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ARTICLE

The afterlife of embryonic persons: what a strange place heaven must be

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Abstract Some commentators argue that conception constitutes the onset of human personhood in a metaphysical sense. This threshold is usually invoked as the basis both for protecting zygotes and embryos from exposure to risks of death in clinical research and fertility medicine and for objecting to abortion, but it also has consequences for certain religious perspectives, including Catholicism whose doctrines directly engage questions of personhood and its meanings. Since more human zygotes and embryos are lost than survive to birth, conferral of personhood on them would mean — for those believing in personal immortality — that these persons constitute the majority of people living immortally despite having had only the shortest of earthly lives. For those believing in resurrection, zygotes and embryos would also be restored to physical lives. These outcomes do not mean that conception cannot function as a metaphysical threshold of personhood, but this interpretation carries costs that others do not. For example, treating conception as a moral threshold of respect for human life in general, rather than as a metaphysical threshold of personhood, would obviate the prospect of the afterlife being populated in the main by persons who have never lived more than a few hours or days.

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Introduction

Some philosophers treat conception as the threshold of personhood, as philosopher John Finnis does, by attributing the capacity to live the life of a human being to all human organisms after conception: 'Every living human being has this radical capacity for participating in the manner of a

person — intelligently and freely — in human goods. That is, every living being which results from human conception and has the epigenetic primordia (which hyaditiform moles and, even more obviously, human sperm and ova lack) of a human body normal enough to be the bodily basis of some intellectual act is truly a human being, a human person' (Finnis, 2000, p. 31). Other commentators (Harris, 1995a,b)

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have criticized this view of personhood, but it persists in both philosophical and political quarters (Murphy, 2010). The use of conception as the threshold of personhood is also sometimes invoked in certain religious traditions as well. In its 1987 *Donum Vitae*, the Catholic Church says that after conception there comes 'a new life', 'the life of a new human being', this 'individual-man with his characteristic aspects already well determined', and 'the biological identity of a new human being', among other phrasings. The authors of *Donum Vitae* then ask 'how could a human individual not be a person?' (Congregation for the Doctrine of the Faith, 1987, section I.1).

Invoking personhood this way does not mean that the Catholic Church has formally declared conception to be the threshold of personhood, as will be discussed, but this approach to personhood is well worth exploring for its meaning for the ethics of assisted reproductive treatment, embryo research and abortion. This threshold also has, however, implications that might give some of its theological advocates pause. Among other things, if conception functions as the threshold of personhood, all who come to exist that way would presumably share the same post-life prospects. The prospect of an afterlife is assumed in many religions for all persons who achieve adulthood and even for those who die young, but if conception amounts to the threshold of personhood, the prospect of an afterlife would presumptively extend to all who cross that threshold. Because significant embryo loss occurs in human beings, the conception threshold of personhood would mean that human embryos constitute the front ranks of candidates for the afterlife, as against persons who are actually born. By itself, this outcome does not falsify the conception threshold of personhood, but other conceptions of personhood do not have to account for the prospect in which zygotes and embryos would be entitled to resurrected, immortal life. What follows here will show what the conception threshold of personhood would mean for certain religious views of the afterlife and how those outcomes are avoidable on other accounts of personhood.

Counting persons

Most human zygotes and early embryos do not survive more than a few hours or days because of genetic anomalies and developmental problems. Other embryos survive a while longer but, because of accidents of timing, fail to implant or are spontaneously aborted. All totalled, some researchers estimate that most — meaning more than 50% — in-vivo human conceptions are lost, which puts human beings who survive to birth in the minority of all conceived human beings (Benagiano et al., 2010). Research about the scale of embryo loss has occurred mostly within the past few decades, but it would be reasonable to assume that a high degree of embryo loss has always been the species-typical way by which human beings have succeeded in having children. In addition to the embryo loss that occurs during in-vivo conception, considerable embryo loss occurs in the course of IVF and other assisted reproductive treatments because of genetic and developmental difficulties, failures in implantation, spontaneous abortion and the intentional disposal of unwanted frozen embryos (No author, 1996). If the embrace of the afterlife extends to any conceived person, all these lost zygotes and embryos have to be included in that reckoning.

