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When Do Persons Begin and End?

At the end of last summer, the New York Times reported that scientists had decoded the genome of the chimpanzee. The Times termed this achievement “a major step toward defining what makes people human.”¹ Defining what makes people human organisms is a great project for biologists. Philosophers, however, engage in a project in the other direction. Instead of asking what makes people human organisms, philosophers ask: What makes human organisms people?

This philosophical project is especially significant today. In our debates about abortion, about medical research that destroys embryos, and about the treatment of those in persistent vegetative states, we are not concerned just about human organisms qua organisms. If we were, we should not make much of a distinction between human beings and the other Great Apes.

In biological terms, the differences among the Great Apes—chimpanzees, bonobos, gorillas, orangutans, and human animals—are miniscule. Human animals and chimpanzees are 98.6% alike in their genetic material.² The genetic difference between human beings and chimpanzees is “about 10 times *less* than the difference between mice

¹ The New York *Times*, “In Chimpanzee’s DNA, Signs of Y Chromosome’s Evolution,” September 1, 2005. (<http://www.nytimes.com/2005/09/01>)

² Daniel John Povinelli, “Behind the Ape’s Appearance: Escaping Anthropocentrism in the Study of other Minds,” *Daedalus*, Winter 2004: 29-41.

and rats.”³ So, it is worth asking, what distinguishes us human persons from the other Great Apes, with which we are biologically continuous?⁴

Of course, the quick answer is that what distinguishes us is the other 1.4% of genetic material that we do not share with chimpanzees. But that’s not the question that I’m getting at. I’m not asking a biological question, such as what effects can a slight difference in nucleotide sequence have on protein production? The question that I am asking is this: What makes human animals people—people who worry about fertilized eggs and frozen embryos and those in persistent vegetative states. Chimpanzees have no such worries. What makes human animals people presumably has a biological base, but that’s not my concern. Rather, my concern lies elsewhere: In virtue of what is an entity a human person?

Would-be answers to this question often lie unexamined and unacknowledged in the background of the biomedical debates that I just mentioned. The biomedical debates presume answers to the questions of when a person comes into existence and when a person goes out of existence. And answers to those questions depend, in turn, on what kind of beings we human persons most fundamentally are.

Some people think that biology tells the whole story about the kind of beings that we are. I want to sketch an alternative to this biological view—an alternative that agrees with the biological view that human persons are material beings and that human persons

³ *The Chronicle of Higher Education*, “Scientists Decipher Genetic Sequence of Chimpanzee, Closest Relative of Human Beings,” September 1, 2005. <http://chronicle.com/cgi-bin/>. My emphasis.

⁴ I use the term ‘human being’ for human persons rather than for human organisms. The term ‘human being’ is used both ways in the literature. E.g., John Perry takes ‘human being’ to be a “purely biological notion,” while Mark Johnston takes ‘human organism’ to name a purely biological kind and ‘human being’ to name a partly psychological kind. See John Perry, “The Importance of Being Identical,” in *The Identities of Persons*, Amelie Oksenberg Rorty, ed. (Berkeley: University of California Press, 1976): 67-90; here, p. 70; and Mark Johnston, “Human Beings,” *Journal of Philosophy* 84 (1987): 59-83, here p. 64.

have animal natures, but further holds that our natures are not exhausted by their biological aspects. If I am right, then despite the thinness of the biological line between human organisms and other Great Apes, there is a significant ontological difference—a difference in the kind of beings that we most fundamentally are.

What is a Human Person?

What I mean will become apparent if we think of our relation to our bodies, to those human organisms. People who hold that we most fundamentally are animals think that the relation between human persons and human bodies is simply identity. One contrasting position is Dualism. Dualists like Descartes hold that a human person consists of two separable entities: a body and an immaterial mind. My view—I call it ‘the Constitution View’—differs from both of these. According to the Constitution View, we are neither identical to our bodies, nor are we a combination of two separate entities—a body and an immaterial mind or soul. Rather, we are constituted by our bodies—much as a statue is constituted by a piece of marble. It would be wrong to take Michelangelo’s *David* to be identical to a piece of marble. For one thing, the piece of marble existed before *David* did. Just as statues are neither identical to, nor something in addition to, their constituting pieces of marble, so too are we neither identical to nor something in addition to, our bodies. We are constituted by our bodies.

But that raises a question: Exactly, what *is* the relationship of constitution—a relation that is neither one of identity nor of separate existence? The answer is a long, complicated story that I cannot give here—except to say what distinguishes persons from the organisms that constitute us.⁵ Persons and organisms have different identity conditions. Biological continuity is necessary and sufficient for the identity of an

⁵ See my *Persons and Bodies: A Constitution View* (Cambridge: Cambridge University Press 2000).

organism. A first-person perspective is necessary and sufficient for the identity of a person. Persons have first-person perspectives essentially: What makes a person the kind of being that she is is that she is capable of having an inner life. We mature persons can think of ourselves from the first-personal point of view; we can reflect on our thoughts—our motives, our desires, our beliefs, our actions; we can exercise self-control. Anything with such abilities has a robust first-person perspective and is a person.

