

Would Aquinas Change His Mind on Hominization Today?

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ABSTRACT: Those who claim that Aquinas would use modern embryo-logical analysis in his discussions of the human soul typically argue that this type of analysis would push the divine infusion of the intellectual soul back to the time of the fertilization of the zygotic cell, while Aquinas (given his lack of such embryological analysis) argues that this infusion comes a few weeks later in the embryo's development. This claim also entails that in order to be a faithful and accurate interpreter of Aquinas today, one must reject the biological notions put forward by Aquinas himself. One would then also reject the interpretations of Aquinas put forward by such authors as Pasnau, Donceel, Dombrowski, Deltete, and so on.

INTRODUCTION

A remarkable paradox within Thomistic anthropology is that, were Thomas alive today, he would revise some of his own arguments and conclusions *based on his own principles* of inquiry. It may seem suspiciously convenient to speak of what Aquinas “would” and “would not” say if he were “alive today,” instead of merely reporting what he did in fact say when he was in fact alive. However, especially in the area of scientific advances in understanding, Aquinas himself makes the following point: “Our intellect’s proper and proportionate object is the nature of a sensible thing. Now a perfect judgment concerning anything cannot be formed, unless all that pertains to that thing’s nature be known.”¹ In his description of the human constitution, therefore, Aquinas would certainly take advantage of advances in genetic and embryological information. “Thomism is bound to no particular scientific theory. St. Thomas...uses the theories current in his day by way of illustration, but with the proviso that these theories may well be discarded by a later generation and that such a discarding would have no

¹ ST I 84.8.

effect upon his thesis.”² Aquinas would not, however, regard a change in *attitudes* toward something’s nature as an actual advance in knowledge; for example, whether or not a society’s attitudes change toward the acceptance or non-acceptance of infanticide would not represent any sort of advance in knowledge regarding the actual nature of the action itself. A societal change in attitudes may, in fact, arise from a willful rejection of knowledge, not an advance. At any rate, it remains true that, as Jean-Pierre Torrell has written, the greatness of the *Summa Theologica* lies in its ability “to inspire solutions to problems for future generations because of the breadth of the great intuitions that govern it. Therein lies, no doubt, the major reason for the *Summa*’s lastingness and its enduring fruitfulness.”³ These “great intuitions that govern” Aquinas’s writing are a faithful and accurate guide to what he would and would not say were he alive today.

For example, since he based his biological discussions on the biology known to his day, Aquinas would adapt these discussions to the wealth of new scientific knowledge now available:

Were he alive today, St. Thomas would without doubt hold the doctrine of immediate animation [i.e., that the human soul is immediately infused into the body at conception]. The fundamental principles of his philosophy of man are independent of his obsolete biology; indeed, when applied to modern knowledge, they provide formidable support for immediate animation. Stripping off the shell of the out-of-date science, we find the permanently valid kernel of his thought on the soul. This is not wishful thinking. It is simply the application of the Thomist axiom stated earlier: philosophy must have an empirical base.⁴

Since “philosophy must have an empirical base,” the principles of inquiry involved do not themselves necessarily have to be changed.

² Gerald Vann, O.P. *The Aquinas Prescription: St. Thomas’s Path to a Discerning Heart, a Sane Society, and a Holy Church* (London UK: Hague and Gill, 1940; reprinted, Manchester NH: Sophia Institute Press, 1999), pp. 94-95.

³ Jean-Pierre Torrell. *Aquinas’s Summa: Background, Structure, and Reception*. Benedict M. Guevin, O.S.B., trans. (Washington, D.C.: The Catholic Univ. of America Press, 2005), p. x.

⁴ “An Approach to a Key Theological Question.” American Bioethics Advisory Commission Report, Part 10. all.org/abac/clontx10.htm, n.p. Accessed 13 December 2005. It is worth adding that not only would Aquinas hold to immediate animation/hominization were he alive today, but he also would no longer consider the infusion of the rational soul to come at widely varying times for males and females.

However, the results obtained from those principles might change as the empirically-based information available for inquiry is expanded or corrected.⁵ “Due to its dependence upon medieval biological data, which has been far surpassed by current scientific research,” as one writer notes, “Aquinas’s explicit account of human embryogenesis has been generally rejected by contemporary scholars.”⁶

Those who claim that Aquinas would use modern embryological analysis in his discussions of the animating soul typically argue that this type of analysis would push the divine infusion of the intellectual soul back to the time of the fertilization of the zygotic cell, while Aquinas (given his lack of such embryological analysis) argues that this infusion comes a few weeks later in the embryo’s development. Since this claim goes to the heart of one’s definition of human-ness and the host of human-life issues related to that definition, it has provoked a number of studies and occasioned much controversy, especially since this claim also entails that *in order to be a faithful and accurate interpreter of Aquinas today, one must reject the biological notions put forward by Aquinas himself.*

RECENT PROBLEMATIC ACCOUNTS

Along with the extensive literature on the question of Thomistic anthropological hominization and its relation to natural law moral principles, as well as on hominization in general, in recent years some works have appeared offering what I consider to be profound misinterpretations both in the area of Aquinas’s metaphysics and anthropology, and also in specific bioethical applications of these interpretations. In the bioethical area, two examples are *Sacred Rights: The Case for Contraception and Abortion in World Religions*, edited by Daniel C. Maguire, in particular Christine H. Gudorf’s essay “Contraception and Abortion

⁵ “Empirical means derived from experience; and, in this sense, both science and philosophy are derived from inductive facts. True, philosophy is predominantly speculative, while science is predominantly investigative; yet both are empirical to the extent that both are emergences from experience.” Robert Edward Brennan, *Thomistic Psychology: A Philosophic Analysis of the Nature of Man* (New York NY: Macmillan, 1941), p. 52.

