

How a Hylomorphic Metaphysics Constrains the Abortion Debate

I. Introduction

Earl Conee considers four well-known but very different discussions of the metaphysics of abortion and concludes that in each case the metaphysical view does not “substantially advance the argument in favor of a particular moral conclusion.”¹ He adds that where there is some apparent force in the metaphysical premise, rival metaphysics can be substituted with no loss in the strength of the reasoning. He concludes that all the work in the abortion debates is being done by non-metaphysical premises.

Conee conjectures that not only are metaphysical principles irrelevant in the four philosophical accounts that he examines in his article, but this will be true of *any* alternative metaphysics that philosophers believe to have a bearing on the morality of abortion. He writes: “Concerning the morality of abortion, metaphysics is epistemically inert.”² Since his target is the irrelevance of metaphysical arguments to abortion in general, we believe it is permissible to discuss metaphysical positions that he doesn’t address as well as those he does. We maintain that his discussion of ensoulment theories is rather tendentious. Certain claims he makes about Cartesian accounts cannot be extended to hylomorphic accounts. While only one of the authors of this article is a defender of a hylomorphic account of personal identity, we both believe, pace Conee, that the leading alternative metaphysical accounts cannot be substituted for a hylomorphic account without some loss of strength in the pro-life position. We claim this because the alternative accounts cannot as easily support the claim that the very early termination of a pregnancy is an abortion of an existing human being rather than metaphysically and morally equivalent to contraception. Conee overlooks the fact that while rival theories may both posit our origins at fertilization, it is less of a stretch of the resources of the one theory than the other. That

means one theory offers more substantial support for a particular position than the other.

We also claim that the arguments which Conee offers to show that abortion is not harmful even if ensoulment occurs at fertilization cannot be extended to the hylomorphic account. While a person conceived on the dualist model may thrive when his soul is unencumbered by the flesh, this is not true of a person on the hylomorphic account of the soul. Nor is it true on a hylomorphic view that abortion may just be delaying the soul's obtaining embodiment and a human life. But even on a Cartesian conception, if ensoulment is a miracle, a divine intervention for a *purpose*, such a metaphysical-theological conception, pace Conee, constrains the morality of abortion.

II. Materialistic Reductionism, Immaterialistic Nonreductionism, and Hylomorphism

Conee relies heavily on a distinction of Parfit's between Reductionist and Nonreductionist accounts of personal identity.⁴ A Reductionist account holds that a person's continuing existence involves nothing more than the continuing presence of certain psychological or physical relations, typically causal in nature, between brief or momentary person stages. A Nonreductionist insists that our continuing existence requires something more than the holding of such psychological or physical connections. There is a need for what Parfit labels a "further fact." Parfit considers a Cartesian soul theory to be a paradigm example of Nonreductionism. Accounts that emphasize psychological or physical continuity are examples of Reductionism. Advocates of the latter typically use language describing personal identity over time "as being nothing more than" such and such ties or "just consisting in" such and such connections. Reductionist accounts differ on what the tie is and whether it has to be the same physical stuff (e.g. brain) subserving the psychology.

Parfit assumes that for the Nonreductionist, identity is always an “all or nothing” proposition. He means by this phrase that it can never be indeterminate whether someone exists or whether that individual is identical to some one else. He contends that if existence could be indeterminate, then the moral wrongness of abortion could increase with the development of the fetus into a creature more like us.

Parfit sketches an argument in which Nonreductionist metaphysical assumptions purport to favor an anti-abortion stance.⁵ Coney reconstructs Parfit’s rather loose presentation in the following form, and then rejects the claim that the metaphysical premises are really doing the work Parfit thinks they are doing:

P1 If Nonreductionism is true, then the “all or nothing” proposition is true.

P2 If the “all or nothing” proposition is true, each person begins existence as a fertilized human egg.

P3 If Nonreductionism is true, then each part of a person S’s life is as much part of S’s life as any other part of S’s life.

C1 If Nonreductionism is true, then each person S has a life at conception which is as much part of S’s life as is any other part of S’s life.