To say that having a first-person perspective is essential to persons is to say that a person could not exist without having a first-person perspective. By contrast, being a wife is not essential to wives. A wife can cease to be a wife without ceasing to exist; it happens all the time. But being a person is different: If a person ceased to be a person, the entity that she was would go out of existence altogether.⁶

So, what distinguishes a person from a human organism is a special capacity that an organism can live without, but that a person cannot live without: a first-person perspective. In short, what is essential to a human animal is its biological functioning; what is essential to a human person is her first-person perspective. So, let's turn to the question:

When Does a Human Person Come Into Existence?

A human person comes into existence when a human organism acquires what I'll call a 'rudimentary first-person perspective'. A rudimentary first-person perspective contrasts with what I'll call a 'robust first-person perspective.' A robust first-person

⁶ I'll continue to put aside the possibility of life after death here, and assume that persons go out of existence when it is no longer physically possible for them to think first-person thoughts—even if, by a miracle, their first-person perspectives could continue.

perspective makes possible an inner life, a life of thoughts that one realizes are her own, a life in which she can think about the past and the future and the ways that things might have been (but aren't.) Although I cannot discuss it here, I believe that a robust first-person perspective is closely related to the acquisition of language. A robust first-person perspective makes possible moral agency and rational agency. We not only act on our desires (as, presumably, dogs do); we realize what desires we have and can evaluate them and sometime try to change them. A robust first-person perspective gives us the ability to assess our goals—even biologically-endowed goals like survival and reproduction. And on and on.

Although normal human infants lack *robust* first-person perspectives, they are nevertheless persons because they have *rudimentary* first-person perspectives. The brain of a human organism will be fairly well-developed before it can support a rudimentary first-person perspective. So, although no one knows whether an eight-month fetus constitutes a person, we may be sure that an embryo does not.

What is a rudimentary first-person perspective? There are three conditions for having a rudimentary first-person perspective. A being has a rudimentary first-person perspective if and only if (i) she is a conscious, sentient being, and (ii) she has a capacity to imitate; (iii) her behavior is not fully explainable except by the attribution of beliefs, desires and intentions.

Let me explain: The requirement of consciousness or sentience rules out security cameras as having rudimentary first-person perspectives, even though a security camera may be said to have a perspective on, say, a parking lot. A sentient being is able to feel pain. It is noteworthy that the *Journal of the American Medical Association* last August published an article saying that fetuses probably cannot feel pain before the end of six

months of gestation: “[N]erve connections in the brain are unlikely to have developed enough for the fetus to feel pain before 29 weeks.” Since sentience is a necessary condition of a rudimentary first-person perspective, a fetus that lacks the structural development to feel pain clearly does not constitute a person.⁷ The second condition for having a rudimentary first-person perspective is a capacity to imitate. A capacity to imitate involves differentiation of self and other.⁸ Finally, the third condition for having a rudimentary first-person perspective is to behave in ways explainable only by attribution of desires, beliefs, and intentions. For one’s behavior to be explainable only by attribution of desires, beliefs, and intentions, one must be able to respond appropriately to changing situations.⁹ Such a being is an intentional agent. So, a being with a rudimentary first-person perspective is a sentient being, an imitator, and an intentional agent.¹⁰

These properties that make up a rudimentary first-person perspective are not just a random collection; they are ones we recognize as personal. Insofar as we think of nonhuman animals as person-like, it is precisely because they seem to have one or more of these features. The properties that a human embryo has—say, having a heart or limbs

⁷ The New York *Times*, “Study Finds 29-Week Fetuses Probably Feel No Pain and Need no Abortion Anesthesia,” August 24, 2005. (<http://www.nytimes.com/2005/08/24>) Right away, an anti-abortion group charged some of the researchers of bias because of their ties to institutions that perform or support abortion services. The editor in chief of JAMA replied that the paper “provides the best scientific evidence to date.” Moreover, it is not routine for authors to disclose the nature of their clinical practice. *The Chronicle of Higher Education*, “2 Researchers Involved in Fetal-Pain Study are Accused of Conflict for Not Disclosing Abortion-Rights Work,” August 26, 2005. (<http://chronicle.com/>)

⁸ The capacity to imitate has been linked by developmental psychologists to “some form of self-recognition” that does not require a self-concept. Michael Lewis, “Myself and Me,” in Sue Taylor Parker, Robert W. Mitchell, and Maria L. Boccia, eds., *Self-Awareness in Animals and Humans*, (Cambridge: Cambridge University Press, 1994), 22.

⁹ Dr. Elise van de Putte of the University Medical Center of Utrecht has informed me that pediatricians take the slightest signs of communication as the *sine qua non* that an infant is a person. Such signs satisfy the criterion of intentionality.

