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Stephen Napier  
*Editor*

# Persons, Moral Worth, and Embryos

A Critical Analysis of  
Pro-Choice Arguments

 Springer

## PERSONS, MORAL WORTH, AND EMBRYOS

# Philosophy and Medicine

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VOLUME 111

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# PERSONS, MORAL WORTH, AND EMBRYOS

A Critical Analysis of Pro-Choice Arguments

*Edited by*

STEPHEN NAPIER

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 Springer

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# Chapter 1

## Introduction: What Are Persons? What Is Valuable?

Stephen Napier

As of this writing, if one searches Philosophers Index© under the term “abortion” one will get back 1, 485 total entries. If one limits the search to the past 10 years (2001–2011), one will get back 427 entries (almost 30% of the literature produced has been in the last 10 years). Running the same search with JSTOR will deliver 3,491 and 735 entries respectively (about 20%).<sup>1</sup> Clearly, abortion is hardly passé or philosophically banal. But it is because of this dense literature that one may ask why another contribution is being added to it. Has not most every line of argument been explored? This introduction aims to explain why the answer to this question is “no,” and in this regard, to explain briefly how the chapters herein truly *contribute* to the dialogue on this issue. I begin with a history of the abortion debate, which aims to highlight the main lines of inquiry and wherein significant contributions can be made.

### 1.1 A Brief History of the Abortion Debate

The first contemporary article<sup>2</sup> that addresses the issue of abortion with any substantive comment comes to us from H.J. McCloskey in which he says the following,

This [abortion] is a somewhat difficult case, but in general much the same would seem to hold [as euthanasia]. It differs from voluntary euthanasia in that the condemnation of legalized abortion depends on a very debatable metaphysical theory about what constitutes human life; it would seem not to be the ordinary person’s view that the fetus is a human being, for when a woman has a miscarriage, especially early in her pregnancy, her friends sympathize with her but neither she nor they mourn the death of a human person (McCloskey, 1961, p. 110).

One can see in this passage an incipient idea according to which abortion is justifiable because the human fetus is not a person. One can easily criticize this passage

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on several grounds, but the lesson to learn from it is the basic strategy or route used to justify abortion. That strategy is to make apparent the differences between us and them (i.e., human fetuses), and these differences are morally significant. There are several ways in which this strategy can reach its fruition, and I believe, it reaches its fruition as a function of developments in two other areas of philosophical inquiry: the philosophy of mind, and value theory.

### ***1.1.1 Philosophy of Mind: Persons and Selves***

Sydney Shoemaker's *Self-Knowledge and Self-Identity* represents a watershed moment of sorts in philosophy of mind and personal identity theory. This work serves as the locus of what is now a famous example involving a brain transplant (Shoemaker calls his argument based on this example the change-of-body argument). Shoemaker presents the example as follows,

Suppose that medical science has developed a technique whereby a surgeon can completely remove a person's brain from his head, examine or operate on it, and then put it back in his skull. . . .without causing death or permanent injury. . . .One day. . . a surgeon discovers that an assistant has made a horrible mistake. Two men, a Mr. Brown and a Mr. Robinson, had been operated on for brain tumors, and brain extractions had been performed on both of them. At the end of the operations, however, the assistant inadvertently put Brown's brain in Robinson's head, and Robinson's brain in Brown's head. One of these men immediately dies, but the other, the one with Robinson's body and Brown's brain, eventually regains consciousness. Let us call the latter "Brownson" (Shoemaker, 1963, p. 23).

Let's assume that Brownson retains all of the personality characteristics, memories, life plans, and a majority of beliefs previously held by Brown. Shoemaker rightly notes that "There is little question that many of us would be inclined, and rather strongly inclined, to say that while Brownson has Robinson's body he is actually Brown" (Shoemaker, 1963, p. 24). Shoemaker has us conclude from this thought experiment that personal identity does not involve bodily identity and that personal identity is partly a function of psychological identity. By way of appreciating the importance of Shoemaker's argument, consider David Wiggins' comments on it; "At the time when Shoemaker's book appeared, *and along with almost everyone else*, I was extremely impressed by this example" (Wiggins, 2001, p. 206, emphasis mine). Indeed, the example is an important one and various permutations of it have shown up in several defenses of abortion rights (e.g., McMahan, 2003, pp. 31 ff.). The example motivates a view of the self that is essentially psychological in nature. The implications of this view will be drawn together in a moment; before doing so it is important to note another development in philosophy of mind, namely the growing popularity of anti-materialist accounts of the mind.

John Searle's work (1992) represents a clear and thorough defense of one anti-materialist account of the mind, namely, emergent dualism. Searle notes, however, that he is writing within a tradition of sorts, following Thomas Nagel (1974), Saul Kripke (1971), and Frank Jackson (1982) as harbingers of the view Searle defends (Searle, 1992, pp. 116–117).<sup>3</sup> The basic contours of the view are that consciousness



is ontologically irreducible to the brain, but conversely, consciousness is causally reducible to systems of neurons. Ontological reduction involves saying that “objects of certain types can be shown to consist in nothing but objects of other types” (Searle, 1992, p. 113). As examples, Searle offers us material objects which can be shown to be “nothing but collections of molecules, genes can be shown to consist in nothing but DNA molecules” (Searle, 1992, p. 113). Causal reduction, however, “is a relation between any two types of things that can have causal powers, where the existence and a fortiori the causal powers of the reduced entity are shown to be entirely explainable in terms of the causal powers of the reducing phenomena” (Searle, 1992, p. 114). He offers us the example of solid objects which are impenetrable by other objects and impervious to liquid, but these causal powers, e.g., being impenetrable, are wholly explained by the lattice structures of the object. We are now in a position to understand why Searle thinks that consciousness is not ontologically reducible to the brain, but is causally reducible to it.

Consider a stone that is made up of various molecules in specific lattice structures. The stone will have features that are distinct from the individual molecules which constitute the stone. The stone will weigh ten pounds, but the individual molecules will not. The properties specific to the stone are referred to as system features. Searle says,

Consciousness is a causally emergent property of systems. It is an emergent feature of certain systems of neurons in the same way that solidity and liquidity are emergent features of systems of molecules. The existence of consciousness can be explained by the causal interactions between elements of the brain at the micro level, but consciousness cannot itself be deduced or calculated from the sheer physical structure of the neurons without some additional account of the causal relations between them (Searle, 1992, p. 112).

The basic reason for thinking that consciousness is ontologically irreducible is that the subjective, first-person nature of consciousness cannot be accounted for on an objective third-person description of neuron firings. Subjective states are not “nothing but” objective ones; they cannot be. “If we tried such an ontological reduction, the essential features of the pain [consciousness of the pain] would be left out. No description of the third-person, objective, physiological facts would convey the subjective, first-person character of the pain. . . .” (Searle, 1992, p. 117).

There is a point to my protected presentation of Searle’s views. First, emergent dualism, and other views of the mind that are essentially non-reductive, are quite popular. Such views provide a scientifically satisfying account of consciousness, mind, or the self. These views are able to explain what is plain fact, we have mental states, consciousness, and the like, that have an inherently subjective-first-person quality to them. Searle claims, however successfully, that in explaining these facts, he has not developed an account that entails some form of Cartesian dualism. Consciousness is caused by and realized only in a developed brain. The importance of such a view as emergentism is that something like it is endorsed by David Boonin (2003) and Jeff McMahan (2003), two of the most prominent defenders of abortion rights. Consciousness, self, or person,<sup>4</sup> emerges only after the brain has developed to a certain point whereby its organizational complexity and functionality causes consciousness.

Of course, emergentism is not the only anti-materialist view that would justify locating the self or person in a conscious subject who is not identical to a body or even a functional brain. In a recent collection of essays critical of materialism, one of its contributors, David Barnett, argues that “unlike your brain, you are not composed of other things; you are *simple*. My argument centers on what I take to be an uncontroversial datum: for any pair of conscious beings, it is impossible for the pair *itself* to be conscious” (Barnett, 2010, p. 161). Barnett calls this The Datum, and he argues that no other explanation for the Datum is satisfactory except that you are simple and undivided.

In all of the hypothetical scenarios we have considered, a composite entity is presented to our minds *as a composite*, and we are asked whether the entity might itself be a subject of consciousness. . . . [W]e find absurdity in the idea that it might be *identical* to a subject of experience. This suggests that what explains The Datum is *Simplicity*; pairs of people are disqualified from being conscious because they are not simple (Barnett, 2010, p. 171).

Furthermore, there is the view of Lynne Rudder Baker according to which “something is a person in virtue of having a first-person perspective (or a narrowly defined capacity for one),” (Baker, 2002, p. 371) and acquiring a first person perspective occurs when one can consider oneself as a self, an individual subject distinct from other things. Baker notes, “A conscious being becomes self-conscious on acquiring a first-person perspective—a perspective from which one thinks of oneself as an individual facing a world, as a subject distinct from everything else” (Baker, 1998, p. 328). Elsewhere, she succinctly notes her position; “[h]uman persons are beings that have first person perspectives essentially and are constituted by human organisms (or bodies)” and describing the relationship of constitution between human organism and person, Baker notes, “[y]our body is a person derivatively, in virtue of constituting you, who are a person nonderivatively. You are a human organism derivatively, in virtue of being constituted by your body that is a human organism nonderivatively” (both quotations from Baker, 2005, p. 28). Although constitution views are not identical to psychological accounts (i.e., McMahan’s view discussed below) the strategy is the same: persons, you and me, are not the same kind of things as the human embryo or fetus from which we developed. Therefore, abortion, as it is typically practiced, does not kill one of us.

These positions and more like them in the philosophy of mind, which are quite popular,<sup>5</sup> are informed by strong intuitions that the person or self is a subject of consciousness, and that consciousness cannot be reduced (ontologically at least) to physical events or processes. The brain transplant example highlights our intuitions that we, persons capable of reading this book, are subjects of consciousness. Where my memories, attitudes, and beliefs go, there I go also. It is not a huge step to take this intuition and apply it to issues at the beginning of life.

Finding a prototypical strategy characteristic of abortion-rights arguments is unlikely given the disparity of views proponents of abortion-rights (hereafter proponents) have. David DeGrazia, for instance, holds to an animalist account of human beings according to which “we are essentially human animals, not minds or persons, and. . . our persistence conditions are biological, not psychological” (DeGrazia,

2005, p. 8). But it is certainly safe to say that a popular and persuasive strategy is to cull the lessons learned in philosophy of mind and apply them to the abortion issue. Jeff McMahan is notable in this regard. (McMahan is certainly not the only proponent of this strategy, but in my opinion, the best defender of it.)

McMahan defends the view that we are essentially embodied minds. He states the view thus,

I suggest that the corresponding criterion of personal identity is the continued existence and functioning, in nonbranching form, of enough of the same brain to be capable of generating consciousness or mental activity. This criterion stresses the survival of one's basic psychological *capacities*, in particular the capacity for consciousness. It does not require continuity of any of the particular *contents* of one's mental life (McMahan, 2003, p. 68).

Further on, McMahan rejects any identity between the person and the human organism (2003, p. 88 ff.), he takes the position rather that the person is a part of the human organism. "My organism is conscious only in a derivative sense, only by virtue of having a conscious part" (McMahan, 2003, p. 93). And he notes that this view preserves, or at least, does not violate any of our metaphysical intuitions while at the same time importing the intuitions uncovered from the philosophy of mind discussed above.

This view preserves the claim that we are not identical with our organisms. It seems, indeed, a conceptual truth that a part is not identical with the whole of which it is a part. According to this view, I am not identical with an organism, nor am I constituted by one; but am a part of one. *I am, however, a separable part, one capable of existing and retaining its identity and integrity apart from the whole* (McMahan, 2003, p. 93).

It is important *not* to understand McMahan's view here as endorsing some form of substance dualism. McMahan explicitly rejects Cartesian dualism (2003, pp. 14-19). McMahan's view seems to line up most closely with Searle's addressed above: the person is a subject of consciousness caused by a functional brain.

Applied to the abortion issue, McMahan's argument for the permissibility of abortion is fairly simple.<sup>6</sup> Since we are embodied *minds*, and human embryos and early-stage fetuses do not have developed minds, killing a fetus does not kill someone like you or me; abortion, in most cases, does not kill a person. McMahan notes succinctly,

We begin to exist when the fetal brain develops the capacity for consciousness, which happens sometime between twenty-two and twenty-eight weeks after conception, when synapses develop among the neurons in the cerebral cortex. Only after the development of the capacity for consciousness is there anyone who can be harmed, or wronged, by being killed (McMahan, 2007, p. 186).

To summarize: a strong strategy used by proponents is to import the lessons learned from developments in philosophy of mind, namely, you and I are essentially psychological entities. McMahan's approach is to endorse an embodied mind account of the person. There are, of course, other theories of the person that are consistent with certain anti-materialist themes such as constitution accounts discussed above and psychological continuity accounts (Parfit, 1984). But the strategy is the same for each: human fetuses are not like us in morally significant ways.

### ***1.1.2 Value Theory: The Moral Worth of Psychological States***

Metaphysical questions about what we are essentially are not the only topics or themes showing up in the abortion debate. Even if one rejects McMahan's account of the person and accepts that we adults are substantially identical to our fetuses and embryos (e.g., an animalist account), there is still room to argue for abortion. A proponent can argue that the development of certain psychological capacities, e.g., consciousness, interests, or rational thought, confers on one moral status sufficient to render killing one morally impermissible. Questions concerning our ontological nature, identity, and constitution can be set aside, and one argues instead that what confers moral worth on a thing, is the presence of certain psychological abilities. Whereas McMahan views the presence of certain psychological capacities as signally what *kind of being* we essentially are, proponents of the present route simply state that such psychological capacities confer on one moral status. Absent such capacities, one does not have moral status sufficient to render killing one morally impermissible.

The intuitions supporting this view are not at all foreign. They have shown up in various discourses on value and goodness, particularly in mid-20th Century philosophy. C. I. Lewis, for example, discussing intrinsic value says the following, "In this sense of 'intrinsic value' as the value of that which is valued for its own sake, *no objective existent has strictly intrinsic value; all values in objects are extrinsic only*" (Lewis, 1971, p. 387). Further on, Lewis links up intrinsic value with *experience*.

*The goodness of good objects consists in the possibility of their leading to some realization of directly experienced goodness.* What could by no possibility ever be an instrument for bringing any satisfaction to anybody, is absolutely without value, or the value of it is negative. Hardly anyone would deny this (Lewis, 1971, p. 387).

In a similar spirit, Brand Blanshard explicitly acknowledges that consciousness alone is intrinsically valuable, "Moore's final conclusion was, then, that a universe without consciousness would be a universe without value. With this I think we must agree" (Blanshard, 1961, p. 273). Further on, Blanshard offers the following ripost on the notion that *things* have value:

Thomists, for example, continue to hold the obscure view of Aristotle that each material thing is a more or less complete actualization of what it is potentially, a more or less perfect embodiment of its special form, and is, so far, good. The disappearance of a boulder on some unheard of dark star would therefore be a loss of value to the world. Of course one may conceive of value in this way if one wishes, but it carries one quite out of touch with ordinary meaning; most men would say it made no difference whatever to the amount of good in the world whether such a boulder existed or not. Take any example of what we ordinarily regard as good or bad, *imagine consciousness away, and the values vanish with it* (1961, p. 273, emphasis mine).<sup>7</sup>

The point of these references is to show that immediately prior to the abortion issue making its debut on the philosophical scene, there were well accepted axiological assumptions; namely, intrinsic value and consciousness were intimately linked. Against this backdrop, it was not a far step to argue, and do so persuasively, that human embryos and fetuses lack moral status because they are not sentient or

capable of exercising consciousness. That human fetuses are human beings, individual members of the species *homo sapiens*, does not morally matter; sentience matters. On this point, Mary Anne Warren states,

Nor does much about the moral status of first-trimester foetuses follow from their biological humanity, or from their status as individuated organisms. Membership in the human species is highly relevant to the moral status of an individual who is already sentient. . . . prior to the initial occurrence of conscious experience, there is no being that suffers and enjoys, and thus has needs and interests that matter to it (Warren, 1997, p. 204).

The dominant theme running through Lewis, Blanshard and on up to modern defenses of abortion rights, is that things, human beings per se, do not possess moral status or intrinsic value; properties, or capabilities do, in particular, the ability to be conscious, sentient or the like. This theme is especially prominent for abortion rights proponents who hold to an animalist account of our nature. DeGrazia, for instance, admits that we are essentially animals; we come into existence when our human organism comes into existence. Unlike the strategy of McMahan and Boonin where they argued that abortion does not kill someone like you or me, DeGrazia accepts that you and I are the same things as the embryos or fetuses from which we developed. To justify abortion with such an ontological commitment requires holding to a time-relative interest account of killing. A time relative interest account of killing assumes first, that the harm of death is dependent upon having an interest in survival. Second, if a thing is not harmed much by dying, then it is, all things considered, not evil to kill the thing. DeGrazia states, “[w]hen the psychological unity that would have bound an individual at the time of death to himself in the future, had he lived, is weak, death matters less prudentially—that is, for that individual—at that time” (DeGrazia, 2005, p. 192). Psychological unity is weak if the being in question lacks an interest in or has “little stake in continuing to exist” (DeGrazia, 2005, p. 191). “Prudential evaluation of a possible future. . . should take into account both the value of that future to one as one experiences it and how psychologically “invested” one *now* is in that future” (DeGrazia, 2005, p. 191, emphasis mine). So even if I am identical to my embryo, precisely when I was an embryo I lacked any interest in existing. Because I had no “stake” in my future, death did not matter to me then; I had no interest in my future.

It is in this setting—developments in the philosophy of mind, i.e., developments of anti-materialist arguments, paired with dominant themes in 20th Century axiology—that abortion rights arguments are coached and achieve their plausibility. And the battle lines between proponents and pro-lifers are along these very lines of thought. And this is probably why the abortion debate invites such philosophical interest; it brings to practical importance fundamental philosophical questions such as what we essentially are, and why we are valuable.

### ***1.1.3 The Pro-life Argument***

Motivating this present project cannot be complete without some articulation of the pro-life argument. Certainly, proponents and opponents have exchanged numerous ideas and arguments over the years, and it is for this reason that we need to

appreciate where the debate presently stands *between* the parties. Of course, as we will see, the title of this sub-section is misleading; there is not *the* pro-life argument, but rather there is a *strategy* at which all arguments aim.

The pro-life strategy is essentially two-pronged. The first prong aims to support (in some way or other), the following two claims:

Moral claim: It is always morally impermissible to kill an innocent human being.

Ontological claim: Abortion is the killing of an innocent human being.<sup>8</sup>

It follows from these two premises that abortion is always morally wrong.<sup>9</sup> This is the positive task which aims to argue for the claim that unborn human beings ought not to be killed. The second prong is the negative task and aims to reduce or deflate proponents' arguments for the permissibility of abortion.

The positive task can be achieved in several ways, but a particularly simple and persuasive dialectic is the one outlined by Robert P. George and Christopher Tollefsen (2008, pp. 22 ff.). One proceeds by arguing first that the early-stage embryo is an individual human being. Arguments of this sort typically advert to embryological data; such data aims to provide undefeated empirical evidence that from conception onward, there is a biological organism of a certain sort, i.e., the *human* sort. Furthermore, and at least in the contemporary articulations of this argument, twinning and totipotency arguments are addressed along the way. Both the twinning and totipotency arguments aim to impugn the idea that the pre-implanted embryo is an *individual* human organism. Twinning arguments (DeGrazia, 2005, 248 ff.) purport to show that because the embryo can divide up to the 14th day, prior to the 14th day, there is not one individual organism. Totipotency arguments (Brogaard and Smith, 2003) purport to show that because the cells constituting the pre-implanted embryo are totipotent (i.e., capable of becoming an individual human organism itself), there is not one individual organism prior to differentiation of the cells. For either argument, the strategy is to impugn the claim that the early-stage embryo is a *distinct* human being. (Neither argument is addressed in this collection since they have both been subjected to extensive criticism; see Khushf (2006); Koch-Hershenov (2006); Napier (2010); George and Tollefsen (2008, pp. 149–158)). After showing that upon conception, there is undefeated evidence that there exists an individual human being, the next step is to argue that that individual is transtemporally identical to the adult human being he or she will later become. The attempt here is to argue simply that human embryos are persons with potential, not potential persons. The kind of thing reading this book is the same individual that came into being at the point of conception, though certainly in an immature stage of development. Richard Stith offers an interesting thought experiment showing the plausibility of this line of argument:

Suppose we're back in the pre-digital days and you've just taken a fabulous photo, one you know you will prize, with your Polaroid camera. (Say it's a picture of a jaguar that has now darted back into the jungle, so that the photo is unrepeatable.) You are just starting to let the photo hang out to develop when I grab it and rip its cover off, thus destroying it. What

would you think if I responded to your dismay with the assertion: “Hey man, it was still in the brown-smudge stage. Why should you care about brown smudges?” You would find my defense utterly absurd. Just so for pro-lifers, who find dignity in every human individual: To say that killing such a prized being doesn’t count if he or she is still developing in the womb strikes them as outrageously absurd. By contrast, if I had simply destroyed a blank, unexposed piece of your film, you would have been much less upset. You really would have lost little more than a smudge. Passive potential does not count for much. Only developing potential already contains its own form (essence, identity), is already the *what* that it is in the process of manifesting (Stith, 2006).

The pro-lifer, then, enters the abortion discussion with her own set of intuitions and examples. It may be helpful to enumerate them here since they are not always made explicit. First, pro-life arguments accept, as Stith’s example illustrates, that developmental changes do not impugn the identity of the individual over time. More succinctly, development is not identity-*destroying*. If we ask the photographer what is it that is developing, he will say it is a picture of a jaguar. Likewise in the case of human development, if we ask “what is it that is developing?” we should answer “a human being.” A second intuition, related to the first, is that the development of certain capacities is not identity-*changing*. This is typically shown, in a backhanded way, through reversible-coma-type cases (Lee, 1997, p. 19; Beckwith, 2007, 135 ff.; Napier, 2010, pp. 795–797). The basic recipe for such cases is to consider an adult human being who (a) has suffered some injury rendering his brain incapable of supporting certain psychological capacities, and (b) there is a medical procedure/therapy that *guarantees* recovery in 9 months (or some short time frame). During the time that the adult is in a coma, it would, intuitively, be impermissible to kill her. Though it may be true that the adult that comes out of the coma acquires a completely different set of beliefs, memories, and personality than the adult going into the coma (thus a different “person” on some accounts), she remains an individual *of the sort that ought not to be killed*. And it is in this sense that the coming-to-be and passing-away of certain psychological capacities does not change the identity of the individual, considered as an individual who ought not to be killed.

A third intuition, and probably the most important, is the idea of *self-development* or intrinsic potentiality.<sup>10</sup> The idea can be illustrated by considering the following example from Devin Henry who is discussing Aristotle’s embryology,

Imagine a paper cup lying by the side of the road. If left alone, the cup will eventually break down into its constituent elements. From the perspective of modern science, where all material objects change according to their physical nature in ways that obey strict universal laws, the fact that the cup breaks down rather than, say, changes into a lamp is not very astonishing. It breaks down because it is made of certain kinds of materials whose nature is to change in that way. But now imagine that right before our eyes those same materials recombined into the form of a cup (rather than a lamp). This would indeed be an amazing feat. For we should have expected those materials to remain in a pile and never (except perhaps by freak chance or human intervention) change back into a cup. Further imagine that this amazing event not only happened with remarkable constancy but that the general phenomenon was ubiquitous in the world. Everywhere you turned different pockets of matter were organizing themselves into different things. Some built themselves up into chairs, others into bookshelves, and still others into increasingly more complex objects like flying machines and automobiles and large food-processing plants! (Henry, 2005, p. 2).

The fact that the human embryo “determines the important features of its own development” (Henry, 2005, p. 3) is significant both biologically and metaphysically. The intuition is that an organism that self-develops, organizes *itself* and generates *its own* developmental trajectory. Because the organism is its own author of change, it maintains identity through change and time. Adverting our attention to the self-determined character of human development allows us to see that one and the same individual exists through time and development. Psychological capacities are viewed, from this perspective, not as initiating in a new individual with separate identity conditions, but as capacities *of* an individual substance. Although consciousness, intentionality and rationality are important abilities of human persons, we are not *identical* to them. On this point, Sydney Shoemaker cites approvingly Thomas Reid, when the latter remarks, “I am not thought, I am not action, I am not feeling; I am something that thinks, and acts, and suffers” (Shoemaker, 1963, p. 51, from Reid, p. 203). Likewise, I am not a capacity (of any sort), I am something that has a capacity.

With respect to supporting the Moral Claim, the pro-lifer typically emphasizes at least three ethical commitments. The first is a commitment to equality and fairness. If the human being from conception onward is substantially identical throughout every phase of his or her entire life (embryo-fetus-infant-child-juvenile-adult-elderly), then at *any point* in her existence, she should be treated like she would at other times. This commitment, of course, admits of qualifiers such as, we treat children differently than we do grown adults—a college student who is acting up in class is expelled; a child who does the same is sent to detention. These qualifiers are dealt with, so to speak, by the second moral commitment; namely, the right not to be intentionally killed is a *fundamental* right. Whereas many of our civil rights are indexed to age or developmental maturity (such as the right to vote or to a public education) the right not to be intentionally killed is not so indexed; it does not depend on how old we are or on how developed we are. Members of the human family are all equal in this respect; we all ought not to be intentionally killed.<sup>11</sup> A third ethical commitment is that even if the human embryo may *not* be transtemporally identical to the human person she develops into, or gives rise to, the embryo still has a future of value.<sup>12</sup> For future of value arguments, the moral commitment is that one should not deprive a thing of a valuable future; and in this context, becoming a person is valuable. Although I do not disagree outright with this line of argument, I harbor doubts about its effectiveness. In order to show that the embryo is deprived of something, it is necessary to suppose that *one and the same thing* acquires something of value in becoming a person, and by killing him, he loses this value. But if the embryo is not the *same thing* as the future person, killing him before the onset of personhood does not deprive *the embryo* of future value. Without defending the substantial identity between the embryo and the adult person, killing the embryo is not morally different than contraception. Peter McInerney observes,

The unexamined premise in the argument is that a fetus *already* has a future-like-ours of which it can be deprived. For the argument to be convincing, it is necessary that a fetus *at its time* “possess” or be related to a future-like-ours in a way that allows the transfer from the wrongness of killing us persons to the wrongness of killing fetuses (McInerney, 1990, 265).