P4 If each person S has life at conception which is as much part of S’s life as any other, then killing any fertilized human egg at conception is killing an innocent person.

P5 Killing an innocent person is morally wrong except to save some person’s life.

C2 If Nonreductionism is true, then killing any fertilized human egg is morally wrong, except to save some person’s life.

Conee claims that premises 1 and 3 can be taken for granted, but the three others need support and none is supplied by the metaphysics of Reductionism and ordinary empirical facts. His conclusion is that Nonreductionism and the “all or nothing” proposition do not make any moral difference. The latter merely rules out indeterminacy, it doesn’t say what sort of being a person is.

Conee attacks the second premise about each person beginning at fertilization. He claims the classic Nonreductionist view that each person is an immaterial soul gives us no reason to think that a person’s existence begins at fertilization even if as Parfit suggests, that conception is the most plausible time to locate the start of our body’s existence. A soul might exist before the body that it acquires comes into being or that a soul might arise well into the pregnancy, perhaps just in time to instantiate the initial psychological traits of the person. Both of these alternatives accommodate within a soul theory the facts of gradual fetal development cited by Parfit. Yet either way, contrary to premise 2, persons do not begin their existence as fertilized eggs. Thus, the classic Nonreductionist position undercuts the credibility of the premise in this argument.⁶

What is important to notice is that Conee is considering only a Cartesian account of the soul. If he had considered a hylomorphic account, such as that of Aquinas, he wouldn’t be able to claim that the soul could exist prior to embodiment or the body prior to ensoulment, claims which Aquinas explicitly rejects. Only on the assumption of substance dualism, can the soul and body be easily separated. In hylomorphic metaphysics, there can’t be a body without a soul. A body is already ensouled matter. And there is no soul which comes into existence without matter,

although the human soul is unique in its capacity to be disunited from matter during a part of the afterlife. This is because in a hylomorphic metaphysics the nature of living beings is essentially a composite of form and matter, with the form and matter in an imperfect state when disunited. Since the “perfect precedes the imperfect” in the order of nature, Aquinas finds it unreasonable that the form of the human being or any other form should begin its existence in an imperfect, deprived state: hence, the human form begins to exist in its natural state of configuring matter, and when separated from matter at death, is in a deprived state until reunited with matter upon resurrection.⁷ Additionally, Aquinas argues that since the human being is essentially a unity of form and matter, if it were the case that forms exist before matter, the soul’s “union with the body would be an accident of the soul: and consequently the man resulting from this union will not be *per se* but an accidental being.”⁸

But perhaps what Conee might argue is that the *rational soul* is necessary for our existence and such a soul comes into existence later in fetal development, replacing or complimenting, as Aquinas claims, the earlier vegetative and sensitive souls. This is consistent with the Aristotelian/Thomistic theory of a succession of souls and has found recent prominence in philosophical literature in which a distinction is made between the animation of the early pre-embryo by vegetative and sensitive souls and the later "hominization" of the embryo by the rational soul. On this view, the later embryo whose soul is rational is the human being which persists as the fetus, infant, etc; the early, pre-hominization embryo is potentially a human being but not actually one.⁹ Recent attraction to this theory is due in part to an interest in reconciling contemporary embryological data on monozygotic twinning with positing the origin of human being, the soul of which is simple, indivisible, and incommunicable. This conception of the soul,

while traditionally of Christian thought, is also in keeping with commonsense intuition: that each human being is unique, unrepeatable, and cannot be divided into two separate human beings. And since monozygotic twinning is the result of the division of a single fertilized egg into two genetically identical embryos which develop into two human beings, it does not seem credible that the original entity is a human being. What is argued, then, is that from fertilization to at some point when twinning, either natural or induced, is no longer possible, the “pre-embryo” is matter animated by just a vegetative soul. When twinning is no longer possible, the sensitive soul becomes present and is eventually succeeded by a rational soul, at which point is the origin of the human being, a composite of matter and rational soul.