¹⁰ Rudimentary first-person perspectives have what Robert A. Wilson calls “action-traction.” See his “Persons, Social Agency, and Constitution” in *Social Philosophy and Policy* 22 (2005): 49-69.

—are not particularly associated with persons, or even with human animals. Even invertebrates have hearts. There is a difference between those properties in virtue of which beings are person-like (the properties of rudimentary first-person perspectives) and the broader class of biological properties shared by members of many taxa. The properties that make up a rudimentary first-person perspective are themselves specifically personal (and not merely biological) properties.

We know that human infants have rudimentary first-person perspectives. Human infants are clearly sentient. There is abundant research to show that they are imitators from birth.¹¹ For example, two well-known psychologists, Alison Gopnik and Andrew Meltzoff tested 40 newborns as young as 42 minutes old. The newborns imitated gestures of mouth opening and tongue protrusion.¹² Imitation is grounded in bodies: newborn imitators must connect the internal feeling of their own bodies (kinesthesia) with the external things that they see (and later hear).¹³ (Aristotle went so far in his *Poetics* as to say that imitation was a distinguishing mark of human beings.) And finally, as another well-known psychologist, Ulric Neisser, put it, “Babies are intentional agents almost from birth.”¹⁴ So human infants meet the conditions for having rudimentary first-person perspectives. Indeed, developmental psychologists agree that from birth, a first-person perspective is underway.¹⁵

¹¹ I do not expect the developmental psychologists to share my metaphysical view of constitution; I look to their work only to show at what stages during development certain features appear.

¹² The average age was 32 hours. Alison Gopnik and Andrew N. Meltzoff, “Minds, Bodies and Persons: Young Children’s Understanding of the Self and Others as Reflected in Imitation and Theory-of-Mind Research” in Sue Taylor Parker, Robert W. Mitchell, and Marria L. Boccia, eds., *Self-Awareness in Animals and Humans* (Cambridge: Cambridge University Press, 1994), 171.

¹³ Alison Gopnik, Andrew Meltzoff, and Patricia Kuhl, eds., *How Babies Think: The Science of Childhood* (London: Weidenfeld & Nicholson, 1999): 30.

¹⁴ See Ulric Neisser, “Criteria for an Ecological Self,” in Philippe Rochat, ed., *The Self in Infancy: Theory and Research* (Amsterdam: North-Holland, Elsevier, 1995), 23.

¹⁵ See, for example, Jerome Kagan, *Unstable Ideas* (Cambridge: Harvard University Press, 1989).

Ah, you may say. Not only do human infants have rudimentary first-person perspectives (and hence are persons), but also do other nonhuman mammals. Observation of household pets like dogs and cats suggests that they have rudimentary first-person perspectives. Nonhuman animals are sentient—they feel pain, for example. They are imitators; even ducks, who imprint on their mothers, engage in imitative behavior. Although there is some controversy regarding the research on animal intentionality,¹⁶ higher nonhuman mammals appear to be intentional agents. We have apparently successful intentional explanations of animal behavior—e.g., “Fido is digging over there because he saw you bury the bone there and he wants it”—and there are no adequate nonintentional accounts of Fido’s behavior. Chimpanzees, who can be trained to recognize themselves in mirrors, even more obviously have rudimentary first-person perspectives.¹⁷

So, human infants and some nonhuman mammals have rudimentary first-person perspectives, but I hold that human infants are persons and nonhuman mammals are not

¹⁶ See, for example, Cecilia Heyes and Anthony Dickinson, “The Intentionality of Animal Action,” in Martin Davies and Glyn W. Humphreys, eds., *Consciousness: Psychological and Philosophical Essays*, (Oxford: Blackwell, 1993): 105-120.

¹⁷ See Gordon Gallup, Jr., “Self-Recognition in Primates: A Comparative Approach to Bidirectional Properties of Consciousness,” *American Psychologist* 32 (1977): 329-38. Discussion of the mirror tests has become so widespread that the phenomenon of recognizing oneself in a mirror is routinely referred to simply by the initials MSR (‘mirror self-recognition’) in psychological literature. Although more evidence is needed about the cognitive development of chimpanzees, there is no clear evidence that chimpanzees have the capacity to construct higher-order representations that would allow conceptions of themselves as having pasts and futures. Daniel J. Povinelli, “The Unduplicated Self,” in Philippe Rochat, ed., *The Self in Infancy: Theory and Research* (Amsterdam: North-Holland, Elsevier, 1995), 186. So it looks as if the scope of the self-concept that Gallup postulated to explain mirror behavior is really quite limited, contrary to Gallup’s speculation.

persons (or probably not).^{18,19} What's going on, you may ask. If having a first-person perspective is what distinguishes a person from everything else, and if a human infant and a chimpanzee both have rudimentary first-person perspectives, how can a human infant be a person and a chimpanzee not be a person?