In order to be thoroughly effective, then, the pro-life response to pro-abortion rights arguments must engage the themes arising out of the philosophy of mind and value theory enumerated above. And that is the aim and motivation of this present collection. In particular, the primary objective is to address *specific* claims and arguments made by abortion rights proponents. And it is to this end that the essays contained herein are devoted.

## 1.2 Chapter Summaries

Alexander Pruss's paper "I Was Once a fetus: That is Why Abortion is Wrong" appropriately begins this collection in that it represents the critical engagement with proponents this collection aims to accomplish. Pruss's dialectic canvases the main lines of attack: he defends the view that you and I are substantially identical to our embryo or fetus. Along the way he addresses a myriad of objections originating from the embodied mind account of McMahan's, constitution views like Baker's, and modern Cartesian views. He also defends something like the Moral claim mentioned above and addresses proponents of a time-relative interest account of killing and other like approaches. Pruss's paper can be read as a conceptual map, if you will, of the abortion debate's terrain and as a significant contribution to the tapestry of the pro-life position. With each view engaged, Pruss offers interesting and persuasive considerations.

The next three chapters by Jason Eberl and Brandon Brown, Francis Beckwith, and Anselm Müller, represent the general strategy of arguing for the substantial identity of the human embryo with one of us. They, of course, have specific topics in mind to which they address, but they all share a commitment to a hylomorphic view of the person, and address that commitment to different abortion rights arguments. Eberl and Brown, for instance, address the symmetry argument according to which if whole brain death marks the end of a person's life, so should whole brain life mark the beginning of human life. Eberl and Brown argue in response that what matters in regard to being a living organism of a certain sort is that it is an *organism*; coordinated and integrated functioning is necessary and sufficient for being an organism. The reason whole brain death reliably indicates death is because the organism ceases to function as an integrated organism. Likewise for the embryo, once one has a coordinated, developing being, an individual human organism exists. Along the way they address their response to Alta Charo (2001), Louis Guenin (2008), David DeGrazia (2008), and Jeff McMahan (2003). Francis Beckwith devotes himself to Dean Stretton's review of Beckwith's own book (Stretton, 2008; Beckwith, 2007). In particular, Beckwith devotes important time to clarifying what he means by a natural capacity, and distinguishes this notion from *being a substance of a certain sort*. Beckwith also explicitly articulates and defends the egalitarian commitment characteristic of most pro-lifers' moral commitments. Once articulated, he develops replies to an interest account of killing characteristic of McMahan (2003), Boonin (2003), Stretton (2008), and psychological accounts of the person held by Himma

(2005) and Tooley (1983). Anselm Müller's metaphysical commitments are roughly the same as the previous two authors and therefore, he recapitulates the same themes such as what a pro-lifer means by potentiality, substance etc.. He differs from the previous two in that he focuses on the work of Arnold Gehlen and on other German scholars working in the area of personal identity and abortion.

The next three contributions do not explicitly hold to a hylomorphic account of the person, much less do they aim to defend such an account. Furthermore, they address themselves to what is in the abortion literature, quite novel. Mathew Lu, for instance, devotes himself to articulating an argument against abortion appealing only to virtue theory. Though this has already been done by Rosalind Hursthouse (1991), Hursthouse's treatment does not conclude that early-term fetuses may not be killed. Lu argues that a virtue account of abortion implies an absolute prohibition on killing human beings of any age. David Hershenov devotes himself to addressing the implications of accepting a four-dimensionalist account of things/persons. Putatively, if one accepts a four-dimensional metaphysics, then there is no reason to identify human persons with a human embryo. Hershenov aims to rebut this inference and shows that one can accept a four-dimensional metaphysics and yet maintain that mindless human embryonic animals are persons. David Fagerberg devotes himself to significantly different terrain than the preceding essays altogether. Fagerberg aims to address fundamental epistemological issues arising in the abortion debate, in particular he articulates a Catholic, and I would say thoroughly Eastern Orthodox, account of conscience and how our conscience can be perfected and how it can be obfuscated. Whereas the previous essays do not assume any particular religious commitment, this essay does. It should not, however, be pretermitted simply on those grounds. The account of conscience and, more generally, of moral knowledge, that he outlines is not just a conceptual analysis but a practical prescription. Just as an expert rifleperson is able to see objects clearly at distances the normal eye cannot, so the morally perfected person can see the contours of the moral order more clearly than the non-perfected. This description, of course, should not be taken to imply that abortion proponents are morally imperfect, and pro-lifers are; rather, Fagerberg explicitly rejects this interpretation in that abortion rights defenders are concerned about rights, freedom, and autonomy—significant goods indeed. What Fagerberg addresses is that such goods are ordered and weighted differently within what he calls the Christian Hypothesis.

Concluding the philosophical section is Christopher Tollefsen's paper which addresses different accounts of moral status defending what he calls the substantial identity view of moral worth. Tollefsen's paper represents an article length treatment of interest or personhood-based accounts of killing. To this extent, he defends the moral claim mentioned above and engages the views of Bonnie Steinbock (2009), Joel Feinberg (1974), McMahan (2003) and others. I conclude the philosophical section with Tollefsen's paper for a reason. Tollefsen addresses himself to what I believe to be one of the most important areas of the abortion debate, i.e., interest accounts of killing and moral status. It is exceptionally common in the literature to locate that value of the human being in certain *developed* traits or abilities. Without falling prey to the "species objection," Tollefsen locates the value of the

human embryo in the kind of substance he or she is. His treatment of moral status is dialectically significant given the currency alternative views hold.

The next section addresses pertinent issues in science affecting the abortion debate. The first paper by A.A. Howsepian addresses the issue of fetal pain. Howsepian offers a very thorough treatment of the literature on fetal pain, and argues for early onset of fetal sentience. The next paper by Maureen Condic aims to offer a definition of a human embryo. In this regard, Condic defends the first two intuitions mentioned in the previous section, namely, that development is neither identity-destroying nor identity-changing.

The final section addresses political-social issues pertaining to the abortion debate. David Thunder's contribution argues for two theses: first, he argues that the Rawlsian ideal of public reason cannot mitigate the social dangers associated with the abortion debate, namely, the debate's effect on disunity, and corrosion of public cooperation and trust. Second, he argues that the Rawlsian understanding of public reason should be supplanted by a virtue-theoretic ideal in that such an ideal has better prospects at preserving cooperation and trust between disputants. Helen Alvaré concludes this collection by arguing that although the philosophical arguments for the humanity of the embryo and fetus are important, legislation and public opinion will not likely shift to a more pro-life orientation without considering the welfare of women. And the welfare of women is significantly compromised, Alvaré argues, in the current mating market where women are pressured into non-marital sexual relations, and abortion serves as a specific support for this very market. Though obviously counter-cultural, Alvaré persuasively defends a new feminism that respects the interests of women and at the same time rejects the ideal of "sexual self-expression" as being fundamentally harmful.

The collection as a whole should *not* be read as a comprehensive defense of the pro-life position. One reason is that several of the contributions articulate, but by their own admission, do not defend a hylomorphic account of the human person. Rather, it should be read as a collection of discrete contributions which *respond to* specific claims defended by abortion-rights proponents. The aim of addressing specific abortion-rights claims goes some way towards justifying why abortion-rights defenders are not represented in this collection—such abortion-rights claims are already in the literature, and the aim here is to respond to them. A dialogical engagement *within* this collection is simply not the goal. A stronger justification is that abortion-rights defenders make a number of plausible and well supported claims. Addressing even a few of them with due justice has involved this entire collection.

## Notes

1. The JSTOR number of 735 may not reflect all of what is out there since JSTOR only indexes articles that are more than 2–5 years old and it does not include all relevant sources. Likewise, Philosophers Index may not reflect all of what is out there since it does not cover all sources either.
2. The procedure used to discover this article was to search JSTOR under the term "abortion." Using this procedure, one will find an article written in 1915 that mentions abortion, but no substantive comments are made regarding it.

3. It may be inaccurate to categorize Nagel, Kripke, and Jackson specifically as emergent dualists, but it is certainly accurate to label them anti-materialists (see Koons and Bealer, 2010, p. ix).
4. Terms such as self, consciousness, and person are used here, as they are in the literature, to refer to a conscious *subject*. Their meaning may diverge, but they each refer to the same thing. William Hasker notes,

It is clear that our concept of a person entails the existence of a self, in the sense of a central, relatively coherent and unified focus of the personality. The self must be *rational*. . . . A self must be an *agent*. . . .the self must be able to *integrate* its emotional responses with its cognitive apprehensions as well as its actions. An important theme in all this is the *centeredness* of the self; the self must somehow be the central unifying focus of the individual as a whole (Hasker, 2010, pp. 175–176).

5. The Editors of *The Waning of Materialism* list on p. ix of their Introduction an impressive list of philosophers who have rejected or harbored serious doubts about materialism in its various forms. See Koons and Bealer (2010, p. ix).
6. Complexities exist when McMahan considers killing late-term fetuses and infants. For example, his time-relative interest account of killing permits infanticide. For McMahan then, it does not appear sufficient to argue that embryos and early fetuses are simply not one of us. His theory of killing extends the scope of permissible killing in significant ways.
7. The obvious response to this thought experiment is that the boulder does not have any intrinsic potentialities; human beings, animals, and plants do. If we ran the same thought experiment with a human being, even one who was unconscious but *could* be conscious, our intuitions would be different and the force of Blanshard's reasoning deflated.
8. Cf. Patrick Lee's rendition of the pro-life argument as follows:  
Intentionally killing an innocent person always is morally wrong.  
Abortion is the intentional killing of an innocent person.  
Therefore, abortion is always morally wrong (Lee, 1997, p. 1).
9. I have avoided cashing out this argument making use of the term "person" since person is a more loaded and less neutral term. "Person", as discovered in the penultimate section, is typically associated with self, mind, or consciousness. "Human being" carries with it fewer connotations, and therefore begs fewer questions—at least it does at this point in the inquiry.
10. These two concepts are not exactly identical; intrinsic potentiality is a power or capacity of a substance, self-development is not a power, but an effect or the sequelae of a thing having a certain intrinsic potency. In any case, they are intimately related sufficient to discuss them alongside one another.
11. I say "intentionally killed" here since there are some pro-life positions that allow for capital punishment and just war. These accounts offer a nuanced account of "intention" such that "abortion-on-demand" is intrinsically immoral, but capital punishment/just war is not.
12. See Marquis (1989, 2001).

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**Part I**  
**Philosophical Considerations**

# Chapter 2

## I Was Once a Fetus: That Is Why Abortion Is Wrong

Alexander R. Pruss

I am going to argue that abortion is wrong in the same circumstances in which it is wrong to kill an adult. To argue further that abortion is always wrong would require showing that it is always wrong to kill an adult or that the circumstances in which it is not wrong—say, capital punishment—never befall a fetus. Such an argument will be beyond the scope of this paper, but since it is wrong to kill an adult human being for the sorts of reasons for which most abortions are performed, it still follows that most abortions are wrong.

The argument has three parts, of decreasing difficulty. The most difficult will be the first part where I will argue that I was once a fetus and before that I was an embryo. This argument will rest on metaphysical considerations. The next part will be to show that it would have been at least as wrong to have killed me before I was born as it would be to kill me now. I will argue for this in more than one way, but the guiding intuition of the first argument is easy to state: if you kill me earlier, the victim is the same but the harm is greater since I am deprived of more the earlier I die. Finally, the easiest part of the argument will be that I am not relevantly different from anybody else and the fetus which I was not relevantly different from any other human fetus, and so the argument applies equally well to all fetuses. The advantage of this argument over others is that it avoids talking of personhood, except in one of the independent arguments in [Section 2.2](#).

### 2.1 I Was Once a Fetus

#### 2.1.1 *The Basic Argument*

That I was once a fetus seems innocuous and obvious.<sup>1</sup> After all, is it not biologically evident that first I was an embryo, then I was a fetus, then a neonate, then a baby, then a toddler, then a child, then an adolescent, and then an adult? Does not

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my mother talk of the time when she was “pregnant with me,” thereby implying that it was I who was in her womb when she was pregnant? Is not the sonogram of my daughter the sonogram of that same daughter of mine who was eventually born? Evident as it might be that I was once a fetus, given how plausible it will be that abortion is wrong *if* I was once a fetus, the opponent will have to focus his attack on this part of the argument. So more needs to be said.

About 39 years ago, i.e., about 9 months before I was born, a conception occurred. A sperm from my father fertilized an ovum from my mother. Within 24 h, or sooner, a new organism came into existence, an organism that was neither a part of my mother nor of my father. For one, this organism was genetically distinct from both. For another, this organism’s functioning was directed towards its own benefit—selfishly, the organism colonized the womb, released hormones that triggered changes in my mother beneficial to it, and so on. It certainly did not behave like a body part of either my mother or my father. Moreover, it clearly was not a part of my father—it need no longer have any interaction with him. But given that the DNA contribution from my father was no less than that from the mother, it is plausible that it was either a part of both or of neither. Since it was not a part of both, it was not a part of either. Besides, we can see that in the earliest days of this organism, the organism floated free, seeking nutrition in my mother’s womb. This organism was not a part of my mother.

The early human organism’s ability to twin—to split into two organisms—is no challenge to the claim that we have a single individual here. We do not deny that an amoeba is an individual organism on the grounds that in the future it will split in two. But if this is not accepted, then we’ll just have to start the argument a little later, after implantation (losing the free-floating part of the argument in the previous paragraph), and limit the conclusions of the argument to prohibit abortion after the first 2 weeks of pregnancy.

Certainly then by 2 weeks from fertilization, we have on the scene a new individual organism, one that did not exist before. Let’s give this organism a name: call it Bob. If we have a camera and look at what was happening in the womb in which Bob is living, we will see an embryo developing, cells differentiating, a fetus forming, growing, and finally a birth. If we keep watching, we see a neonate, then an infant, then a toddler, then a child, then an adolescent and then an adult. It’s all a continuous history. But recall what I am out to prove. I am out to prove that I was once a fetus, and indeed an embryo, against an opponent that will not grant this. My opponent will thus have to deny that I and Bob are one and the same entity. My opponent will have to say that “Bob” and “Alex” name two different entities, rather than being two names for one and the same entity at different stages of its life.

In any case, we have initially on the scene Bob the embryo. And then all this development happens. I now need a metaphysical principle: If an organism that once existed has never died or traveled in time,<sup>2</sup> then this organism still exists. Whether it is possible or not, time travel does not in fact occur in our experience, and so the crucial question is: Has Bob the embryo ever died? This is a question that the biologists can tell us the answer to. Bob’s cells have divided, differentiated, and Bob has developed. But nowhere in the continuous history I described have we seen

anything we could identify as “the death of Bob.” In fact, the whole process is the very opposite of the process of death: we have a process of growth, directed at the goal of adulthood. That embryo that was conceived in my mother’s womb 9 months before my birth has not died. True, it ceased to be an embryo after a while, and at the end of the 9 months it ceased to be a fetus. But this is no more a literal death than my passing from childhood to adolescence or from adolescence to adulthood was a death.

If we say that Bob died, we should be mystified as to *when* he died. All we have in his life history is a process of growth and development. Now, it is true that not all deaths are alike—not all deaths involve an evident destruction. For instance, some philosophers think that the right way to describe an amoeba’s splitting is to say that the original amoeba dies and from its flesh there arise two new amoebae. Likewise, some philosophers think that when two entities merge into a single unified entity, the original entities perish and a new one is formed. That in fact may be how we should understand the process of conception: the egg and sperm perish, and a new thing results. But nothing like that happened in Bob’s life history—Bob never split into two individuals and never merged with anything else so as to lose its own identity. On the contrary, Bob’s functional organization has grown in complexity and interconnection, without any functional capabilities of a sort that one might think essential to its organic identity being lost.

Now, if I were an identical twin, matters would be slightly different as an argument could then be made that the pre-twinning embryo has indeed perished when it split in two. But I assume that’s not what happened to Bob (and if it is, the argument simply starts applying 2 weeks later). Bob has not died in the prosaic way of having his organic functioning disrupted, and hasn’t even died in the more outré ways that metaphysicians discuss.

Therefore, Bob, that embryo who came into existence 9 months before my birth, has never died. But if he has never died, and we do not have time travel, then he is still alive. Where, then, is Bob? But surely there is no mystery there. Every part of Bob—other than the cells in the placenta and the umbilical cord that were shed<sup>3</sup>—developed continuously into a part of me, and every part of me has developed ultimately out of a part of Bob. It is thus quite futile to look for Bob outside of me. If Bob is anywhere, he is right here, where I am. It may be true that most of the original cells in Bob are no longer around, but that does not stop the survival of an organism: organisms replace their cells regularly, and do not perish thereby.

Now, Bob can’t be a proper *part* of my body, because all of my body has continuously come from Bob’s body. Therefore, one can’t set aside some special part of my body and say “that part of me is Bob.” So, where is Bob? The answer is simple: *right here*. I am Bob. That embryo has grown to be a fetus, then to be a neonate, then an infant, then a child, then an adolescent and finally an adult. Bob is I and I am Bob. This was what I was trying to establish.

But this is a little too quick. I just said, vaguely, that Bob is here, and concluded that Bob is I. We need the following. Here where I stand there is only one large animal, and it is I. Bob is presumably right here—there is nowhere else for him to be. Bob has been growing for much of his life, and so Bob is also a large animal.

The only large animal here is Alexander Pruss, and hence Bob and Alexander Pruss are one and the same animal. I, thus, am Bob. If Bob is here, and if no part of me is a large animal, and if Bob is a large animal, Bob and I must be one and the same entity.

Moreover, as Alfonso Gomez-Lobo has pointed out to me, the identity between Bob's genome and my genome provides significant evidence of Bob and me being the same entity. This evidence is defeasible—both identical twins have the same genome as the embryo from which they are derived—but it is, nonetheless, evidence.

Besides, given how organic development works, it is easy to see that every organ of mine is an organ of Bob's, since Bob's organs have developed into being my organs, and yet without any transplant happening. Thus, I and Bob are organisms having all of our organs in common. But the only way that can be is if I and Bob are *the same* organism, i.e., I am Bob. "Bob" and "Alexander" are just different names for one and the same being, Alexander Robert Pruss, just like "Morning Star" and "Evening Star" are different names for the same planet Venus.

There is only one effective way of countering the above arguments, and this is to deny that I am an animal, that I am an organism, as that would allow one to maintain that where I am there is only one large animal, and it is Bob but not I. This response seems absurd on the face of it, and it is right that we should see it as absurd. I may be rational, but surely I am also a primate, and hence an animal. Moreover, presumably, all properly-functioning adult primates are conscious, and in any room where I am, there non-coincidentally is also a properly-functioning adult primate of the same weight, shape and location as me. That primate is conscious and I am conscious. But it seems an absurd multiplication of consciousnesses to suppose that there are *two* conscious beings there. And if there are two, which one makes the decisions? Primates make decisions and I make decisions. (Could the two of us disagree?) And if there are two conscious beings, presumably both conscious of the exact same things, then how do I know that I am the non-primate rather than the primate? It is palpably absurd to posit two thinking things in every room where I am present, and so the reasonable thing to say that I and the primate are one and the same. But the primate is an animal. Hence, so am I. (This is essentially one of the main arguments of Eric Olson, 1997.)

Nonetheless, there is a standard and powerful argument against the view that I am an animal. In a simple form it is this (Olson, 1995). If (a) my cerebrum is destroyed, (b) all of your body outside of your cerebrum is destroyed, and (c) your cerebrum is implanted in my skull and attached to my brain stem, then you would continue to exist, and continue thinking your thoughts, while I would surely be dead. Yet the, objection goes, the *animal* that was associated with you would be destroyed—the animal cannot be identified with the upper brain. And insofar as the metabolic activity is controlled mainly by the brain stem, and not by the cerebrum, the animal associated with me would continue to exist.

This argument, however, is mistaken. We should deny that the human animal perishes when everything outside its cerebrum is destroyed. Instead, we should say that the animal suffers from an amputation of every physical part but the cerebrum. At this point, however, there is a puzzle. You could not survive if every part of you

other than your foot was destroyed. Why say that you can survive if every part of you other than your cerebrum is destroyed?

One answer is that in those humans who have grown to the point where they have a cerebrum, the cerebrum is the central control system for the body.<sup>4</sup> This is obvious in the case of higher-level activity, but the amount of control we can achieve over breathing and—with more practice—heartbeat, the uncanny effectiveness of placebos for a wide variety of bodily problems, and the crucial elements of the voluntary in normal adult human reproductive and nutritive behavior all point to the centrality of cerebral activity once it develops. It is plausible that when the central control system of an organism survives and is separated from the rest of the body, the animal goes where that central control system goes.

Olson rejects this kind of a solution and simply bites the bullet—we do not go with our cerebra. His reasoning is this, “A detached cerebrum is not an organism because its parts are not caught up in any biological event that coordinates their activities. Its cells don’t work together as a unit” (Olson, 1995, p. 174). But this is mistaken. The parts of the separated cerebrum *are* caught up in a biological event that coordinates their activities. They are caught up in the kind of neural processing activity that occurs in primates.

Olson goes on, however, to illustrate the kinds of biological events he thinks should be involved. I shall only consider his first example, as the others can be handled analogously: “An organism controls the rate of its metabolism and the growth of its various parts by elaborate feedback mechanisms” (Olson, 1995, p. 174). But here we need to distinguish between *actual* control and *attempted* control. Imagine that all of the output signals from an adult primate’s brain stem were blocked. Very soon, the adult primate would die from lack of control of circulation. But the important point to observe is this: it would die *very soon*, not instantly. For a very short time, the heart would continue to function on the basis of signals earlier sent (which after all travel at some finite speed). Yet the actual *exercise* of control would stop as soon as the signals were blocked. Moreover, we can imagine that the bodily functions were artificially stimulated while the brain, including brain stem, was unable to control the rest of the body. Surely the animal would survive. It is not actual control, then, but a striving for the control of metabolism that is involved in the life of an organism. But the cerebrum, and not just the brain stem, is involved in the control of the metabolic life of the body. This is true both because of the subtle ways in which our psychological states affect our metabolic life, and because of the simple fact that under normal circumstances adult human metabolism is dependent on, and at least partly regulated by, the voluntary activities of eating and drinking.

The above response is logically compatible with two views of what happens when the cerebrum of a normal adult human is destroyed. On the first view, the normal adult human perishes. Human development is directed in a central way towards the formation of the cerebrum, and once the cerebrum is formed, the organism perishes with its destruction. On this view, in the initial cerebrum-transfer thought experiment, I perish when my cerebrum is destroyed, and you continue to exist, using what remains of my body as a prosthesis.

On the second view, the adult human survives the destruction, but not the removal, of the cerebrum (thus, the order of events matters—to remove and then destroy the cerebrum is different from destroying it and then removing what remains). To survive, the adult human needs either a functioning cerebrum or a functioning lower brain, and when both survive in separated form, the animal goes with the cerebrum rather than with the lower brain, as that is more central to it. One might, after all, reasonably say a similar thing about planaria which, when cut transversely in half, can have each half regenerate to a full planarian: Perhaps if you destroy the head half, the remaining tail half is the old animal, now mutilated. And if you destroy the tail half, the remaining head half is the old animal, now mutilated. But if you simply cut the planarian in half, then maybe the head half is our old planarian, while the tail half is a new, asexually reproduced, animal (certainly we would say this if we cut off only a small portion of a tail and it grew into a full planarian). On this view, both you and I survive the experiment, and you use me parasitically as a prosthesis.

It is also important to remember that to say that we are organisms is not to identify the metabolic functions as what is central to us. After all, we are not *simply* organisms. We are also, among other classifications, eukaryotes, chordates, tetrapods, amniotes, mammals, and primates. There is no reason to think that it is only what is found at the highest taxonomic level, that of organisms, that is central to our animal functioning. It is also in our nature, as the kind of organism we are, to develop a functioning cerebrum which is a central control system. We are rational animals.

### 2.1.2 Alternatives

I shall now consider several alternatives to the view that we are animals. The first is Cartesian dualism. Souls and bodies are separate substances. What I *really* am is a soul, a spiritual substance. The body is simply a tool my soul owns and uses, much as I might use a hammer. My body is an organism, indeed an animal, but I am not myself an organism or animal. Thus, what Bob is is my body: he is an animal I own and have a special relationship with. This dualistic view has paradoxical consequences. My wife has never kissed me—she has only kissed Bob, my body. You cannot touch me—you can only touch Bob. Rape seems more like a property crime. Making philosophical sense of the meaning of sexuality is a lost cause: two persons' having sexual intercourse is nothing but intercourse between the animals associated with each of the persons. Stealing one of my kidneys is a mere *property crime*—it is not stealing a part of me. These consequences are ethically unacceptable. After all, the government can legitimately take away some of my property for the greater good, and does so in taxes. If my body were mere property, then the government would in principle have a right, when necessary, to extract a kidney from me as a tax payment. Finally, observe, that if this is right, then the traditional rallying cry of abortion supporters “It’s my body” is no different in principle from the implausible argument that I can do whatever I like in my house because my house is my property.

There is too much absurdity there, and so this Cartesian view fails. But even if it did not fail, it could only be used by a proponent of abortion who had good reason to deny that the soul substance was united with the embryo from conception—otherwise, the safer thing is to refrain from killing what *might* be me. Moreover, the simplest hypothesis is that the soul substance is united with the animal at the beginning of the animal's existence—any other point is arbitrary. Since the soul substance is unobservable, it seems difficult to trump the simplicity-based presumption in favor of this hypothesis by empirical observations. One could try to bring in a religious argument based on revelation, but those typically are excluded from philosophical discussions of abortion.