A consequence of this succession of souls is that if people couldn't exist without a rational soul, then none of us was ever an early embryo. However, there are certain reasons to believe that there is only a single soul and it comes into existence at fertilization. Our reason for this is that the impetus for positing a succession of souls are twinning-based problems which, we shall see in the next section, lose their force when the empirical data of human embryology is reexamined. In fact, a hylomorphic theory is not only consistent with embryological data, but may provide more explanatory power for the data than rival metaphysical theories. We also claim that positing our origins at fertilization is consistent with other key features of Aquinas' hylomorphic theory and theological beliefs. One of these features is the claim that we are metaphysically unique, essentially different from other non-human animals beings in such a way as to support the Christian belief that we are made in the image and likeness of God. If we are not continuous with other living creatures, but radically different, it shouldn't be surprising if fertilization of a human egg resulted in an embryo whose properties were quite distinct from

embryos of other species. Another reason to favor ensoulment at fertilization is that if the rational soul can take over the functions of the vegetative and sensitive souls, as Aquinas maintains, considerations of parsimony suggest positing that multi-purpose soul at fertilization.

A further consideration is that if the rational soul came later than fertilization, it would come much later than Thomists maintain, since there is no evidence of rationality in the advanced fetus or even newborn. Surely Thomists don't want to posit that babies are not ensouled. But they can only avoid this conclusion by claiming that the rational soul is latent in advanced fetuses and newborns. But then there is less reason to doubt that the rational soul should be able to come into existence even earlier (at fertilization) without manifesting its rational capabilities. Another consideration is that early miscarriages unknown to the mother or anyone else, would be hard to make sense of if ensoulment didn't occur at fertilization. If ensoulment involves God's miraculous intervention, why would He create a being soon to be destroyed unbeknownst to any human? Whatever theodicy or defense explains the existence of evil will not be easily able to subsume this unknown death. And it won't do to just maintain that only the rational soul has a miraculous origin, thus freeing God from the charge of a seemingly pointless miraculous intervention. The problem is that since there is no evidence of rational functioning until long after birth, infants who die will not 'survive' their biological deaths for they don't have immaterial souls. Such infants going permanently out of existence doesn't seem compatible with a benevolent God. And if the deceased infant 'survives' death and experiences an afterlife, it boggles the mind to imagine a vegetative or sensitive soul vegetating or sensing without any matter. But if God infused a rational soul after the infant's death, the soul would not come into existence in union with matter which is incompatible with the Thomistic claims made

above. So we see that there are a number of reasons why we should postulate that the hylomorphic soul originates at fertilization. These are reasons not as readily available to the Cartesian which suggests that a particular nonreductionist metaphysics can, contra Conee, constrain the abortion debate.

III. Hylomorphism, Organisms and Monozygotic Twinning

The forms of those hylomorphic composites which are plants, animals and humans are what Aquinas refers to as “substantial forms”. These forms are actual; when they are present they are fully so, yet in order to manifest its capacities a form actualizes the potential matter with which it is united. The matter which the form “configures” is in a state of potentiality and comes to exist in its biological state (engaged in metabolic, homeostatic functions etc.) because of its unity with the form; the form is what gives it life, so to speak, configures the matter in order to express the form with which it is united. This configuration, then, is teleological in nature, and specific to each species: it is an explanation for the unified growth of animated beings, *viz.* plants, animals, and human beings.

Aquinas also claims that each species has its own form, and that there is a difference between the form, or soul, of the human being and the forms, or souls, of sub-human animals and plants. The souls of animals and plants cannot come to exist apart from the matter, nor do they originate via supernatural intervention. This, Aquinas argues, is evidenced “by their function, which cannot be exercised without a bodily organ, wherefore absolutely speaking they have no being independently of the body”.¹⁰ Because the vegetative and sensible souls of plants and animals are functionally correlated to the matter with which they are united— they do not, in Aquinas’ terms, “transcend the matter”— these souls are said to originate with the “natural

powers of the generator”, as opposed to the supernatural intervention of God. There is not a lack of material explanation for the functions of these beings; hence, the forms of these beings cannot “exist apart from the body, nor be brought into being except insofar as the body is brought into being”.¹¹ Since the body is brought into being through the proper fusion (as in gametes) or fission (as in lower animals) of matter, there is no reason to posit an origin outside of the natural generation of the composite, be it asexual reproduction, as is the case with plants and lower animals, or a fusion of gametes, as is the case with sub-human higher animals.¹²