The US Census Bureau (2012) estimates the total population as exceeding 7 billion, an enormous number in its own right, but it is dwarfed by the number of people who have ever lived. In 1995, the Population Reference Bureau estimated that 106,456,367,669 human beings have ever been born, although because of the difficulties involved, its authors call that number a 'guesstimate' (Haub, 1995). These numbers do not, however, include persons who were lost as embryos. According to existing estimates of embryo loss, the 106 billion people who have ever lived would represent less than half the number of persons ever conceived. For the sake of the discussion, let us say that that number represents 49% of human conceptions. If embryo loss has occurred at the rate of 51% across the history of human beings, the conception threshold of personhood would mean that another 115 billion people would have come into existence but not survived beyond a few days, making the total number of people who have ever existed as of 1995 in excess of 221 billion. Millions more people who died in the very earliest stages of life and who survived to birth would have, of course, come along since 1995.

Invoking conception as the onset of personhood contexts seems to require the conclusion that the majority of persons who have ever lived have died within hours or days of coming into existence. In certain religious contexts, invoking conception as the threshold of personhood seems to mean that those persons also constitute the majority of people moving into the afterlife.

After people die

According to some religions, people are immortal from the point of their creation onward in the sense that their immaterial souls never die. Thomas Aquinas (1975b, section 82, pp. 308—311) made a theological case for immortality on behalf of the Catholic Church. For example, if embryos are, in fact, human persons from the point of conception, this deathless fate would seem to belong to them as well.

According to Catholic teachings, heaven, a transient purgatorial cleansing, or hell are in store for all persons, depending on their sacramental relationship with God. But what outcomes could be in store for zygotic or embryonic human persons who lack the capacity to enter into sacramental relationships? Do the same prospects in the afterlife exist for these persons just as they exist for an adult who dies? Over the centuries, Catholic theologians have debated the fate of infants who die unbaptized (Hart, 2000). Commentators such as Augustine argued that such infants would - and could only - go to hell because they lacked the benefit of sacraments necessary for heavenly salvation (International Theological Commission, 2007, section 16). Other theologians declined to accept that outcome in light of their understanding of God's nature and revelation regarding salvation, and some advanced the idea of limbo, a border place between heaven and hell in which - it was postulated — unbaptized infants would enjoy the happiness of the natural order of human life but not the happiness available to a human being in the supernatural order. Limbo

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was said to encompass 'the souls of infants who die subject to original sin and without baptism, and who, therefore, neither merit the beatific vision, nor yet are subjected to any punishment, because they are not guilty of any personal sin' (International Theological Commission, 2007, introduction). Some commentators saw limbo, therefore, as a non-supernatural paradise that protected the link between Christianity and heaven but without condemning too harshly those who stood outside Christian sacraments for no failing of their own (Hardon, 1981, pp. 510–511). On this account, one might make the case that unbaptized zygotic and embryonic persons would survive eternally in limbo.

While the idea of limbo was defended by various theologians, the Catholic Church never adopted the doctrine as a formal teaching. In 2007, that Church set forth a new account of what might happen in the afterlife to unbaptized infants who lack any kind of sacramental relationship with God. The centrepiece of that account is the position that:

there are theological and liturgical reasons to hope that infants who die without baptism may be saved and brought into eternal happiness, even if there is not an explicit teaching on this question found in Revelation. However, none of the considerations proposed in this text to motivate a new approach to the question may be used to negate the necessity of baptism, nor to delay the conferral of the sacrament. Rather, there are reasons to hope that God will save these infants precisely because it was not possible to do for them that what would have been most desirable — to baptize them in the faith of the Church and incorporate them visibly into the Body of Christ (International Theological Commission, 2007, introduction; emphasis added).

In this way, the Commission defends the proposition that unbaptized infants might be taken into heaven even if they have never benefited from the sacraments.