My arguments against the Cartesian view are not arguments against the existence of a soul. The Cartesian view that the soul is a separate substance, distinct from the body, is not the only view of the soul. The Aristotelian or Thomistic view is that the soul is that which makes an organism be the organism it is and develop as it does. Thus, the soul is not something over and beyond the organism—it constitutes the organism as what it is. Our souls constitute us as the kinds of organisms we are. Thus as soon as there is a unitary organism, there is a soul. (Admittedly, Aristotle and Thomas believed that the conceptus did not have the same soul as I do—but either they were theorizing in the absence of empirical evidence about the conceptus being an animal that continuously grows and develops into me, or they were going against what they should have said by their own lights.<sup>5</sup>)

The Cartesian view is rather unpopular these days in secular circles. But there is a secular version of it that replaces body-soul duality with body-brain duality: I am not my body, I am not an animal—I am a *brain*. This kind of a view will not help the abortion supporter all that much, since the brain develops relatively early in pregnancy—around 6 weeks after conception. But in fact the most trenchant objections against the “I am a soul” view can be made against the “I am a brain” view. Only in the course of brain surgery can my wife kiss me if I am a brain. Rape, still, is a kind of property crime. My kidneys are not parts of me, but mere property, and hence can be expropriated by the government if necessary. The same applies to views on which I am not my brain but I am constituted by my brain.

And there is a further objection to any view on which the existence of my brain is necessary for my existence.<sup>6</sup> My brain developed out of earlier cells guided by the genetic information already present in the embryo: there was, first, a neural tube, and earlier there were precursors to that. Brain development was gradual, cells specializing more and more and arranging themselves. Why should the cells that were the precursors of the brain cells not be counted as having been the same organ as the brain, but in inchoate form? If so, then perhaps I was there from conception, even on a brain view.

Now, a non-Cartesian way of denying that I am an animal is to claim that I am a person and “person” is a functional concept like the concepts in functionalist theories of mind,<sup>7</sup> so that what I am is a functional entity.

Now, on a plausible functionalist view, I am identical with the entity that in fact engages in certain functions, namely: the receiving of inputs from the environment, the neural processing of these inputs in the way that is paradigmatic of personhood,

and the sending out of appropriate outputs. But the entity that receives these inputs, processes them in its brain and sends out outputs is the animal that has evolved these functions—the human animal. And hence, once again, I am an animal, even if functionalism is true. Or to put it a bit differently, Bob was an organism that *would* come to have the developed capability for engaging in these functions, and hence Bob is now that which has that developed capability (if  $x$  was once such that it would come to have a property  $P$ , then eventually  $x$  has the property  $P$ ). But according to this kind of functionalism I am identical with the entity that has that developed capability. Hence, I am Bob.

But one might take functionalism a step further. One might take me not to be the entity that exhibits the functioning, but to be the functioning itself. But that is absurd. For if I am a certain *type* of functioning, then I am an abstraction, which is absurd. So, on any at all tenable version of a view on which I am the functioning itself, I am a *token* of activity—I am a particular token causal process. But now we have a standard modal problem. For surely throughout my life I could have acted and thought differently from the way I in fact did. But were I to have done that, my activity would have been a different token of its type, or even a token of a different type. In either case, it would have been a different token, and so, had I acted and thought differently, I wouldn't have been myself—which is absurd. Moreover, it is an intuitively plausible claim that rather than my *being the thinking*, I am that which does the thinking.

A different kind of view insists that instead of my being an animal, I am *constituted* by an animal, and in the current literature this appears to be the most promising alternative to the view that I am identical with Bob. On constitution views, where I am, there are two coincident objects—a person and an animal. The activities of the two things are interconnected. On one version of the view, while the animal doesn't think, it engages in neural activity that constitutes my thinking and consciousness, and while I don't eat, I engage in some high level activity that is constituted by the animal's eating. On another version of the view, both I and the animal think, perceive and eat, but there are explanatory or constitutive relations that are supposed to reduce the puzzling consequence that there are two thinkers and two eaters.<sup>8</sup>

Consider first the view on which the animal doesn't think and isn't conscious, while I don't eat. Now, human animals do not lack any of the neurological prerequisites of consciousness that dogs or other higher animals have. If any animals are conscious, human animals are. But some animals, say canines, are conscious. Hence, human animals are conscious. This shows that the constitution theorist who denies that human animal is conscious has to also deny that dogs are conscious. The only plausible way to hold that view is to make the same distinction about higher animals as was made about us (Jeff McMahan makes that distinction in correspondence). There is Rover and there is a canine animal occupying the same place in space, and Rover is constituted by that canine animal. We do not have a name for the kind of thing Rover is, but let us call it a "derson", the dog equivalent of a person (it is presumably then the derson that is the *pet*, the entity that the owner has the special friendly relationship with). This view is quite implausible. It forces us either to deny that Rover is a dog and say that he is only a derson *constituted* by a dog, or

else to deny that dogs are animals and say that dogs are dersons that are constituted by canine animals.

Moreover, even quite primitive organisms like the sea slug *aplysia* appear to exhibit representational states, defensive activities and even learning.<sup>9</sup> While perhaps one might with difficulty accept some analogy to the person/human animal division in dogs, the idea of a similar division among sea slugs is absurd. Surely sea slugs are just animals. Now, sea slugs have representational states, and so do persons and the alleged dersons. Many of the representational states of dersons and human persons are more complex than those of a sea slug, and some of the representational states of dersons and human persons are believings and perceivings. While one could hold that some canine or human representational states—say, nerve-ending firings—are states of the animal and some—say, believings—are states of the der-son or person, such a theory appears unduly complex. It is much simpler to suppose that all the representational states accrue to the same entity. And indeed structurally Rover's believings and perceivings seem to enter into explanations of goal-oriented activities like self-defense in much the way that the sea slug's representational states do, except with greater complexity.

Moreover, a view that denies that human animals are conscious carries the cost of forcing one not only to deny functionalist accounts of selfhood, but also to deny functionalist accounts of consciousness. For as noted earlier, human animals engage in the kind of processing of information that functionalism holds consciousness to be. And yet functionalism is probably the best hope of naturalists for an account of consciousness. This increases the cost of the constitution view at least for naturalists.

Or consider this. If eating cannot be attributed to us, then by the same token other animal functions such as coition cannot be attributed to us either. Maybe we can say that the couple makes love, but it is their co-located animals that engage in coitus. This view not only sounds absurd (and obscene), but misses the ethically important fact that in sexual intercourse, interpersonal and animal relations come together. Moreover, it becomes puzzling why it is that the rape of a comatose victim is so wrong—the rapist, after all, may have no significant engagement with the person but only with the animal, on this kind of constitution view.

Now consider the kind of constitution view on which my animal also thinks, is aware, chooses, acts, etc., just as I do, and on which I breathe and eat just as my animal does. As a first move, note that it is difficult to deny that something that thinks, is aware, chooses and acts is a person. Thus my animal is a person and I am a person, and so it seems that there are two persons who are writing this paper. However, this inference has been denied. The usual move is to say that I think in a primary way while my animal thinks in a derivative way, while my animal eats and breathes in a primary way and I do so in a derivative way. We can then identify persons with the things that think, are aware, act, etc. in a *non-derivative* way.

Notice, though, that the dog and sea slug argument continues to apply, with only somewhat less sting than before. It would be implausible to suppose that (a) human beliefs are only derivatively the beliefs of the animal, while (b) dog beliefs are non-derivatively the beliefs of the animal. Therefore, we would still



have to suppose persons that are distinct from their canine animals. And the case of the sea slug would still point to a discontinuity between sea slugs and dogs: sea slug defensive behavior is to be explained by representational states that belong non-derivatively to the animal, while a significant amount of the dog's defensive behavior is explained by representational states that only derivatively belong to the animal, being primarily states of the person.

Next, consider an argument that Trent Dougherty gave me: It seems plausible that any derivations of properties would go in the same direction as the direction of constitution. On the constitution view, I am asymmetrically constituted by the animal but I do not constitute the animal. Therefore, it is plausible to suppose that it is *my* activities that are derivative. But while some of my activities—say, eating and breathing—are derivative from the animal's activities, it is the animal's thinking that is derivative from my thinking.

Furthermore, the idea of a division of activities and attributes between those primarily of the person and those primarily of the animal is dubious. While eating, breathing and mating are things that even fairly primitive animals do, and hence may count as primarily activities of the animal, they are also activities that we can engage in voluntarily. Breathing is a particularly interesting case. We breathe sometimes voluntarily and sometimes involuntarily, and there is a continuum between the two extremes. When asleep, our breathing is entirely involuntary. When we blow up a balloon, it is entirely voluntary. But sometimes it is something in between—for instance, when I self-consciously think about my breathing, as I am when writing this paragraph, my breathing becomes quite irregular.

Next, consider this. Thinking, being aware, choosing, and acting are typically valuable activities. Indeed, the distinctive value of the lives of persons comes from engaging in such activities. Therefore, on this constitution view, the life of my animal has the same kinds of value that my life does, since it involves these activities. Therefore, the same kinds of moral considerations that apply in my case should apply in the case of my animal. In particular, it is just as wrong to kill my animal as it is to kill me, and for the same reason. Now in [Section 2.2](#) of this paper, I will argue that if I am identical with the fetus in my past, it is wrong to kill that fetus because it would deprive me of great goods. But by the same token, if my animal is identical with the fetus, and my animal has the same goods that I do, then it will be wrong to kill that fetus because it would deprive that animal of great goods. Hence, my main argument against abortion will continue to work.

There is a natural response to this: my animal's mental life does not have the same value of my mental life, because my animal's mental life is derivative from mine. But if this is so, then the constitution account threatens to make the derivative "mental life" of my animal be only an *ersatz* mental life. The mental life of my animal just wouldn't be the same kind of mental life if it didn't have the same value. And if it is an ersatz mental life, then we are back to the first constitution view on which the animal did not think.

Finally, consider an argument based on the ideas of Olson (1997, p. 166) and Merricks (2007, p. 141). When I think that I am a person, what is my animal thinking? The dilemma is that either it is thinking that *it* is a person or it is thinking that

*I* am a person. Suppose first it is thinking that *it* is a person. Then the animal is mistaken, on the constitution view, because it is only I who am the person. But this threatens my knowledge of the fact that I am a person. There are on this view two entities whose mental life is just like mine. One of them is a person and the other is an animal. Why should I think that of the two, it is *I* who am the person, rather than the other entity? Thus, this horn of the dilemma leads to scepticism over whether we are persons.

Suppose, on the other hand, that the animal's thinking, though presumably tied to the same neurological processes as mine, has as its content that *I* am a person. Likewise, then, when I say "I am a person", the animal says "I am a person", but in its idiolect "I" refers not to the speaker, but to its constituted person, namely to me. Therefore, we need to revise our view of what the indexical "I" refers to. Only in half of the cases does it refer to the speaker. In the other half of the cases it refers to the speaker's constituted person. This implausible conclusion adds significant cost to the view.

The best view is that I am Bob. I was once an embryo and a fetus. The embryo or fetus that was there was just I—in an earlier stage of my life. This completes the first and hardest step of the argument.

### 2.1.3 Epistemic Considerations

But let me end the first argument with a final remark. Suppose that one of the alternative accounts of my identity is insisted on. Thus, it is denied that I am an animal, and affirmed that in the same place where I am, there is an animal and there am I as well. Suppose, however, that my argument in [Section 2.2](#) succeeds in showing that if I was a fetus, it would have been wrong to kill that fetus. The following move is then available to me.

Consider the metaphysical view, *V*, that denies that I am an animal and affirms that an animal is co-located with me, and suppose you accept *V*. Now consider this thought experiment. Suppose Sam is a supernatural being that you know to be incapable of asserting a falsehood (even by accident). Sam tells you: "I know whether *V* is true or not. Here's a deal. If *V* is true, I will give you \$50,000. If *V* is false, I will kill your brother. Do you accept?" It would clearly be morally irresponsible to accept. The arguments in favor of *V* are not sufficiently strong to justify doing something that, if *V* is false, will result in your brother's death.

But, likewise, if the rest of my argument succeeds, and the only plausible way to get out of the argument is to accept *V*, then to have or perform an abortion on the assumption that *V* is true is rather like accepting Sam's deal, though exactly *how* like Sam's deal it is will depend on what one's reasons for abortion are. It might after all be acceptable to take a deal like Sam's if one's life depended on it, rather than its being a matter of \$50,000. Nonetheless, a lot of variants on Sam's deal will be unacceptable, and we still get an argument that it would be wrong to have an abortion in many circumstances.

Moreover, there are policy implications. Suppose that Sam offers Congress the following deal: “If  $V$  is true, I will greatly alleviate poverty; if  $V$  is false, I will raise the murder rate by about a million deaths a year.” Unless the arguments for  $V$  are much stronger than any we have in the philosophical literature, this is a deal surely not to be accepted. There are not very many—if any—controversial metaphysical views that one would be right to stake so many lives on, and  $V$  is surely not among them.

## 2.2 If I Was a Fetus, It Would Have Been Wrong to Kill That Fetus

### 2.2.1 *Argument 1: Deprivation of Future*

There are several paths to the conclusion of the second part of the argument, that if I was once a fetus (or an embryo for that matter), then it would have been wrong to kill that fetus, under exactly the same circumstances under which it would be wrong to kill me now.

The most powerful argument is to look at what is wrong with killing me now. Killing me now is a paradigmatic crime-with-a-victim, the victim being me. What would make killing me now wrong is the harm it would do to me: it would deprive me, who am juridically innocent, of life, indeed of the rest of my life. Now, consider the hypothetical killing of the fetus that I once was. This killing would have exactly the same victim as killing me now would. Moreover, the harm inflicted on the victim would have been *strictly greater*, in the sense that any harm inflicted on me by killing me now would likewise have been inflicted on me by killing me when I was a child. I am now about 38 years old. Suppose that left to nature’s resources, I would die at 65. Then, killing me now would deprive me of years 38 through 65 of my life. However, killing me when I was a fetus would also deprive me of years 38 through 65 of my life—as well as the years from the moment of the killing up to 38. Given that murder is a crime whose wrongness comes from the harm to the victim, it is clear that when the victim is the same, and the harm greater, killing is if anything more wrong.

Of course, there may be circumstances in which it is acceptable to kill me now. It might be that under some circumstances capital punishment is justified. If so, then it might be right to kill the fetus under the same circumstances. However, it is also clear that the circumstances involved in capital punishment do not apply in the case of the fetus. Whether there are any other circumstances in which it is acceptable to kill me now is a question that is beyond the scope of this paper, though I believe the answer is basically negative. In any case, we see that the wrongfulness of killing me when I was a fetus is at least as great as the wrongfulness of killing me now in relevantly similar circumstances. Thus, my moral status when I was a fetus with respect to being killed is the same, or more favorable than, my status now.<sup>10</sup>

The reason for the “more favorable than now” option is that we have an intuition that it is particularly wrong to kill people earlier. Although there may be no duty to sacrifice one’s life thus, we see nothing irrational in an older person sacrificing his life for a younger on the grounds that the older has literally less to lose by death. When I was a fetus, I had more to lose by death than I do now. Thus, to have killed me then would, strictly speaking, have been a greater harm. Stephen Napier has pointed out to me that this intuition is supported by the fact that we generally find it easier to justify removing life support from geriatric patients than from neonatal intensive-care patients.

Observe that nothing is said here about whether I was a person when I was a fetus. This is irrelevant. Whether I was already a person then or not, killing me would have the same victim and greater harm as killing me now. Observe that if I was not a person when I was a fetus, then the harm in killing me then would have been even greater than if I was already a person then. For, killing me when I was not a person would thus have deprived me of *all* of my personhood as lived out on earth, and this radical deprivation would have been a greater crime than killing me now which would not deprive me of ever having had a personhood lived out on earth.

Observe also that even if the deprivation of a valuable future were not *the* factor that makes a typical murder wrong, such a deprivation is a very serious harm in its own right. Consider the act of making me spend the rest of my life in a coma, perhaps in order to gain medical knowledge into how comatose patients function. To do that is not the same as killing me. (If one thinks that irreversible loss of consciousness is death, we may suppose here that the loss of consciousness is not irreversible, but that as a matter of fact the plan is never to reverse it.) What is wrong here? Presumably it is that I have been deprived of something of great value, namely many years of adult life. But that is the same thing that I would have been deprived of had I been aborted.

**Objection 1: What makes killing me now wrong is that I have *interests*, not that I will be deprived of a future. But fetuses have no interests.**

Now, first of all, it is very plausible that anything that can be harmed has interests, that anything that can be deprived of a valuable future can be harmed, and hence that the fetus has interests. However, those who propose the interest-violation account of the wrongness of killing typically take it that to have an interest one must be a being with a capacity of taking an interest in things. I think that the claim that anything that can be harmed has interests is more plausible than the claim that only something that can take an interest has an interest. Still, let us continue to consider this view of interests as tied to my developed capacity of taking an interest.

Recall the assumption that killing is wrong due to the harm it imposes. Now if overall I had an interest in being killed, plainly my having that interest would not make killing me any more a harm than if I had no interests—in fact, it would make it less of a harm. Similarly, if my interests were independent of whether I live or die, they would not make killing me a harm. It is only when all things considered I have an interest *in being alive* (or in something that requires being alive) that the interest at all plausibly contributes to making it wrong to kill me. So we should

charitably modify the objection to say that what makes killing me wrong is that I have an interest in not being killed.

Now consider this dilemma. Either it is or is not possible to have an all-things-considered interest in dying. Suppose it is not possible. Then no matter how miserable a life one has, it is a life worth living. Many theists will affirm this because they believe all human life to be a living out of the life of an image of God, or a participation in God. Such a view is only plausible on views on which our interests are not tied to our subjective judgments. But if they are not so tied, then it seems very plausible that we could say that the fetus also has an interest in life, and hence the interest-based objection to the argument fails.

Suppose now that it is possible to have an all-things-considered interest in dying. Presumably, then, the following will be a case like that. Mike has completed all the tasks he's set for his life. He is in horrendous pain, tired of the indignities of hospice care, and will die within a year. Mike has no family, and all his friends have abandoned him. He desires death to come swiftly and painlessly. He is clear-headed about this desire, and this desire would survive idealized psychotherapy. If it is possible to have an all-things-considered interest in dying, Mike has such an interest. And we have assumed that it *is* possible.

But now add one further element to the story: Mike does not consent to being killed. This element is compatible with all that I have said. For it is important to distinguish what one desires from what one consents to. Consent is an act, while desire is an emotion. Sexual relations with a non-consenting party are rape even if the non-consenting party in fact desires the sexual relations. A "she wanted it" defense by a rapist is not only typically factually wrong, but even if it were factually correct, it would be no defense at all, since what is required for a sexual act to be consensual is consent, not desire. And there can be reasons why one might not consent to something that one desires. For instance, one might believe that it is immoral for one to consent to the desired state of affairs because of some general or specific moral rule. Maybe when Mike's grandfather was on his deathbed, Mike promised to him never to consent to being killed, even if he (Mike) should be in great pain.

Now, if the wrongness of killing is grounded in an interest in being alive, then it is permissible to kill Mike even if he does not consent, as long as it is not in Mike's interest to be alive. But it is wrong to kill a clearheadedly non-consenting innocent person, and hence the interest account of the wrongness of killing is mistaken.

Therefore, if it is possible to have an all-things-considered interest in dying, the interest account of the wrongness of murder is mistaken. And if it is not possible to have such an interest, the interest account does not support the permissibility of abortion.

One might try to enrich the account in the objection by adding that what is wrong is killing someone contrary to their interest *and without their consent*. This does not affect the horn of the dilemma on which we supposed it impossible to have an all-things-considered interest in dying. Now consider the enriched account on the supposition that it is possible to have an all-things-considered interest in dying in a case like Mike's. Then while we get right the fact that to kill Mike is wrong, the enriched account violates the intuition that what makes murder wrong is the harm it

imposes on the victim—on this view, it is not the *harm* but the *unconsented-to harm* that makes the murder wrong. And I am taking the intuition that murder is wrong in virtue of the harm to the victim as basic.

**Objection 2: Boonin has proposed that what makes it wrong to kill a normal adult now is the prospective victim’s present dispositional desire, or present ideal dispositional desire, not to be killed (Boonin, 2003, sect. 2.8). (An ideal desire is a present desire that is corrected for “distorting effects” (Boonin, 2003, pp. 71–72)). But fetuses have no such desire.**

The response to Objection 1 applies very easily here. We simply imagine a case of someone who has a present dispositional desire, or present ideal dispositional desire, to die, but who, nonetheless, clearheadedly refuses to consent, or actually objects, to being killed. To kill such an individual is murder.

Moreover, one may apply a second dilemma against this account. Either the account is based simply on present dispositional desires or it is based on present ideal dispositional desires. Suppose it is based on present dispositional desires. Then, the account permits the killing of the deeply depressed suicidal teenager who has no present occurrent or dispositional desire to live; and that is absurd.<sup>11</sup>

But accounts based on ideal dispositional desires are untenable, for at least three reasons. The first is that ideal dispositional desires seem to be the desires one *would* have if one were appropriately informed, if one had gone through the appropriate psychotherapy, and so on. But then this is a counterfactual account, and as such it suffers from all the problems of counterfactual accounts that go under the head of “the conditional fallacy.”<sup>12</sup> For instance, we might suppose that George is such that were he to become fully informed about some relevant subject, he would immediately get a fatal heart attack, and hence ideal desires cannot be counterfactually defined for him. Or suppose I have no occurrent or dispositional desire to eat a pickle, and on the contrary am slightly disgusted by the idea. But were I to be informed that the comet Tempel 1 is pickle-shaped, I would suddenly find myself with a strong desire to eat a pickle. That curious counterfactual is surely irrelevant to the question of what would be good for me now, when I have no desire for a pickle. But the point of bringing in ideal desires is presumably to figure out what is good for a person.

The second reason is this. The motivation for focusing on the agent’s own desires is presumably an internalist one: something is good for one if and only if it is appropriately related to one’s very own desires. However, as William Lauinger has persuasively argued (Lauinger, 2009)<sup>13</sup>, this internalist intuition is betrayed once we move to ideal case. For the desires of someone who is fully informed and/or has gone through idealized psychotherapy may very well be the desires of an individual psychologically alien to me (though numerically identical with me), and hence, on internalist grounds, prudentially irrelevant.

The third problem with the idealized psychotherapy move is this. If I received idealized psychotherapy as a fetus, I too would have wanted to live. Granted, it requires a greater departure from the actual world for me to receive idealized psychotherapy when I am a fetus than for the teenager to do so, but the counterfactual is

still plausibly true (perhaps because of some possible world where medical technology accelerates brain development), and so if the wrongness of killing the teenager is grounded in the counterfactual, it was likewise wrong to kill me as a fetus.

And if one wants to build in some condition about how idealized psychotherapy is not to involve too great a departure from the actual world, then counterexamples will abound. For we can easily imagine cases where for idealized psychotherapy to be given to the teenager, a quite significant departure from the actual world is required. For instance, the teenager may be *extremely* resistant to psychotherapy, so that the amount of change to her brain that would be needed to make her amenable to psychotherapy would be about as large as the development that the fetus would require. For another, we could imagine that there are many overdetermining causes preventing psychotherapy (e.g., many independent and highly reliable robots who will kill the teenager if psychotherapy is attempted), requiring a great departure from the actual world to find a world where the teenager undergoes psychotherapy. Yet such resistance to psychotherapy or the presence of robots does not make it acceptable to kill the teenager.

**Objection 3: Carson Strong has proposed that what is central to the wrongness of killing is deprivation of the *continuation* of projects, and it is much worse to deprive people of the continuation of a project than to deprive them of the possibility of beginning the project (Strong, 2008, p. 730).**

The consent considerations in the response to Objection 1 fully apply here. Moreover, it is clear that it is wrong for a psychiatrist to kill a patient just because she has discovered that the patient's life is, in fact, empty of projects. In fact, Strong himself gives a case apparent of this sort and seems to think that killing is *prima facie* seriously wrong there (Strong, 2008, p. 729).<sup>14</sup> Furthermore, we may consider that it is just as bad for parents to raise their children in such a way that they will not be able to embark upon significant projects as to raise them in such a way that they will not be able to complete such projects. In starting a valuable project, one has already done something of value—one has made an *attempt*.

To deprive someone of the project prior to the beginning deprives the person of *both* the good of the beginning of the project *and* of the continuation, and hence, surely, is the worse. This is particularly clear in the case of very significant projects. It is surely better to embark on the project of virtue and not complete it, than never to start out.

**Objection 4: What grounds the wrongness of killing is not interests or harms, but the victim's *dignity*, and the fetus lacks dignity.**

However, dignity does not seem to be an achievement. Hence, I either have always had it, in which case fetuses have dignity since I was once a fetus, or I have never had it, in which case the wrongness of killing me cannot be grounded in it. Moreover, if one sees dignity as having the kind of value it needs to have to do the sort of ethical work it does, one will have to conclude that it is a very grave wrong to deprive a being of that good. But if the fetus does not have dignity, and dignity only develops at some later age, then to kill the fetus deprives it of the good of dignity.

This last remark reminds us that I do not actually need my argument to suppose that deprivation of a valuable future like mine is *the* primary harm in killing. All I need is that such deprivation of such a future is an extremely serious harm of a sort that it would be wrong to impose on me. It would be wrong, for instance, for you to make me unconscious for the rest of my life, because it would deprive me of many of life's goods: the ability to walk about, to converse with friends, to raise my children, and so on.<sup>15</sup> But the deprivation of the future that killing involves *also* deprives me of all of the very same goods. So if deprivation is a wrong-maker in the case of making someone unconscious for the rest of one's life, it will be just as potent a wrong-maker in the case of killing. In this variant of the argument, the conclusion is that it would have been impermissible to kill me when I was a fetus except in circumstances analogous to those which would permit making me unconscious for life.

A complication here, as well as in the original version of the argument, is with the afterlife. Suppose that after I die, I go to a happy heavenly afterlife.<sup>16</sup> In that case, perhaps I have lost nothing by being killed—or by being made unconscious, for that matter. At least three responses are possible here. The first is that a defense of abortion that depended on the supposition of a happy heavenly afterlife for the aborted fetus might well require religious assumptions of a sort that many would think problematic to use in public debate in a secular state. It would probably require the settling of the question of which religious tradition is correct and might also require the settling of open theological questions within that tradition, such as whether unbaptized infants go to heaven or to limbo.

The second problem with an afterlife response is that even if there is a happy heavenly afterlife available, killing one deprives one of the goods of an *earthly* life, which goods presumably are worth having as well. After all, the best arguments for a happy heavenly afterlife presuppose the existence of God, and if God exists, then he presumably has to have a good reason why he does not send us all directly to heaven.