⁶ Jason T. Eberl. “Aquinas’s Account of Human Embryogenesis and Recent Interpretations.” *Journal of Medicine and Philosophy* 30/4 (2005): 379-94, p. 380.

in Roman Catholicism”⁷; and *A Brief, Liberal, Catholic Defense of Abortion*, written by Daniel A. Dombrowski and Robert Deltete.⁸ The latter work contains an exegesis of both Aquinas and Augustine that appears quite mistaken, as well as the argument that the Catholic Church’s “immediate hominization” teaching regarding the human embryo arises out of two discredited scientific views from the 1600s.⁹ In the Introduction to the first-mentioned work, Maguire refers to abortion as a “sacred right”: “We believe that women should make the decision for abortion themselves and that it is a misuse of governmental power to take this sacred right from them.”¹⁰

However, the example that provides the primary impetus to the present essay revolves around Aquinas’s metaphysics and anthropology; this is Robert Pasnau’s work *Thomas Aquinas on Human Nature*.¹¹ Pasnau’s analysis of the “Treatise on Human Nature” in the *Summa Theologica*, although containing much of benefit, also puts forward many views of the soul, its nature, its immortality, and so on that are quite problematic; furthermore, Pasnau uses his account of Aquinas’s anthropology to provide a chapter-long attack upon the Catholic Church’s social teachings in the area of abortion. Pasnau writes:

There is an unfortunate tendency to conflate interest in medieval philosophy, especially in the work of Thomas Aquinas, with sympathy for the Roman Catholic Church. Inasmuch as the Church’s intellectual foundations lie in medieval philosophy, above all in Aquinas, sympathy for his work naturally should translate into sympathy for Catholicism. But the conflation is still unfortunate, because in recent years the Church has identified itself with a noxious social agenda—especially on homosexuality, contraception, and abortion—that has sadly come to seem part of the defining character of Catholicism. So it should be gratifying, for students of medieval philosophy, to see how in at least one of these cases Aquinas provides the resources to show something

⁷ Daniel C. Maguire, ed. *Sacred Rights: The Case for Contraception and Abortion in World Religions* (New York NY: Oxford Univ. Press, 2003). Gudorf’s essay is found on pages 55-78.

⁸ Daniel A. Dombrowski and Robert Deltete, *A Brief, Liberal, Catholic Defense of Abortion* (Champaign IL: Univ. of Illinois Press, 2000).

⁹ These discredited views are “preformationism” and the idea of the human “homunculus.”

¹⁰ Maguire, “Introduction,” *Sacred Rights*, p. 6.

¹¹ Robert Pasnau. *Thomas Aquinas on Human Nature: A Philosophical Study of Summa Theologiae Ia 75-89* (Cambridge UK: Cambridge Univ. Press, 2002).

of what is wrong with the Church's position.¹²

Pasnau's account of Aquinas's views of delayed hominization is also similar to that of Dombrowski and Deltete, and thus this essay is in large part a reaction contrary to this account. Pasnau's views, of course, could be passed over more easily had he put them forward as his own views, not as Aquinas's. As he himself writes, "This is not meant to be an exercise in neo-Thomistic metaphysics; it is a proposal about how we should understand Aquinas himself." He also somewhat candidly admits his readiness for "drawing conclusions about [Aquinas's] metaphysics that go beyond what the texts explicitly say."¹³

Pasnau's work is pitched at a level that is scholarly, yet accessible to the intelligent undergraduate. Therefore, if this respectably published and well-publicized work were *the* account of Aquinas's anthropology that a reader were depending upon for his or her understanding of Aquinas's views, that reader would come away seriously misled regarding some features of Aquinas's metaphysics and anthropology. Further, this hypothetical reader would especially misunderstand how Aquinas's teaching on the soul's animation of the human substance could possibly lead directly to the current bioethical views held by many Thomists and many of those sympathetic to Thomistic arguments. As Haldane and Lee put it, corrective responses are necessary "since there will be readers whose only knowledge of the issues in question will come from Pasnau's account, and since that account is contentious in substance, and advanced in advocacy of a particular moral interest.... Matters are other than as Pasnau has chosen to present them."¹⁴

This present essay, therefore, seeks to rectify the mistaken views presented in the writings mentioned by presenting a more or less traditional account of Thomistic anthropology along with the now-traditional view of the immediate hominization of the human being at the time of conception; along with this hominization goes the concomitant endowment of human rights and protections. The term "now-

¹² Ibid., p. 105.