The answer is that a human infant's rudimentary first-person perspective is developmentally a *preliminary* to having a robust first-person perspective, but a chimpanzee's rudimentary first-person perspective is not preliminary to anything. By saying this, I mean to pick out those rudimentary first-person perspectives that developmentally ground or underpin robust first-person perspectives. Unlike chimpanzees, human animals are of a kind that normally develops robust first-person perspectives.²⁰

A being with a rudimentary first-person perspective is a person only if the being is of a kind that normally develops robust first-person perspectives. This is not to say that a human person will develop a robust first-person perspective: perhaps some

¹⁸ Indeed, a further similarity between human infants and higher nonhuman mammals is that they are social creatures. There seems to be general agreement among psychologists that developmentally there is a symmetry of self and other. Philippe Rochat flatly asserts that the developmental origins of self-awareness are primarily social. Philippe Rochat, "Early Objectification of the Self," in Philippe Rochat, ed., *The Self in Infancy: Theory and Research* (Amsterdam: North-Holland, Elsevier, 1995), 54.

¹⁹ According to Jerome Kagan, it is "not at all certain that [human] 12-month-olds, who experience sensations, possess any concepts about their person, and it is dubious that they are consciously aware of their intentions, feelings, appearance or actions." Jerome Kagan, "Is There a Self in Infancy?" in Michel Ferrari and Robert J. Sternberg, eds., *Self-Awareness: Its Nature and Development* (New York: The Guilford Press, 1998), 138. Daniel J. Povinelli and Christopher G. Prince report that "there is little evidence that chimpanzees understand anything at all about mental states." Daniel J. Povinelli and Christopher G. Prince, "When Self Met Other" in Michel Ferrari and Robert J. Sternberg, eds., *Self-Awareness: Its Nature and Development* (New York: The Guilford Press, 1998), 88.

²⁰ Notice that I am not defining a rudimentary first-person perspective in terms of any kind of potential. Rather, a rudimentary first-person perspective is a property that a creature actually has, and if that creature is of a kind that normally develops a robust first-person perspective, then a new being—a person—comes into existence. The person has a first-person perspective (robust or rudimentary) essentially. Only persons have robust first-person perspectives; chimpanzees may have rudimentary first-person perspectives.

severely retarded or autistic individuals, have only rudimentary first-person perspectives. However, they are still persons, albeit very impaired, because they have rudimentary first-person perspectives and are of a kind—human animal—that develops robust first-person perspectives. We can capture this idea by the following thesis:²¹

(HP) A human animal constitutes a person at time t if and only if it has a
Rudimentary or a Robust First-Person Perspective at t .²²

This thesis gives a necessary and sufficient condition for there to be a *human* person. There may be other kinds of persons: silicon-persons (constituted by aggregates of silicon items) or God (not constituted by anything). The thesis (HP) is silent about other kinds of persons.²³

So, a human person begins to exist when a human organism comes to have a rudimentary first-person perspective. We have no good reason to think that there is an exact moment when this happens. Indeed, nothing that we know of in the natural world clearly and unmistakably comes into existence at an instant. On my view, a human person comes into existence near birth: what is born is a person constituted by an organism.²⁴ Even though we cannot locate an exact moment when a person begins to

²¹ I am taking ‘ x constitutes a human person at t ’ as shorthand for ‘ x constitutes a person at t & x is a (nonderivative) human organism.’ This latter detail is a needed technicality since, on the Constitution View, *person* is a primary kind, and there may be nonhuman persons. ‘Human person’ refers to a person constituted by a human organism.

²² Since a (nonderivative) person is a person essentially, there would be no need for a temporal designation if I were directly characterizing persons. But here I am giving the conditions under which a human animal constitutes a person, and I need the ‘at t ’ because there are times at which a human animal does not constitute a person (e.g., when it is an embryo).

²³ In *Persons and Bodies*, I said that a person comes into being when a human organism develops a robust first-person perspective *or the structural capacity for one*. The effect of (HP) is to mark the onset of personhood to human animals with rudimentary first-person perspectives and not to consider an animal’s structural capacity.

²⁴ For consequences of this view for thinking about abortion, see my “When Does a Person Begin?” in *Social Philosophy and Policy* 22 (2005): 25-48. The main consequence is that any argument that relies on a premise that all fetuses are persons is unsound.

exist, there is no question about fertilized eggs or frozen embryos—or any organism without a brain: no such entity constitutes a person.

“Well,” you may say, “person or not, a frozen embryo or even a fertilized egg is still a human organism.” Is that really true? Let’s consider when a human organism begins to exist.

When Does a Human Organism Come Into Existence?