The rational soul of the human being, however is an exception. It is a “subsistent substance wherefore its being does not consist solely in its union with the body”; although it originates in union with matter, it can exist on its own without the body, albeit in an imperfect state.¹³ The rational soul’s independence from matter is a function of its nature: Aquinas claims that operations of the rational soul, such as intellect and will, are not restricted to any part of the body (although many of our intellectual functions, such as imagination and sensibility-based thoughts, necessitate union with matter). The rational soul, then, unlike the vegetative and sensible souls, found in plants and “dumb” animals, by its very nature functionally “transcends” matter; it is not, Aquinas claims, confined within the limits of corporal nature.¹⁴

The transcendence of the human form from matter is a hallmark of the rational soul of man, setting it apart from all other forms. A human being, which is a union of rational soul and matter, has the capacities of the intellect and will which Aquinas claims are non-localized in any body part and, by inference, are capacities of the soul alone. Because all of the capacities of the human being are not reducible to properties of configured matter, the rational soul is said to necessitate supernatural origins, *viz.*, the infusion by God of the soul into matter. This is because

a form whose “operation is independent from matter cannot be produced from corporeal matter”; whereas the forms of non-human animals and plants are functionally correlated with the body and therefore originate by the same means as the body— *viz.*, fusion or fission of matter— the human form functionally transcends matter and so requires an immaterial agent.¹⁵ This is also consistent with Aquinas’ claim that the soul can survive separation from the body: if the human soul originated by the same means as the body— for example, with fusion of the gametes— then the soul would cease to exist when the body ceases to exist as a human body.¹⁶

The contemporary Thomist’s approach to embryology is typically to suggest a succession of souls during, roughly, the first couple of weeks after fertilization, for it is during this time frame that human and non-human embryos are said to have the capacity to divide into two or more new embryos through either induced or natural division of the embryo. These twinning capacities, however, when scrutinized, do not present a strong case against the human being originating at fertilization. In the first case, that of induced twinning, it is theorized that the cells of the human embryo, during the two days after fertilization, are “totipotent”: if placed in the proper environment each cell has the capacity to form into a new human being.¹⁷ This inherent potential for division into two or more embryos poses an apparently insurmountable problem to a human being, existing as a composite of matter and incommunicable soul, at fertilization: if the zygote and multicellular pre-embryo which it develops into can be divided, resulting in two (or more) human beings, it seems improbable that the original entity was a human being, for it would have had to fission out of existence or arbitrarily survive as just one of the resulting twins.¹⁸ The claim that the early cells of the human embryo are totipotent, however, while treated by theorists as empirically given, is based on the assumption that human beings are essentially the same as

animals, and because animal embryos, including non-human primates, are able to be artificially divided (and, in fact, are routinely so, either for the purpose of experimentation or breeding, as in widespread “cattle cloning”), it is the case for human embryos as well. In fact, attempts to artificially divide human embryos have been unsuccessful to date, thereby rendering irrelevant (at least for now) the problems which totipotency was alleged to pose to a hylomorphic metaphysics and ensoulment at fertilization.¹⁹

Naturally occurring monozygotic twinning is, however, empirically given, but, again, upon scrutiny, it is arguable that it does not pose a problem to the hylomorphic metaphysics championed here. This is, in part, because the implications of this kind of twinning are significantly different from those of totipotency, despite the tendency in the literature to conflate the two.²⁰ One such difference is that totipotency entails that the early embryo consists of several at least potential human beings which are, in the normal course of development, subsumed into one human being. The understandable response on the part of the soul theorists who have mistaken totipotency as empirically given is to posit *our* origins at some point after the possibility of division. What is typically argued, then, is that since monozygotic twinning, too, results from the division of the developing single fertilized egg, it would be problematic to claim that these unicellular pre-twinning entities were human beings since they have to cease to be such if twinning didn’t occur and the cells were integrated into one human being that persisted late into the pregnancy. Monozygotic twinning, however, does not entail that *any* early cell can be removed and develop as though it were a fertilized egg; rather, on occasion, a single fertilized egg divides naturally into two or more beings. There are no totipotency-like problems here, for the multicellular embryo is not *necessarily* potentially several human beings. What the lack of