¹³ Ibid., pp. 138 and 85.

¹⁴ John Haldane and Patrick Lee, "Aquinas on Human Ensoulment, Abortion, and the Value of Life," *Philosophy* 78 (2003): 255-78, p. 256.

traditional view” is used as opposed to Pasnau’s description of the state of affairs: “Despite the official Church stance, there is a growing consensus among all parties to the dispute that, whatever be said after the first two weeks, it cannot reasonably be supposed that a one-week-old ‘pre-embryo’ counts as a human being.”¹⁵ Since Pasnau refers to the “growing consensus among all parties to the dispute,” one must assume that he no longer considers those agreeing with the “official Church stance” (what is here called the “now-traditional view”) to be legitimate parties to the dispute. Of course, if one polls only those on one side of an argument, one tends to discover “growing consensus” rather easily.

MODERN EMBRYOLOGY AND THE HUMAN FORM

In fact, the issue of hominization has provoked such extensive discussion that one must wonder at Pasnau’s claim that “Aquinas’s view on these matters [i.e., on the delayed ensoulment of the embryo forming the human substance] is not widely known. Those who do know are generally not eager to advertise it, and indeed have often attacked it in scholarly circles.”¹⁶ Pasnau seems at the very least to imply that some sort of deliberate concealment of Aquinas’s views has been going on amongst scholars, one presumes for ideological reasons related to their embarrassment or to the damage to their own arguments were Aquinas’s actual teaching of “delayed hominization” (as it is called¹⁷) more “widely known.” To the contrary, as argued by Haldane and Lee:

¹⁵ *Thomas Aquinas on Human Nature*, p. 420 n17.

¹⁶ Pasnau, *Thomas Aquinas on Human Nature*, p. 115.

¹⁷ The terms “hominization,” “ensoulment,” and “animation,” when referring to humans, will be used synonymously when used specifically by me in this work, even though many early Latin and Roman Catholic philosophers and theologians (including Aquinas himself) would separate them. In the Orthodox tradition, “As a general rule, the Greek Fathers (e.g., Gregory of Nyssa) held a theory not only of immediate animation but also of immediate hominization” (Dombrowski and Deltete, *A Brief, Liberal, Catholic Defense of Abortion*, p. 27). Aquinas, on the other hand, based on his insufficient embryological information, made a distinction between animation and hominization, arguing for the immediate animation of the embryo (i.e., the embryo is living and developing from the moment of conception) but not its immediate hominization (i.e., the embryo is not from conception infused with the intellectual soul making it human). See ST I, 76, 3 ad 3 and I.118.2 ad 2.

Quite contrary to this impression of concealment, however, it is a commonplace of informed, scholarly discussions in this area that Aquinas (along with other ancient and medieval writers) believed in late human ensoulment, often referred to as “delayed hominization,” and there is an extensive scholarly and semi-popular literature on it contributed to by parties from different sides of the interpretive, philosophical, theological, and moral debates.... As it is, [Pasnau’s] treatment of the matter suggests an overly hasty rush to judgment.¹⁸

Contra Pasnau, Haldane and Lee go on to point out, “Not only are scholars in the field generally well aware of Aquinas’s views about human ensoulment, but the Catholic Church itself has made reference to such views in its public declarations promulgating a contrary position.”¹⁹ Consequently, this position has not only been known “in scholarly circles,” as Pasnau puts it, but more popularly as well. For instance, in its 1974 *Declaration on Procured Abortion*, the Congregation for the Doctrine of the Faith states:

In the course of history...the various opinions on the infusion of the spiritual soul did not introduce any doubt about the illicitness of abortion. It is true that in the Middle Ages, when the opinion was generally held that the spiritual soul was not present until after the first few weeks, a distinction was made in the evaluation of the sin and the gravity of penal sanctions. Excellent authors allowed for this first period more lenient case solutions which they rejected for following periods. But it was never denied at that time that procured abortion, even during the first days, was an objectively grave fault. This condemnation was in fact unanimous.²⁰

One of these “excellent authors” mentioned in this Declaration was of course Aquinas. Pasnau quotes Aquinas²¹ as arguing regarding abortion before the infusion of the rational soul that “although this sin is serious, and should be counted as wrongdoing...still it is less than homicide.”²² In this same footnote, Pasnau also refers the reader to ST II-II.64.8 without quoting it. In this passage, Aquinas comments on Exodus 21:22 as follows: “He that strikes a woman with child does something unlawful: wherefore if there results the death either of the woman or of

¹⁸ Haldane and Lee, “Aquinas on Human Ensoulment, Abortion, and the Value of Life,” pp. 258-60.

¹⁹ *Ibid.*, p. 261.

²⁰ Sacred Congregation for the Doctrine of the Faith, *Declaration on Procured Abortion* (Vatican: Holy See, 1974), p. 7.

²¹ *In quatuor libros Sententiarum*, Distinctio 31, Expositio (Pasnau’s translation).

