christian, including bypassing the one-flesh union of one man and one woman for the procreation of children (Genesis 2:23-24); prioritizing adult desires over the rights of children; treating embryos as property rather than as persons with inherent dignity; and the forming of ensouled embryos who are destined to be killed, among other issues. A comprehensive discussion of the ethical issues associated with IVF is beyond the scope of this essay; for a brief synopsis, the reader is directed to the position statement on IVF adopted by Lutherans For Life in 2026.[70]
2. The declaration of personhood at fertilization results in the indefinite need to maintain "spare" embryos in a cryopreserved state, leading to high ongoing costs for parents, a burden too onerous. Even if IVF were to cease, more than one million embryonic babies would remain in frozen storage.[71] What is one to do with them?

   a. Allowing the parents to donate the embryos for research could potentially benefit others to come, yet this utilitarian approach results in the killing of embryonic babies, treating them as means rather than ends in themselves, and is thus ethically problematic from a Christian perspective.

   b. Allowing the parents to opt for destruction, i.e., active killing, of the ensouled embryonic babies, amounts to a violation of the Fifth Commandment. Some couples, moved by the plight of these very young children, have adopted them with the biological parents' permission, agreeing to receive them in the adoptive mother's womb, carry them to term, and bring them into their homes. While opposing IVF, Lutherans For Life adopted a position statement in 2023 supporting this approach to rescue these tiny people.[72] Furthermore, Lutheran Family Service, working in Illinois, Iowa, Nebraska, and South Dakota, provides support for couples eager to receive these embryonic babies.[73] Other Lutherans have reservations; Richard Eyer, for example, expresses concern that, among other issues, embryo adoption may encourage the practice of IVF and that "the adoption of embryos for implantation by strangers might add to the as yet unknown risk of producing a new generation of persons who are no longer capable of seeing any need for or connection between the biological and the relational in marriage and conception."[74] Additionally, not every embryo will survive transfer, even

though the intent is to sustain the baby's life. From his Roman Catholic perspective, Nicholas Tonti-Filippini(†) argued against embryo adoption, stating that the intimate bond between the mother and her child in the womb should be strictly reserved for children procreated through the one-flesh marital union of the woman and her husband.[75] Furthermore, arguing that "suspended animation is itself a moral wrong," he maintained that the frozen embryo should be thawed, the cryopreservative removed, and its cells rehydrated, and thus "returned to its natural state in which it regains its dynamism, albeit for a short time before death intervenes through lack of sustenance and a favorable environment."[76] On the other hand, the author of this essay supports embryo adoption. That said, the question of embryo adoption, and, barring that, the fate of those remaining in cryopreserved suspended animation, is an issue of casuistry that invites further ethical reflection.

3. The declaration of personhood at fertilization threatens the availability of PGT, introduces liability concerns for any invasive prenatal diagnostic procedures (chorionic villus sampling, amniocentesis) given the risk of fetal death, and, in the end, removes a woman's "right" to an abortion. The ultimate purpose of PGT is eugenic; namely, not allowing a "defective" baby to live. This is likewise the *telos* of much testing of babies in the womb, although such testing can also have a life-affirming intent; for example, learning of specific issues that may be amenable to *in-utero* treatment, or alternatively, allowing parents to prepare in advance for the birth of a baby who may need tertiary care upon delivery. Eugenics is anathema to the Christian, as each person is one for whom Jesus died, and whose dignity and moral status are rooted *solely* in this fact.

   Furthermore, the weakest members are indispensable to the Body of Christ (1 Corinthians 12:22).[77] Abortion, whether chemical (even from the time of fertilization) or surgical, for whatever reason, kills an ensouled baby and violates the Fifth Commandment.[78] While those who historically held to delayed ensoulment may have imposed lighter penalties for abortion before full formation of the embryo, the position of the Church has always been that abortion at any stage of pregnancy is a sin.[79] Thus, the Christian knows neither of abortion as healthcare nor of any so-called moral "right" to an abortion. Furthermore, far from being "dangerous," the personhood at fertilization declaration ultimately promotes safety for both mother and baby.[80]

What Does This Mean?