I take the question, “When does a human organism begin?” to be a biological question. This biological question stands in contrast to the philosophical question, “When does a human person begin?”²⁵ One frequently-heard answer to the biological question is that a human organism comes into existence at the time of fertilization of a human egg by a sperm. But beware: There is not an exact moment of fertilization. Fertilization itself is a process that lasts 20 or more hours.²⁶

However, the view that a human organism comes into existence at—or at the end of—fertilization is logically untenable, because a fertilized egg may split and produce twins. If it is physically possible for a fertilized egg to produce twins (whether it actually does so or not), a fertilized egg cannot be *identical* to a human organism. As long as it is possible to twin, an embryo is not *a human individual*, but a cell cluster.²⁷ An embryo is liable to twin until implantation in a uterus.²⁸ Before that time, a multi-celled embryo

²⁵ Biologists have the last word on the biological question, but not on the philosophical question. Empirical data are relevant to the philosophical question, without being conclusive.

²⁶ Norman M. Ford, *The Prenatal Person*, p. 55. Moreover, everything in the natural world comes into existence gradually: solar systems, cherry blossoms, jellyfish, tractors and other artifacts. I discuss this further in “Everyday Concepts as a Guide to Reality,” forthcoming in *The Monist*.

²⁷ G.E.M. Anscombe, “Were You a Zygote?” in A. Phillips Griffiths, ed., *Philosophy and Practice*, (Cambridge: Cambridge University Press, 1985), p. 111. .

²⁸ Recently (as a result of development of in vitro fertilization) the term ‘pre-embryo’ has been used to refer to a fertilized ovum and its descendant cell clusters before implantation in a uterus. *The American Heritage Dictionary*. On Oct. 29. 2005, the Arizona Court of Appeals ruled that a pre-embryo

cannot itself be an organism, or an individual of any sort.²⁹ This is so, because it is logically impossible for two organisms to be identical to one organism, and in the case of twinning, two human organisms develop from a single embryo.

Let me illustrate the point.³⁰ Suppose that an embryo (a cell cluster) divides and twins result. Call the embryo ‘A’, and one of the twins ‘B’ and the other twin ‘C’. Since both B and C stand in exactly the same relation to A, it would be arbitrary to suppose that A was identical to one but not to the other. However, if A were identical to both B and C, then—by the transitivity of identity—B and C would be identical to each other. But B is clearly not identical to C. Therefore, A (the original embryo) cannot be identical to B or C. A human organism cannot come into existence until there is no further possibility of twinning—a week or two after fertilization.³¹ A frozen embryo that is still capable of twinning is demonstrably *not* a human organism.³²

Interestingly, the teaching of the Roman Catholic Church is not otherwise. The Catholic Church is widely misunderstood to hold the view that “life begins at conception.” In fact, though, the Roman Catholic Church is officially agnostic on the ontological question of whether an embryo is a human organism or person, but takes the moral stand that, regardless, a fertilized egg must be respected and treated as a person. According to the Second Vatican Council, “Life once conceived must be protected with

was not a person under the wrongful-death statute. I’ll avoid the term ‘pre-embryo’ here.

²⁹ Anscombe, “Were You a Zygote?”, p. 112. See also Peter van Inwagen, *Material Beings* (Ithaca: Cornell University Press: 1990), Section 14. A single-celled zygote may be a short-lived organism, that goes out of existence when it first divides, but it is not a human organism.

³⁰ Four-dimensionalists handle the twin issue differently. According to them, twins may share a stage with a single embryo.

³¹ The Visible Embryo, a website sponsored by the medical community at the University of California Medical Center, gives a slightly different estimate of the time of implantation. See <http://www.visembryo.com/baby/links.html>.

³² There are a number of problems associated with twinning and the coming-into-being of an organism. See Rose Koch, “Conjoined Twins and the Biological Account of Personal Identity,” *The Monist*, forthcoming.

the utmost care; abortion and infanticide are abominable crimes.”³³ This teaching is explicitly independent of the question of the time of animation or the “infusion” of a spiritual soul.³⁴ That is, the teaching deems it irrelevant whether or not there is a human organism at stake. The teaching simply is a prohibition: “You shall not kill by abortion the fruit of the womb”³⁵—regardless of whether “the fruit of the womb” is a human organism or not. To quote again, “The Magisterium has not expressly committed itself to an affirmation of a philosophical nature [about the time that a person or a human organism comes into existence], but it constantly reaffirms the moral condemnation of any kind of procured abortion. This teaching has not been changed and is unchangeable.”³⁶

So, the Roman Catholic prohibition against abortion rests entirely on the presumed authority of the Church, and (contrary to popular understanding) not on any claims about the nature or status of the fetus.³⁷ [I was corrected on this point by John Finnis, a Vatican adviser who is a member of the Pontifical Academy Pro Vita and holds a chair at Notre Dame and is Professor of Law and Legal Philosophy at Oxford.] It is simply irrelevant

³³ “Instruction on Respect for Human Life in its Origin and on the Dignity of Procreation; Replies to Certain Questions of the Day,” given in Rome, at the Sacred Congregation for the Doctrine of the Faith, February 22, 1987, under the auspices of its Prefect, Joseph Cardinal Ratzinger, now Pope Benedict XVI. I am grateful to John Finnis for alerting me to this work and to the next one.