The third response to the afterlife objection is that, plainly, a healthy normal human adult *is* seriously harmed by being made unconscious for the rest of his or her life, and if a particular afterlife hypothesis is to be plausible, its defender needs to make it compatible with this intuition. And if the hypothesis is compatible with this intuition, it should also be compatible with the idea that the adult would be seriously harmed by deprivation of life.<sup>17</sup>

**(E) Objection 5: What is wrong with murder is the deprivation of a *person* of future goods, since such a deprivation is contrary to the person's autonomy<sup>18</sup>**

But the case of killing the suicidal teenager is a serious problem for this suggestion. It is wrong to kill the teenager, but it is difficult to say that it is contrary to the present autonomy of a person to kill her if she *wants to* be killed.

It is a non-starter to say that by killing the suicidal teenager one is depriving her of her *future* autonomous activity. For the same is true of the fetus. One might invoke counterfactual idealized psychotherapy, and say that it is wrong to kill the



teenager as she would not wish to be killed given such psychotherapy, but the same problems as in the case of the discussion of Objection 2 face that move.

Perhaps we can say that *some* of the teenager's present autonomous activity requires the continuation of life for that activity to come to fruition. But we can imagine sufficiently profound depression that is sufficient to ensure that the teenager engages in no present autonomous activity that requires a future life. We could imagine, for instance, that the teenager is presently asleep, and that a neural scan shows that prior to falling asleep she had not embarked on any autonomous projects that require a future life. In such an extreme case, it is not clear why it is contrary to her *autonomy* to deprive her of the future goods of her. They are not goods that she is pursuing. It seems that all the work in making the killing wrong is being done by the value of these goods, not by the autonomy. But if the work is done by the value of these goods, then we can say the same thing about the fetus that would be deprived of these same goods by being killed.

Maybe, though, one might have the intuition that if anyone is permitted to decide when  $x$  is to die, it is only  $x$  herself. Currently, the teenager is incapable of making a responsible or autonomous decision about the matter, and so neither is it permissible for anyone else to make that decision for her. But exactly the same point can be made about the fetus. Granted, there is this difference: the severely depressed teenager is incapable of making a *responsible* or *autonomous* decision, while the fetus is simply incapable of making a decision. But insofar as considerations of autonomy go, non-responsible, non-autonomous decisions count for little if anything. So if no one is permitted to decide for the teenager that the teenager is to die, no one is permitted to decide for the fetus or embryo that he/she is to die.

### 2.2.2 *Argument 2: Personhood*

Moreover, a common intuition shows that in fact I was a person when I was a fetus. This will give a second argument for why killing a fetus is wrong, and it will be the only argument that crucially depends on issues of personhood. The argument turns on the metaphysical notion of an "essential property." The essential property of a being is a property which that being cannot lack as long as that being exists. For instance, many philosophers think that *being a horse* is an essential property of a horse. If you take a horse like Silver Blaze and modify it to such a degree that it is no longer a horse, Silver Blaze will cease to exist and something else will come to exist in his place. Likewise being material is an essential property of a rock: it could not exist without being material.

Now, it is a very plausible intuition that *being a person* is an essential property of every person. If someone were a person, and personhood were removed from her, she would cease to exist. If this intuition is correct, then the fetus that I was was a person, since I am a person. If the fetus that I was were not a person, then it would be the case that I could have existed without being a person—which would be impossible.

Even more plausibly, it is an essential property of me to have a property that I will call *human dignity*. Human dignity is a property of me which makes it wrong

for another human being to set out to kill me when I am juridically innocent. As before, I leave capital punishment as an open question. Human dignity is an essential property: it is part of the essence of who I am—were I to lack this intrinsic dignity, I would not be myself, I would not exist. But if human dignity understood in this way is an essential property and I have it, then the fetus that I was also had it—otherwise it wouldn't be an essential property. The idea that human dignity is an *achievement*, is something one can have only for a part of one's life, seems mistaken.

### 2.2.3 Argument 3: Strong Deontology and Gradual Change

Strong deontology holds that it is wrong to intend to kill a normal (and hence also juridically innocent)... adult human solely in order to produce benefits to other individuals, no matter how great these benefits.<sup>19</sup> On the other hand, we generally think it is not wrong to kill a frog or even a dog to produce great benefits. Moreover, it takes a smaller benefit to justify killing a frog than to justify killing a dog. As a model of this, we may define the *moral significance of  $x$  at time  $t$*  as the largest quantity  $u(x,t)$  of utility with the property that whenever  $u < u(x,t)$ , it is wrong to kill  $x$  at  $t$  solely in order to produce a utility  $u$  to individuals other than  $x$ . If our units of utility are average human lives, then most people will say that  $u(\text{normal adult frog, now}) < u(\text{normal adult dog, now}) < 1$ , as it is permissible to kill an a normal adult dog to save a typical human life.

Note that if it is wrong to kill  $x$  at  $t$  for the sake of *any* utility whatsoever, then  $u(x,t)$  is equal to infinity. The strong deontological view, then, entails that if  $x$  is a normal adult human at  $t$ , then  $u(x,t)$  is equal to infinity.<sup>20</sup> A more moderate deontology might hold that  $u(x,t)$  is large but finite—maybe it's wrong to kill one innocent to save two, but not wrong to kill one innocent to save a thousand. My argument requires strong deontology, which I think is the correct view.

Presumably, in the case where  $x$  is an earthly individual, the value of  $u(x,t)$  depends on various relevant natural properties such as complexity, intellectual sophistication and agential capability. Let utilities be measured in units of average human lives. The following three premises are now very plausible:

- (1) If  $x$  is an earthly individual, then  $x$  does not significantly change in the relevant natural properties over the period of a femtosecond.
- (2) If  $x$  is an earthly individual, and  $u(x,t)$  changes significantly over an interval of time, then  $x$ 's relevant natural properties also change significantly over that period of time.
- (3) If  $u(x,t_2) > 100 u(x,t_1) + 100$ , then  $u(x,t)$  has changed significantly between  $t_1$  and  $t_2$ .

Now, (1)–(3) entail:

- (4) If  $x$  is an earthly individual, then either  $u(x,t)$  is infinite at every time  $t$  during  $x$ 's existence or  $u(x,t)$  is finite at every time during  $x$ 's existence.

To see the entailment from (1) to (3), suppose for a *reductio ad absurdum* that  $u(x,t_1)$  is finite and  $u(x,t_2)$  is infinite. Now, there is a sequence of times  $T_1, \dots, T_n$

such that  $T_i$  and  $T_{i+1}$  are within a femtosecond of each other, and  $T_1 = t_1$  and  $T_n = t_{n+1}$ . I now claim that if  $u(x, T_i)$  is finite, then  $u(x, T_{i+1})$  is finite as well. For if  $u(x, T_i)$  is finite and  $u(x, T_{i+1})$  is infinite, we have  $u(x, T_{i+1}) > 100 u(x, T_i) + 100$ , since the right hand-side of this inequality is finite while the left is infinite, and by (3) we have it that  $u(x, t)$  has changed significantly between  $T_i$  and  $T_{i+1}$ , which by (2) implies that  $x$  has changed significantly over that period in the relevant natural properties, and this contradicts (1) as  $T_{i+1}$  and  $T_i$  are within a femtosecond of each other. Since  $u(x, T_1) = u(x, t_1)$  was suppose to be finite, it follows that  $u(x, T_2)$  is finite, and hence so is  $u(x, T_3)$ , and so on up to  $u(x, T_n)$ . Therefore  $u(x, t_2)$  is finite as  $t_2 = T_n$ , and this contradicts our assumption that  $u(x, t_2)$  is infinite.

We now add the following three premises:

- (5) The fetus in my past is identical with me.
- (6) I am an earthly individual.
- (7)  $u(I, \text{now})$  is infinite.

Here, (5) was established in [Section 2.1](#), (6) is obvious, and (7) follows from strong deontology. It follows that:

- (8) The fetus that I once was such that  $u(x, t)$  was infinite.

Therefore, the fetus that I once was was such that it would have been wrong to kill it for the sake of any finite utility to others. Given that typical abortions are performed for the sake of finite utility to others, it means that a typical abortion of me when I was a fetus would have been wrong.

The argument bears a certain resemblance to the fallacy that claims that a significant change cannot be compounded of a large number of insignificant changes—that might be called the Sorites fallacy. But the argument does not commit the fallacy, as it does not deny that a significant change can be compounded of insignificant changes. Rather, the argument, very plausibly, denies that an *infinite* change can be compounded of a finite number of insignificant changes.

Moreover, it is plausible that a being which is such that  $u(x, t)$  is infinite has whatever dignity or right to life that I do. And hence it is wrong to kill that being in circumstances relevantly similar to circumstances where it is wrong to kill me.

The argument may be thought to prove too much. As a referee pointed out, it seems to also have the consequence that the transition in evolutionary history that produced humans could not have been a transition made by insignificant degrees. For it must be that there was a first primate  $x$  that had  $u(x, t)$  infinite and its parents  $y_1$  and  $y_2$  had finite  $u(y_i, t')$ . Here, however, one can bite the bullet. It does not seem absurd to suppose that a small genetic change in the right place in the genetic code can produce a significant difference. Moreover, the genetic changes are discrete. While we can slice time about as finely as we wish, into femtoseconds or even Planck times if we wish, a genetic difference will involve a discrete change to at least one codon.

### 2.2.4 Argument 4: Veil of Ignorance

Finally, Russell DiSilvestro has offered a very different argument for the wrongfulness of killing the fetus that once was, based on John Rawls' concept of justice (DiSilvestro, 2005, pp. 285–304). Even though I take Rawls' concept of justice to be incorrect, I shall give a variant of DiSilvestro's argument. Rawls bids us to imagine that we do not know which role in society we fill—imagining this is called entering behind the “veil of ignorance”. What kind of a society with what kinds of rules would I rational come up with, on selfish grounds, if I did not know which role in this society I am going to live in? Rawls says that that kind of society is the just society, and its rules are the rules of justice. In such a society, for instance, we would forbid racism, because behind the veil of ignorance we would not know whether we would end up having the role of victim or inflictor of racism, and we would not want to take the risk of being the victim. Likewise, we would prohibit the murder of adults.

Would we forbid the killing of fetuses? This question depends on just how much we are to be ignorant of behind the veil of ignorance. If we know that we are not fetuses, then we might not forbid the killing of fetuses when it is convenient to non-fetuses, because we would have no selfish reason to prohibit it. So is the fact of us not being fetuses something that is behind the veil of ignorance or not? Well, we must be careful not to take too much out from behind the veil. For instance, if racism is to end up being deemed unjust, our *race* must lie behind the veil. Moreover, even our being conscious must fall behind the veil—thereby showing how much the veil is just a figure of speech, since we cannot really be ignorant of our consciousness. The reason our being conscious must fall behind the veil is that otherwise we might well enact that it is right to kill the unconscious for the sake of the conscious—to use the woman in a coma for medical experiments, say. But at the same time, we can't put too much behind the veil. We had better have an awareness of ourselves as human, since otherwise our “just society” will end up prohibiting all killing of animals, and this would make even most vegetarian farming wrong because of the moles and voles and other animals killed in the process of farming.

So where do we draw the line? We can propose this simple criterion. Behind the veil, we are aware of which social roles it would be logically possible for us to fill, but not aware which of those roles we do in fact fill. It would not be logically possible for me to fill the role of a mole in the ground—the mole would not be me. So I know, even behind the veil, that I am not a mole. However, it plainly *is* logically possible for me to fill the role of a fetus—it is possible, because I *did* fill the role of a fetus once! Thus, whether I am a fetus or not is something that must fall behind the veil of ignorance, and hence the killing of fetuses will end up being prohibited in exactly the same way as that of adults: we just wouldn't want to take the risk that we might end up being a fetus that is being killed. Hence, justice requires a prohibition on killing fetuses in exactly the way in which it requires a prohibition on killing adults.

### 2.3 If It Was Wrong to Kill Me When I Was a Fetus, It Was Wrong to Kill Anyone When He or She Is a Fetus

If you cut me, do I bleed any more than the next human? No. I was not and am not special. If it was wrong to kill me when I was a fetus, it was likewise wrong to kill anyone else when he was a fetus.

It might be argued that there are some special differences between the fetus that I was, which we have seen it would have been wrong to kill, and some other fetuses. For instance, I was *wanted*. But that I was wanted did not anywhere enter into my arguments against killing me when I was a fetus. It is wrong to kill me *now* no matter whether I am wanted by others or not. Killing me earlier, I have argued, is not significantly different from killing me now, and so whether I was wanted or not is irrelevant.

A different objection would be that, as far as I know, I did not endanger my mother's life. However, my arguments would continue to apply even if I did: the fetus needs to be protected at least to the extent to which we would protect an adult under relevantly similar circumstances. The fetus endangers the mother's life unintentionally. Whether it is acceptable to kill the fetus under those circumstances depends on whether it would be acceptable to kill me now were I to endanger my mother's life *unintentionally*. But the unintentional endangering case is different. As I announced, the aim of this paper is limited: it is to argue that killing fetuses is wrong under the same circumstances under which it is wrong to kill adults, but it is not the purpose of the paper to discuss the circumstances, if any, under which it is permissible to kill adults. I think it *would not* be acceptable to kill me were I presently endangering my mother's life unintentionally: I will simply say in support of this that were I alone in a space capsule, 3 days from rescue, with my mother, with only enough air for 1.5 days each, it would not be acceptable for my mother or her agent to kill me, I take it.

A yet different objection is: I was a healthy fetus, but some others are not. The wrong in killing me when I was a fetus would have been depriving me of a meaningful and long future life. But what if the fetus cannot be expected to have such a life? Again, I respond that the purpose of this paper is limited: I am not going to settle issues of euthanasia here. It is acceptable to kill such a fetus only if it is acceptable to kill an adult who cannot be expected to have a meaningful and long future life. Again, I think it is not acceptable to kill an adult under such circumstances. Human life is intrinsically worthwhile. But this is not a paper about euthanasia (though the discussion of Objection 1 to Argument 1 in [Section 2.2](#) does have some relevance to the morality of euthanasia). If I have shown that the fetus is worthy of at least the same respect as an adult in comparable circumstances, I have done my task.<sup>21</sup>

### Notes

1. This paper is a significantly extended version of Pruss (2002).
2. If *x* yesterday climbed into a time machine to take her to the year 3000, and has never returned, then today *x* doesn't exist, even though *x* hasn't died yet.

3. One might try to argue that Bob died at birth, because of the loss of his placental cells and umbilical cord. But this is implausible. The loss of an organ does not kill a human being unless it disrupts general functioning, and in this case no disruption of general functioning occurred.
4. Perhaps operated by the soul if interactionist dualism is correct. Note that the view that we are animals is compatible with dualism if the dualist is willing to accept—as Aristotle and Aquinas were—that animals have souls.
5. For a discussion of Aquinas' view, see Stephen Heaney, "Aquinas and the Presence of the Human Rational Soul in the Early Embryo", *Thomist* 56 (1992): 19–48.
6. This includes the view of Jeff McMahan, *The Ethics of Killing: Problems at the Margins of Life* (Oxford: Oxford University Press, 2003).
7. For classic versions of functionalism about minds see Hilary Putnam, *Mind, Language, and Reality* (Cambridge: Cambridge University Press, 1975) or David Lewis, "An Argument for the Identity Theory", *Journal of Philosophy* 63 (1966): 17–25.
8. E.g., Lynne Rudder Baker, *Persons and Bodies: A Constitution View* (Cambridge, Cambridge University Press, 2000).
9. See R. D. Hawkins and E. R. Kandel, "Is There a Cell Biological Alphabet for Simple Forms of Learning?", *Psychological Review* 91 (1984): 375–391, and Joëlle Proust, "Mind, Space and Objectivity in Non-Human Animals", *Erkenntnis* 51 (1999): 545–562.
10. The argument is, of course, similar to that of Don Marquis, "Why Abortion is Wrong", *Journal of Philosophy* 86 (1989): 183–202, but I put more emphasis on my identity with the fetus, thereby obviating the question whether the goods of adulthood count as the *fetus's* future.
11. See also Beckwith (2006, pp. 187–188).
12. See C. B. Martin, "Dispositions and Conditionals", *Journal of Philosophy* 44 (1994): 1–8.
13. William C. Lauinger, "Human Well-Being: The No Priority Theory" (PhD diss., Georgetown University, 2009).
14. Strong (2008, p. 729, Case 2). The case involves a "severely and permanently cognitively impaired" patient whose only future goods are of "tasting food he likes and being free of pain and suffering." Given the cognitive impairment, it does not appear that the tasting of the food and being free of pain and suffering should count as a *project*.
15. For a similar line of argument, see (Persson, 1999, pp. 199 ff.)
16. Cf. the argument of Kenneth Einar Himma, "No Harm, No Foul: Abortion and the Implication of Fetal Innocence", *Faith and Philosophy* 19 (2002): 172–194. See also Mark C. Murphy, "Pro-Choice and Presumption: A Reply to Kenneth Einar Himma", *Faith and Philosophy* 20 (2003): 240–242.
17. One might try to question this as follows. If you killed me, you would allegedly put in me in heaven right away. But by making me unconscious for forty years instead, you delay my entry into heaven, thereby depriving me of *both* earthly and heavenly goods. However, typical heavenly afterlife hypotheses have an infinite afterlife. So whether you killed me or made me unconscious until death, my subjective experience would be of immediately entering into the same infinite length of heavenly life after your action, since I would not be conscious of the passage of years while I was unconscious.
18. This objection is due to an anonymous reader.
19. One may wish to qualify this: "unless the individual is about to commit or has committed a serious offense." I say that in such a case if one is intending to kill *solely* to produce benefits to persons other than the individual in question, one is acting unjustly; it is only when one is also acting to serve justice that the action is justified. However, my arguments will also work if one adds the indicated qualification.
20. This does not exhaust the content of the strong deontological view, since the strong deontologist is apt to say that it would be wrong to kill one innocent person to save an infinite number of others.
21. I am grateful to many people over the years, including blog-commenters, with whom I have discussed these issues. I would like to express a special gratitude here to Francis Beckwith

and Stephen Napier for careful readings and a number of comments that have significantly improved this paper. I am grateful to Trent Dougherty for some very helpful discussions, and to two anonymous readers for helpful comments.

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# Chapter 3

## Brain Life and the Argument from Potential: Affirming the Ontological Status of Human Embryos and Fetuses

Jason T. Eberl and Brandon P. Brown

The moral status of human embryos and fetuses is one of the most vexed questions in bioethics and various responses often stand or fall on the answer to the question of the *ontological* status of embryos and fetuses—whether they count as “persons,” “potential persons,” or merely “human biological material.”<sup>1</sup> The *argument from potential*, as it is often referred, is typically formulated as follows: (1) Persons possess a high, perhaps infinite, degree of moral value; (2) Persons thereby possess certain basic rights, including a right to life; (3) Human embryos and fetuses<sup>2</sup> typically possess the potential to develop into persons; (4) Having the potential to develop into a person suffices for something to possess the moral value of a person; (5) Hence, embryos and fetuses also typically possess a high, perhaps infinite, degree of moral value and thereby the same basic rights. A standard counterargument is that the rights possessed by an *actual* entity are not transferable to a *potential* forerunner—e.g. when President Barack Obama was growing up in Hawaii, he did not possess the right, as a potential Commander-in-Chief, to order U.S. troops into Afghanistan (Feinberg, 1986, p. 267).

This and other counterarguments motivate the search for a stronger foundation to assert that embryos and fetuses have a moral status sufficiently equivalent to that of mature human persons who bear a basic right to life. The most direct argumentative route is to establish that embryos and fetuses are not potential, but *actual* persons. Of course, embryos and fetuses do not yet engage in any of the activities typically understood to define the essence of personhood<sup>3</sup>; however, they arguably possess the *intrinsic potentiality* to develop themselves—with the assistance of a protective, nutritive environment (something upon which all organisms, including mature human persons, are dependent as well)—into fully actualized beings who can immediately engage in such activities. The crucial premise is that possessing the intrinsic potentiality to develop oneself into a fully actualized person<sup>4</sup> suffices for an organism to be—both ontologically and morally—a person already (Gómez-Lobo, 2004, p. 205; Schwarz, 1998, p. 271). If this premise holds, an embryo or

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fetus is not a “potential person” but a “person with potential” (Finnis, 2006, p. 18; Lee, 2004, p. 262; Oderberg, 1997, p. 263)—specifically, the potential to develop oneself, while preserving one’s numerical identity, into an entity that actually thinks in a self-conscious rational fashion (Ford, 1988, p. 85). The qualification that an embryo or fetus preserves its *numerical identity* as it develops is crucial insofar as we understand personhood to be a *substance sortal*, meaning that an entity is a person *essentially* and thus cannot become or cease to be a person without becoming a numerically distinct entity. The contrary view is that personhood is a *phase sortal*, referring to a mode of existence that an entity can begin or cease while remaining the numerically same entity, like being a father or a professor (Olson, 1997, p. 30).

In addition to critiquing the argument from potential, those who deny that embryos and at least early-term fetuses count ontologically or morally as persons also sometimes launch a counterargument that purports to illuminate an inconsistency among the defenders of embryonic and fetal personhood. In light of a report published by the Ad Hoc Committee of the Harvard Medical School (1968), scholars and medical practitioners began to abandon the idea that the traditional cardiopulmonary criterion for determining when a human person has died was the sole means to determine death, arguing that, since the brain is the central organ which regulates the body’s vital metabolic functions, irreversible cessation of the functioning of the brain as a whole—cerebral cortex, cerebellum, and brain stem—may in fact constitute death irrespective of cardiopulmonary status. This “whole-brain” criterion<sup>5</sup> of death is based on the understanding that a human organism cannot function *as a unified whole* without a functioning brain. The whole-brain criterion has received legislative approval in several nations, including the U.S. (President’s Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research, 1981), as well as moral approval from the Roman Catholic Church (John Paul II, 2001; White et al., 1992). Although some bioethicists have argued that the whole-brain criterion is conceptually invalid and that the determination of death should be limited to “circulatory/respiratory” criteria, the whole-brain criterion persists among most medical practitioners as a valid means for defining and clinically determining when a human person has died.<sup>6</sup>

The charge of inconsistency stems from the fact that those, including ourselves, who hold that “brain death”—in terms of *whole-brain* anoxia secondary to the sufficiently prolonged absence of cerebral, cerebellar, and brain stem blood flow leading to irreversible loss of function—is necessary<sup>7</sup> and sufficient for a human person to go out of existence,<sup>8</sup> do not hold a symmetrical criterion of “brain life” to mark the beginning of a human person’s existence. In other words, if the cessation of brain function defines the end of one’s life, why is brain function not required to define the beginning of one’s life, since embryos clearly do not possess any neural structures whatsoever and early-term fetuses possess only rudimentary neural structures incapable yet of supporting self-conscious rational thought? We will first respond to the criticism that defining the end of one’s existence in terms of whole-brain death, while also defining embryos and early-term fetuses as “persons with potential,” is a violation of a supposed “brain birth/death symmetry.” Second, we will argue that embryos and fetuses should be recognized as having the ontological and

moral status of persons due to their intrinsic potentiality to develop a brain supportive of self-conscious rational thought, and respond to two recent criticisms of the argument from potential.

### 3.1 Symmetry at the Margins of Life?

The idea of symmetry at the margins of life is appealing in that it allows for comparisons between two of the most ethically contentious topics of human biology: birth and death. If it is possible to correlate birth and death conceptually, then support for practices surrounding the end of life can be found by examining accepted practices at the beginning of life and vice versa. Brain death—understood in terms of the irreversible cessation of *whole*-brain functioning—has become a well-known concept, a clearly defined criterion as outlined by the Harvard Ad Hoc Committee (1968) and the U.S. President’s Commission’s *Defining Death* report (1981). Its putative counterpart, “brain life,” is a less definitive concept and thus bears a large part of the novelty involved in the argument for brain birth/death symmetry. In one of the original formulations of the symmetry concept, its particular value to ethical dilemmas at the margins of life is clearly an attraction:

A consistent theory of human beginning has potential implications for making ethical decisions . . . it can go a long way towards making ethical choices clearer, and may serve to point the way to a broadly acceptable societal ethical consensus (Goldenring, 1985, p. 199).

The argument for brain life/death symmetry is premised on the idea that the formation and functioning of the brain marks the beginning of a person’s life just as brain death marks the end of one’s life: “whenever a functioning human brain is present, a human being is alive” (Goldenring, 1985, p. 200; cf. Gertler, 1986; Sass, 1989).<sup>9</sup> This statement is significant more for what it implies than what it explicitly confirms. Without disputing that a functioning brain can give *evidence* of life, it may not follow that the brain’s absence is incompatible with human life, as will be seen in our discussion of embryology.

To presume an exact symmetry in birth and death is to envision life as a bell curve, in which the ascent of development and growth is mirrored by the degenerative processes that wear away our vitality. This can be an appealing vision; however, it is not free from both logical and biological objections.

The concept of brain birth/death symmetry implies several similarities between the beginning and end of human life. Yet there is no general agreement, and certainly no biological evidence, to establish that the initialization and cessation of neural functioning are more similar than they are dissimilar. One key difficulty for the symmetry argument is the disparity between the processes of growth and debility. A human being’s development and degeneration manifest in quite different ways. Both represent aging, but beyond this the correlation becomes more difficult to identify. In the first place, any biological process of generative development occurs in an ordered, predictable, and deliberate manner. There is the unfolding of a process that is guided and directed by an embryo or fetus’s genome and other intrinsic biological

factors. The degenerative processes of aging, on the other hand, do not for the most part occur in a predictable and ordered way among individuals. In healthy individuals, the pace can be rapid or drawn out, the severity mild or extreme, and the extent focal or diffuse; the process is even more diverse among differing individuals with significant disease processes, such as cardiomyopathy or cancer. We cannot predict the variances of aging because we do not know to what extent they are “normal” and to what degree they are to be expected. The variety of our experiences of aging confirms our inability to anticipate the next step in degeneration. Within the medical community, there is an increasing move to avoid phrases such as “normal aging,” since time and again we witness examples of older adults who do not demonstrate the supposedly expected effects of age (Moody, 2009).