While the secular medical community continues to dehumanize the preimplantation embryo and increasingly, the baby in the womb until term (and sadly at times in the postnatal period as well), the Christian can proclaim the ensoulment, per-

sonhood, and dignity of the baby from the moment of fertilization. The biological evidence of embryonic breathing/respiration testifies to that theological truth, yet the non-believer will not make the connection without the intervention of the Holy Spirit. This may, however, be a useful point in a pro-life apologetics conversation that God can use to change hearts.

For the Christian, the embryonic baby, from the single-cell zygote stage of development, like his/her parents and family, is a neighbor whom the believer is called to *sacrificially* love and serve (Galatians 5:13-14).[81] That means recognizing the dignity with which he/she has been gifted, and bearing the associated burdens. For families, these might be financial, including the cost of ongoing cryopreserved storage until the mother is able to receive the baby into her womb and hopefully carry him/her to as close to term as possible. Of course, there are already financial and physical burdens associated with natural procreation. Alternatively, there is an emotional burden of letting go and allowing another couple to adopt one's embryonic baby. Raising a child with long-term physical and/or developmental disability entails significant burdens of its own and presents an opportunity for the Body of Christ as a whole to bear these along with the family, praying for and with them and helping in any way they can (Galatians 6:2). Similarly, the Church can jointly with the family, bear the burdens of infertility, loss, and the like. All of these works of sacrificial love, whether on the part of the parents and immediate family or of the congregation, flow out of the gifts received in God's Divine Services.[82] The role of the Pastor is critical: to hear the penitent sinner's confession and to absolve him or her "in the stead and by the command" of Jesus (John 20:19-23);[83] to care for souls, to teach the sanctity of life from fertilization into eternity from the pulpit, which can easily be done in the context of the weekly lectionary pericopes, and in Bible studies, and to equip the saints, i.e., the members of the congregation, to care for each other (Ephesians 4:13). In the end, all believers can look forward to the certain hope of the resurrection on the Last Day, when, "death shall be no more, neither shall there be mourning nor crying nor pain anymore, for the former things have passed away" (Revelation 21:4b, ESV), and perhaps many who did not survive embryonic life will be there in their risen and glorified bodies, joining in the marriage supper of the Lamb (Revelation 19:9b)! Amen. Come, Lord Jesus! (Revelation 22:20).

Postscript: A Note on Jeremiah 1:5

The ESV text of God's call to Jeremiah reads, "Before I formed you in the womb I knew you, and before you were born I consecrated you…" This is somewhat different from the KJV, which reads, "Before I formed thee in the belly I knew thee; and before thou camest forth out of the womb I sanctified thee…" The KJV is closer to the Hebrew text than the ESV. The Hebrew reads, "Before I formed

you in the *beten* (belly) I knew you, and before you came forth from the *rechem* (womb) I consecrated/sanctified you…." The word *beten* (belly) is a more general term referring to the part of the torso below the diaphragm, while the word *rechem* refers more specifically to the womb (and is related to the word *racham*, to have compassion!). Given that critical formation of the embryonic baby takes place prior to his or her being implanted in his or her mother's womb, coupled with the lack of appreciation for this and a pervasive attitude of dehumanization of the tiniest of people in the secular community, perhaps, to help equip the Christian sanctity of life witness, it is time for the Bible translators to readopt the words, "belly … womb" of the KJV, albeit embedded in current English usage.