³⁴ E.g., “[T]he various opinions on the infusion of the spiritual soul did not introduce any doubt about the illicitness of abortion.” “Declaration on Procured Abortion,” given in Rome at the Sacred Congregation for the Doctrine of the Faith on November 18, 1974, under the auspices of its Prefect, Franciscus Cardinal Seper.

³⁵ “Declaration on Procured Abortion.”

³⁶ You may ask: If, as I have argued, a fertilized egg is not a human organism, and still less a person, then why should a fertilized egg be protected (especially at the expense of the life of a woman, who certifiably is a person with a human life)? The closest answer that I found is from the 1974 “Declaration on Procured Abortion,” which holds that the fertilized ovum “would never be made human if it were not human already.” But, in the absence of any claim that the thing that is human already is even a human organism, being “human already” is no warrant for protection. A human cell (from the inside of your cheek, say) is “human already”. But that is hardly reason for us to treat it with any special dignity. Quotation is from “Instruction on Respect for Human Life in its Origin and on the Dignity of Procreation.”

³⁷ “Declaration on Procured Abortion.”

to Catholic teaching whether an embryo before implantation is a human organism or not. The prohibition against abortion is pure decree that is not supported by any “affirmation of a philosophical nature.”

In any case, there is no new human organism until after the end of the process of implantation of a blastocyst (a ball of a few hundred cells) in the wall of the womb (between one and two weeks after fertilization). Even at implantation, an organism does not come into existence instantaneously. There is no sharp line demarcating the coming into existence of a new human organism. There is only a gradual process. But we can say this much: Soon after implantation (the primitive streak stage), the embryo is an individual, as opposed to a mass of cells.³⁸ Not before this point is there an individual human organism.

In making a case for cloning embryos for the purpose of biomedical research, Michael Gazzaniga, a neuroscientist who served on President Bush’s bioethics council, points out, “After natural sexual intercourse, an estimated 60 to 80 percent of all embryos generated through the union of egg and sperm spontaneously abort—many without our knowledge. So [he continues] if we use IVF [in vitro fertilization] to create embryos and then implant only a select few, aren’t we doing what nature does?”³⁹

³⁸This is a point that has been made by Roman Catholic writers. E.g., See Norman M. Ford, *When Did I Begin? Conception of the Human Individual in History, Philosophy and Science* (Cambridge: Cambridge University Press, 1988), 174-8. See also Anscombe, “Were You a Zygote?”

³⁹ Michael S. Gazzaniga, “The Thoughtful Distinction Between Embryo and Human,” *The Chronicle of Higher Education*, April 8, 2005, pp. B10-B12. Quotation is from p. B12. The fact that 60-80 percent of embryos produced by sexual intercourse spontaneously abort with no one’s knowing of their existence gives me reason to doubt that every fertilized egg is as precious as a person in the eyes of God.

To sum up the answer to the biological question about human embryos: Before implantation, there is no human organism, just a cluster of human cells. So, destruction of a pre-implantation embryo is not destruction of a human organism.⁴⁰

The main point, however, is that human organisms and human persons do not come into existence at the same time. On the Constitution View, human organisms come into existence months before human beings (i.e., persons) do. There may be arguments against aborting a twenty-week-old fetus, say, but if such arguments hope to be sound, they should not have as a premise the claim that the fetus is a person.

Just as persons come into existence some time after the organisms that constitute them do, we may ask a similar question about going out of existence: Do persons and the organisms that constitute them end at the same time? Before turning to this question, we need to consider life and death.

Life and Death

The usual philosophical approach is to ask what life is (or what death is), and then to ask what things have life. I do not think that this is a good approach. The word 'life' by itself is incomplete until we know what kind of thing that we are talking about. The life of x comprises all the events that x is a part of, and what kinds of events x can be a part of depends on what kind of entity x is. So, instead of asking what life in general is, I want to consider what a particular life (say, your life) is. What you are most fundamentally is a person. Your life is the career of a person, you. Your life includes

⁴⁰Gazzaniga, "The Thoughtful Distinction Between Embryo and Human." He says, "From my point of view, there is no conflict or weighing of goods between the embryo and stem-cell research. I assign no moral status to the 14-day-old embryo." B11.

what you do and what happens to you during the time that you exist: you fall off your bicycle, you go to school, you get a job, and so on.