necessity allows for, then, is that in the case of monozygotic twinning, two forms are infused by God into the matter of the egg at fertilization and, at some point in the first two weeks or so of development, configure the matter in such a way as to cause the “single” entity to fission. This is consistent with Aquinas’ claim that the creation of human beings involves a supernatural intervention and with the actualizing capacity of the hylomorphic form - a capacity which is not a feature of the Cartesian account of the soul.

Further data on monozygotic twinning is also consistent with the hylomorphic conception of ensoulment at fertilization: in some cases of twinning, the fissioning of the original entity is incomplete, resulting in conjoined twins. These twins are always genetically identical, the result of a single fertilized egg which fails to divide properly. However, although conjoined twins share material dimensions, our intuitions tell us that they are not one human being (or person); it is absurd to consider surgical division of these twins the division of a single human (or person) into two. We therefore do not always consider material dimensions as sufficient for the “countability” of individuals, which is frequently an assumption underlying the problems posed by totipotency and twinning. It is erroneously assumed that material dimensions are sufficient for determining the number of individuals present so that what appears to be just one embryo indicates the presence of only one human being. That this need not be the case is clearest in the case of the dicephalus, an extreme version of conjoined twins that share all of their organs beneath the cerebrum (upper brain).²¹ On any plausible account of biological individuation, this is one organism. But the two cerebrums make possible two distinct streams of consciousness which lead us to say that there are two persons (or human beings.) Since this is a case of two persons where there appears to be just one organism, it makes it much more plausible to believe that two

persons (or two human beings) can share the material dimensions of a pre-embryo. This renders plausible a soul theorist's claim that both twin human persons, and thus both souls, are present from fertilization in the same cell(s) prior to the fission which takes place with monozygotic twinning.

So we see that the phenomena of natural and artificially induced twinning does not render ensoulment at fertilization implausible. If the impetus for recent arguments on our post-twinning origins are the alleged problems of totipotency and twinning, a review of the biological data may, in turn, serve to substantiate arguments for the infusion of a rational soul at fertilization.

IV. Metaphysical Constraints on the Abortion Debate

Even if Conee were forced to admit that certain metaphysical views favored early existence more than others, he wouldn't grant any *moral* significance to this. Conee considers the possibility that adding more metaphysical assumptions to a Nonreductionist account of the self will provide more support for a particular moral conclusion. What Conee then does is suppose that we are souls (or ensouled?), begin at conception, and are rational and sentient from the first day that we exist. Despite granting such assumptions for the sake of argument, Conee concludes that this will fail to make a moral difference. He even suggests "that this attempt fails in ways that look ineliminable."²² We disagree.

Conee claims that even if we assume that the fetus has the added capabilities of sentience and rationality, this leaves unanswered the morally vital question: "What does the abortion of a fetus do to the soul that is associated with it?" He considers two possibilities in which abortion would appear to do no harm to us if we were souls and one account in which it would. He writes that "the present soul view in conjunction with the empirical facts tells us nothing about the fate

of a soul in abortion...Perhaps abortion would free the soul to lead a perfectly good existence, unencumbered by fleshy constraints, or perhaps abortion would just delay when a particular soul gains a human life, or perhaps the soul would be damaged or destroyed in a fetal abortion..."²³ Conee concludes that in the absence of such additional information, reasonable beliefs about abortion are not constrained.