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Notes

1. The opinion, SC 2022-0515, SC 2022-0579, may be downloaded at https://law.justia.com/cases/alabama/supreme-court/2024/sc-2022-0579.html. For a brief synopsis of the case and its background, see John Eidsmoe and Mary Huffman, "Law and Personhood: A Biblical and Medical Study from a Two Kingdoms Perspective," *Verba Vitae* 1, no. 3-4 (2024): 129-131.
2. SC 2022-0515, SC 2022-0579, 47-48.
3. SC 2022-0515, SC 2022-0579, 80.
4. Michelle J. Bayefsky, Arthur L. Caplan, and Gwendolyn P. Quinn, "The Real Impact of the Alabama Supreme Court Decision in *Le Page v Center for Reproductive Medicine*," *JAMA* 331, no. 13 (2024): 1085-1086. Regarding the effect on PGT, the authors noted that couples might use IVF coupled with genetic testing of the embryos to avoid passing on genetic disease; if this were not available, the baby would be tested *in-utero*, and aborted if afflicted. Regarding fertility preservation, this refers to women who may, for example, be about to begin chemotherapy which could impact later fertility; IVF allows her to freeze embryos for later transfer when she has recovered and is better able to carry a pregnancy to term. The authors note that freezing eggs is another option, but adds risk due to repeat freezing and thawing.
5. Verda J. Hicks, "ACOG Statement on Alabama Supreme Court IVF Decision," may be accessed at https://www.acog.org/news/news-releases/2024/02/acog-statement-on-alabama-supreme-court-ivf-decision?utm_source=redirect&utm_medium=web&utm_campaign=int.
6. See, for example, Susan Crockin and Francesca Nardi, "Alabama Supreme Court Rules Frozen Embryos Are 'Unborn Children' and Admonishes IVF'S 'Wild West' Treatment," which may be accessed at https://integration.asrm.org/news-and-events/asrm-news/legally-speaking/frozen-embryo-destruction-and--potential-travel-restrictions-for-surrogacy-arrangements2/.

7. See, for example, Christina Maxourlis, "In unprecedented decision, Alabama's Supreme Court ruled frozen embryos are children. It could have chilling effects on IVF, critics say," https://www.cnn.com/2024/02/20/us/alabama-embryo-law-ruling-supreme-court.
8. Acts 1986, No. 964, §1. Italics have been added for emphasis. This document may be accessed at https://legis.la.gov/legis/Law.aspx?d=108446. A 2025 revision defined a human embryo as a "fertilized human ovum that is biologically human, with certain rights granted by law, composed of one or more living human cells and human genetic material"; an *in-vitro* fertilized human embryo as a "human embryo created through the in vitro fertilization process that has certain rights granted by law, and is composed of one or more living human cells and human genetic material so unified and organized that it may develop in utero into an unborn child"; and nonviable *in-vitro* fertilized human embryo as "an in vitro fertilized human embryo that fails to meet necessary developmental milestones, except when the embryo is in a state of cryopreservation. An embryo shall not be deemed nonviable before seventy-two hours from fertilization. Viability of an in vitro fertilized human embryo is presumed unless it is deemed nonviable." Acts 2025, No. 116, §1, may be accessed at https://law.justia.com/codes/louisiana/revised-statutes/title-9/rs-9-121/. The Louisiana law was mentioned by legal scholars Rebecca S. Feinberg, Michael J. Sinha, and I. Glenn Cohen, in their editorial, "The Alabama Embryo Decision – The Politics and Reality of Recognizing 'Extrauterine Children,'" *JAMA* 331, no. 13 (2024): 1083.
9. The text of SB 159 may be accessed at https://legiscan.com/AL/text/SB159/2024.
10. Ted Cruz and Katie Boyd Britt, "We'll Protect Both Life and IVF," *Wall Street Journal Opinion*, May 19, 2024, may be downloaded at https://www.wsj.com/opinion/well-protect-both-life-and-ivf-81e2bf1f. The text of the "IVF Protection Act" may be accessed at https://www.britt.senate.gov/wp-content/uploads/2024/05/2024.05.17-IVF-Protection-Act-LYN24343.pdf. The bill was actually introduced by Cruz, and cosponsored by Britt, along with Senators Cynthia Lummis, Roger Wicker, and Robert Marshall. The bill called for the denial of federal health care funds to states that prohibit IVF, though it did not compel individuals or organizations clinics to provide IVF services. It was referred to the Finance Committee and did not go to the full Senate for consideration. See the summary at https://www.congress.gov/bill/118th-congress/senate-bill/4368/all-info.
11. See Donald Trump's February 18, 2025 Executive Order "Expanding Access to In Vitro Fertilization" at https://www.whitehouse.gov/presidential-actions/2025/02/expanding-access-to-in-vitro-fertilization/. Also, Trump's work to lower the cost of and increase coverage for IVF at https://www.whitehouse.gov/fact-sheets/2025/10/fact-sheet-president-donald-j-trump-announces-actions-to-lower-costs-and-expand-access-to-in-vitro-fertilization-ivf-and-high-quality-fertility-care/; and https://www.dol.gov/newsroom/releases/ebsa/ebsa20260510.
12. U.S. Department of Health and Human Services Office of Population Affairs, "Embryo Adoption Awareness and Services," page 5, may be accessed at https://files.simpler.grants.gov/opportunities/167d140c-52a1-4ebb-99be-ecddf378082d/attachments/13b771a1-4ca4-4420-a526-efabdbccb0da/PA-EAA-26-001_EAA_NOFO.pdf.
13. "Embryo Adoption Awareness and Services," 4.
14. These definitions may be found at https://www.acog.org/practice-management/health-it-and-clinical-informatics/revitalize-gynecology-data-definitions. Technically, an oocyte is a developing egg cell, while an ovum is one that has matured and is ready for fertilization.