Philosophers have generally thought of life in terms of biological life, where biological life is understood in terms of the integrated functioning of organs.⁴¹ But my use of the word ‘life’ for a personal life like yours or mine is not just stipulative or metaphorical. Although the word ‘life’ does have a biological use, as evidenced by debates about whether viruses are alive, it also has a nonbiological use, as evidenced by our talk of a person’s life as a diplomat. To see that ‘life’ should not be equated with ‘biological life’, consider that when people speak of a living God, they do not mean a living organism.⁴² We’d be taken aback to buy a new life of Lincoln and discover that it focused on the functioning of his organs. So, it is clear that the word ‘life’ is used both with and without biological implications.⁴³

Life is a property that different kinds of beings may have. The word ‘life’ may refer to a person’s life or to an organism’s life.⁴⁴ Since a human organism exists before it

⁴¹ Some philosophers have entertained a conception of life that is not an organic or biological at all. For example, in their influential article, “Eternity” (*Journal of Philosophy* 78 (1981): 429-458), Eleonore Stump and Norman Kretzmann say, that “anything that is eternal has life.” p. 431. And some materialists at least countenance the possibility of conscious life without biological properties. Richard Boyd says that “there seems to be no barrier to the functionalist materialist’s asserting that any particular actual world mental event, state, or process could be—in some other possible world—nonphysically realized.” Moreover, Boyd suggests that the “possibility that certain kinds of actual world token mental events, states or processes might be realized in some other possible world even if the body of the subject no longer exists.” Richard Boyd, “Materialism Without Reductionism: What Physicalism Does Not Entail” in *Readings in the Philosophy of Psychology, Volume I*, Ned Block, ed. (Cambridge MA: Harvard University Press, 1980): 101 (67-106)

⁴² In John 10:10, Jesus is quoted as saying, “I’ve come to bring life, and to bring it more abundantly.” He clearly is not talking about biological functioning.

⁴³ These two uses of ‘life’ are left undistinguished in phrases like ‘the sanctity of life’ or ‘the culture of life’. It is particularly egregious to use the phrase ‘the sanctity of life’ to suggest that what is sacred is an abstraction called ‘life’; people may be sacred, but life as an abstraction is not, and real people with real lives should not be made to suffer for the sake of an unanchored abstraction.

⁴⁴ For a contrasting understanding of life and death that also uses the Constitution View of persons, see David Hershenov’s “The Death of a Person,” forthcoming in *The Journal of Medicine and Philosophy*.

constitutes a person, the life of the organism is not identical to the life of any person. Despite our use of the word ‘life’ for both personal and biological lives, a person constituted by a human organism does not have two lives.⁴⁵

Rather, a person’s life is a personal life, and the personal life of a human being has biological aspects. A purely biological life is the career of an organism. If the organism constitutes a person, then what would’ve been a biological life on its own becomes subsumed by, or incorporated into, a personal life.⁴⁶

So, a person constituted by a body does not have two different lives, but one integrated personal life that has biological as well as nonbiological aspects. The connection between an injury to one’s organs and one’s resulting dread of a long recovery is a causal connection *within* a personal life. Before a fetus comes to constitute a person, there is biological life; but there is no personal life. Biological life is what is continuous throughout the animal kingdom.⁴⁷ But if I am right, biological life is only one aspect of personal life.⁴⁸

‘Life’ and ‘death’ are correlative terms. If an entity is alive, the beginning of its life is the beginning of its existence, and the end of its life is death. To make room for

⁴⁵ I could use the more technical vocabulary of *Persons and Bodies* and say that the person has a personal life nonderivatively and a biological life derivatively and that the organism has a biological life nonderivatively and a personal life derivatively.

⁴⁶ Nonhuman persons, if there are any, may have personal lives with no biological aspect at all.

⁴⁷ Anyone who believes in a “right to life” should either understand life as personal life (rather than as organic life) or extend that right to the other Great Apes. My own opinion is that only persons have a right to life, and even that is not absolute. Consider a premature baby who has a rudimentary first-person perspective, but with extraordinary treatment can be saved for a year in excruciating pain. I think that the humane response is to let the baby die, or even to give a lethal injection to hasten an otherwise prolonged and painful death. Prolonging such a baby’s life—even though it is not just organic life—seems to me unspeakably cruel.

⁴⁸ Since organisms constitute persons, and not vice versa, persons are of a higher primary kind than organisms. Hence, it is not the case that a personal life is an aspect of biological life, except perhaps derivatively.

the possibility of life after death, we should qualify this and say that death is the end of its life on Earth. Since the bioethical debates—even among those who believe in life after death—just pass over the issue of life after death, I will too.⁴⁹ For purposes here, I'll consider life and death to be relative to Earthly existence, and not consider the possibility of life after death. If one's life consists of everything that one does and everything that happens to one during the time that she exists [in the here and now, as I'm assuming], it is natural to consider one's death as the end of one's life and the end of one's existence.

When something dies, its career (in the here and now, anyway) is over. When you die, any hopes that you had of doing something in the future will remain forever unfulfilled; amends that had not been made will remain forever unmade. Your death will involve a permanent and irreversible loss. The book will be closed.

When Do Persons and Organisms Die?

Different kinds of entities die under different circumstances. In particular, although the death of an organism and the death of a person may coincide, they need not. The death of an organism occurs with the permanent cessation of biological functioning—like respiration, metabolism, circulation of the blood.⁵⁰ The death of a person occurs with the permanent loss of her first-person perspective, her ability to conceive of herself from the first-person. Even if she is unconscious, as long as it is physically possible for her to recover enough to entertain a thought like, “Am I dying?” she—the person—still lives. When she permanently loses that ability, the entity that was a person is no longer

⁴⁹ There are exceptions. E.g., David W. Shoemaker, “Embryos, Souls and the Fourth Dimension,” *Social Theory and Practice* 31 (2005). Thanks to David Hershenov for this reference.