Another problem is identifying precise biological “moments” by which to make the comparisons that underlie the desired symmetry. The medical community has generally agreed on a sense of certainty regarding the criterion of whole-brain death, on specific clinical and physiological markers by which we can be epistemically confident, not of the precise moment of death, but rather of a moment that is reasonably certain to be after death has occurred. In other words, a determination of brain death is merely an acknowledgment that the person has reached a point where we can be reasonably certain that brain death has already occurred. No such similar “moment,” however, has been defined for the origins of the brain—a so-called “brain birth.” Several stages have been postulated, each with various merits and qualities, but none of which can definitively claim to be any more of a true birth than the others. For example, the earliest origins of the cerebral cortex with the neural plate and neural tube occurs as soon as 15 days gestation, organization into a basic brain structure occurs at approximately 25–40 days, an identifiable nerve network at 40 days, hemisphere formation at 6 weeks, and EEG activity around 14 weeks; all of these are potential candidates for “brain birth” (Jones, 1989, 1998). Each of these is a fundamental and essential point along neural development, but there is no general agreement as to which aspect of neural development is most crucial and therefore deserves to be denoted *the* critical moment when a person first comes into existence.

Despite the fact that the brain death criterion does not attempt to pinpoint the exact moment of death, insofar as a precise determination would be nearly impossible to recognize in any consistent way, the attempt to identify brain birth does represent a vain search for such an exact moment. Yet it is far more biologically accurate to speak of “processes” rather than “moments,” given what we know regarding the gradual continuum along which biological changes occur. Definitions of brain death speak in the past tense about an event that has already occurred. The discovery of brain birth, however, must be made in the present moment; if brain birth denotes the beginning of moral status, it is crucial to recognize it from its genesis as the stakes are far higher. It is no great loss to discover, once the brain death criterion has been applied, that we inaccurately assumed life for a person in whom brain death had occurred hours or days earlier. But to realize that we have failed to recognize a functioning brain in a person who had in fact been alive for some time in the past is a very disturbing thought, made all the more so if our failure to respect the life that was present resulted in death or irreversible damage.

With such strong emphasis on identifying the moment of brain birth, one conclusion would be to assume that “birth” has not occurred until formation of the *complete* brain, with all its internal neural connections made. While this might seem a reasonable suggestion in terms of the biological realities, it presents a logical absurdity. It is now widely recognized that the brain does not complete its internal formation, especially in the “higher” neocortical connections, until well after birth (Gogtay et al., 2004). Thus, to accept this last criterion as the marker of brain birth, while maintaining a metaphysical symmetry between brain birth and death, would be to admit that a person is not truly alive—at least in the same way that a brain dead individual is truly dead—until sometime after birth.<sup>10</sup> The search for “brain birth” results in the discovery of a *continuum*, but no definitive moment. For the purposes of a search for symmetry, “although it is possible to place the 2-week embryo, 8-week embryo, 36-week fetus, term fetus, newborn infant, and child on a continuum, it is doubtful whether the biological interest elicited by this is matched by ethical significance” (Jones, 1998, p. 241).

The attempt to establish symmetry in the formation and disintegration of the brain assumes that the physical organ, including all its essential parts—cerebral cortex, cerebellum, brain stem, etc.—correlates precisely with a physiological function. What this thesis does not consider is the possibility that physiological processes are found not always neatly within an organic structure, but rather as a *principle* or *function*—viz. a function that coordinates all the active processes of the body.

The case for basing the limits of personhood on a single organ’s physical function rests upon an assumption that a human body—or any other type of animal body—relies on only one organ throughout pre- and post-natal life for a specific function or set of functions. According to this idea, if the organ in question has not yet been formed or begun to function, or has already ceased to act according to its proper biological function, then that function must not yet exist or has ceased to exist. Presumably, we can judge the presence of a certain function by measuring the activity of the organ to which it is attributed. In other words, if human life is dependent on the brain, then we can simply look for neural activity to determine if life is present. If the brain has not yet formed (“birth”) or if it has irreversibly ceased to function (“death”), we can conclude that life has not yet begun or has ceased to exist.

The difficulty with such an assessment is that we know from human embryology and anatomy that such a correlation is not always accurate. There are significant internal embryological and fetal functions that occur quite differently from the corresponding functions in an adult. In fact, this is the very basis for the distinction between human *embryology* and human *anatomy*. A further difficulty is that the dividing line between those areas of difference in embryological and adult function occurs often and approximately at birth, *but not consistently and precisely at birth*. In other words, the shift of physiological function from the embryological arrangement to the adult arrangement does not always take place at the moment of birth. As our knowledge of the nervous system continues to increase, we have become increasingly aware of just how far from complete development the human brain is at birth.

Furthermore, neural activity is not the only exemplar of this phenomenon. The cardiovascular and pulmonary systems both show prominent differences in function during development. For example, the cardiovascular system, arranged quite differently in a fetus and an adult, can continue to contain fetal elements well after birth, as in the case of the patent foramen ovale, patent ductus arteriosus, etc. Perhaps the most dramatic example of the end of an organ equaling the end of a function involves respiration, a central, necessary vital function whose absence remains a critical factor in the circulatory/respiratory determination of death.<sup>11</sup> Respiration is obviously linked to a specific pair of organs, the lungs, and we know that once the lungs permanently cease to function—as with, for example, massive pulmonary embolism and subsequent pulmonary infarct—that respiration can no longer continue without medical intervention. In other words, the absence of organic activity (lungs) equals the absence of the corresponding physiological function (respiration).

Does this correlation hold for the other end of the spectrum: the development and “birth” of the lungs and respiratory system? Does it follow that, prior to the completed development and activity of the lungs, respiration does not occur? This cannot be the case, since the physiological process of respiration is necessary long before birth and long before the lungs perform their specific physiological function. In fact, we know that long before the lungs are developed—even before there are identifiable structures that could be called the lungs—there is a separate means of respiration taking place, with gas exchange occurring via the placenta. Thus, respiratory function occurs prior to the development of the lungs through an organ that is not to be found in adult humans. If we were to assume that functional symmetry exists between lung “death” and lung “birth,” we might incorrectly infer that no respiration occurs in the developing fetus.

Hence, we conclude that the proper understanding of human development cannot accurately rely upon any putative symmetry in a way that would assume it is always the same organ performing a single, unchanging function throughout human development and mature life. With this conclusion in mind, we can highlight the inherent fallacy in the concept of brain birth/death symmetry by considering the brain’s function as chief coordinator of the rest of the body. Its role in coordinating all other organic functions is not disputed. What must we say, then, about the organization of the body prior to the fully formed brain? There is indeed a *coordinating principle*, known to be present prior to formation of the brain and nervous system, and seen especially in the organized and ordered growth and development that occurs pre-natally. Thus, the principle of bodily coordination is not limited to the physical organ of the brain. If there is symmetry, it is in terms of a physiological function that predates the physical brain’s formation. We can see the influence of this coordinating principle in early embryonic life, as a kind of progenitor to the brain.

A human zygote contains the *epigenetic primordia* of the biological structures proper to a mature human organism. A zygote’s DNA-filled nucleus functions as the “control center” that regulates embryonic biological functioning, such that a zygote is a unified, individual substance from fertilization onward. As Benedict Ashley concludes,

From the moment of fertilization there already exists in the zygote (and this was probably already pre-determined in the ovum) a metabolic *polarity*, with the nucleus determining the upper pole of the metabolic gradient, and a *bilaterality* which will eventually be fundamental to the plan of the adult body. Consequently, as the first cell-divisions take place, there is already some differentiation in the cytoplasm of the daughter cells. They may be totipotent when separated, but as existing in the morula, they already constitute heterogeneous parts. At this stage it appears that the maternal RNA produced in the cytoplasm by the DNA of the nucleus of the original ovum plays a regulative role, and the nuclei, with their new unique DNA, are still relatively quiescent. Nevertheless, it was the nucleus of the zygote which initiated the whole process, and it will be the new nuclear DNA which finally takes over the regulation of the development from the blastula on. Thus, during this intermediate phase, it is still the nuclear DNA which has ultimate regulatory control, although it permits the maternal RNA to play its own role. We ought, therefore, to hold that, during this time, the primary organ are the daughter nuclei, which originated from the nucleus of the zygote. Since all are essentially similar, they can be said to act collectively, although it is probable that some of them, or even one, located at the superior pole of the organism, has the dominant effect, and can be identified as the primary organ of the whole (Ashley, 1976, p. 123; cf. Ashley and Moraczewski, 2001, p. 197).

Various studies on the development of mouse embryos support this description of an inherent organizational structure in a zygote and its daughter cells that determines an embryo's future biological development (Gardner, 1997, 2001, 2002; Piotrowska and Zernicka-Goetz, 2001; Piotrowska et al., 2001; Beddington and Robertson, 1999).

The zygotic nucleus functions as an embryo's primary organ insofar as it is not only the zygote's metabolic regulator, but is also the epigenetic primordium of the "primitive streak" that forms upon an embryo's implantation in the uterus, which in turns will develop into the brain and nervous system. Once formed, the brain becomes the integrative foundation for a person's organic functioning, as well as supporting her self-conscious rational operations. As we will argue in more detail below, the presence of the brain's epigenetic primordium suffices for a zygote to have an *active potentiality* for such operations, since the zygote's ordered natural development will result in an actually self-conscious rational person. Therefore, despite its lack of an actually functioning brain, a zygote ontologically counts as a person already (Eberl, 2006, Chapter 2).

How does the coordinating principle apply at the end of life? If we look beyond the physical brain, to a case where brain death is known to have occurred, there is no compelling evidence for the existence of a coordinating principle that takes over after whole-brain death. In fact, it is an expected consequence of whole-brain death that the body will gradually but surely transition into an uncoordinated state, in which the previous bodily integrity maintained by the brain gradually slips into disintegration.<sup>12</sup> Of course, this disintegration does not occur immediately or instantaneously, any more than do the cells of the body all die at once upon the cessation of respiration. The loss of the coordinating principle within the body, however, inevitably leads to disintegration. Thus, while a person may exist prior to brain "birth," brain "death" still signals the end of that person's existence.

We contended above that the presence of the brain's epigenetic primordium suffices for a zygote, and a fortiori the embryo or fetus into which the zygote develops,

to possess an active potentiality for not only the physiological functions that sustain the life of a mature human organism, but also the activities associated with self-conscious rational thought that are definitive of human *personhood*. We will thus proceed to describe in more detail the concept of “active potentiality” at work in this claim and defend our utilization of this concept to argue that embryos and fetuses are *persons with potential*.

## 3.2 Concept of Potentiality

Aristotle provides a well-developed definition of potentiality—later adopted and further elaborated upon by Thomas Aquinas—which is distinguished into two types: *active* and *passive*.<sup>13</sup> Something has an active potentiality if it has within itself everything necessary, given its proper *design environment*, to actualize itself in the relevant manner.<sup>14</sup> The locus of a substance’s set of active potentialities is its *substantial form*.<sup>15</sup> By contrast, something has a passive potentiality if it can be the subject of externally directed change such that it can become what it is not already.<sup>16</sup>

Furthermore, active potentiality comes in two varieties. The first is what Robert Pasnau refers to as a “capacity in hand” to perform an operation, which means that no further development or significant change is required for the potentiality to be actualized (Pasnau, 2002, p. 115). For example, a person may have a capacity in hand to speak Spanish if, for example, she had majored in it in college; but it may be the case at any one moment that she is not using this capacity and so it is not in actual operation, which it would be if she were actually speaking Spanish at that moment. The second is what Norman Kretzmann refers to as a substance’s “natural potentiality” to develop a capacity to perform an operation (Kretzmann, 1999, p. 39). For example, before having learned Spanish and thus developed a capacity to do so, a person would have a natural potentiality to develop this capacity, as opposed to a dog or a plant that lacks such a natural potentiality; any natural substance has numerous such potentialities as defined by its essence, some of which may be developed into capacities in hand while others are left undeveloped.<sup>17</sup>

Because a substance possesses its essential set of active potentialities by virtue of its substantial form, which is also what grounds a substance’s persistent numerical identity (Stump, 2003, p. 46), it follows that (a) something which has an active potentiality for self-conscious rational activity *already* possesses the essential nature definitive of personhood, and (b) something which lacks such a potentiality, even though it may have the passive potentiality to obtain it, does *not yet* possess the nature of personhood and thus must undergo a change in both specific and numerical identity if it is to become a person.<sup>18</sup>

It might be objected that (a) does not follow insofar as possessing an active potentiality for self-conscious rational activity no more makes one a person than possessing an active potentiality to learn Spanish makes one a Spanish-speaker. But there is a salient difference between these two active potentialities insofar as the potentiality to learn Spanish requires external assistance—a teacher, book, or

computer program—to *teach* one how to speak Spanish, to change one from a non-Spanish-speaker into a Spanish-speaker. This form of external assistance differs *in kind*, however, from the supportive uterine environment a woman provides for an embryo or fetus to develop *on its own*—i.e., without any further alteration from an external source to, say, change its genome—into an actually self-conscious and rational being. Left to its own devices, an embryo or fetus in utero will naturally come to actualize its potentiality for self-conscious rational thought; left with merely a supportive environment—air, food, and water—with no further external assistance, a person *on her own* will not be able to actualize her natural potentiality to speak Spanish.

Active potentiality thus refers to something's capacity to *be* in a certain way, as opposed to merely the possibility of its *becoming* something (Witt, 1995, p. 264). For example, a sperm or ovum possesses the relevant active potentialities definitive of personhood only if it could come to actualize those potentialities while preserving its numerical identity—i.e. it remains the *same* substance identical with itself throughout its development from a germ cell to an actually self-conscious rational person. A change, however, from a germ cell to a person does not appear to be an identity-preserving transformation: a sperm loses its substantial identity when it fuses with an ovum, and vice versa, to form a new substance—an embryo (DiSilvestro, 2006, p. 149; Perrett, 2000, p. 189; Hershenov, 1999, p. 265; Reichlin, 1997, p. 4; Burke, 1996, pp. 497–500; Lee, 1996, pp. 26–28; Covey, 1991, p. 239; van Inwagen, 1990, pp. 151–152; Buckle, 1988, pp. 233–238; Ford, 1988, pp. 84–85, 109–110; Stone, 1987, pp. 816–818). Michael Lockwood thus errs when, discussing the ontological status of an embryo produced through in vitro fertilization (IVF), he claims that, “to the extent that a fertilized human ovum in vitro has an active potential for developing into a human person, so do the contents of the petri dish prior to fertilization” (Lockwood, 1988, p. 197; cf. Warren, 1997, pp. 206–207; Bigelow and Pargetter, 1988, p. 177).<sup>19</sup> Lockwood neglects to take into account the lack of *numerical* identity between a sperm and ovum in a petri dish prior to fertilization and the zygote produced once they conjoin.<sup>20</sup> Therefore, the only sense in which a germ cell may plausibly be called a “potential person” is in the weak sense that it provides the *makings* of a person.

All that is required for something to be a person is for it to have at least an active potentiality to perform self-conscious rational operations. The actual performance of such operations is accidental to a person's existence.<sup>21</sup> A developing embryo or fetus possesses an active potentiality for self-conscious rational thought, although it cannot yet actually think in such a manner (Lee, 2004, pp. 252–253). By contrast sperm and ova do not have such an active potentiality, but rather merely a passive potentiality to become a person since each must undergo a change brought about by an extrinsic principle: sperm must be changed through union with an ovum and vice versa, which transforms them into a substance with active potentialities for the definitive operations of personhood.<sup>22</sup> Once this substantial change occurs, a person exists even if she is not actually exercising all of her definitive operations. Having described the basic elements supporting the view that embryos and fetuses may be considered as persons by virtue of their possession of an active potentiality



for self-conscious rational thought, we will address some recent arguments against the ontological and moral relevance of the concept of potentiality in this context.

### 3.2.1 *In Vitro vs. In Utero Embryos: Charo and Guenin*

R. Alta Charo raises the question of whether the potentiality of an embryo or fetus in utero differs in relevant respects from that of an embryo in vitro, which must be implanted in the body of a woman, who provides a supportive uterine environment, if its development is to continue beyond the first week of cell division:

A fertilized egg or early embryo in a petri dish most certainly has an intrinsic tendency to continue growing and dividing. Without the provision of an artificial culture medium, however, it will never grow and divide more than about 1 week. If the provision of such a medium is considered a form of external assistance akin to that at issue in passive potentiality, then the fertilized egg is a potential week-old embryo, not a potential baby (Charo, 2001, p. 86; cf. Mahowald, 2004, p. 210; Singer and Dawson, 1990, p. 87).

Louis Guenin also contends that an embryo's developmental potential is a function not only of its intrinsic nature, but also of its overall "situation" and any relevant "discretionary actions" on the part of external agents:

Unless there occurs the discretionary action of intrauterine transfer, it is not nomologically possible for an extracorporeal embryo to develop into an infant. The least upper bound on developmental potential of an unenabled embryo nurtured by cell culture techniques in a device such as a dish falls in the neighborhood of day 10—well short of sentience or even the formation of limbs and organs. The developmental potential of such an embryo lies a discretionary step behind that of an embryo formed by natural conception (Guenin, 2008, p. 30; cf. Lizza, 2007).

*Contra* Charo and Guenin, the discretionary provision of a uterus or artificial culture medium is not "a form of external assistance akin to that at issue in passive potentiality." Though obviously a form of external assistance, what an IVF technician provides by implanting an embryo in a woman's body is a supportive environment for an embryo to exercise its own developmental potential; of course, to focus here merely on the "supportive environment" a woman provides to any embryo or fetus she gestates is not to downplay the *personal* dimension of the maternal-fetal bond that forms throughout gestation and which offers support for the embryo/fetus's development that goes well beyond its biological needs. Uterine implantation or placement into a culture medium does not alter the intrinsic nature of an embryo itself or bestow upon it more inherent potentialities than it already possesses (Gómez-Lobo, 2005, pp. 106–107; Reichlin, 1997, pp. 11–12).

The external assistance a uterus provides is analogous to an astronaut's space-suit or an underwater explorer's submarine. Each provides what the person needs to exercise her vital metabolic functions; but the lack of such support does not entail that she lacks the relevant potentialities for those functions. If an astronaut's space-suit malfunctions and stops supplying oxygen, her vital metabolic functions will cease shortly thereafter. If, however, a fellow astronaut fixes her suit in a timely fashion and restores the flow of oxygen, her vital metabolic functions will resume.

This indicates that the astronaut's active potentiality for such functions remained despite the temporary loss of the requisite supportive environment.<sup>23</sup> Another relevant example is the incubator most prematurely born infants require to continue their post-natal development. Although such infants cannot survive without the incubator's assistance, their dependence on it does not entail that their potentiality for full development is merely passive and not self-directed.

Thus, the requirement of external assistance to further one's development does not entail that one's potential for such development is merely passive. There is a relevant difference between *mere* external assistance and external *directive* assistance. The former aids a substance to become fully what it already *is* due to its essential nature; the latter directs a substance to change into something it is not yet in such a fashion that its numerical and specific identity is altered through the change. For example, mature human persons require external assistance—viz. a supportive biosphere—in order to exercise their active potentialities relative to living, sensing, and thinking—i.e. in order to exist fully as living rational animals; but the biosphere does not alter the essential nature of mature human persons as such. The activity of an IVF technician, however, in bringing sperm and ovum into union to produce an embryo, is *directive* insofar as the technician is bringing something into existence—an embryo—which had not previously existed, and in the process causes the individual sperm and ovum to go out of existence through the fertilization process.

Guenin offers two counterpoints to the claim that an embryo's location, whether in vitro or in utero, is morally arbitrary (Guenin, 2008, pp. 54–55). First, he asserts that such a claim amounts to “genetic determinism,” which is the scientifically crude and false thesis that an organism's genes wholly determine whether and how it will develop. We concur that an embryo's genetic identity—i.e. its having a complete human genome—is insufficient for it to possess the relevant active potentialities to develop into an actually self-conscious rational person. For example, a typical hydatidiform mole is a mass of hyperplastic placental tissue that contains the same fundamental genetic makeup as a human embryo. What distinguishes a hydatidiform mole from a developing embryo is that the former can never develop into an organism with a functioning cerebrum supportive of self-conscious rational thought, despite its intrinsic genetic structure and even if it is placed in a supportive uterine environment; the latter can. Furthermore, every somatic cell composing a human organism possesses the complete human genome—although various genes have been “switched off” in the process of differentiation—yet, as will be discussed below, it is not the case that every somatic cell possesses an active potentiality to develop itself into a distinct person (Oderberg, 1997, p. 285). Finally, given the possibility of there existing non-human persons, possessing a human genome is not a necessary criterion for personhood either. Thus, putting aside for the moment the possibility of non-human persons, the putative criterion of genetic identity must at the very least be qualified by the stipulation that an embryo's genome is not deficient in ways relevant to whether or not it possesses an active potentiality to develop a functioning cerebrum supportive of self-conscious rational thought (DeGrazia, 2008, p. 303). In addition, various biological factors in the cytoplasm of

the embryonic cells must be present and active. Hence, the argument based upon the intrinsic active potentiality of an embryo to develop into an actually self-conscious rational person, regardless of whether it is located *in vitro* or *in utero*, does not imply any fallacious adherence to the thesis of genetic determinism.<sup>24</sup>

Second, Guenin claims that extrinsic relational properties may indeed ground moral conclusions. For example, “In rationing during a famine, an adult’s greater weight may warrant a greater ration than that allotted a child, yet weight is a function of the earth’s gravitational field and locus within it” (Guenin, 2008, p. 55). This example is problematic in several ways. First, determining how much food an adult should be rationed, in contrast to a child, is a *pragmatic* decision based on the adult’s need for a higher caloric intake; the adult and child both benefit from the same *moral* conclusion that each should receive the amount of food they need to survive. Second, weight functions only as an indicator of what really differentiates the health needs of the adult versus the child—viz. the adult’s greater *mass*, which is an intrinsic property that does not depend on being situated in a gravitational field; an adult and a child floating in the vacuum of space would still have different nutritional needs.

Guenin concedes that an extracorporeal embryo does not possess “any less intrinsic value than an embryo in the womb,” but rather contends that there are “occasions on which, in consequence of a permissible decision, an embryo’s developmental potential is bounded” (Guenin, 2008, p. 55). Clearly, an extracorporeal embryo’s intrinsic developmental potential is artificially “bounded” insofar as it is a fact that such embryos cannot develop beyond a certain point unless implanted. But this does not entail that the embryo’s intrinsic potential is not *present*, or that it does not remain ontologically *unbounded* insofar as, if it were implanted, it would naturally develop into maturity unless further impeded by extrinsic conditions.

We further contend that there can be no “permissible decision” through which an embryo’s developmental potential becomes bounded by a discretionary action. Alfonso Gómez-Lobo describes an analogous case: “a little girl is born and her parents decide not to feed her. They also issue a strict prohibition on others feeding her. Their decision would make her a ‘nonenabled’ infant with no ‘developmental potential’” (Gómez-Lobo, 2009). If one deems such a parental decision not only to be morally impermissible, but also not to have the ontological implications Guenin claims regarding the infant’s intrinsic developmental potentiality—i.e. her active potentiality to develop into an actually self-conscious rational person—then Guenin’s analogous conclusions regarding embryos should be denied as well. This conclusion, we should note, is a *moral* one that we claim should bind the consciences of individuals or couples who have embryos produced through IVF either (a) to implant all of the embryos they have had produced—not all at once, of course, but through multiple attempts at pregnancy—or (b) to arrange for another individual or couple to *adopt* any embryos remaining once the genetic parents’ procreative goals have been met.<sup>25</sup> It does not necessarily follow from this moral conclusion that it would be practical or prudent to impose criminal *legal* sanctions on individuals or couples who have embryos created without later offering them the opportunity to be implanted in the hopes of achieving pregnancy.

An in vitro embryo's potentiality for development into an actually self-conscious rational person does not preclude its existence as a person already. This is because the potentiality at issue is an active potentiality that is part of the embryo's intrinsic nature (President's Council on Bioethics, 2002, p. 156). But perhaps the argumentative support for this conclusion proves too much. Charo and others argue that since a person can be cloned from a somatic cell, any such cell that currently constitutes her body is potentially another person (Charo, 2001, pp. 86–87; Savulescu, 2001, p. 220; President's Council on Bioethics, 2002, pp. 148–149; McHugh, 2004, p. 210; Hanson, 2006). But this argument fails to apply properly the active/passive potentiality distinction. Many changes, requiring the *directive* activity of an external agent, must accrue to a somatic cell before it can, in the relevant sense, have the potentiality to become a person, starting with the extensive reorganization of its internal structure—viz. removal of its nucleus, which is then implanted in an enucleated ovum (Gómez-Lobo, 2004, p. 203; Brown, 2007, p. 616, n. 6; Rogers, 1992, p. 250).

The primary reason a somatic cell fails to have an active potentiality to develop into a fully actualized person is that the *identity criterion* is violated insofar as the cell must be disaggregated, through enucleation, and only a part of it—the nucleus—is implanted in another already extant cell—the ovum. This entails a *substantial change* in specific and numerical identity for both the somatic cell and the ovum (Guenin, 2008, pp. 24–25; Eberl, 2006, pp. 81–82; DiSilvestro, 2006, pp. 149–50; Hershenov, 1999, p. 265). Michael Burke affirms this conclusion by contending that a somatic cell cannot be considered to be of the same *natural kind* as an embryo insofar as the latter, but not the former, is an animal—an organism (Burke, 1996, pp. 504–505, 509).<sup>26</sup>

Additionally, to countenance the possibility that a somatic cell has the same potentiality as an embryo to become a fully actualized human person is to presume that it is *already* a human person. This presumption is implausible because a somatic cell that is *part* of a human person cannot itself be such an entity (Burke, 1996, p. 510).<sup>27</sup> All parts of a person's body are proper parts of her and not substances in their own right, unless they become separated from the body.<sup>28</sup> Since a somatic cell is not a substance in itself, but only part of a substance, it cannot be a person; nor does it have an active potentiality for further self-directed development into a fully actualized person (George and Tollefsen, 2008, p. 187; Oderberg, 1997, p. 292).

### 3.2.2 Cognitively Deficient Fetuses: McMahan

Jeff McMahan distinguishes between a normal, healthy fetus with no congenital deficiencies that would impair the development of the cognitive capacities definitive of personhood and fetuses that have structural or functional neural deficits such that they can never, without external intervention, develop into fully actualized persons (McMahan, 2002, p. 310). He contends that the question of whether the fetuses

with the neural deficits possess a morally relevant potentiality to develop the cognitive capacities definitive of personhood does not depend on their *intrinsic* properties alone, but also on the *external* conditions that may or may not allow such potentiality to be actualized; in other words, it cannot be reasonably claimed that a fetus possesses an intrinsic potentiality for self-conscious rational thought if certain external conditions preclude its actualization.