15. For a full review, see Donna J. Harrison, "Contraception: An Embryo's Point of View," *Concordia Theological Quarterly* 84, no. 1-2 (2020): 137-159.

16. These details may be found in any embryology text. For a concise online review aimed at physicians, and used by the author in the writing of this paper, see Yusuf S. Kahn, and Kristin M. Ackerman, "Embryology, Week 1," in *StatPearls* (Treasure Island, FL: StatPearls Publishing, 2026), https://www.ncbi.nlm.nih.gov/books/NBK554562/. For a review aimed at those outside the health care professions, the author recommends the *Voyage of Life* interactive website developed by the Charlotte Lozier Institute, which may be accessed at https://lozierinstitute.org/voyage/.

17. In other words, reproductive tract. This author prefers the use of "procreation" to "reproduction." In the words of John Pless, "We often speak of the conceiving and birthing of children as reproduction. Yet this language is deceptive, for it carries with it the imagery of the factory and the assembly line. The language of procreation is preferable to reproduction. Procreation better illustrates the reality of creation. We are created, not manufactured or mass produced." See John T. Pless, *A Small Catechism on Human Life*, rev. ed. (St. Louis: LCMS Life Ministries, 2023): 22.

18. The verb θάλπω (*thalpo*), literally meaning "make warm," is used here by Paul to refer to the mother's cherishing of her children. See the entry in Walter Bauer, Frederick William Danker, W. F. Arndt, and F. W. Gingrich, eds., *A Greek-English Lexicon of the New Testament and Other Early Christian Literature*, 3rd ed. (Chicago: University of Chicago Press, 2000), 442; henceforth BDAG.

19. Maureen L. Condic, Samuel B. Condic, "Defining Organisms by Organization," *The National Catholic Bioethics Quarterly* 5, no. 2 (2005): 335-341. For more intricate details of preimplantation human development, see, for example, Maureen L. Condic, "When Does Human Life Begin? The Scientific Evidence and Terminology Revisited," *University of St. Thomas Journal of Law & Public Policy* 8, no. 1 (2013): 46-70.

20. See Douglas V. Morton, "The Incarnation and Human Personhood," *Verba Vitae* 1, no. 3-4 (2024): 81-82. Morton's use of the term zygote here is inaccurate, and the text should read "blastocyst." This author agrees that Jesus may not yet have been implanted in his mother's uterus at the time that John leaped in Elizabeth's womb.

21. For a concise review of the medical aspects of IVF used by the author in the writing of this paper, see Francesca Mancuso, Manvinder Singh, and Anthony L. Shanks, "In Vitro Fertilization," in *StatPearls* (Treasure Island, FL: StatPearls Publishing, 2026), https://www.ncbi.nlm.nih.gov/books/NBK562266/.