²² Pasnau, *Thomas Aquinas on Human Nature*, p. 418 n7.

the animated fetus, he will not be excused from homicide.” By means of this reference Pasnau is implicitly arguing for Aquinas’s distinction between the killing of the non-animated early conceptus, which according to Aquinas is not to be seen as homicide, and the killing of the animated fetus, which is to be so seen. However, as has already been shown, this aspect of Aquinas’s thought has already been known and discussed; it is not some sort of hidden-away or embarrassing revelation, as Pasnau seems to indicate. Furthermore, it is worth highlighting at this point that Aquinas, despite his delayed hominization view, did in fact see abortion after the first few weeks of pregnancy as homicide, and abortion before that time as a “serious” sin.

Continuing advances in embryology eventually led in 1987 to the following statement from the Roman Catholic Church:

[R]ecent findings of human biological science...recognize that in the zygote resulting from fertilization the biological identity of a new human individual is already constituted. Certainly no experimental datum can be in itself sufficient to bring us to the recognition of a spiritual soul; nevertheless, the conclusions of science regarding the human embryo provide a valuable indication for discerning by the use of reason a personal presence at the moment of this first appearance of a human life: how could a human individual not be a human person? The Magisterium has not expressly committed itself to an affirmation of a philosophical nature, but it constantly reaffirms the moral condemnation of any kind of procured abortion.... Thus the fruit of human generation, from the first moment of its existence, that is to say from the moment the zygote is formed, demands the unconditional respect that is morally due to the human being in his bodily and spiritual totality. The human being is to be respected and treated as a person from the moment of conception; and therefore from that same moment his rights as a person must be recognized, among which in the first place is the inviolable right of every innocent human being to life.²³

In other words, no matter the results of the philosophical dispute over hominization, determining “the first appearance of a human life” does not now depend on when the embryo begins to look human or begins to develop recognizably human organs and features, such as the cerebral cortex, but now depends on genetic testing. The human “form” (or soul) causes the material embodiment to develop into a mature example of that which it is, namely, a human. Therefore, the human being is

²³ Sacred Congregation for the Doctrine of the Faith. *Donum Vitae* (Vatican: Holy See, 1987), p. 1.

“ensouled” or “animated” at the time when it possesses all its potential to become a mature example of that which it is—that is, when the genetic “information” is available that is capable of directing all subsequent development. The new human being possesses all such potential from the time when it is conceived.

Internal genetic self-development, as it begins to occur, is thus the physical sign of the logically prior instantiation of the metaphysical form. The zygote has no innate “potential” to develop into anything other than what it already is. It is not a “potential person,” as many today have put it. At whatever level of development, the animated conceptus is a potential doctor, or teacher, or farmer, or university student. However, it can only be these things in *potential* because of what it already *is*. It is a potential professor, but not a potential starling or gazelle; it will never be a starling or gazelle, although it may very well be a professor some day, because it already is a human and can never change its metaphysical substance, its form, as is seen physically in its genetic structure. As professor Robert P. George points out:

Until fairly recently in modern history we lacked the knowledge of embryogenesis and early human developmental biology to say securely what we now know with certainty, namely, that even the early embryo is a complete, self-integrating human organism that by directing its own integral organic functioning develops himself or herself to the next more mature stage of his or her life. We now know securely that the difference between an embryo and a fetus, infant, child, adolescent, and adult is not a difference in *kind*, but is rather a difference *in biological maturity or stage of development*. Embryos and human beings are not different kinds of beings; an embryo is simply a human being in the earliest developmental stage.... The human embryo is not...merely a “potential person,” whatever that might mean; rather the human embryo *is* a human being—a whole living member of the species *Homo sapiens*—in the embryonic stage.²⁴

However, in Aquinas’s time, these facts could not have been known, since they could only have been determined with knowledge of genetics and DNA coding. If Aquinas had known of DNA’s potential for speciation and development, he would have recognized that the

²⁴ Robert P. George, “Sweet Reason.” Review of *Human Life, Action, and Ethics: Essays by G.E.M. Anscombe*, edited by Mary Geach and Luke Gormally, eds. *First Things* 159 (January 2006): 56-59, pp. 58-59. Emphasis in original. For a more extensive discussion, see also George’s *The Clash of Orthodoxies: Law, Religion, and Morality in Crisis* (Wilmington, Delaware: ISI Books, 2001).

animating form of the material embodiment of a human actually is infused into the human's matter at a much earlier stage than he had thought.²⁵ His ideas of delayed hominization were based on the superficial physical resemblance of a human embryo at an early stage of development to the embryos of other animals at similar stages of development. Genetically, of course, it is now known that the resemblance is in fact superficial:

Modern biology has proved that the fundamental "disposition" or "organization" of living matter is genetic. We can now do what the ancients could not: we can distinguish the human embryo from embryos of other species. The perceptible form of the zygote, its genetic structure, may therefore be regarded as, so to speak, the outward and visible sign of its metaphysical form, that which makes it what it is, a member of the human species. The human zygote as we understand it today with DNA and RNA would in Thomas's understanding eminently satisfy as having the organized matter required for the infusion of a human spiritual soul.²⁶

So, a Thomistic definition of human-ness today must take these developments within genetics and DNA testing into account. If Aquinas's Aristotelian embryological sequence of "vegetative," "animal," and finally "rational" forms were correct, surely the embodiment of these various forms would be manifested genetically, in a corresponding sequence of vegetative, animal, and finally human DNA codes. However, this of course is not the case—in fact, the very idea seems absurd—because the human form (and only the human form) is present from the very beginning of its embodiment, as revealed by testing the human zygote's DNA structure. Of course, this is not to say that the human form or soul is to be located in a human's DNA code, but rather that the DNA code is a necessary condition both to the embodiment of the human soul and to the soul's capacity, under normal conditions, to develop the hylomorphic union of form/matter into a mature embodied example of a human.