The Commission undertakes this discussion without defining infants in any way except to contrast them with adults who can exercise powers of reason (International Theological Commission, 2007, section 81). Yet the Commission's analysis should presumably apply to any conceived person, and its own discussions shows as much. Referring to the rise in the number of unbaptized infants, the Commission says that 'In these times, the number of infants who die unbaptized is growing greatly. This is partly because of parents, influenced by cultural relativism and religious pluralism, who are non-practising, but it is also partly a consequence of in-vitro fertilization and abortion' (International Theological Commission, 2007, section 2). The Commission here treats IVF embryos as among the unbaptized, namely as human persons eligible for baptism (Hart, 2000). Against this background, it is therefore difficult to see how the rationale that opens heaven to unbaptized infants would not also apply to any conceived person, regardless of the state of development and regardless of whether conceived in vitro or in vivo. Embryos would, of course, be no more capable of incurring any personal sin than newborns, and for that reason the stance of hoping for their salvation is plausible despite their standing outside the circle of the baptized.

One way to avoid having an afterlife populated primarily by persons who knew only zygotic or embryonic

life is to argue that the sheer scale of embryo loss means that conception cannot be the threshold of human person-hood. Benagiano et al. (2011) address this viewpoint, but they are unimpressed with the scale of embryonic mortality. They point out that fatality is necessarily part of what it means to be human. If the facts of embryo loss are correct, it may seem odd that most people die just hours and days into their lives, but as these commentators correctly note there is nothing about this view that means those early human organisms cannot be persons since nothing about the status of personhood shields anyone from death.

The Catholic Church has not formally declared the personhood of zygotes and embryos as a matter of formal religious teaching (Congregation for the Doctrine of the Faith, 1987, section I.1). The consequences that have been sketched above would, however, apply to any religious views that do treat conception as the threshold of personhood. If we take the rhetorical gestures (quoted in the first paragraph of this article) that this church makes toward the personhood of these human organisms, it makes sense to think through the consequences of invoking personhood at conception for the afterlife.

An aside on bodily resurrection

Not only do some religions such as Catholicism maintain the immortality of persons, they maintain that people in the afterlife will exist bodily, being rejoined in body to their immaterial souls at some point. For example, Aguinas (1975b, section 79, pp. 297-300) defended the prospect of bodily resurrection and also speculated about the age of the body in the afterlife, and he concluded: 'But all must rise at the age of Christ, which is that of youth, by reason of the perfection of nature which is found in that age alone. For the age of boyhood has not yet achieved the perfection of nature through increase; and by decrease old age has already withdrawn from that perfection' (Aguinas, 1975b, section 88, p. 329). On this account, human bodies will be restored at a point at which they are neither still maturing nor starting to decline. In the afterlife, people who died in their eighties or nineties would presumably have the clock set back to whatever constitutes the exact midpoint between the 'increase' and 'decrease' of age. People who die very young would presumably have the clock set forward to that midpoint. For people who never survived beyond the zygotic or embryonic state, resurrection would entail not a restoration of their biological maturity but a conferral of a biological maturity they never

Some philosophical schools of thought maintain that human beings are socially constituted in their personhood, namely that human personhood consists not only in bodies but in social experiences: human persons are not independent givens but are only ever socially constituted (Rasmussen, 2008). If we are persons *only* in that way, zygotic and embryonic persons would necessarily lack that fundamental feature of personhood as they enter the afterlife; they would be non-individuated by social experiences. In thinking through the nature of the afterlife, one would also have to ask how this component of human individuation could be accounted for, if at all.

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The formidable amount of effort required to restore old bodies to their age of perfection and to advance immature bodies to their age of perfection - with whatever individuated traits they may have — does not throw the possibility of bodily resurrection into unrecoverable doubt. If one is willing to accept a religious view that immaterial souls can survive bodily death, that bodies can be resurrected and that re-embodied human beings live eternally, one is already conceding unimaginable divine power. After concessions like these, there is no reason to think God could not confer bodily maturity or individuation on a person who was never anything more than a single cell or on an embryo which was never more than a cluster of cells. The relevant point here is not the specific bodily form which human zygotes and embryos might assume in the afterlife but that bodily resurrection for these early forms of human life would be entailed for religious views that treat conception as the threshold of personhood.