22. See "It Takes More Than One," from the American Society for Reproductive Medicine, available at https://www.asrm.org/advocacy-and-policy/fact-sheets-and-one-pagers/it-takes-more-than-one/.

23. See, for example, Henry T. Greely, "The 14-Day Embryo Rule: A Modest Proposal," *Houston Journal of Health Law & Policy* 22, no. 1 (2022): 147-182, available at https://houstonhealthlaw.scholasticahq.com/article/38532-the-14-day-embryo-rule-a-modest-proposal.

24. Some theologians, including Martin Luther (1483-1546) later in his life, posit a dichotomous view of the human being as consisting of body and soul/spirit, while others, including Luther in his earlier writings, propose a trichotomous view of the human as consisting of body, soul, and spirit. Either view can be supported in Scripture. For the sake of simplicity, this essay assumes a dichotomous view. For an overview of the nature of the soul and the

"Dichotomy or Trichotomy" debate, see Klaus Detlev Schulz, *Theological Anthropology and Sin* (Ft. Wayne, IN: The Luther Academy, 2023), 90-91, 99-104.

25. For a comprehensive discussion of the *Imago Dei* (image of God), see Dan Lioy, "The *Imago Dei*: Biblical Foundations, Theological Implications, and Enduring Significance," *Verba Vitae* 1, no. 3-4 (2024): 45-72.

26. And, as noted above, the One who was the object of the faith given to John the Baptizer was at the time very early in the first trimester of His prenatal human development.

27. Morton, "Incarnation and Personhood," 84-86.

28. The word ἄνθρωπος (*anthropos*) in the Romans verses can simply refer to a human being.

29. For a concise summary, see Schulz, Theological Anthropology, 92-99. For a more expansive summary, see David Albert Jones, *The Soul of the Embryo: An Enquiry into the Status of the Human Embryo in the Christian Tradition* (London: UK/ New York: Continuum, 2024), 92-108.

30. Jones, *Soul of the Embryo*, 92-97. The specific references in *Wisdom of Solomon* are 8:19-20 and 15:8; the commentary on these verses in the 2012 Concordia Publishing House edition of the Apocrypha refers back to the Platonic view of pre-existing souls; see Edward A. Engelbrecht, ed., *The Apocrypha: The Lutheran Edition with Notes* (St. Louis: Concordia Publishing House, 2012), 40, 49.

31. Schulz, *Theological Anthropology*, 94-95.

32. Jones, *Soul of the Embryo*, 99; Schulz, *Theological Anthropology*, 95.

33. Jones, *Soul of the Embryo*, 100-110 & 142-144; Schulz, *Theological Anthropology*, 92-94; Dennis Di Mauro, *A Love for Life: Christianity's Consistent Protection of the Unborn* (Eugene: Wipf & Stock, 2008) 13-14; Michael J. Gorman, *Abortion & the Early Church: Christian, Jewish & Pagan Attitudes in the Greco-Roman World* (Eugene, OR: Wipf and Stock, 1998), 56-57. Johann Gerhard (1582-1637), holding to Traducianism, bluntly stated, "God would be unjust in sending a pure soul into an impure body" in his Commonplace "On the Image of God in Man before the Fall," Chapter VIII, Paragraph 128, in Johann Gerhard, *On Creation and Predestination–Theological Commonplaces*, trans. Richard J. Dinda (St. Louis: Concordia Publishing House, 2013), 319. Quotations from the Formula of Concord are taken from The Book of Concord, *The Confessions of the Evangelical Lutheran Church*, ed. and trans. Theodore G. Tappert (Philadelphia: Fortress Press, 1959), 510, 513.