Aquinas makes a clear demarcation between the "sensitive [sensation-receiving] soul," which humans share with all creatures with sensory apparatus, and the intellectual soul. The sensitive soul is

²⁵ Aquinas's own writings on this matter in the ST are primarily found in I.118.2 and I.76.3.

²⁶ "An Approach to a Key Theological Question," n.p.

generated by the act of procreation, as is the case with all animals,²⁷ while the intellectual soul “comes from without,” being begotten “through creation by God.”²⁸ As the intellect is non-corporeal, it cannot be generated in a corporeal fashion. Aquinas thinks of the intellectual soul as supervening upon the sensitive soul, without thereby losing the powers of the sensitive soul, and so in Aquinas’s view the developing human embryo does not possess the human form until it is infused by God with the intellectual soul.

However, Aquinas in these instances errs in his view of the development of the corporeal embryo; he is passing along the faulty embryological information available to him, virtually unchanged from the time of Aristotle. As Brennan writes:

In matters of empirical observation, both Aristotle and Aquinas were men of their age, which was definitely a prescientific age. This means that extreme caution must be used to dissociate the permanent philosophic analyses from the useless and outmoded scientific formulas with which these analyses are often overlaid. The record of Aristotle’s and Aquinas’s theories in the field of science is, for the most part, without value, except as a moment in the history of their mental development.²⁹

Aquinas does not think of the developing embryo as possessing the human form until that form animates a recognizably human embodiment. These mistaken scientific views need not threaten one’s adoption of a Thomistic anthropology, since “the fundamental principles of his philosophy of man are independent of his obsolete biology.”³⁰

AQUINAS AND DONCEEL ON CONCEPTION AND HOMINIZATION

Whatever one’s view of the topics under discussion, it at least is clear that Aquinas’s position cannot legitimately be used as Pasnau uses it; as one review of *Thomas Aquinas on Human Nature* puts it, Pasnau’s account of Aquinas, both in metaphysics and in anthropology, is both “contentious in substance, and advanced in advocacy of a particular

²⁷ ST I.118.1.

²⁸ ST I.118.2.

²⁹ Brennan, *Thomistic Psychology*, p. 4.

³⁰ “An Approach to a Key Theological Question,” n.p.

moral interest.”³¹ The “particular moral interest” that Pasnau is interested in advocating is the pro-choice position on abortion, which he argues Aquinas would also uphold, at least in the case of abortions in the first six weeks of pregnancy and possibly up to twenty weeks or so. As has been argued, however, Aquinas’s “view on these matters” relating to abortion does not seem to be presented by him in any well-established or dogmatic fashion, and would certainly vary depending on the empirical information available to him.

On the other hand, Joseph F. Donceel, whose writings on this question have influenced Pasnau and others,³² argues that in Aquinas’s hylomorphic view, the matter that receives the soul must be more highly organized as the soul itself is ranked higher in the scale of being; consequently “hylomorphism cannot admit that the fertilized ovum [or even] the early embryo is animated by an intellectual human soul.”³³ As Stephen Heaney paraphrases this view, “Since soul and body must be proportioned to each other, it is argued, a rational soul cannot be present until the human body is formed enough to support it, i.e., until there are organs in place through which the rational soul can begin to exercise its proper powers.”³⁴ This principle is stated succinctly by Aquinas himself: “The form does not surpass the proportion of the matter.”³⁵ In another

³¹ Haldane and Lee, “Aquinas on Human Ensoulment, Abortion, and the Value of Life,” p. 256.

³² Pasnau refers approvingly to Donceel as follows: “The Jesuit theologian Joseph Donceel makes this point forcefully [i.e., that those who think of the intellectual soul as being infused by God at the conception of the human are guilty of a sort of Cartesian dualism] in a 1970 article [“Immediate Animation and Delayed Hominization”], where he shows how many recent accounts of the soul’s infusion, even those offered in Aquinas’s name, have been blatantly Cartesian. Donceel remarks, in describing Aquinas’s hylomorphism, that ‘even God cannot put a human soul into a rock, a plant, or a lower animal, any more than He can make the contour of a circle square’ (p. 82)” (*Thomas Aquinas on Human Nature*, p. 420 n19).

³³ Donceel, “Immediate Animation and Delayed Hominization,” *Theological Studies* 31 (1970): 76-105, p. 80.

³⁴ Heaney, “The Human Rational Soul in the Early Embryo.” Vanderbilt.edu/SFL/Thomist/Fertilization, n.p. Accessed 2 June 2007. See also Heaney’s “Aquinas and the Presence of the Human Rational Soul in the Early Embryo.” *The Thomist* 56 (1992): 19-48.