McMahan compares a child born without eyes a thousand years ago and one born in a world where eye transplants are routinely performed. The former lacks an intrinsic potentiality for sight, since nothing could be done a thousand years ago to allow him ever to see; whereas the latter does possess such a potentiality, since he would be able to see once the transplant was performed. Applying this analogy to the case of a fetus with neural deficits, so long as such deficits are not correctable by current medical expertise, McMahan concludes that one cannot reasonably assert that such a fetus possesses an intrinsic potentiality for self-conscious rational thought (McMahan, 2002, p. 311).

Is it not just as reasonable, however, to assert that the child born without eyes a thousand years ago possesses the same intrinsic potentiality as one born in a world of routine eye transplants?<sup>29</sup> McMahan states, regarding the second child, “Certainly if he receives a transplant and is thereby enabled to see, that demonstrates that all along he had the potential to see” (McMahan, 2002, p. 311). But what if the second child did not receive the transplant because his parents *elected* for him not to have the operation? Maybe it was too expensive or they preferred to raise a blind child, just as congenitally deaf parents may prefer to raise a deaf child (Davis, 2010, Chapter 3).

Although we do not agree with him on this point, it is worth noting John Lizza’s contention that human choices may affect what potentialities are realistically present in a given case (Lizza, 2007; cf. Guenin, 2008, p. 30). If McMahan allows for the extrinsic availability of eye transplants to impact the intrinsic potentialities of a child born without eyes, then why not also the extrinsic condition of whether the child’s parents elect for him to receive an eye transplant? Perhaps McMahan could respond that there is nothing different about the potentiality of the child whose parents elect for him to receive the transplant and the child whose parents do not, because (a) the medical expertise is readily available for the parents to elect and (b) the children each have well-functioning optic nerves, visual cortex, and cerebrum that will allow them to have conscious visual experiences once their new eyes are attached. The child born a thousand years ago, though, may also have well-functioning optic nerves, visual cortex, and cerebrum such that, if the medical expertise were readily available to him, he would be able to see as well. The only difference between the child born a thousand years ago and the one born in the world of eye transplants is the availability of the extrinsic means to provide him with new eyes; but such extrinsic means would be, for practical purposes, *unavailable* to the latter child if his parents elected not to proceed with the transplant.

McMahan thus seems forced to agree with Lizza and admit that the child born in the world of eye transplants would not have the potential for sight unless *all* the requisite external conditions were satisfied, including the choice of his parents to proceed with the transplant—as well as being able to afford it or have

it otherwise paid for somehow. McMahan may happily agree with Lizza on this point. On the other hand, if McMahan agrees that Lizza's conditions on potentiality are too strict—as implied by the previous quotation—and that parental choice should not be considered as a proper determinant of whether the child possesses an intrinsic potentiality for sight, then he should abandon his reliance upon external conditions altogether and admit that there is no difference in intrinsic potentiality between either of the children considered in this case.

Returning to the case of normal versus cognitively deficient fetuses, for McMahan, it is clear that a normal developed fetus possesses an intrinsic potentiality to develop into a fully actualized person; whereas the fetuses with neural deficits possess only an extrinsic potentiality since something must be done to them by an external agent in order for them to develop normal cognitive capacities (McMahan, 2002, pp. 312–315). He further argues that the *availability* of such external intervention makes a difference with respect to a fetus's relevant potentialities in this regard.

*Contra* McMahan, we hold that the availability of external interventions to correct a structural or functional deficiency does not bear on the presence of certain intrinsic potentialities that are indicative of the *kind* of entity a fetus is: a fetus possessing an intrinsic potentiality to develop a brain capable of supporting self-conscious rational thought is a member of the ontological kind *rational animal* or *person*. This remains the case until the fetus, or the later child or adult into whom the fetus develops, dies by losing the intrinsic potentiality not only for self-conscious rational thought, but also for life altogether (Eberl, 2005b). A fetus—or any human organism—that possesses and then apparently loses its intrinsic potentiality for self-conscious rational thought in fact retains its potentiality by virtue of persisting as the numerically and specifically same kind of entity—viz. a rational animal with the relevant intrinsic potentialities definitive of such a nature, even if the material conditions of its body do not allow such potentialities to be actualized and regardless of the availability of external interventions that would ameliorate such conditions.

### 3.3 Conclusion: Potentiality and Moral Value

We have focused on metaphysical arguments concerning the ontological status of human embryos and fetuses, responding to the “brain birth/death symmetry” argument as well as recent criticisms of the appeal to the intrinsic potentiality of embryos and fetuses to develop into fully actualized self-conscious and rational persons. To conclude, we will offer some brief remarks on the *moral* status of these “persons with potential,” adopting a broadly construed *natural law* ethic that recognizes the intrinsic value of various types of beings by reference to their essential capacities and, by extension, the active potentiality to develop such capacities in hand. As Jim Stone concludes,

Nature, good, and identity are intimately related. An animal's nature determines a developmental path which guarantees identity, a path that produces the animal's adult stage. In

human animals, that stage involves the attainment of conscious goods, which are produced by the nature as it actualizes itself along an identity-preserving path that evolved because it produces those goods. Nature, good, and identity each determine the other, each is an aspect of the other; they are bound in unity. What the fetus *is* finally, is something that makes *itself* self-aware; that good is the fetus's good—this is its nature. Anything benefits from the good which it is its nature to make for itself. I submit that we have a *prima facie* duty to all creatures not to deprive them of the conscious goods which it is their nature to realize (Stone, 1987, p. 821).

It is worth noting that Stone's conclusion does not depend on whether an embryo or fetus is a person; nevertheless, if an embryo or fetus has the ontological status of a person, it is certainly arguable that it should be regarded as having the moral status of a person as well.

The moral conclusion, however, does not immediately follow from the ontological conclusion. According to Mark Brown, an active potentiality for self-conscious rational thought becomes relevant only when it is present by virtue of a functioning human brain (Brown, 2007, p. 602).<sup>30</sup> This is based on the contention that psychological properties are necessary for someone to possess *interests* that ground the rights they should be recognized to possess (DeGrazia, 2008, pp. 305–306). Michael Tooley also denies that fully actualized persons possess the moral rights they do by virtue of their ontological constitution, but rather by virtue of certain psychological states that allow them to have *desires*, the fulfillment of which rights are designed to protect (Tooley, 1983, p. 151). McMahan, on the other hand, allows that a late-term fetus, which is not yet actually self-conscious and rational, but has developed a cerebrum capable of at least some degree of consciousness and further development, may be understood as possessing an interest—albeit a weak “time-relative” interest—in its own further development into a person (McMahan, 2002, p. 307).<sup>31</sup>

Unfortunately, we cannot delve into a more extensive discussion here of the moral relevance of an entity's possessing an active potentiality to develop itself into an actually self-conscious rational person, except to contend that *at minimum* such an entity merits consideration as the object of a *prima facie* moral obligation not to kill it or deprive it of the goods that it may reasonably be expected to come to possess, absent external interference with its natural, self-directed development. As Don Marquis argues, the same principle that grounds the wrongness of killing an adult human being—viz. loss of an objectively valuable future—renders abortion impermissible since an embryo or fetus also possesses an objectively valuable future insofar as it is numerically identical to an adult human person who will actually have such experiences (Marquis, 1989). There may also be a positive *prima facie* moral obligation to assist such an entity's development by providing it with a supportive environment and removing any impediments to the actualization of its definitive active potentialities.<sup>32</sup>

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## Notes

1. Another way this issue is often couched is in terms of whether embryos and fetuses count as “human beings” or “potential human beings.” We address the issue at hand in terms of *personhood* rather than *humanity* insofar as the former concept unambiguously refers to a being with a high degree of—if not an inviolable—moral status with attendant basic rights, such as the right to life. The latter concept, on the other hand, is debated as to whether it inherently refers to a being that merits a different level of moral regard than other species of living, sentient animals; see, for example, Peter Singer’s famous charge of “speciesism” (Singer, 1975). We accept for the sake of discussion that being “human” does not automatically confer an inviolable right to life; although it would if it is the case that all human beings are persons. For a counterpoint concerning the ontological and moral status of a “non-person human being,” see Brown (2008).
2. From here on, the modifier “human” will be understood.
3. There is no settled list of which activities—or, more generally speaking, properties—are definitive of personhood. The earliest philosophical definition of personhood comes from Boethius, who defines a person as an “individual substance of a rational nature” (Boethius, 1918, III). John Locke offers an alternative definition of a person as “a thinking intelligent Being, that has reason and reflection, and can consider itself as itself, the same thinking thing in different times and places” (Locke, 1975, II.27.9). Contemporary philosophers have perpetuated the thesis that a person is any being that exhibits *a capacity for self-conscious rational thought*, augmented perhaps by other capacities such as using language to communicate, having non-momentary self-interests, and possessing moral agency or autonomy (Singer, 1992, p. 84; Warren, 1994, p. 308; Tooley, 1983, p. 146; Baker, 2005). These various ways of defining personhood are not inherently contrary to each other, since they all include the criterion of either *rationality* or *self-consciousness*, such that any being who possesses the capacity for both would undoubtedly qualify as a person.
4. By “fully actualized person,” we do not intend to refer to a *perfect* person—i.e. one who has no unactualized potentialities—for certainly no person fits that criterion. Rather, we mean an individual who has actualized the definitive potentialities associated with self-conscious rational thought such that she unquestionably counts as a person.
5. Although there are multiple clinical and diagnostic imaging *criteria* involved in a diagnosis of whole-brain death, we will refer to these collective findings as the “whole-brain death *criterion*” in reference to the sufficient condition for defining the death of a human organism.
6. For an overview of the debate and a defense of the whole-brain criterion, see Eberl (2011).
7. The assertion that whole-brain death is *necessary* for a person to be declared dead may be challenged by those who advocate for so-called “non-heart-beating” organ donation—also termed “donation after cardiac death”—in which a person is declared dead utilizing circulatory/respiratory criteria with vital organ procurement beginning a few minutes thereafter; the required wait-time differs for various protocols and is subject to extensive ethical debate. For discussion of non-heart-beating donation protocols in light of our adherence to the whole-brain criterion, see Eberl (2006, pp. 121–126).
8. We will not entertain here any discussion of whether a human person may persist in some form after death.
9. The symmetry argument is also utilized in the opposite direction to criticize the whole-brain criterion (Potts, 2000; Persson, 2002; McMahan, 2002, pp. 435–437).
10. While such a conclusion—that a post-natal human being is not alive (in an ontologically and morally relevant sense) until brain formation is fully completed—would be problematic for many, there are some scholars who might not be deterred by this; see Tooley (1983).
11. The Uniform Determination of Death Act, formulated in light of the U.S. President’s Commission’s report (1981) and subsequently adopted by all fifty U.S. states, allows for *either* whole-brain or circulatory/respiratory criteria to be utilized in determining when death has occurred.



12. In criticizing the whole-brain criterion, D. Alan Shewmon has presented numerous cases of prolonged somatic survival—utilizing extensive technological and pharmacological support—following the cessation of whole-brain functioning. See Shewmon (1997, 1998, 2001), Repertinger et al. (2006). For a response to Shewmon in defense of the whole-brain criterion, see Eberl (2011).
13. This section and the following include material derived from Eberl (2008, 2005a).
14. We derive the concept of a “design environment” from Alvin Plantinga’s concept of something fulfilling its *proper function*, according to its *design plan*, in an *appropriate environment* (Plantinga, 1993, ch. 2).
15. The term “substantial form” refers to the set of properties something possesses that defines its *essence*, such that a change of substantial form would entail a change in numerical identity and perhaps also a change in its species membership; as opposed to an accidental form, such as “being red,” which defines a way in which a thing may or may not be without altering its essential nature or changing its numerical identity. The concept of substantial form includes both the *universal* set of essential properties that are shared by all individual members of the same natural kind, and the *individuated* set of properties that inhere in a particular material substance. Once individuated, a particular substance’s substantial form grounds its persistent diachronic identity. For further discussion of the individuation of the substantial form of human persons and the persistent identity of a person by virtue of her individual substantial form, see Eberl (2004).
16. For further elucidation of this basic distinction in types of potentiality, see Perrett (2000, p. 192), Reichlin (1997, pp. 13–17), Lee (1996, pp. 24–26), Larmer (1995, pp. 243–244).
17. For further elucidation of this distinction in types of active potentiality, sometimes construed as “proximate” vs. “remote” active potentiality, see Lee and George (2008, pp. 136–138), Lee (1996, p. 28, n. 33), Gómez-Lobo (2005, p. 109), Schwarz (1998, pp. 265–266), Reichlin (1997, p. 15), Joyce (1978, pp. 99–100), Wade (1975, p. 249).
18. By “specific and numerical identity,” we mean that something not only ceases to be the same *individual*, but also the same *kind* of thing—e.g. something changes from being a non-person to being a person.
19. Lockwood’s assertion would stand if one held mereological composition to be “unrestricted.” In the present context, we will stipulate a restricted notion of composition premised on the Aristotelian view that there are natural ontological kinds, such as “animal,” which cannot exist as “scattered objects.” For discussion of the ontological status of embryos and fetuses given unrestricted mereological composition, see Hudson (2001, pp. 151–158); for a critical analysis of Hudson’s view, see David Hershenov’s [Chapter 7](#) in this volume.
20. Jeff McMahan also draws an explicit distinction between “identity-preserving” and “non-identity” potential, applying the latter to the case of a sperm or ovum (McMahan, 2002, p. 304). McMahan also denies identity-preserving potential to an embryo or early-term fetus that has yet to develop a cerebrum capable of at least some degree of consciousness (2002, p. 305). This conclusion, however, depends upon his ontological account of human persons as “embodied minds,” which fundamentally differs from the Aristotelian-Thomistic account of human nature we advocate here (Eberl, 2009; 2004). Space does not permit us to provide a detailed comparative analysis of these two ontological views in order to ground an argument for the objective validity of the Aristotelian-Thomistic view over alternative views—such an argument is currently under development by one of us for publication as a monograph tentatively entitled, *The Nature of Human Persons: A Comparative Hylomorphic Analysis*. If the argument succeeds, then one may not adopt a “take-it-or-leave-it” attitude toward this understanding of the ontology of human persons, or consider it as simply one option among many from which one may arbitrarily select; the conclusions we draw here regarding the concept of potentiality within this ontological framework would thereby also enjoy objective validity.
21. See Aquinas (1948, Ia, Q. 118, a. 1 *ad* 4; 1984, a. 13), Kretzmann (1999, p. 379, n. 27).
22. See Aquinas (1995, bk. IX, lect. 6, §1837.)
23. Could one counter that the astronaut’s dependence on her fellow astronaut’s assistance in restoring her supportive environment implies that her potentiality for being alive is merely

- passive*? No, because the assistance provided does nothing to alter or replace the astronaut's organic structure by which she is able to breathe in and circulate oxygen once it is made available to her again.
24. Although an embryo's genotype could still be considered the "primary causal factor" that determines whether it will develop into a fully actualized *human person*, as opposed to a chimp or a pig, which also shows the ontological irrelevance of the environment in which an embryo is located: "The same external conditions—a human, or at least mammalian, uterine environment—could lead to individuals of very different types depending on the kind of DNA. A chimp embryo transplanted to a human uterus would result in the birth of a chimp, while a human embryo transplanted to a human uterine environment would grow into a human infant . . . Plainly, genotype matters plenty" (Brown, 2007, p. 603).
  25. For elucidation and defense of the practice of prenatal adoption, see Brown and Eberl (2007).
  26. It is important to note that Burke's argument against a somatic cell having the same potentiality as an embryo rests on conceiving the embryo as an "animal," not necessarily as a *human* animal or person. Thus—*pace* Oderberg (1997, p. 263)—Burke does not beg the question at hand of the embryo's ontological and moral status.
  27. As Russell DiSilvestro notes, there is a relevant distinction between the term "human" functioning in the "stuff sense" and in the "count sense"; the former applies to the proper parts of a human person, including each of her somatic cells, while the latter refers to the person herself (DiSilvestro, 2006, pp. 150–151). This same conclusion would apply—*contra* Brown (2007, pp. 607–608)—to the totipotent cells composing an embryo in its earliest stages of development (Oderberg, 1997, p. 280).
  28. A somatic cell that has been separated from a person's body is not a proper part of her. Such a cell, though, could not be considered to have the same potentiality as a cloned embryo either, because it is not *totipotential*. External intervention is required to enucleate the cell and implant its nucleus into an enucleated ovum in order for a person to be produced from it. As noted above, this process alters the cell's specific and numerical identity. Therefore, there are no grounds for asserting that a somatic cell that has been separated from its body and may be enucleated for the purpose of generating a cloned person has in itself an active potentiality to become a fully actualized person.
  29. Such potentiality would be equated to Kretzmann's notion of a "natural potentiality" as opposed to Pasnau's "capacity in hand," since neither child possesses the capability to see in a *proximate* sense without the benefit of the operation.
  30. Note that Brown is not appealing to the concept of brain birth/death symmetry as discussed above, but rather to a version of the symmetry concept that tracks existence as a person with that of a brain supportive of self-conscious rational thought, which would imply the "higher-brain" concept of death for human persons—referring to the irreversible cessation of cerebral activity as opposed to that of the brain as a whole. For discussion and critique of the concept of higher-brain death, see Eberl (2005b) and Moussa and Shannon (1992).
  31. For a critical response, see Liao (2007).
  32. Such a positive obligation arguably includes "rescuing" frozen embryos created through in vitro fertilization, but which are no longer needed by their genetic parents, by means of prenatal adoption (Brown and Eberl, 2007).

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# Chapter 4

## The Human Being, a Person of Substance: A Response to Dean Stretton

Francis J. Beckwith

Over the past decade or so several challenges to the prolife understanding of fetal personhood have been published. Two of the authors who have contributed much to this critique are Jeff McMahon and Dean Stretton. The purpose of this chapter is to respond to some of their arguments. My point of departure will be Stretton's 2008 *Journal of Medical Ethics* review (Stretton, 2008, pp. 793–797) of my 2007 book, *Defending Life: A Moral and Legal Case Against Abortion Choice* (Beckwith, 2007). In his critique of my defense of fetal personhood Stretton relies heavily on McMahon's work. I will first summarize the case I make for fetal personhood in *Defending Life*, and then respond to the challenges to my case offered in Stretton's review.

In *Defending Life* I offer a defense of fetal personhood, which I call the *substance view* (Beckwith, 2007, chs. 4 and 6). According to the substance view, the human being is a particular type of living organism—a rational moral agent—that remains identical to herself as long as she exists, even if she is not presently exhibiting the functions, behaviors, or current ability to immediately engage the activities that we typically attribute to active and mature rational moral agents. Because the human being is a rational moral agent, she is a person of intrinsic moral value as long as she exists.

When I say that the fetus is a person I mean to say that she is just as much a bearer of rights as any person whose rights-bearing status is uncontroversial, e.g., her mother, you, or me. That is, the fetus is entitled to all the rights to which free and equal persons are entitled by virtue of being free and equal persons. So, for example, one cannot deprive the standard fetus of her life without the sort of justification we would expect if we were depriving a standard 10-year-old of his rights. To illustrate, if it is wrong to kill a 10-year-old as a result of taking his kidneys and giving them to people the government thinks will benefit society (e.g., scientific geniuses on the verge of curing cancer or AIDS), it is wrong to kill a 20-week-old fetal-clone as a result of taking his kidneys and giving them to his genetic progenitor, a scientific

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genius, who needs them to survive so that he may continue his work on cures for cancer and AIDS.

Although it is my contention that the human substance begins his existence as a zygote and remains identical to himself as long as he exists from his prenatal origins through adulthood, my focus in this chapter will not be on the early embryo prior to the 14th day after conception. Questions have been raised as to whether the early embryo during this time is a unified organism.<sup>1</sup> Because space constraints do not allow me to answer those questions here, I will focus on arguments that maintain that even though the unborn is a unified organism subsequent to the 14th day after conception, he is nevertheless not a person of intrinsic moral value until he achieves a certain level of development.

This chapter is divided into two sections: (4.1) in the first I provide a brief summary of the substance view and how I defend it, (4.2) the second section provides a criticism of Stretton's critique of my analysis. In particular I address his arguments concerning (4.2.1) degreed natural capacities, (4.2.2) developed psychological capacities, and (4.2.3) the moral permissibility of the intentional creation of mentally handicapped fetuses.

## 4.1 The Substance View

A substance is an individual being of a certain sort.<sup>2</sup> So, for example, the substance Barack Obama is a *human* substance, a being with a particular nature that we call "human." The substance Lassie too is an individual being, but she is a *canine* substance, a being with a particular nature that we call "canine." W. Norris Clarke offers a four-part definition of what constitutes a *human* substance:

- (1) it has the aptitude to exist in itself and not as a part of any other being; (2) it is the unifying center of all the various attributes and properties that belong to it at any one moment; (3) if the being persists as the same individual throughout a process of change, it is the substance which is the abiding, unifying center of the being across time; (4) it has an intrinsic dynamic orientation toward self-expressive action, toward self-communication with others, as the crown of its perfection, as its very *raison d'être*....(Clarke, 1994, p. 105).

Each kind of living organism or *substance*, including the human being, maintains identity through change as well as possessing a nature or essence that makes certain activities and functions possible. "A substance's inner nature," writes J. P. Moreland, "is its ordered structural unity of ultimate capacities. A substance cannot change in its ultimate capacities; that is, it cannot lose its ultimate nature and continue to exist" (Moreland, 1995, p. 101).

Another way to put it is to say that substances, including human beings, are ontologically prior to their parts (Moreland and Rae, 2000, p. 206) which means that the organism as a whole maintains absolute identity through time while it grows, develops, and undergoes numerous changes, largely as a result of the organism's nature that directs and informs these changes and their limits. The organs and parts of the organism, and their role in actualizing the intrinsic, basic capacities of the whole,<sup>3</sup> acquire their purpose and function *because* of their roles in maintaining, sustaining, and perfecting the *being as a whole*. Organisms may lose and gain parts and yet remain identical to themselves over time. Consider the following illustration.



A domestic feline, because it has a particular nature, has the ultimate capacity to develop the ability to purr. It may die as a kitten and never exercise that ability. Regardless, it is *still* a feline as long as it exists, because it possesses a particular nature, even if it never acquires certain functions that by nature it has the ultimate capacity to develop. In contrast, a frog is not said to lack something if it cannot purr, for it is by nature not the sort of being that can have the ability to purr. A feline that lacks the ability to purr *is still a feline* because of its nature. A human being who lacks the ability to think rationally (either because she is too young or she suffers from a disability) *is still a human person* because of her nature. Consequently, a human being's lack of an ultimate capacity makes sense *if and only if* she is a being of a certain sort.

Second, the feline remains the same particular feline over time from the moment it comes into existence. Suppose you buy this feline as a kitten and name him "Coween." When you first bring him home you notice that he is tiny in comparison to his parents and lacks their mental and physical abilities. But over time Coween develops these abilities, learns a number of things his parents never learned, sheds his hair, has his claws removed, becomes ten times larger than he was as a kitten, and undergoes significant development of his cellular structure, brain and cerebral cortex. Yet, this grown-up Coween is identical to the kitten Coween, even though he has gone through significant physical changes. Why? The reason is because living organisms, substances, maintain identity through change.

According to the substance view, since a human organism can only develop certain functions she has the capacity to develop by nature because of the sort of being she *is*, a human being, at every stage of her development is *never* a potential person. That is, she is *always* a person with potential, even if that potential is never actualized due to premature death or the result of the absence or deformity of a physical state necessary to actualize that potential. For example, a human being without vocal chords in a society in which there are no artificial or transplant vocal chords never loses the ultimate capacity to speak, but she will in fact never speak because she lacks a physical state necessary to actualize that ultimate capacity.

The substance view is also *perfectionist*. That is, it sees the maturation of a human being's ultimate capacities as perfections of its nature. So, for example, the whole human being is harmed if his brain is not allowed to develop as a consequence of ailment or assault. Thus, if the embryo's brain development is intentionally obstructed so that he does not achieve higher brain function and thus cannot exercise his natural powers for rational thought and moral reflection, the human being has been morally harmed because a good to which he is entitled has been prevented from coming to fruition. Or, suppose a human being is brought up by his parents in such a way that they indoctrinate him to believe that he is property that is not qualitatively different than a commercial product such as a television or a microwave oven. This human being has suffered at least two harms: his parents have not fulfilled their proper roles as loving parents to which their child is entitled, and he has been taught false things about his nature that diminish in his own mind his real moral worth as a person.

In my defense of the substance view, I offer several illustrations. They are intended to show the inadequacy of alternative accounts of the human person that maintain that the fetus does not become a moral subject (or "person") until

she acquires one or more characteristics, such as organized cortical brain activity (OCBA),<sup>4</sup> self-conscious interest in her own existence (Tooley, 1983), interests that presuppose desires,<sup>5</sup> and/or rudimentary brain activity (Himma, 2005, pp. 48–55). I argue that these characteristics, though perhaps sufficient conditions for personhood, are not necessary, since we can easily conceive of cases in which human beings no longer possess these characteristics while not ceasing to be persons. One illustration I use is the case of Uncle Jed.

Imagine that your Uncle Jed is in a car accident that results in him being in a coma for 9 months. Suppose that at the beginning of the coma, his physician tells you this: “Your uncle Jed will come out of this coma in 9 months. Initially, he will likely not remember anything, including the languages he knows as well as his ability to play the violin. But in time, roughly 2 years, he will likely regain all that he has lost.” During the 9 months in which Uncle Jed is in a coma he is in a state not unlike that of the standard fetus.<sup>6</sup> Nevertheless, it seems that the denier of fetal personhood would maintain that it would be morally *impermissible* to kill Uncle Jed while in this state, since Uncle Jed will eventually “return.”