34. Jones, *Soul of the Embryo*, 102-105, 146; Schulz, *Theological Anthropology*, 95-99.

35. Jones, *Soul of the Embryo*, 112-113; Gorman, *Abortion & the Early Church*, 52.

36. Jones, *Soul of the Embryo*, 113-116.

37. Ibid., 18-21.

38. Ibid., 21-31. Regarding the curdling at conception, Jones compares Aristotle to Job 10:10. Johann Gerhard picks up on this in his *Commonplace*, "On Providence" Chapter VIII, Paragraph 73; regarding Job 10:8-11, "In this passage, the formation of the fetus in the womb is described with very meaningful words. For the seed corresponds with the milk with regard to material, conditions, manner of generation, places in which they occur, and their use. In fact, the first formation of the embryo is a sort of curdling (Aristotle, *De generat. animal.*, bk. 1, ch. 20): 'Just as in the curdling of milk the milk is the substance, but the fig juice or rennet is that which has the curdling element – likewise

the emission from the male is divided within the female.'" Gerhard, *On Creation and Predestination*, 75.

39. Jones, *Soul of the Embryo*, 48-50; Di Mauro, *A Love for Life*, 2. Jones points out that the rabbis interpreted "no harm" as causing a miscarriage, while "harm" implied the death of the mother. While the death of the baby is an injustice, this crime merits only a fine, as the unborn baby is not yet ensouled. Jones also points out the NIV translation of "no harm" as "gives birth prematurely," implying that the baby is born alive, while "harm" is translated "serious injury." Jones, *Soul of the Embryo*, 46-47, 50-51. The commentary in the *Concordia Self-Study Bible* (NIV) explains that "serious injury" in verse 23 applies to either the mother or the child; see *Concordia Self-Study Bible: New International Version*, Robert G. Hoerber, General Editor (St. Louis: Concordia Publishing House, 1986) 117. The commentary in *The Lutheran Study Bible* (ESV) on this pericope simply states "God considers unborn children human beings"; see *The Lutheran Study Bible: English Standard Version*, ed., Edward A. Engelbrecht (St. Louis: Concordia Publishing House, 2009), 131.
40. Jones, *Soul of the Embryo*, 119-121; Di Mauro, *A Love for Life*, 22.
41. Jones, *Soul of the Embryo*, 121, 123-124, 156-174.
42. Ibid., 214-235. For a description of the thought processes within "Pro-Choice" Christian groups, see Di Mauro, *A Love for Life*, 35-45.
43. Cosmin Lazar, "The Dignity of the Human Embryo in the Anthropology of Saint Maximus the Confessor," *International Journal of Orthodox Theology* 11, no. 2 (2020): 185 & 198. The paper may be accessed at https://www.orthodox-theology.com/media/PDF/2.2020/CosminLazar.pdf.
44. See the entry in Francis Brown, S.R. Driver, and Charles A. Briggs, *Hebrew and English Lexicon of the Old Testament* (Boston and New York: Houghton Mifflin Company, 1907): 659; henceforth BDB. The classical work is accessible online at https://hbionline.org/research/images/brown-driver-briggs.pdf.
45. BDB, 675.
46. BDB, 924.
47. BDAG, 832-836.
48. BDAG, 838.
49. Used in the LXX translation of *nephesh* (ex. Proverbs 24:12); *neshama* (ex. Job 26:4); *ruach* (ex. Job 27:3).
50. BDAG, 1098-1099.
51. The ESV, for example, concludes the verse, "living creature."
52. The ESV translates the verse as follows, "In his hand is the life of every living thing and the breath of all mankind." The connection between "his" and "YHWH" comes from the previous verse.
53. Consider, for example, "Then Jesus, calling out with a loud voice, said, 'Father, into your hands I commit my spirit (πνεῦμά, *pneuma*)!' And having said this he breathed his last (ἐξέπνευσεν, *exepneusen*)." (Luke 23:46, ESV; the KJV concludes, "gave up the ghost." Either way, Jesus' soul departs as he takes his last breath.)
54. John W. Kleinig, *Wonderfully Made: A Protestant Theology of the Body* (Bellingham, WA: Lexham Press, 2021), 8.

55. See, for example, Franchesca D. Houghton, "Hypoxic Regulation of Preimplantation Embryos: Lessons from Human Embryonic Stem Cells," *Reproduction* 161, no. 1 (2021): F41-F51. Note that the data presented are derived from experimentation on human and animal embryos. This writer does not condone human embryonic experimentation.