³⁵ ST II-II.24.3.

article,³⁶ Donceel quotes a similar argument from Henri de Dorlodot:

A fertilized ovum, a morula, a fetus which has reached the stage resembling a gastrula, and even an embryo in the first period of its existence, do not possess the organization of a specifically human body. And the seat of the imagination and the *vis cogitativa* does not exist so long as the brain itself does not exist, and indeed as long as there are not present the first rudiments of the structure of a human brain.³⁷

Donceel quotes Aquinas quoting Aristotle that the soul is “the act of a physical organic body which has life potentially” and points out that in this quotation the word “organic” means “having organs.”³⁸ From Dorlodot and Aquinas, therefore, Donceel argues that the organic structure of the brain must be present in order for the soul to be its “act,” an organic structure which arises somewhere between the third and fourth months of pregnancy. Donceel thinks that the idea that the zygote is animated by its own human soul at conception comes from the confusion of the soul as the formal cause of the human, which it is, with the soul as the efficient cause of the body, which, Donceel claims, it is not.

Perhaps arguing against this last point would serve to argue against the others as well, since the ensuing discussion would address not only the idea of the efficient cause of the body, but also the idea of delayed hominization. First of all, it must be conceded that Donceel is entirely correct in stating that Thomas himself separated between the soul as formal cause and as efficient cause. Donceel quotes from the *Summa Contra Gentiles*, “Form and matter combine together in one being, which is not the case with the effective principle together with that to which it gives being.”³⁹ Although he does not quote a later passage, Donceel could well have done so: “The body is not formed by virtue of the soul of the begotten, as regards the body’s foremost and principal parts, but by the virtue of the soul of the begetter.... All matter is similarly configured to its form; and yet this configuration results not

³⁶ Donceel, “Abortion: Mediate v. Immediate Animation,” *Continuum* 5 (1967): 167-71.

³⁷ Henri de Dorlodot. “A Vindication of the Mediate Animation Theory.” *Theology and Evolution*. E.C. Messenger, ed. (London: Sands and Co., 1949), p. 260.

³⁸ ST I.76.4.

³⁹ SCG II.68.

from the action of the subject generated but from the action of the generator.”⁴⁰

However, in context Aquinas is referring to the father’s semen as the means used by the “action of the generator” and the “soul of the begetter” from which the body of the zygote begins to be organized; when he writes two sentences earlier that “the soul fashions a body like to itself,” he is again referring to the *father’s* soul (and not to the mother’s),⁴¹ not recognizing that the conceptus inherits genetic characteristics from both parents. According to Aquinas, the male’s soul acting through his semen infuses the vegetative soul of the embryo; this “sensitive” soul begins in its turn the organization of the body by means of the “vital principle” of the father. The active power [*virtus*] of self-organization resides in the semen of the male, according to Aquinas, while the female provides the matter or material embodiment of the fetus. In this pre-modern view, the mother is thus the material cause of generation, while the father is the efficient cause.⁴² The embryo eventually is infused with the intellectual soul directly by God, since the intellectual soul cannot be infused by a corporeal operation such as intercourse, or by a corporeal matter such as semen; this intellectual soul is thus the formal cause of the existence of the human being. One must then bring up, as Heaney asks, “How is such development [of a human being] possible at all without the presence of a human rational soul?”⁴³ Aquinas recognizes the principle that the effect cannot be greater than the cause; therefore, for Aquinas the development of the zygote is initiated by the organizing principle of the soul. However, in Aquinas’s view, it is not the soul of the zygote which initiates this organization, but

⁴⁰ SCG II.89.

⁴¹ SCG II.89.

⁴² ST I.118.1.

⁴³ Heaney, “The Human Rational Soul in the Early Embryo,” n.p. In context, the complete quote is as follows: “What is necessary for development toward a physically discernible individual at the primitive streak stage? I suggest Aquinas’s answer (and mine) would be that it is the presence of a human rational soul.... Under favorable circumstances, the fertilized ovum will move through developmental individuality, then progressively through functional, behavioral, psychic, and social individuality. In viewing the first stage, one cannot afford to blot out subsequent stages. How is such development possible at all without the presence of a human rational soul?”

the parental soul: The formal cause of the zygote lies in the parent as maker, not in the conceptus as a sort of “artifact.”

Clearly, even though Aquinas himself presents this view, this Aristotelian biology and account of conception is surely no longer required to hold in order to hold a Thomistic anthropology. The internal organization of the conceptus and the development of its internal organs come from an equally internal power already contained by the zygote at conception; moreover, the semen is no longer thought scientifically as containing any kind of “active power or spirit in the sense that Aquinas understood the term.”⁴⁴ Again, if Aquinas were alive today and were to be presented with the information available regarding the self-directing activities of the embryo even at its earliest stages, the question asked earlier would still be completely pertinent: “Would Aquinas alter his views today?” If the answer is “Yes,” as has already been argued, this transformation of views would also transform Aquinas’s view of “delayed hominization”: “The matter must indeed be commensurate with the form for an organism to develop to maturity. However, modern science makes abundantly clear that the sufficient matter for the development of the human person is the genome in the one-celled zygote.... Thus, the theories set forth for delayed hominization, often utilizing the thought of Aquinas as proof, become implausible,” as Kevin O’Rourke has written.⁴⁵