Perhaps Conee is right to claim that the Nonreductionist soul view he considers tells us nothing about the fate of a soul in abortion. But this is because he is limiting his discussion to a more Platonic/Augustinian/Cartesian view of the soul. If he had considered the metaphysics of the hylomorphic view, he couldn't have as easily reached the conclusion that the morality of abortion is untouched by metaphysical constraints. According to the hylomorphic view of Aquinas, we are a composite of form and matter. We would not be identical to a disembodied form. No one can become identical to a part of themselves – at least without abandoning the classical logic of identity. Aquinas writes in his commentary on 1 Corinthians "Anima mea non est ego" (My soul is not I.)²⁴ He continues "and if only souls are saved, I am not saved, nor is any man."²⁵ Peter Geach elaborates upon this aspect of hylomorphism:

Aquinas was convinced that there are disembodied spirits but ones that cannot see or hear or feel pain or fear or anger; he allowed them no mental operations except those of thought and will...In our human life thinking and choosing are intricately bound up with a play of sensations and mental images and emotions; if after a lifetime of thinking and choosing in this human way there is left only a disembodied mind whose thought is wholly nonsensuous and whose rational choices are unaccompanied by any human feelings - can we still say there remains the same person? Surely not:

such a soul is not the person who died but a mere remnant of him.²⁶

On a hylomorphic view supported by Thomists, resurrection is necessary for *our* afterlife. And even if it weren't necessary but would still occur as promised, it would seem to offer a benefit that disembodied existence does not. Why would resurrection be promised if we could flourish without a body, unimpaired by our body as Conee writes? It would mean that the human being would not even experience any (nonsinful) pleasures of the senses. So dispatching the soul of a fetus would not be a welcome state for it would be neither the survival of the individual that was a fetus, or even that attractive an existence for a being that we are not identical to but intimately related to as a whole to a part. The fetus would never know any pleasures of the senses until the resurrection. More accurately, it would mean that the fetus is not the being in the afterlife prior to the resurrection. So what good does disembodied existence do an individual if it wouldn't be that disembodied existence? What good does it do me if a part of me survives my death and I don't exist again until the resurrection when my form and body are together again? Very little it would seem. The rewards would not be mine. So we have metaphysical reasons for thinking the embryo's death, *ceteris paribus*, is not good for the ensouled creature.

Readers shouldn't try to deny that this is a metaphysical position that constrains the abortion debate. It surely is a metaphysical constraint if Conee can count as metaphysical the possibility of great pain associated with the soul leaving the body due to an abortion. He writes "it must be admitted that to concede all of this would be to concede the existence of metaphysical doctrines that give some support to moral restrictions on abortion." He just discounts this by adding that "this view is not credible, and it does not resemble anything defended by philosophers."²⁷ But the metaphysical view sketched above in the previous passage about

disembodiment has been defended by very reputable philosophers. Detachment of one's soul is not an enviable state since one is not the soul or if one was, such an existence would be devoid of sensation, images, feelings etc. Our nature, as human beings, is to exist as a unity of soul and matter; it is the perfection of the soul to exist in union with matter and when our soul is in a disembodied state we are imperfect. So if the great pain that an aborted soul might experience can be considered a metaphysical thesis that constrains abortion, though an implausible one, the hylomorphic account of disembodiment can be considered a metaphysical thesis that constrains abortion, and a much more credible one.

And perhaps a reductio of Conee's view that abortion may not be bad for the ensouled being is that the argument would just as well apply to us adults.²⁸ If we have souls, and souls flourish when apart from the body, as Conee speculates, then killing readers wouldn't be bad for them. If that is not a reason in favor of killing them, or for being agnostic about the wrongness of killing them, then it isn't a good argument for believing soul theories don't constrain the killing of fetuses.

We can briefly touch on one of the other possibilities Conee mentions about souls and abortion – that it merely delays the acquisition of a living body. If we are a hylomorphic composite of soul and body, then abortion cannot be just a delay in getting a new body. We exist only if that body and soul are joined. We are not identical to a part, the soul, and merely related to a body, the latter being interchangeable. While our body could perhaps be gradually replaced as some personal identity theorists speculate, we couldn't get a new body through abortion and the "free floating" soul coming to inform something else.