Personhood at conception: what kind of threshold?

Various commentators have argued that the personhood of an organism depends on properties other than conception or even biological humanness, such having as a minimal grade of sentience (Borlotti and Harris, 2005). Working within religious traditions, some commentators have argued that ensoulment may be necessary to personhood, with some commentators saying that ensoulment cannot take place until at least some biological maturation occurs beyond the zygotic phase (Ford, 1988, pp. 40, 60-61). For example, Aquinas held that ensoulment of the human embryo took place after a period of embryonic development (Aquinas, 1975a, section 89.11, p. 304; Ford, 1988, pp. xiv-xv). This kind of account, known as mediate ensoulment or mediate hominization, as against immediate ensoulment, offers a developmental space in which human organisms may not yet be human persons properly speaking.

As mentioned, the Vatican specifies in its 1987 *Donum Vitae* that it has not formally declared the personhood of zygotes in a philosophical way. Despite that demurral, the Congregation declares nevertheless that the humanity in question should be protected from death so far as possible. The difference here is that — despite some rhetorical gestures in the direction of personhood — the Vatican looks to conception not as a threshold of metaphysical personhood but as a moral threshold that triggers certain kinds of respect even if no persons properly speaking are involved. The Church returned to this kind of moral interpretation of conception in *Dignitas Personae* (2008), when its Congregation for the Doctrine of the Faith declared that:

It is appropriate to recall the fundamental ethical criterion expressed in the Instruction Donum Vitae in order to evaluate all moral questions which relate to procedures involving the human embryo: 'Thus the fruit of human generation, from the first moment of its existence, that is to say, from the moment the zygote has 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' (Congregation for the Doctrine of the Faith, 2008; emphasis in the original).

Here again, the Congregation declares that respect and treatment as a person is owed from the moment of conception, which is not the same as saying that conception amounts to the metaphysical creation of a person properly speaking or that respect is owed on the basis of personhood alone. This commitment to respect toward early stages of human life grows out of the status of zygotes and fetuses in the divinely ordained generation of human life and the meaning of marriage (Congregation for the Doctrine of the Faith, 1987, sections I.4 and I.5). In this sense, the respect owed human zygotes, embryos and fetuses is owed independently of personhood properly speaking.

If zygotes and very early embryos are not persons, theologians do not have to puzzle about the fate of those persons who are entrained by their genetics and developmental difficulties to almost immediate death. On this interpretation, the death of zygotes and early embryos would be unfortunate, but not the mournful event that is the death of persons and not either something of immortal consequence. However, the question of an afterlife does apply after any point at which theologians or other commentators interpret embryos as human persons. However many of them there might be, what fate awaits them?

Conclusions

A very strange heaven is part of the cost of treating conception as a threshold of personhood, for those who couple that idea with the idea of immortal, resurrected life. By treating conception as the onset of personhood, the afterlife would be mostly peopled by human beings who in their earthly histories never said a word, never took a step and never had anything but a biotic relationship with another human being, let alone known God or religion in any recognizable way. This account of persons and their afterlives is intelligible as an eschatology, namely as an account of final events in human lives and the world, but it means that the majority of people who enter the afterlife would do so as people who have lived for only a very short time.

By contrast, if the threshold of personhood comes at some point after conception, zygotes and embryos that die early on would presumably not be presumed to have an afterlife. Nothing about this latter approach to personhood is incompatible with the argument — for those who want to make it — that moral respect is owed to human zygotes and embryos because of their status in the generation of human beings. Nothing about this alternate interpretation of personhood would mean either that theologians could not hope for heaven on behalf of human persons who die very young. Alternate conceptions of personhood do mean, however, that questions about the entitlement of zygotes and embryos to resurrection and immortality would be moot, and in that regard they are more parsimonious in accounting for the nature and fate human beings.

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