56. Kaori Goto, et. al., "Prediction of the In Vitro Developmental Competence of Early-Cleavage-Stage Human Embryos with Time-Lapse Imaging and Oxygen Consumption Rate Measurement," *Reproductive Medicine and Biology* 17, no. 3 (2018): 289-296. The author does not condone this type of work with human embryos, and shares the work specifically to document embryonic respiration.

57. Uppercase lettering is theirs. The MeSH heading description may be accessed at https://www.ncbi.nlm.nih.gov/mesh?Db=mesh&Cmd=DetailsSearch&Term=%22Respiration%22%5BMeSH+Terms%5D.

58. Sukhamay Lahiri, "Historical Perspectives of Cellular Oxygen Sensing and Responses to Hypoxia," *Journal of Applied Physiology* 88, no. 4 (2000): 1468-1469. Interestingly, the Hippocratic corpus posits the incorporation of air/breath (*pneuma*) very early in development; Jones, *Soul of the Embryo*, 19.

59. Nicholas Tonti-Filippini, "The Embryo Rescue Debate: Impregnating Women, Ectogenesis, and Restoration from Suspended Animation," *The National Catholic Bioethics Quarterly* 3, no. 1 (2003): 134-136.

60. Jason T. Eberl, "Metaphysical and Moral Status of Cryopreserved Embryos," *The Linacre Quarterly* 79, no. 3 (2012): 306, 311. Although Aquinas argued for delayed ensoulment, Eberl, drawing on the work of Benedict Ashley (1915–2013), argues that had Aquinas had the current understanding of human embryology at his disposal, he would have argued for full ensoulment (rational soul) at fertilization/conception. Ibid., 306.

61. Note that Lazarus had been dead four days; thus, decay had already set in.

62. Gilbert Meilaender, *Bioethics: A Primer for Christians*, 4th ed. (Grand Rapids, MI: William B. Eerdmans Publishing Company, 2020), 37-38. Italics are Meilaender's. David Jones shares the view that "human embryos possess certain powers that are lost later in life." Jones, *Soul of the Embryo*, 227.

63. Natural human chimerism is complex and has a number of variants, including fusion chimerism, described above, as well as microchimerism, from cells passing between the baby and the mother across the placenta, and twin chimerism, caused by cells passing between fraternal twins via fused placentas. For purposes of the question of ensoulment, only the case of fusion chimerism is relevant here. For a review of natural human chimerism, see Kamlesh Madan, "Natural Human Chimeras: A Review," *European Journal of Medical Genetics* 63, no. 9 (2020), available at https://www.sciencedirect.com/science/article/pii/S1769721220302895. Natural human chimerism is thought to be rare, but many may have it without knowing it. Madan reminds the reader that "recipients of tissue and organ transplants are artificial chimeras."

64. Lindsey Disney, Larry Poston, "The Breath of Life: Christian Perspectives on Conception and Ensoulment," *Anglican Theological Review* 92, no. 2 (2010): 291. Italic emphasis is Disney's and Poston's. ASV is the American Standard Version translation of Scripture.

65. Jones, *Soul of the Embryo*, 228-229.

66. Condic and Condic, "Defining Organisms," 335-338.

67. This same consideration informs how the Christian treats a body after death.

68. Condic and Condic, "Defining Organisms," 339-340; Maureen L. Condic, "When Does Human Life Begin? A Scientific Perspective," *Westchester Institute White Paper Series*, 1, no. 1 (2008): 10.

69. Condic, "When Does Human Life Begin?" 9-10. Spontaneous parthenogenesis may lead to the development of ovarian teratoma, a tumor that contains tissues from the embryonic germ cell layers (ectoderm, mesoderm, and endoderm); thus, one may see body parts such as teeth, hair, fat, and muscle in these tumors. On parthenogenesis and ovarian teratoma, see Abdelmonem Awad Hegazy, Aiman Ibraheem Al-Qtaitat, Raafat Awad Hegazy, "A New Hypothesis May Explain Human Parthenogenesis and Ovarian Teratoma: A Review Study," *International Journal of Reproductive BioMedicine* 21, no. 4 (2023): 277-284.