Conee's argument that metaphysics doesn't constrain the abortion debate is further

weakened by other theological-metaphysical principles. While a soul doesn't necessarily commit one to a theological view of its origins, such beliefs have been historically paired. They certainly are in Augustine and Descartes, and the latter is the paradigmatic Nonreductionist. And Aquinas sees God's creation and infusion into matter of each soul as necessary to a coherent account ofhylomorphism. Now if we understand miracles as interventions in the lawful physical order, ensoulment is a miracle. So if God must miraculously intervene to ensoul a person, one would think he does so with a purpose in mind, if only due to the actuality of each soul upon creation: on a hylomorphic account, each created soul is fully present albeit encumbered by the potential matter with which it is united. To abort such a nascent life would seem to counter God's purpose.

If Conee or his supporters respond that God allows spontaneous abortions (miscarriages), our reply is that this is the result of the broken world in which form doesn't always master matter. We could reasonably say that is an act of God since He made and sustains the objects in the world and their causal powers. But that is quite a different matter from a human intentionally destroying life. We can't say that is God's will, reading it off the natural course of events. We can, of course, say He allows abortion as He allows other evils. (It would perhaps be helpful to distinguish between His original plan and then His conditional plan given the Fall.) But it would hardly be reasonable to say that it is God's will that people go around killing each other. An abortion, in the context of this article, is the *intentional* action of a woman acting freely. So the metaphysics of ensoulment does appear to constrain the abortion debate. This is overlooked by Conee, not so much because of his narrow focus on a Cartesian soul, but his neglect of Descartes' theistic commitments. And it is surely legitimate to judge those commitments to be metaphysical considerations.

V. Conclusion

A hylomorphic metaphysics is not only compatible with the findings of modern embryology, it may also provide the best explanation of phenomena which occur in embryology, and may therefore, contra Conee's claim, be not easily replaceable by alternative metaphysical theories. Aquinas' teleological metaphysics accounts for the configuration of the matter of the developing embryo into a more complex being even when there is not an explanation which makes reference to the causal powers of an organism for growth and unity of the pre-embryo (the cells of which do not yet compose a multi-cell organism.) Aquinas' hylomorphism is also consistent with the difference in potential between animal and human embryonic cells, for it may be that it is a unique capacity of our soul to impart individuality and kindhood to the matter which renders it incapable of being replaced by two new human beings as a result of division. And a hylomorphic account weakens Conee's attack on ensoulment theories being uncommitted to when we began to exist. We have shown that there is reason for believing that we were each once zygotes and no reason to deny this on the grounds that twinning might occur. We have also postulated that it is the form which brings about twinning, a position whose appeal is enhanced in the absence of any substantial body of empirical support for any other explanation of why monozygotic twinning occurs.²⁹ Finally, we believe that hylomorphism also undermines Conee's charge that ensoulment theories are agnostic regarding whether abortion harms the ensouled person.

What we have presented is an account of ensoulment at fertilization which differs significantly from the Cartesian account which Conee concentrates upon. He concludes from "the cases that (he) has examined that metaphysics doesn't so much as alter the balance of reasons"

and “that the metaphysical facts are epistemically independent of the conditions that determine how it is moral to treat pre-viable human organisms.”³⁰ Even if he is right to draw that inference from his study of Cartesianism (and a few other metaphysical approaches), our discussion of hylomorphism shows that he is wrong to conclude his paper with the claim that “Nothing indicates that this result does not generalize to all reasoning about the morality of abortion.”³¹

Notes

1. Conee, Earl. “Metaphysics and the Morality of Abortion.” 108. 432. *Mind*. October 1999. 619-645. The four approaches are that of Parfit, Marquis, Chisholm and Quinn. We ignore the latter two discussions.
2. Conee. *Ibid.* 620
3. Conee. *Ibid.* 620, 643.
4. Parfit, Derek. *Reasons and Persons*. (Oxford: Oxford University Press, 1984) Part III.
5. Parfit. *Ibid.* 321-22
6. Conee. “Metaphysics.” 623.
7. St. Thomas Aquinas, *Quaestiones Disputatae de Potentia Dei*, trans. English Dominican Fathers, (London: Burns, Oates and Washburn, 1923) Q. 3 a.10; see also St. Thomas Aquinas, *Summa Theologiae*, trans. English Dominican Fathers (New York: Benzinger Brothers, 1948) I q. 90 a.4.
8. *The Summa contra Gentiles of St. Thomas Aquinas*, trans. English Dominican Fathers, (London: Burns, Oates and Washburn, 1923) II 58.
9. A modern version of this theory can be found in Fr. Joseph Donceel’s “Immediate Animation