Now let’s change the facts a bit. Suppose that same physician offers this prognosis: “Your uncle Jed (i.e., Uncle Jed<sub>2</sub>) will come out of this coma in 9 months. But when he does, he will have no memories and will have to relearn all his abilities, including his prolific violin playing. It will take him approximately 3–5 years to reacquire all his abilities, but his memories are gone forever. This means that he will have the opportunity to have new experiences and thus new memories. You should, of course, inform him and teach him about his family and friends. But it will be, in a sense, a new beginning for your Uncle Jed.” Uncle Jed<sub>2</sub>, like Uncle Jed, will be like a standard newborn child when he awakes. And like Uncle Jed, Uncle Jed<sub>2</sub>, during the next 9 months in the coma, will be like a standard human fetus. Yet, unlike in the case of Uncle Jed, it seems that the denier of fetal personhood would have to conclude that it is morally permissible to kill Uncle Jed<sub>2</sub> while in this state, since he would be, after all, in the same position as the standard fetus without any prospect of the memories and abilities of the pre-coma mature Uncle Jed<sub>2</sub> making a return.<sup>7</sup> So, the difference between Uncle Jed and Uncle Jed<sub>2</sub> is this: the first will reacquire that to which he temporarily lost access while the latter will acquire something similar to what he had permanently lost. And it is on that basis alone that two similarly situated comatose patients may be morally distinguished as one not worthy of death and the other not worthy of life. This, frankly, seems like thin gruel on which to ground the difference between unjustified homicide and permissible killing.

## 4.2 Stretton’s Critique

Stretton counters the substance view in several ways.<sup>8</sup> In this section, I will cover his arguments concerning (4.2.1) degreed natural capacities, (4.2.2) developed psychological capacities, and (4.2.3) the moral permissibility of the intentional creation of mentally handicapped fetuses.

### 4.2.1 *The Argument from Degreed Natural Capacities*

In *Defending Life* I make the argument (following Patrick Lee)<sup>9</sup> that because most abortion-choice thinkers attempt to ground a human being's personhood in abilities that come in degrees—e.g., rationality, self-awareness, ability to communicate, and so forth—that means that personhood is a degreed property and thus cannot be the ground for believing that all human persons are equal in intrinsic moral worth (Beckwith, 2007, pp. 138–139). Stretton maintains that I am arguing that because natural capacities do not come in degrees while presently exercisable abilities do, and because the right to life cannot come in degrees (i.e., you either have it or you don't), therefore, a human being's right to life is grounded in his natural capacities and not in his presently exercisable abilities.<sup>10</sup> Stretton responds by pointing out that natural capacities come in degrees as well, and thus the substance view is in the very same predicament as the views that ground the right to life in presently exercisable abilities.<sup>11</sup>

Although Stretton is certainly correct that natural capacities come in degrees, being a human substance does not come in degrees. For it is in the latter, and not the former, that the defender of the substance view is locating a human person's moral worth. In fact, I cannot think of any defender of the substance view,<sup>12</sup> or any view similar to it,<sup>13</sup> who thinks otherwise. Take, for example, a portion of the two pages of my book to which Stretton refers but from which he does not quote. (The following includes changes from the original which I place in brackets, in order to be consistent with the use of language in this chapter):

[T]he AEA [the Anti-Equality Advocate, i.e., someone who believes that all human beings are not equal in dignity and intrinsic moral worth] cannot explain why fundamental human rights [and moral worth] ought not to be distributed on the basis of native intellectual abilities and other value-giving properties, e.g., rationality, self-awareness. This is because capacities are stages along a continuum, with some basic capacities being exercisable only as a result of other capacities first being actualized (e.g., the proximate capacity to learn a language requires a certain level of brain development) and the present exercisability of those capacities differ in their degrees (e.g., people have a wide range of language skills). Some adult human beings are more or less rational and more or less self-aware in comparison to others, and some human beings, because they are damaged or immature, are in the process of developing, and have not yet achieved, certain second-order capacities (e.g., the requisite brain structure to develop the capacity to learn algebra) that make certain first-order capacities possible (e.g., the present capacity to do algebraic problems if you know algebra). But if that is the case, then some [intrinsically valuable human persons] are more or less "intrinsically valuable" than others. But morally intrinsic value [MIV] is not a degreed property; you either have it or you don't, and thus [MIV] cannot be conditioned upon the possession of a degreed property, for if you have more of it then you should have more moral worth. It would follow from this that the notion of the moral equality of human beings is not only illusory when applied to the [fetus] (which the AEA already believes) but to all human beings as well. But the AEA does not want to deny human equality among IVHBs [Intrinsically Valuable Human Beings, or "persons"]. Yet, the AEA can only reject this undesirable consequence if he embraces the notion that human beings [have intrinsic moral worth] because they are rational moral agents *by nature* from the moment they come into existence (Beckwith, 2007, pp. 138–139).<sup>14</sup>

My argument is that the human being is a particular sort of substance—a rational moral agent—that by her nature has certain natural basic intrinsic capacities that may or may not come to maturity and may or may not be lost and gained during the human being’s natural life. Unborn human beings, as do all human beings, are substances of this sort because of their nature. Clearly, this nature *entails* certain natural basic intrinsic capacities, including the capacity to develop the abilities to reason and to engage in moral choice. But that means it is the human being’s nature that determines its natural basic intrinsic capacities, and it is that nature—rational moral agent—that grounds her moral worth as a person. Stretton, ironically, seems to see this as well: “Being human is of course not a degreed property—we are all equally human. . . ; but on the substance view the reason humans are alleged to have a right to life is their natural capacity for rationality and communication (a degreed property)—and so the substance view must also explain why the right to life is not a matter of degree” (Stretton, 2008, p. 794). Stretton is correct that all human beings are equally human. But for the supporter of the substance view, this means that all human beings share the same rational nature, which is not a degreed property. And it is because a human being has that nature that he or she has certain natural basic intrinsic capacities whose maturity and flourishing contribute to his or her perfection (or proper end). But if the human being is immature or ill and his natural basic intrinsic capacities cannot develop as they are supposed to, that human being still possesses full moral worth and is thus equal in dignity to his fellow human beings precisely because he is a substance of a particular nature and that nature is not a degreed property. As Christopher Kaczor points out,

A mentally retarded human being and a normal hedgehog are equally incapable of exercising distinctly human reasoning and freedom, but the handicap of the human is tragic while the rational incapacity [of] a hedgehog is inconsequential. This difference rests on the fact that the human, but not the hedgehog, cannot exercise his or her species-specific form of flourishing. Since even mentally handicapped human beings share in a species-specific form of flourishing ordered to the goods of rationality and freedom, they are human persons (Kaczor, 2010, p. 101).

In the cases of Uncle Jed and Uncle Jed<sub>2</sub>, both lost their abilities to exercise immediately rational and moral choice, with the former, Uncle Jed, having the prospect of regaining his past achievements that resulted from the exercise of these abilities. But this does not change the fact that both Uncle Jed and Uncle Jed<sub>2</sub> are substances of a particular sort, rational moral agents. And it is because they share that nature—and not because of any abilities that they may regain or lose—that determines whether they are human persons. The purpose of the Uncle Jed stories is to illustrate why a human being’s nature rather than her presently exercisable powers and abilities better grounds her personhood.<sup>15</sup> Thus, Stretton is wrong in thinking that I am grounding personhood in natural basic intrinsic capacities. Rather, I am grounding natural basic intrinsic capacities in human nature, something equally shared by all human beings regardless of their size, level of development, environment, dependency, or health.

So, contra Stretton, the substance view is not in the same position as alternatives that attempt to ground personhood in degreed properties. But this, not surprisingly, leaves some proponents of the latter views not entirely comfortable

with its non-egalitarian implications. For instance, Jeff McMahan, in his careful and thoughtful analysis of the difficulties of grounding human equality on decreed properties, laments that

all this leaves me profoundly uncomfortable. It seems virtually unthinkable to abandon our egalitarian commitments. . . . Yet the challenges to the equal wrongness thesis, which is a central element of liberal egalitarian morality, support. . . .skepticism about the compatibility of our all-or-nothing egalitarian beliefs with the fact that the properties on which our moral status appears to supervene are all matters of degree. It is hard to avoid the sense that our egalitarian commitments rest on distressingly insecure foundations (McMahan, 2008, p. 104).

### ***4.2.2 Argument from Developed Psychological Capacities***

Stretton, relying on the work of McMahan, suggests that there could be other reasons as to why Uncle Jed<sub>2</sub> ought not to be killed: (1) the argument from respect and (2) the argument from developed psychological capacities. Because the second is the stronger of the two and relies on McMahan's more detailed work, I will address briefly the first before moving on to the second. Stretton writes, "[T]he adult's [Uncle Jed<sub>2</sub>'s] past mental states may ground duties of respect even though they have been erased in roughly the way we may owe duties of respect to the dead even though their past mental states have been erased" (2008, p. 794). This is hardly the point, since the question is whether Uncle Jed<sub>2</sub> while in the coma has a right not to be turned into a corpse. To suggest that we should respect him like we respect the dead is no real solution to the conundrum. After all, if the morgue were to discover a pulse emanating from what they presumed was the corpse of Uncle Jed<sub>2</sub> (with all the same prospects as in the story above) it seems incredible to suggest that the medical examiner would instruct his staff, "The only duties we owe him are those we owe a corpse."

Stretton's other argument goes like this: "the continuation of developed psychological capacities—even primitive ones like the fetus has—may provide a sufficient psychological connection between the foetal adult and its future self to ground a right to life. . ." (2008, p. 794).<sup>16</sup> It is difficult to know what Stretton means by developed psychological capacities (DPCs). However, because he refers the reader to McMahan's work (McMahan, 2002, pp. 73–75) that is the place to look. Because Stretton's "foetal adult" is undoubtedly like Uncle Jed<sub>2</sub>, he is likely referring to McMahan's view that one's egoistic concern about the future grounds one's right to life. Writes McMahan:

I suggest that the basis for an individual's egoistic concern about the future—that which is both necessary and sufficient for rational egoistic concern—is the physical and functional continuity of enough of those areas of the individual's brain in which consciousness is realized to preserve the capacity to support consciousness or mental activity. Usually the functional continuity of these areas of the brain involves broad psychological continuity, but in the very earliest phases of an individual's life and in some instances near the end, the same mind or consciousness persists in the absence of any degree of psychological connectedness from day to day. And as we have seen, what matters may be present in these cases, at least to some minimal degree (McMahan, 2002, p. 66).

Thus, what Stretton seems to be suggesting is that pre-coma Uncle Jed<sub>2</sub> in possession of DPCs has an egoistic concern about his future and thus an interest in “the physical and functional continuity of enough of those areas of . . . [his] brain in which consciousness is realized to preserve the capacity to support consciousness or mental activity” (McMahan, 2002, p. 66). For this reason, comatose and post-coma Uncle Jed<sub>2</sub>, also in possession of the same (or at least some of pre-coma Uncle Jed<sub>2</sub>’s) DPCs, may have a right to life.

It’s not clear, however, how this counts against the substance view, even if the DPC account does adequately account for the wrongness of killing Uncle Jed<sub>2</sub>. For the defender of the substance view is not saying that there could not be other reasons aside from the substance view for believing a human being has a right to life. Rather, she is arguing that the substance view has, in comparison to other views, greater explanatory power in accounting for why we believe certain human beings are intrinsically valuable persons and why we should believe that of all other human beings as well. For example, if I say it is wrong to kill Jon because he is an innocent human person, but you say that it is wrong to kill Jon because he is handsome, the latter reason does not show the former to be inferior or false, even if it turns out that you restrain yourself from killing Jon because he is handsome. Moreover, Stretton’s suggested alternative, the DPC account, ironically, may serve as a reason *not* to abandon the substance view, since the substance view does definitively ground the right to life of Uncle Jed<sub>2</sub> while Stretton admits that the DPC account only *may ground* his right to life.

Nevertheless, it seems to me that one can reject the DPC account on two grounds: (1) egoistic concern cannot ground moral worth, and (2) it relies on an artifactual account of cerebral architecture that can be plausibly challenged.

#### 4.2.2.1 Egoistic Concern

As I noted above, Stretton seems to be suggesting that pre-coma Uncle Jed<sub>2</sub> in possession of DPCs has an egoistic concern about his future and thus an interest in “the physical and functional continuity of enough of those areas of . . . [his] brain in which consciousness is realized to preserve the capacity to support consciousness or mental activity” (McMahan, 2002, p. 66). But appealing to a human being’s egoistic concern to resolve a moral question seems to get things backwards. For objects of concern are either good or bad. That is, the morality of concerns, desires, projects, and interests are assessed by whether they are true goods for a being of this sort and not merely whether they are the being’s own. Tony Soprano, for example, may have an egoistic concern for his future because he desires to “rub out” Johnny Sacramoni a week from Monday. Or, Mr. Jones, after hearing of his wife’s affair may lose any interest in life and seek to end his own as soon as possible. In neither case is one’s egoistic concern remotely adequate to ground the person’s moral worth, since it is the moral worth of human persons qua human persons that is in question, and the concerns of the individual ego, as in the cases of Tony and Mr. Jones, may be directed toward immoral ends inconsistent with a basic good for human beings as such. Thus, because one’s egoistic concern about one’s future may not advance

one's good or the good of other persons, and because moral worth is always good, therefore, egoistic concern about one's future cannot ground moral worth.

Nevertheless, it does seem to be the case that it is a good to be concerned about one's future, but only because of the role it plays in the actualization of the perfections to which a human being is ordered by virtue of his or her rational nature. According to the substance view, the goodness of one's concern for one's future means that life itself is a basic good and that being alive allows one to participate in a variety of other goods such as friendship, love of neighbor, the honing of talents and skills, engaging in acts of charity, serving the Lord, appreciating fine art and music, etc. These goods contribute to the flourishing of the human person because he is an individual substance of a rational nature ordered toward these goods. Thus, one's egoistic concern for the future is not what grounds one's moral worth. Rather, it is on the basis of one's moral worth by which one assesses the moral quality of one's egoistic concern for the future. That is, the question is whether or not one's egoistic concern aligns with the proper exercise of the powers of moral and rational choice for one's good appropriate for the sort of being one is. Therefore, the question of how we should treat Uncle Jed<sub>2</sub> while he is in the coma is not, "Did he have an egoistic concern for his future prior to entering the coma?," but rather, "What sorts of actions toward Uncle Jed<sub>2</sub> would show proper respect for the good to which such a being is ordered by virtue of its nature?"

#### 4.2.2.2 Cerebral Architecture

Although it seems that egoistic concern by itself cannot ground moral worth, McMahan's case is much richer than that. Recall, he argues that "*the basis for an individual's egoistic concern about the future. . . is the physical and functional continuity of enough of those areas of the individual's brain in which consciousness is realized to preserve the capacity to support consciousness or mental activity*" (McMahan, 2002, p. 66—emphasis added). So, it is by observing Uncle Jed<sub>2</sub>'s cerebral architecture (CA) that we are able to detect whether he has the developed psychological capacities (DPCs) that may ground his right to life. Consequently, by conscripting McMahan's argument, Stretton seems to be saying that Uncle Jed<sub>2</sub>, while subsisting through pre-coma, comatose, and post-coma states, possessed DPCs because he had the CA of a mature rational agent. Nevertheless, Uncle Jed<sub>2</sub>'s inability to employ his mature CA for the exercise of his moral and rational powers that he possesses as a consequence of being a rational moral agent by nature is a lack possessed by *both* the standard fetus, which like Uncle Jed<sub>2</sub>, according to Stretton,<sup>17</sup> may have a right to life because it has primitive developed psychological capacities (pDPCs), *as well as* the standard embryo that Stretton does not think has a right to life because its psychological capacities are undeveloped (uDPCs).<sup>18</sup> Thus, if I am reading Stretton correctly (through McMahan), it is the temporal continuity of CA between pre-coma, comatose, and post-coma Uncle Jed<sub>2</sub> that *may ground* his right to life. I do not think this succeeds vis-à-vis the substance view.

When Stretton writes of "the continuation of developed psychological capacities" (Stretton, 2008, p. 794), what does he mean by "continuation"? He clearly does not

mean that these capacities continue as a sort of independent cluster, an individual substance, that subsists through time while losing and gaining parts and properties. For these DPCs are themselves properties *had by* a being of a certain sort that may lose and gain DPCs while it subsists through time. After all, when these developed psychological capacities are functioning properly, they work in concert with other properties and abilities for the good of the whole being, or substance, that owns them. Thus, the only way that DPCs can continue through time is as properties or powers had by a substance. So, if Stretton is correct that the temporal continuation of these DPCs is what gives (or may give) Uncle Jed<sub>2</sub> the right to life, this account requires that we think of both Uncle Jed<sub>2</sub> as a substance of a certain sort, a rational moral agent, for which the continuation of developed psychological capacities is a good that contributes to the being's perfection. In that case, it is the human being as a whole that is the proper subject of moral concern, since it is its good and proper end for which DPCs, as well as the being's other potencies, capacities and powers, acquire their meaning and purpose.

But in the case of Uncle Jed<sub>2</sub> the DPCs cannot be exercised because he is damaged in such a way that he lacks a necessary physical condition or state that the exercise of these capacities requires. For this reason, Uncle Jed<sub>2</sub> while in a comatose state is in the same position as the standard embryo, though, as Stretton implies, the standard embryo lacks DPCs. So, it is the embryo's lack of DPCs that morally permits one to kill him or her. But the embryo does possess from the moment he comes into being, and as he subsists through time, *undeveloped* psychological capacities (uDPCs). That is, from at least by the time the primitive streak arises about 14 days after conception the human being subsists through time with the ultimate capacity to develop DPCs because he is a being of a rational nature intrinsically ordered to do so. Thus, for the embryo, the development of psychological capacities, like in the case of Uncle Jed<sub>2</sub>'s developed, though impotent, psychological capacities, acquire their meaning and purpose because of the role they play in the good of the substance as a whole. So, both the embryo and Uncle Jed<sub>2</sub> are substances who possess the same ultimate capacities though they presently cannot exercise them, with the embryo requiring further development while Uncle Jed<sub>2</sub> needs healing. So, the only difference between the two is that one possesses the CA of a mature rational moral agent (DPCs) while the other does not (uDPCs). Thus, according to Stretton, a human being that subsists through time with DPCs may be a person who may not be killed without overwhelming reason while a human being that subsists through time with uDPCs is not a person and thus may be killed for a variety of lesser reasons. But the basis for this serious moral distinction—possessing a developed CA—seems arbitrary. For why should the possession or absence of *that* physical property make a moral difference if both beings share the same rational nature and the same unexpressed intrinsic powers? Why precisely is the physical shape and maturity of a dormant organ system by which a being's cognitive powers may be exercised relevant to assess a being's moral worth? Stretton does not say.

It seems to me that the confusion lurking behind Stretton's reliance on mature CA is a crude physicalism that treats organisms as if they were artifacts rather than living substances. Consider this example. Imagine if two airline passengers were debating



whether the object on the ground that they were viewing through their windows at 30,000 feet is a Catholic Cathedral or the Playboy Mansion. The building's external and internal architecture would be relevant to resolving this dispute. This is because the architecture of a building, whether a cathedral or a mansion, is not something intrinsically had by the building, as if the building were a unified substance over and above the sum total of its parts that acquire their meaning in relation to the whole and work in concert for the good of the whole. For the building is an artifact whose purpose is the result of an external mind imposing a pattern on bits of inert matter.

There is no "building substance" that subsists through time with its own intrinsic capacities and natural powers that may be actualized for the perfection of the building. For a building, or any artifact, present architecture is everything, since there is no substance that subsists through time intrinsically ordered to a particular end. For a living organism, the development of its architecture, cerebral or otherwise, is suggestive of the sort of being it is. So, when it comes to a living substance, its nature is everything, for it reveals to us its intrinsically ordered ends, its architectonic hierarchy of powers, properties and potencies.

This is why, as Aristotle points out, if you own a bed made out of wood and then plant a piece of the bed in the ground, "it would not be a bed that would come up, but wood" (Aristotle, *Physics*, Bk. II, Part 1). This "shows that the arrangement in accordance with the rules of the art is merely an incidental attribute, whereas the real nature is the other, which, further, persists continuously through the process of making" (Aristotle, *Physics*, Bk. II, Part 1). In other words, the form and finality of the bed is imposed from without (an "arrangement in accordance with the rules of art") while the form and finality of the wood is intrinsic to the nature of the tree from which it was taken ("the real nature" that "persists continuously through the process of making"). In the words of Etienne Gilson: "The artist is external to his work; the work of art is consequently external to the art which produces it. The end of living nature is, on the contrary, cosubstantial with it. The embryo is the law of its own development. It is already of its nature to be what will be later on an adult capable of reproducing itself" (Gilson, 2009, p. 125). Consequently, Stretton's appeal to cerebral architecture as possibly dispositive to a being's right to life assumes a controversial understanding of living organisms that some, especially metaphysical realists, will find unconvincing.<sup>19</sup>

#### ***4.2.3 The Argument from the Moral Permissibility of the Intentional Creation of Mentally Handicapped Fetuses***

In *Defending Life* I argue that given the dominant understandings of personhood in the literature, understandings that connect a human being's moral worth to certain presently exercisable mental abilities, it is difficult to account for the wrongness of intentionally creating mentally handicapped fetuses.<sup>20</sup> For example, suppose that Mr. Jones clones himself.<sup>21</sup> That clone, X, is then implanted into a womb and it

begins to develop normally. However, at a certain point in his gestation Mr. Jones orders that X's neural tube be stopped from developing so that X may not acquire the higher brain functions that are necessary for X to exercise his rational and moral powers. That is, a healthy embryo is manipulated so that he develops into an anencephalic child.<sup>22</sup> Mr. Jones issues that order because he wants to harvest X's body (which has Mr. Jones's genome) so that if and when any of Mr. Jones' organs become diseased or less functional, he can replace those organs with X's healthy ones.

But, as Dan W. Brock points out, "Most people would likely find this practice appalling and immoral, in part because here the cloned later twin's capacity for conscious life is destroyed *solely as a means* for the benefit of another" (Brock, 1997, E8). What I suggest is that this intuition is best grounded in the substance view of persons. That is, only if the fetus is entitled to his higher brain functions does it make sense to say that the cloned twin has been wronged. Remember, the substance view is a perfectionist view, which means, as I noted above, it sees the maturation of a human being's intrinsic ends or purposes as perfections of its nature. So, for example, the whole human being is harmed if her brain is not allowed to develop as a consequence of ailment or assault. Thus, if the embryo's brain development is intentionally obstructed so that she does not achieve higher brain function and thus cannot exercise her natural powers for rational thought and moral reflection, the human being has been morally harmed because a good to which she is entitled has been prevented from coming to fruition. But if that's the case, then any act intended to disrupt or compromise the human being's proper end, including abortion, is *prima facie* immoral. After all, if it's wrong to prevent the embryo from acquiring her higher brain function by blocking her neural tube, it's wrong to do so by killing her via abortion.

In response to my argument, Stretton writes:

To the contrary, this case seems to *refute* the substance view. To render a normal *adult* anencephalic would be tantamount to murder; surely then the same is true of *unborn* human beings, on the substance view? Yet our intuition is *not* that the creation of anencephalic clones is tantamount to murder. Our sense is rather that the deliberate creation of disabled beings is *prima facie* wrong (though well short of murder) even where those beings are not harmed by being created. . . . This intuition, however, provides no support for the substance view (Stretton, 2008, p. 794).

Stretton, again, is misconstruing my argument. He reads into it something I do not defend. In no place in which I offer this argument do I suggest, imply, or claim that creating an anencephalic child is tantamount to murder. That belief plays no role in the argument's logic nor in the reason why I offered it. What then was I trying to accomplish with the argument?

Let us start with the moral claim "it is a *prima facie* wrong to intentionally create an anencephalic human being." For someone who holds the substance view this moral claim makes sense, for the human being whose brain is intentionally obstructed from normal development is being denied that which he is by nature entitled, since a functioning brain is a perfection of his nature. Stretton, however, concedes that intentionally creating an anencephalic human being is a *prima facie*

wrong even if the intervention to alter the human being's brain development occurs before he develops what Stretton and others (like McMahan, 2002; Boonin, 2003; and Dworkin 1993) consider the properties that impart personhood to the human being. So, what precisely are the grounds by which Stretton issues this judgment? He does not say. Is it because the fetus is entitled to his higher brain functions? If so, then abortion is unjustified, since it too robs the fetus of his higher brain functions (in addition to all of his bodily functions including the use of mature versions of his heart, lungs, legs, harms, ears, nose, eyes, etc.)

So, here's the problem: almost everyone agrees that it is a *prima facie* wrong to intentionally create an anencephalic human being. I, then, ask the question: what account of the human person best accounts for this intuition? It seems to me that the substance view has the best resources to do so, since views like those held by Stretton, McMahan, Boonin, and Dworkin affirm that it is morally permissible to destroy the fetus, including his developing brain, prior to his acquisition of certain value-making properties. So, if one can destroy the fetus for the apparent good of another (the pregnant woman) prior to him becoming a person, why cannot one use the fetus's body parts for the good of another (the cloned twin's progenitor) by making sure he does not become a person?

Let me offer another twist to this thought experiment. Suppose that the creating of anencephalic clones for organ harvesting becomes widespread. In response, millions of citizens rise up in protest, calling for the liberation of the clones. These citizens call their movement, clone-choice (CC), since they believe that it is morally wrong for the clones to have their moral and rational powers—i.e., their choice—obstructed from maturing by cerebral mutilation. Those that support the practice respond, calling their movement, clone-life (CL), since they believe that it is morally wrong to interfere with a person's reproductive powers to create non-person human beings (anencephalic clones) for the preservation of the lives of "real" persons. CL, with the assistance of the government, sets up thousands of "Life Centers" throughout North America in which cloning and harvesting procedures are offered to the public at a low cost. In these centers are millions of adult-looking human clones without higher brain functions resting in suspended animation. It turns out that some scientists working with CC have discovered a surgical procedure that will allow the adult clones to develop their higher brain functions. Suppose that some of these scientists break into several Life Centers, perform this surgery on about fifty of the adult clones, take these clones to safe houses where they are nourished, cared for, and sheltered, and over the course of 9 months the clones do in fact develop higher brain functions. If you think what the scientists did was not only good but an act that justice requires, it seems that you must believe that the clones are beings of a rational nature ordered toward certain perfections that when obstructed, results in a wrong.

The strength of my argument does not depend on the claim, nor conclude that, the creation of anencephalic human beings is tantamount to murder. Rather, its strength depends on the inability of views contrary to the substance view—those embraced by Stretton and others—to account for the wrongness of an act for which the substance view can easily account.