⁵⁰ Whether an animal goes out of existence at death is a separate question. Traditionally, an animal is thought to go out of existence at death, but my colleague, Fred Feldman, has argued that it still exists after death; the same thing that was alive is then dead. A dead animal, he argues, is still an animal. See his *Confrontations with the Reaper* (New York: Oxford University Press, 1992).

there. One way that a person may suffer irreversible loss of just her first-person perspective is permanent cessation of her higher brain functioning; another and more common way that a person may suffer irreversible loss of her first-person perspective is permanent cessation of general biological functioning. But in either case, a person leaves this world (so to speak) when she suffers irreversible loss of her first-person perspective.

Hence, a person dies with the irreversible loss of a first-person perspective, and an organism dies with irreversible organ failure. Not surprisingly, there are different criteria for death. The criterion for the death of a human animal (an organism) is now whole-brain death,⁵¹ which occurs when a patient is in an irreversible coma and has no brainstem response, no sign of brain activity on an electroencephalograph recording, and no ability to breathe independently.⁵² When the whole brain, including the brainstem that regulates heartbeat and respiration, shuts down, the organism is dead—even if machines continue to support various organs.

Being brain dead must be distinguished from being in a persistent vegetative state. In brain death, the entire brain ceases to function; in a persistent vegetative state, the cerebral cortex, which controls higher, cognitive functions, shuts down. An organism may be capable of unaided respiration and circulation without being capable of any kind of cognitive functioning. Such an organism in a vegetative state still has biological life. But is there still a person there?

According to the Constitution View, it depends. It depends on whether the vegetative state is permanent, on whether it is physically possible for the patient to recover her ability to think ‘I’. If it is not, then, although the organism that used to

⁵¹ Or something close to it. J. Bernat modifies the whole-brain criterion of death in order to allow for isolated electrical activity. pp. 18-19. (Thanks to David Hershenov for this reference.)

⁵² Gazzaniga, B10. In “A Defense of the Whole Brain Concept of Death,” (Hastings Center Report, 1998)

constitute the person is still alive, there is no person there. This, I believe, was the case with Terry Schiavo: the brain continued to regulate breathing, but the autopsy showed that the brain had so deteriorated that there was no physical possibility of any higher brain function. Terry Schiavo, the person, had ceased to be there long before she was declared dead.

So, medically speaking, there are criteria that distinguish between the death of a person and the death of an organism that constitutes a person—namely, permanent cessation of higher brain function and cessation of all brain function. Typically, persons and organisms cease living at the same time, but in very difficult and heart-rending cases, the organism may continue to carry on organic-life-sustaining functions when there is no longer a person, no longer an entity with a first-person perspective.

Conclusion

If the Constitution View is right, then it is a mistake to equate the coming-into-existence of a human person with the coming-into-existence of an organism, even if that organism ultimately comes to constitute a person. And it is equally a mistake to equate the ceasing-to-exist of a human person with the ceasing-to-exist of an organism, whether there is any life after death for persons or not.⁵³ The conditions sufficient for being a person are fairly clear (having a first-person perspective), even if it is sometimes difficult to discern whether a particular entity has a first-person perspective. Many cases, however, present no difficulties about whether an entity is a person. It is clear, I think, that neither a frozen embryo nor an entity in a persistent vegetative state for many years is a person.

⁵³ If there is no afterlife, then death is the end of existence of a person; and the death of a person may not coincide with the death or the end of existence of the constituting organism. If there is an afterlife, then a person may continue to exist after the remains of the constituting organism have decomposed to the point of nonexistence.

Of course, there are many ethical questions, and many questions of public policy, that the Constitution View of persons leaves untouched. For example, I have not discussed the obvious fact that, whatever the status of the fetus, a pregnant girl or woman undoubtedly does have a life—a life that may be ruined by having a baby. Her life is surely morally relevant to the question of abortion. But such matters are beyond the scope of this paper. All that I have tried to do is to provide a basis for reasoned judgment about whether a given entity is a person or not.

According to the modern synthesis in biology, we human persons are biological beings, continuous with the rest of the animal kingdom. The Constitution View recognizes that we have animal natures. The first-person perspective may well have evolved by natural selection, but, biologically speaking, first-person perspectives do not stand out. The contribution of the Constitution View is to show how to put together Darwinian biology with a traditional concern of philosophers—our inwardness, our ability to see ourselves and each other as subjects, our ability to have rich inner lives. These are fruits of first-person perspectives that distinguish persons from all other beings.⁵⁴

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⁵⁴ Many thanks to David Hershenov, Gareth B. Matthews, and Katherine A. Sonderegger for comments on a draft of this paper.