and Delayed Hominization”, 31 *Theological Studies* (1970) 76-105, and Norman Ford’s *When Did I Begin? Conception of the Human Individual in History, Philosophy and Science* (New York: Cambridge University Press, 1988) and the following discussion between philosophers: Jean Porter & Mark Johnson, “Delayed Hominization, Reflections on some Recent Catholic Claims for Delayed Hominization”, 56.4 *Theological Studies* (1995) 743; Thomas Shannon, “Delayed Hominization: A Response to Mark Johnson”, 57.4 *Theological Studies* (1996) 731; Mark Johnson, “Delayed Hominization: A rejoinder to Thomas Shannon”, 58.4 *Theological Studies* (1997) 708; Thomas Shannon, “A Further Postscript to Mark Johnson”, 58.4 *Theological Studies* (1997) 715

10. *Quaestiones Disputatae* I q. 3 a.2.

11. Ibid. I q. 3 a.2.

12 Ibid q. 3 a.2.

13. Ibid. I q. 3 a. 2: 9.

14. Ibid. I q. 3 a 2: 8; see also *Summa Theologiae* I q.76 a.2. And see Eleonore Stump’s “Non-Cartesian Dualism and Materialism without Reductionism” for a response to the charge that a disembodied hylomorphic soul is a category mistake. 12.4 *Faith and Philosophy*. October (1995) 514-517.

15. *Summa Theologiae* I q. 90 a. 3 p.2.

16. *Quaestiones Disputatae* I q. 3 a. 9.

17. NIH Statement Before the Senate Appropriations Subcommittee, April 26 2000:

<http://www.nih.gov/news/stemcell/State.htm>

18. See Richard McCormick, “Who or What is the Pre-embryo”, 1 *Kennedy Institute of Ethics Journal* (1991)1-15. This poses a problem to materialists as well, see Grobstein, Clifford.

Science and the Unborn: Choosing Human Futures (New York: Basic Books, 1988) 27; *Embryo Experimentation*, ed. Peter Singer, H. Kuhse, S. Buckel, K. Dawson and P. Kasimba (Cambridge: Cambridge University Press, 1990) 67; Olson, Eric T. *The Human Animal: Identity Without Psychology*. (Oxford: Oxford University Press, 1997) 90; Smith Barry and Brogaard, Berit. “16 Days”, 28 *Journal of Medicine and Philosophy*. (2003) 45-78.

19. Hall, J.L. et al. “Experimental Cloning of Human Polyploid Embryos Using an Artificial Zona Pellucida.” The American Fertility Society conjointly with the Canadian Fertility Society and Andrology Society, Program Supplement (1993) Abstracts of the Scientific Oral and Poster Sessions. Abstract 0-001, SI.

20. See for, example, Donceel, “Immediate Animation”

21. McMahan, Jefferson. *The Ethics of Killing: Problems at the Margins of Life*. (Oxford University Press, 2002) 35-39.

22. Conee. “Metaphysics.” 625.

23. Conee. Ibid. 626.

24. The relevant aspects of Aquinas’ view have been championed more recently by Geach in his essays “Immortality” and “What Do We Think With?” collected in his *God and Soul*. See also his *Three Philosophers*. (Oxford: Basil Blackwell, 1961) 98-100.

25. Geach. “Immortality”. 22.

26. Geach. *Ibid.* 22.

27. Conee. "Metaphysics." 626-7

28. This was pointed out to us by Jim Delaney.

29. See Sills, Scott et al. "Human Zona Pellucida Micromanipulation and monozygotic Twinning Frequency after IVF." 15.4 *Human Reproduction*. (2000) 890-895 where they write "While MZ twins are thought to result from the division of a single fertilized egg to form two genetically identical embryos, the precise mechanism(s) responsible for this division are not known."

30. Conee. "Metaphysics." 644-45

31. Conee. *Ibid.* 645