As Germain Grisez points out in his response to Donceel:

St. Thomas’s biological errors invalidate his anthropological conclusions [i.e., his conclusions as to when the intellectual soul is infused]. If St. Thomas had known about the specific and individual genetic uniqueness of the zygote which makes it biologically a living organism of the human species, he would have supported immediate animation [i.e., hominization at conception]. Moreover, Donceel’s view disregards the fact that fetal development is a continuous process. Thus he does not explain why the fetus, which in his opinion cannot be a human body at the zygote stage, can be one after a few weeks.⁴⁶

⁴⁴ Ibid., n.p.

⁴⁵ Kevin D. O’Rourke, O.P. “The Embryo as Person.” *Life and Learning XVI: Proceedings of the Sixteenth University Faculty for Life Conference*, ed. Joseph W. Koterski, S.J. (Washington, D.C.: Univ. Faculty for Life, 2007): 281-96, p. 292.

⁴⁶ Grisez, *Abortion: The Myths, the Realities, and the Arguments* (New York: World Publishing Company, 1970), p. 283.

Consequently one could hold completely with Aquinas's essential principle—i.e., that a human rational soul is necessary to initiate the organization of the zygote, transforming matter into a living human body—and disagree with his view of what exactly occurs at conception—i.e., that the organizational soul is that of the parent rather than that of the conceptus itself. “For Aquinas, if effect is not to be greater than cause, a human soul must be responsible. Since for us the soul of one of the parents cannot be the cause, the cause must be the human rational soul of the zygote, right from the moment genetic uniqueness is established.”⁴⁷ This “genetic uniqueness” is enough of an organic structure, as is evident from its subsequent development, to receive the God-given infusion of its own unique rational soul, the animating form of that development, which can then exercise its proper powers through that organic structure.

The infusion of the human soul at the time of conception is thus not “pointless,” as Pasnau puts it,⁴⁸ but necessary; the cause of the human embryo's development as a human seems to be the embryo itself, its inner animating principle being the human form as given by God. The cause of the continued development of a *human* body is the presence of a *human* form.⁴⁹ “Evidence that a zygote or early embryo has an active internal principle guiding its ordered natural development into a being that actually thinks rationally is sufficient, I contend, to conclude that it is already a rational being,” as Jason T. Eberl writes: “It has an active potentiality for rational thought and is thus informed by a rational soul.”⁵⁰

Some have misunderstood this crucial point; for instance, Pasnau argues as follows:

Modern proponents of what I call the moment-of-conception thesis like to appeal to science in defense of their approach, especially to the presence from conception of the

⁴⁷ Heaney, “The Human Rational Soul in the Early Embryo,” n.p.

⁴⁸ “Without these physical capacities [dependent upon a certain level of brain development], the mind would be unable to function. At a minimum, it would be pointless for God to infuse the human soul at any earlier point” (*Thomas Aquinas on Human Nature*, p. 113).

⁴⁹ Haldane and Lee. “Aquinas on Human Ensoulment,” p. 269.

⁵⁰ Eberl, “Aquinas's Account of Human Embryogenesis,” p. 392.

human genetic code.... Strangely, this sort of argument relies implicitly on the sort of reductive materialism that one would expect to be anathema to the pro-life movement. If to be human is to have a God-given soul, then the presence of the human genetic code at conception shows nothing about whether the embryo is a human being.⁵¹

However, one should note that the DNA code is a necessary but not (as a materialist might assert) a *sufficient* condition for human development. The infusion of the intellectual soul into the human embodiment is required, as the formal cause and organizing principle of the human substance, but the human minus the embodiment is not a human as humans know themselves today; in other words, the supposition “to be human is to have a God-given soul,” as Pasnau claims, is not strictly accurate, or it is at best only half-accurate. Corporeal nature is also a necessary but not sufficient condition for a human being to *be* a human being.⁵² As Gilbert Meilaender says, “The duality of our nature is such that we have no access to the free spirit apart from its incarnation in the body. The living body is therefore the locus of personal presence.”⁵³

In other words, *the soul does not animate the development of a human being unless it is embodied, and human embodiment may be recognized by the presence of human DNA*. In all other respects the human soul is more important and logically prior to the human body; as Aquinas asserts, “Man’s being consists in soul and body, and though the being of the body depends on the soul, yet the being of the human soul does not depend on the body: indeed the body is for the soul, as matter for its form.”⁵⁴ The body, including its DNA code, is a necessary but not sufficient condition for human existence; on the other hand, for humans to exist in their current condition, the reverse is also true: The soul is a necessary but not sufficient condition for human existence *as known today* (while not presently considering the post-mortem, pre-resurrection state). The mere presence of human DNA or “genetic identity”—as in a wart, for instance—is not enough to constitute a human being: “It is not

⁵¹ Pasnau, *Thomas Aquinas on Human Nature*, p. 109.