70. "In Vitro Fertilization," *Position Statements of Lutherans For Life*, available at https://lutheransforlife.org/life-issues/position-statements/. Note that the document is continually being revised; thus, specific page numbers are not static.

71. In the ten-year period from January 1, 2004–December 31, 2013, an estimated 1,237,203 embryos were cryopreserved in the United States and possibly still in storage; see Mindy S. Christianson, et. al., "Embryo Cryopreservation and Utilization in the United States From 2004-2013," *Fertility and Sterility Reports* 1, no. 2 (2020): 73.

72. "Embryo Adoption," Position Statements of Lutherans For Life; see note 70 above.

73. See "Embryo Adoptions" at https://lutheranfamilyservice.org/adoption-services/embryo-adoptions/.

74. Richard C. Eyer, *Holy People, Holy Lives: Law and Gospel in Bioethics* (St. Louis: Concordia Publishing House, 2000), 120-121.

75. In his words, "Heterologous embryo transfer may be at best a mistaken, misguided charity though an extraordinarily generous charity, but the mistake may be a very grave mistake, striking as it would seem to at the very dignity of the woman and of her marriage." Tonti-Filippini, "Embryo Rescue Debate," 124. Not all Roman Catholics agree; see, for example, the discussion in Christopher M. Reilly, "Embryo Adoption: A Radically Counter-Cultural Act of Mercy," *Dignitas* 27, no. 1-4 (2020): 30-31.

76. Tonti-Filippini, "Embryo Rescue Debate," 134.

77. One example of this is that the weak pull the strong out of self, in service to the other.

78. Management of ectopic pregnancy is not abortion.

79. Di Mauro, *A Love for Life*, 16-17, 19-24; Gorman, *Abortion & the Early Church*, 63-73; Jones, *Soul of the Embryo*, 57-74.

80. For a brief overview of the risks to the mother, see Ingrid Skop, "Wounded Women: The Consequences of 'Choice,'" available at https://lozierinstitute.org/wounded-women-the-consequences-of-choice/. Additionally, a 2025 study by the Ethics and Public Policy Center examined all-payer insurance claims from women prescribed mifepristone abortions from 2017-2023 (a total of 865,727 such prescriptions). Of these women, 10.93% experienced sepsis, infection, severe bleeding, or another serious event requiring emergency care within 45 days after such an abortion, a rate 22 times higher than the less than 0.5% reported from clinical trials on the drug label. The full study is available at https://eppc.org/publication/insurance-data-reveals-one-in-ten-patients-experiences-a-serious-adverse-event/.

81. The noun ἀγάπη (*agape*, love) in v. 13, and the associated verb ἀγαπάω (*agapao*, to love) in v. 14, point to the sacrificial love shown by Jesus on the Cross (cf. John 3:16).

82. Consider Martin Luther's Post-Communion Collect: "We give thanks to Thee, Almighty God, that *Thou hast refreshed us with this Thy salutary gift*, and we beseech Thy mercy *to strengthen us through the same in faith toward Thee and in fervent love among us all*; for the sake of Jesus Christ our Lord. Amen" (emphases mine), in Martin Luther, *Liturgy and Hymns*, ed. Ulrich S. Leupold, vol. 53, p. 138 in *Luther's Works, American Edition*, vols. 1–30, ed. Jaroslav Pelikan (St. Louis: Concordia Publishing House, 1955–76); vols. 31–55, ed. Helmut Lehmann (Philadelphia/Minneapolis: Muhlenberg Press/Fortress Press, 1957–86); vols. 56–82, ed. Christopher Boyd Brown and Benjamin T. G. Mayes (St. Louis: Concordia Publishing House, 2009–).

83. Cf. The Commission on Worship of the Lutheran Church–Missouri Synod, *Lutheran Service Book* (St. Louis: Concordia Publishing House, 2006), 185, 214.

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