⁵² Ric Machuga. *In Defense of the Soul: What It Means to Be Human* (Grand Rapids MI: Brazos Press, 2002), pp. 19ff.

⁵³ Gilbert Meilaender. *Bioethics: A Primer for Christians* (Grand Rapids MI: Eerdmans, 1996), p. 6.

⁵⁴ ST I-II.2.5.

the case that merely possessing human DNA is sufficient for something to be a person [for if so] then hydatidiform moles—masses of placental tissue with the same genetic identity as an embryo—would also count as persons.... What separates a hydatidiform mole and a developing embryo is that the former can never, despite its intrinsic genetic structure and even if it is placed in a supportive uterine environment, develop into an organism with a functioning cerebral cortex; the latter can.”⁵⁵ However, the presence of this human DNA or genetic identity in an embryo, along with the presence of the animating principle (the form, the soul) leading to its mature expression as a living, functioning human—these taken together *are* enough for us to recognize the presence of a human being.

Dombrowski and Deltete, in arguing for a “Catholic defense of abortion,” seek to sidestep the use of these genetic criteria by pointing out that earlier foundational Catholic philosophers (primarily Aquinas and Augustine) admitted themselves ignorant regarding the beginning of human life:

Augustine is explicit that he does not know (*ignoro*) when the human infant begins to live in the womb (*quando incipiat homo in utero vivere*), nor if human life exists in a latent state (*utrum sit quaedam vita et occulta*) before that point.⁵⁶

But even if taken as stated, what is this supposed to demonstrate? As has been argued up to this point, one need only reply to this that Augustine’s self-confessed ignorance on this matter, 1600 years ago, does not excuse one’s ignorance today. The genetic requirements for the beginning of a human life are now known in a way that of course would not have been possible for either Augustine or Aquinas.

SPEAKING IN AQUINAS’S NAME

Nor is the position of this essay contrary to the principles of Aquinas’s metaphysics, although it is contrary to Thomas’s own thirteenth-century scientific mistakes. As Denis Bradley writes, “For Aquinas, the intellectual power is a necessary property of the human essence; what seems eminently reasonable to think is that this essential property,

⁵⁵ Jason T. Eberl. *Thomistic Principles and Bioethics* (London and New York: Routledge, 2006), pp. 130 n16 and 131 n29.

⁵⁶ Dombrowski and Deltete, *A Brief, Liberal, Catholic Defense of Abortion*, p. 23.

especially if it is regarded as a nonseparable property of the living human body, is a power contained in the body's determinate and determining form—the initial chromosomal program—that internally controls the development of the zygote.” This idea, of course, does not equate the human form or intellectual soul with the human's “initial chromosomal program” or DNA code. An analogy might be the relationship between electrical current and a light bulb; the bulb contains within itself a “light-giving” system, but cannot actually give that light until it is infused with the animating principle of the electrical current. In this analogy, the light bulb is the human chromosomal program, and the electrical current is the rational soul infused by God (of course, such an analogy is not meant to imply that the soul is any sort of physical force such as is electricity). Bradley goes on to argue that Aquinas today—“Aquinas *redivivus*,” as he puts it—would no longer find “compelling” the scientific views upon which authors such as Pasnau, Dombrowski, Deltete, and so on, base their position.⁵⁷ These authors “take up the outdated biology of these Catholic doctors, but cast aside their ethics—thus making a very selective use of Catholic tradition.”⁵⁸

The ethical prescription that one should protect innocent human life is more or less invariant in the Thomistic natural law tradition; however, the biological notion of what exactly constitutes that human life has advanced considerably since the time of Aquinas, given advances in empirical embryological knowledge. One might summarize this line of thought simply by saying that Thomistic biology is for the most part outdated; Thomistic ethics is not. Aquinas today would feel no compunction in casting aside his outdated embryology, while holding fast to the ethical obligations we have toward all humans, including those in the womb.

Contrary to Pasnau, Dombrowski, Deltete, and others, therefore, a Thomist today can be entirely true to Aquinas's principles (and not merely speaking “in Aquinas's name,” as Pasnau puts it) in arguing that

⁵⁷ Denis Bradley, J.M. “‘To Be or Not To Be?’ Pasnau on Aquinas's Immortal Human Soul,” *The Thomist* 68 (2004): 1-39, p. 32.

⁵⁸ Anne Barbeau Gardiner, “For Catholic Dissenters, Abortion Is Like Mowing Grass,” Book Review of *A Brief, Liberal, Catholic Defense of Abortion* in *New Oxford Review* (October 2004), accessed at newoxfordreview.org, n.p. (12 Nov. 2007).

the hylomorphic union of soul and matter making up a human being is thus present from the conception of that human being. Aquinas consistently worked out a coherent account of human development based on his Aristotelian knowledge of conception and generation. However, his empirical knowledge of conception and generation was simply *wrong*. Given further empirical facts today, he with equal consistency would simply work out a different account of human development, one that indubitably would run counter to Pasnau's pro-choice advocacy. If one holds this view of the adaptability of Aquinas's principles, it can be seen that Pasnau is wrong to advance his own views by making of Aquinas a sort of frozen medieval museum piece stuck in an antiquated science.