### 4.3 Conclusion

In this chapter I offered a modest defense of the substance view of persons—that the human being is a substance with a rational nature—by responding to several criticisms of it offered by the bioethicist Dean Stretton. Although Stretton’s critique raises important questions with which the defender of the substance view must wrestle, I do not believe his critique succeeds in undermining my contention that the substance view has far more explanatory power than its rivals.<sup>23</sup>

### Notes

1. An often-cited argument is based on the phenomenon of monozygotic twinning, which can occur within the first two weeks after conception. There who offer this and other arguments are trying to show that the embryo prior to the arrival of the primitive streak (about 14 days after conception) is not yet an individual human organism. However, there are several works that offer a case for the pre-primitive streak embryo’s individuality. See, George and Tollefsen (2008, pp. 151–158); Beckwith (2007, pp. 73–83); Lee and George (2006, pp. 61–67); A. A. Howsepian (1997, pp. 38–41); and A. A. Howsepian (2008, pp. 140–157).
2. Some portions of this section are adapted from sections of chapter 6 of my *Defending Life*.
3. I am using the following terms interchangeably throughout this chapter: “ultimate capacities,” “basic capacities,” “intrinsic basic capacities,” and “natural basic intrinsic capacities.” This is what I mean by ultimate capacities: those capacities that a substance is rationally ordered to actualize for the perfection of itself. For example, all human beings have the ultimate capacity for rational thought, even if it is never actualized due to illness, physical defect, or death.
4. David Boonin argues that the unborn human being does not become a moral subject until it acquires organized cortical brain activity (OCBA), which may occur as early as 25 weeks gestation or as late as 32 weeks. Writes Boonin:

[A]n individual cannot begin to acquire this special moral standing until it begins to have at least some actual desires. . . . A human fetus has no such desires prior to the point at which it has conscious experience, and it has no conscious experiences prior to the point at which it has organized electrical activity in its cerebral cortex. It therefore has no such desires prior to the point at which it has organized electrical activity in its cerebral cortex. One implication of this account of the wrongness of killing, then, is that the fetus does not acquire the moral standing that you and I have prior to the point at which it has such activity.” (David Boonin, 2003, pp. 125–26)

5. Ronald Dworkin writes that it is “very hard to make sense of the idea that a fetus has rights from the moment of conception. Having rights seems to presuppose having interests, which in turn seems to presuppose having wants, hopes, fears, likes and dislikes. But an early fetus lacks the physical constitution required for such psychological states.” (Ronald Dworkin, 1993, p. 15).
6. Clearly, this is a reasonable way to think about these things, since even the abortion choice advocate must claim to know something about what the typical fetus can and cannot do in order to maintain that the fetus is outside the scope of the moral community because it lacks certain presently exercisable abilities. In fact, knowledge of what constitutes the “standard fetus” and its capacities, powers, and abilities during the entirety of its gestation is assumed in the cases made by Boonin and Dworkin (see notes 4 and 5).
7. Boonin, for example, writes:

Of course, the critic might instead appeal to an imaginary case in which a temporarily comatose adult has had the entire contents in his brain destroyed so that there is no more information contained in his brain than is contained in that of the preconscious

fetus. In this case, it seems right that my position does not imply that such an individual has the same right to life as you or I. But, as in the case of the adult who has never had conscious experiences, a critic of abortion cannot appeal to such a case as a means of rejecting my position because we cannot assume ahead of time that killing such individuals is seriously immoral. (Boonin, 2003, p. 78)

8. One “argument” that Stretton offers in response to my Uncle Jed<sub>2</sub> illustration that I will not address in the text is this one: “This is unpersuasive, since many pro-choicers will simply deny that the foetal adult [Uncle Jed<sub>2</sub>] has a right to life.” (Stretton, 2008, p. 794). Finding an argument unpersuasive by denying the veracity of its conclusion is not the same as showing it to be unreasonable or flawed. What I am arguing is that the difference between Uncle Jed and Uncle Jed<sub>2</sub> is arbitrary and thus has no moral import in establishing that the killing of the latter is not homicide. What, then, are the premises that unseat this charge of arbitrariness? Stretton does not say. He just makes the observation that some people will remain unpersuaded by my argument because they will deny its conclusion. But turnabout is fair play. For I am certain that most of my prolife allies will not be persuaded that Stretton’s observation is an adequate reason to abandon their belief that the Uncle Jed<sub>2</sub> ought not to be killed.
9. See Lee (1996, pp. 54–62); Lee (2007, pp. 93–97).
10. “Beckwith’s second argument... is that since the right to life is not a matter of degree, but developed capacities are a matter of degree (for example, some are more rational and intelligent than others), the right to life cannot be grounded, as pro-choicers seek to do, in developed capacities, but rather must, as the substance view claims, be grounded in natural capacities...” (citations omitted) (Stretton, 2008, p. 794).
11. “The obvious response... is that natural capacities also come in degrees, both within the human species (where some are naturally more rational and intelligent than others), and over the course of evolution (which we may assume involved imperceptibly gradual increases in natural capacities from our non-human ancestors to ourselves). Thus the substance view also grounds the right to life in degreed capacities or properties. Being human is of course not a degreed property—we are all equally human...; but on the substance view the reason humans are alleged to have a right to life is their natural capacity for rationality and communication (a degreed property)—and so the substance view must also explain why the right to life is not a matter of degree. I submit we are all committed to positing some kind of threshold within a continuous range of degreed properties or capacities.” (citations omitted) (Stretton, 2008, p. 794).
12. Patrick Lee writes:
 

However, Stretton has misconstrued my argument and the criterion I (along with many others) propose for the right to life. I argued that defenders of abortion have no good reason to base the right to life on developed capacities for conceptual thought and free choice rather than on basic, natural capacities for such acts – capacities which are possessed by unborn, as well as more mature, human beings. However, the conclusion of my argument was not that the criterion for the right to life is natural capacities, but that it is, being a certain type of substance. I then proposed that the genuine criterion for having a right to life is *being a person*, that is, a distinct substance of a rational nature (the classic Boethian or Thomistic definition of ‘person’).” (Patrick Lee, 2007, p. 97, note omitted).
13. “A substance’s capacities culminate in a set of its ultimate capacities that are possessed solely in virtue of the substance belonging to its natural kind: for example, Smith’s ultimate capacities are his because he belongs to the *natural kind* ‘being human’” (Moreland and Rae, 2000, p. 73).
14. In its original, this quotation cites Moreland and Rae, (2000, pp. 202–204), in order to point the reader to a fuller explanation of the distinction between first-order and second-order capacities.
15. By “personhood” I mean the essential properties a being must possess in order to be accorded respect as a moral agent. This is an essentialist view, that “properties” are not accidental

- qualities (as modern analytic philosophers often think of them), but rather, characteristics that flow from and are caused by the being's essence, though they may not necessarily be actualized. Thus, Uncle Jed always possesses the property of the "ability to think" even when he cannot exercise it.
16. Stretton cites McMahan (2002, pp. 73–75) here.
  17. Recall his argument: "the continuation of developed psychological capacities—even *primitive ones like the fetus has*—may provide a sufficient psychological connection between the foetal adult and its future self to ground a right to life. . ." (Stretton, 2008, p. 794) (emphasis added).
  18. See Stretton (2008, pp. 794–795). See also, Stretton (1997). Because I am not sure what Stretton means when he uses the term "fetus"—whether he is using it in the popular sense to mean an unborn human being during its entire gestation in the womb or in its more technical sense as an unborn human being in its 9th week after conception or later—I am assuming he means it in the latter sense. Prior to the 9th week, the appropriate technical term is "embryo." Thus, I am using "fetus" and "embryo" in the text with those technical definitions in mind.
  19. Obviously, the view I am defending, the substance view, is no less controversial. But this means that how one views an organism's development will be shaped not only by the facts on the ground but how those facts cohere with one's metaphysics and the arguments one offers for it. My point is this: the force of Stretton's counterargument depends on his own prior metaphysical commitment to what appears to be an artifactual understanding of organisms. But if one rejects that metaphysics for a variety of other reasons, then the counterargument loses much of its force.
  20. See Beckwith (2007, pp. 139–140, 148–149, 158–159, and 212).
  21. The following is similar to a scenario suggested in Kahn (1989, pp. 14–18).
  22. The National Institutes for Health provides this definition of anencephaly:

Anencephaly is a defect in the closure of the neural tube during fetal development. The neural tube is a narrow channel that folds and closes between the 3rd and 4th weeks of pregnancy to form the brain and spinal cord of the embryo. Anencephaly occurs when the "cephalic" or head end of the neural tube fails to close, resulting in the absence of a major portion of the brain, skull, and scalp. Infants with this disorder are born without a forebrain (the front part of the brain) and a cerebrum (the thinking and coordinating part of the brain). The remaining brain tissue is often exposed—not covered by bone or skin. A baby born with anencephaly is usually blind, deaf, unconscious, and unable to feel pain. Although some individuals with anencephaly may be born with a rudimentary brain stem, the lack of a functioning cerebrum permanently rules out the possibility of ever gaining consciousness. Reflex actions such as breathing and responses to sound or touch may occur. (<http://www.ninds.nih.gov/disorders/anencephaly/anencephaly.htm>).

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# Chapter 5

## The Concept of Person in Bioethics

Anselm Winfried Müller

### 5.1 Is Abortion the Killing of a Person?

Abortionist arguments take different forms. Three kinds of argument in particular are common: (a) the (early) human foetus is not a human being; so (an early) abortion is not a case of killing innocent human beings. (b) Killing is intrinsically wrong only when directed against persons; up to a certain stage, however, the fetus (or even infant), though a human being alright, is not (yet) a person; so up to a certain stage of development abortion is not intrinsically wrong. (c) The human fetus is a human being (or person) and as such has a right to life; but in particular cases countervailing considerations may show that other rights or moral demands take precedence over the prohibition on killing the foetus.

The following considerations will be relevant only to (b)-type arguments. They are intended to show that such arguments are wrong to claim or imply that the relevant concept of *person* must, or is plausibly taken to, be one that allows for, and forces on us, a distinction between personal and non-personal human beings.

### 5.2 Bioethical Views Are Affected by Our Answer to the Question Whether Human Beings Are Persons by Their Very Nature or Rather by Additional Properties

Over the last decades, a number of questions have been discussed in terms that make use of the concept of person: Can an organism have a right to life without being a person? Are some animals persons, so that we should treat them as deserving moral consideration? If a human foetus, perhaps even a newborn baby, is not a person: what follows concerning our obligations towards it? Does a human being that has fallen into a permanent vegetative state (PVS, a kind of coma) have the moral claims

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of a person? Is brain death the end of the life of a person even if not of the (human) organism?

I say that these questions make use of the concept of person. But it would be more accurate to say that they make use of the word “person” in a sense that bioethicists, following John Locke, have given it. Even this is not quite accurate, since different writers explain the word in terms of different properties or sets of properties. What they agree on is the idea that a human being is a person not in virtue of being a human being but rather—as long as he or she is a person at all—in virtue of allegedly “commonsense personhood” (Feinberg, 1986, p. 270), generally interpreted as the actual possession of, roughly speaking, *rational capacities*. (Thus e.g. Dennett, 1978; Hoerster, 1995, pp. 69–88; Kuhse and Singer, 1985, esp. p. 133; and many others. For comments and critical responses see e.g. Birnbacher, 2006, pp. 53–76; Ford, 2002, pp. 7–9; Gormally, 1992, pp. 181–188; Hursthouse, 1999, pp. 66–74; Marquis, 1999, pp. 46–48; Purdy, 1999, p. 74; Rhonheimer, 2010, chapter 6; Sutton, 1990, pp. 104–119; Spaemann, 2007; Thomson, 1999, p. 36.)

The word “person” has not always been used in this way. European philosophical and theological traditions employ the Latin word *persona* in accordance with a famous definition given by Boethius: *A person is an individual substance of a rational nature (persona est naturae rationabilis individua substantia)*. In these traditions as well as in everyday uses of the word’s derivatives in European languages, there is no room for the idea that a human being may *become, or cease to be*, a person. Rather, for you to be a person is for you to be a creature of a certain kind. You cannot become, or cease to be, a person any more than you can become, or cease to be, a human being.

Of course, the divergent use we find in contemporary bioethics is not arbitrary. Even in the classical definition given by Boethius, personality is tied to “*natura rationabilis*”. So rationality, it seems, is essential to being a person. Human foetuses, however, and small infants, as well as people in a PVS or heavily demented, lack the capacities that seem to constitute rationality. Hence there appears to be no foundation for calling them persons.

It is tempting, therefore, to apply the word “person” only to organisms that actually possess those rational capacities. And most bioethicists do treat personhood as a property that may characterize particular human beings (or other animals) for a certain span of time without in any way being essential to their existence. It plays the role of a property like, say, a particular height. You can become and cease to be a person, just as you can become and cease to be 170 cm tall.

The differences between *personhood*, the possession of certain rational capacities, and *personality*, in the Boethian sense of *being a person*, are not much discussed by philosophers working in bioethics. One reason for this may be the fact that both these concepts are employed in order to point to the basis of what may be called moral dignity. This kind of connexion is made by contemporary bioethicists as well as by medieval philosophers and Kant.

It is, however, important to compare the two notions and to examine their claims to capture the ways in which we conceive of ourselves and other human beings. For, given that the word “person” has associations strongly evocative of moral feelings,

our moral views will easily be affected by what use of it we adopt. The current tendency, in bioethical discussions, towards the “personhood” reading is liable to contribute to a change in our moral outlook. Usually, this reading goes together with what I have called “personism”, the view that personhood rather than membership of the human *species* is morally significant (cf. Müller, 2004). Personism is particularly consequential in matters of life and death. Abortion as well as euthanasia is *prima facie* more acceptable if the *relevant question* is: “Does the organism to be killed exhibit rational capacities?”, rather than: “Is this organism a human person?”

So I wish to examine the implications of the *personhood* sense of “person” and, in particular, whether it gives us the only consistent or plausible way of understanding judgements such as “X is a person”. The following considerations are thus *not* intended to broach any bioethical questions directly. And it is only in the last five sections that I am going to give reasons for thinking that it is personality rather than personhood that should be viewed as a source of moral requirements.

### 5.3 “Personhood” Signifies a Set of Rational Capacities

The use of “person” and “personhood” in bioethics is not as uniform as my introductory remarks may have suggested. We can, in particular, distinguish a specifically moral from a neutral use. The neutral use identifies personhood with a set of capacities or dispositions that are supposed to be actualized in the use of reason. In their explanations, different authors have recourse to different aspects of rationality: thought, future-oriented deliberation, sense of value, self-consciousness, interest, creativity etc. (Birnbacher, 2006, p. 58 f.; cf. also Tighe, 1999, p. 91). Michael Tooley writes: “An organism possesses a serious right to life only if it possesses the concept of a self as a continuing subject of experience and other mental states, and believes that it is itself such a continuing entity” (1999, p. 23). It should be noted, however, that for Tooley himself this property of an organism is the *basis* of personhood rather than personhood. For, his own notion of a person is not a neutral but a moral one. By “personhood” he just *means* “a serious right to life” (1999, p. 22).

I am going to use “personhood” in a *neutral* sense. And in order to circumvent the controversy over the precise content of the notion, I am going to use the word simply, if somewhat vaguely, in the sense of *actual possession of rational capacities*, thus leaving it open as to what has a claim to being such a capacity.

### 5.4 The Idea of Personhood Involves a New Dualism

The first comment I wish to make on this notion of personhood is that it suggests a new kind of dualism. Bioethicists do not, indeed, speak of a duality of *substances* in a human being that is a person. But they presuppose that individuals of our species can be *reidentified*. Hence they presuppose that something remains the same during the life of a human being: the kind of thing he or she always is, something that may

be called their essence, or *human nature*, as opposed to the properties (including personhood) that may come and go.

The capacities and functions of personhood, which are in this way excluded from the constitution of human nature, correspond recognizably to what in Western philosophy used to be called man's "rational soul." And the traditional dualism that treats a man's body and his rational soul as independent substances does indeed seem to be reflected in a bioethical conception that says: The human being is an organism to whose *life as a human being* rationality is quite inessential. There is no room here for attributing, in an Aristotelian spirit, to one and the same principle—the human soul—both a man's rational capacities, dispositions, actions etc., and the rest of his life's potentialities and manifestations.

With a classical—say: Cartesian—dualism, the new dualism thus shares the view that no one principle is the origin of both bodily *and* rational (and thus personal) features and performances of a human being. It differs from the classical version in that it does not postulate two substances. Rather, the rational side of a human being, which is seen as principle of life by Aristotle, and as spiritual substance by Descartes, now plays the role of a remarkable and morally significant accident—an accidental property that most of us, in virtue of some law of nature, exhibit for the greater part of their lives. According to this new dualism, personhood, our rational side, cannot be part of human nature—or indeed of the nature of any other animal.

## 5.5 The Fact that Some Human Beings Live Without Rational Capacities Lends Plausibility to the New Dualism

It is obvious, and I have already indicated (Section 5.1), why it is plausible to think of our rationality in terms of personhood rather than personality. True, we tend to view our rational capacities as a distinctive mark of the human, and to think of those human beings that live without them as somehow lacking them. Nevertheless, it cannot be denied that human life does occur without those capacities. And from this it seems to follow that rationality *cannot* be of the *essence* of man.<sup>1</sup> Moreover, the personist will say, it is rationality that confers on an animal the dignity that gives it a right to life. So it is personhood, not membership of the human species that brings with it that moral status.

## 5.6 The Potentiality Argument: We Should Understand Personality in Terms of the (Second Order) Capacity for Acquiring Rational Capacities

In the context of bioethics, the new dualism is frequently attacked by means of the following argument: It is true that rational capacities do not characterize any human being all the time, nor even every human being some of the time. But the capacity

for acquiring those capacities belongs to man as such. And this potentiality is what constitutes him as a person (cf. e.g. Finnis, 1999, p. 14).

The new dualist will reply that it isn't *potential* rationality that imports personhood, but only *actual* possession of rational capacities. Against this, his opponent may point out that the implications of this reply are liable to undermine the bioethical position of the new dualist himself. For the latter maintains that personhood—which is, after all, the possession of rational *capacities* only—provides you with moral claims. He does *not* insist that only the *exercise* of these capacities gives you a right to life etc. Otherwise, as has been pointed out, he would have to say, e.g., that nothing is intrinsically wrong with killing a human being that is asleep. In other words: The new dualist's "actual rationality" is itself a kind of *potentiality*, consisting of the (first order) capacities for thinking, self-awareness, decisions, etc. But why, so the potentiality argument goes, stop here? Why not admit that the (second order) capacity for acquiring those (first order) capacities is a sufficient condition for an organism's being a person?

Even if this argument is a serious challenge to the new dualist's position, we cannot content ourselves with it. It cannot, for instance, show why we should treat as persons also human beings who have lost their rational capacities *irreversibly*. And, even more importantly, it does not tell us *why* we should tie the status of being a person to second order capacities rather than to first order ones (if not to their actualization!).

Moreover, the potentiality argument seems to make, to the new dualism, a tacit *concession* that may prevent it from arriving at a more convincing account. For it *shares a problematic assumption* with that dualism: the assumption that "being a person" must relate to a *contingent property*.

## 5.7 Being a Person Is not Appropriately Conceived of as a Contingent Property

What is wrong with that assumption? Are we not *forced* to make it, given that persons may, e.g., lose the capacities that make them persons?—No, we are not. I object to the assumption on two counts.

First, the traditional concept of a person is *not* a property concept. Now, it is indeed legitimate to provide an existing word with a special, technical meaning for a particular purpose. And this is what the new dualist does in his use of "person" and "personhood". What I am objecting to is, on the one hand, that he does not *declare* that his use diverges radically from the traditional one and, on the other, that he says next to nothing about the nature of the divergence. Implicitly he suggests, or gives the impression, that the new dualism and its revolutionary bioethical conclusions derive in quite unforced a manner from reflexions on the familiar notion of a person—while, in fact, they are based on something rather different.

So much for a first critical comment on the assumption that *being a person* must relate to a contingent property. My second comment relates to the *must* in

this assumption. Again, this necessity is not in general made explicit. New dualists do not often say, let alone argue, that there is no consistent alternative to taking “is a person” as an ascription of personhood—a contingent property.

But isn’t it obvious that these words do relate to a contingent property? They function, after all, as a predicate of sorts. So what is wrong with the assumption that their use ascribes a property? And since the criteria of being a person are not satisfied in the case of every human being at every time, evidently that property applies to human beings contingently rather than necessarily. What is the alternative?

## 5.8 Rational Capacities Are Non-contingent in the Sense that the Notion of a Human Being Includes Their Necessity

It is impossible to envisage an alternative as long as one sticks to the simple dichotomy *contingent v. necessary*. On the basis of this dichotomy, new dualists will inevitably say that rationality is a contingent property whereas representatives of the potentiality argument will say that it (understood as a second order potentiality) is necessary and essential to being human. And there seems to be, so to speak, no alternative to this alternative.

We can, however, view the matter somewhat differently. It seems possible, in particular, to distinguish between the denial of strict necessity and the attribution of mere contingency. I am not, of course, attacking classical logic. Where rationality, or anything else, is rightly predicated of an individual, it attaches to that individual either of necessity or not of necessity. However, what is not necessary need not, therefore, be entirely contingent. In particular, we should leave room for the possibility that the *nature* of a thing is represented by a concept and a corresponding expression that *relate to* determinate qualities without *attributing* these qualities to every individual to which they apply.

In such a case, the proper understanding of an individual’s nature includes a reference to features that are necessarily associated with that nature but not necessarily found realized in that (or any other) individual at every given time.

Concepts and terms of this kind, and in particular sortal ones, are utterly common, especially in our talk about tools and machines. You do not understand, e.g., what is a *watch*, unless your notion of it refers to its indicating the time of day. On the other hand, the concept of a watch continues to be applicable to something that has been correctly identified as a watch even after its hands have stopped functioning properly. We are *not* going to say that the thing before us has ceased to be a watch.

Consider now the suggestion that the concept of a *human being*—as well as every other *species* concept—is of this kind: In classifying something as a human being, we are using a concept that essentially *relates, inter alia*, to rationality, the possession and use of rational capacities. Our understanding of that individual’s nature includes a reference to features, namely rational capacities, that are necessarily associated with that nature but may fail to be realized, either just now or for

ever, in the particular individual that is being identified as a human being. Is this a plausible account of the concept of a human being? I hope to show that it is, by drawing on considerations that I largely owe to Aristotle, Arnold Gehlen, and Michael Thompson.

## 5.9 Reason Is a “Biological” Component of the Human Form of Life

Arnold Gehlen’s anthropology develops, in detail, the insight that rationality is not an aspect of human life that is, as it were, attached to the animal constitution of man as an added immaterial extra that is biologically irrelevant and therefore only contingently connected with that life. Rationality is, for him, a biologically integral part of human nature.

Gehlen has not, of course, forgotten that rational capacities develop in human beings only after these already exist; and he knows that such capacities may get lost or never manifest themselves in a particular individual. But this does not mean, he would insist, that they are dispensable for human life. On the contrary, in order for a human society to survive, let alone thrive, its members need to exercise these capacities.

It is not necessary here to pursue the details of Gehlen’s account of the ways in which reason operates in the various areas of the kind of life that humans typically lead (cf. Gehlen, 1995). Just remind yourself that we need techniques for obtaining food and shelter, deliberation and knowledge for useful action, foresight and planning for facing the future, communication for cooperation, institutions for security and stability of resources, morality for the channelling of interests, impulses, and emotions.

In particular, there can be no individual human life that does *not* include the actualization of rational capacities unless there are human beings around that do possess and practise “personhood”. The demented need to be cared for by sane people; those with severe mental incapacities could not survive without the assistance of those with the relevant capacities; and if you have already decided that human life can easily, and more easily, go on where the demented and incapacitated have been eliminated: it cannot, at any rate, go on without babies, and babies need to be brought up by rational adults.

We cannot conceive of *human* life without the idea of actualized rational capacities. In an individual where these are not present, or in the course of developing, human life is *defective*; and, indeed, defective *qua human* life. Rationality is not an “optional addition” to human life; it *ought* to go with rational capacities, even if it does not always do so.

It is in the nature of our species to procure the satisfaction of its vital needs by employing rational capacities. In this sense, then, possession of these capacities is essential to the equipment of the human organism. For the individual that is deprived of rational capacities, life depends on the operation of reason “administered” by

thinking adult specimens. It is obvious, and entailed in the notion of *human* life, that being cared for by *another's* rationality is *necessarily the exception* not the rule. And in this sense, rationality is not, in humans, a contingent quality.

Absence of rationality in an adult human being is thus not like absence of a back-door in a house. Back-doors may be useful, and there are houses with back-doors as well as houses without back-doors. But there is nothing incongruous in the idea that *all* houses might lack back-doors—as there is in the idea that all human beings might lack rational capacities.

It is more appropriate to compare the possession of rational capacities to that of organs like legs or lungs. The teleological necessity is of the same variety in either case. A human being can have lost a leg, or breathe with the help of an iron lung. But it would be wrong to conclude that for humans to have legs and lungs is a contingent matter.

### **5.9.1 Query: Perhaps Rationality Is Essential to a Human Society, But Not to the Human Individual?**

What, however, about small children? Surely, absence of reason is not a defect in *them*? And what about the *individual* lives of human adults that, let us grant, *are* defective in lacking reason: are not they human lives without being rational lives, consisting of vital operations that do not include rational operations? What, that is, about the very cases whose divergence from the typical life pattern of the healthy human adult seems to cause trouble?

With regard to these questions, the view suggested by Gehlen seems to amount to no more than the following: For a society of humans to survive, personhood must be *common* among them. *In this sense*, rationality may be essential to human life. But those individuals who lack personhood are nevertheless human beings; and to *them*, to *their* lives, rationality does not seem to be essential at all.

#### **5.9.1.1 First Reply: The Kind of Life We Find in Non-rational Humans Is Developing or Defective Rational Life**

Now the view I have just sketched does not seem to be quite true. For it does not seem to fit our understanding of “pre-rational” and “post-rational” life in human beings. In the case of babies, and even embryos, part of what their life consists in is growth into an animal that functions by means of reason. The manifestations of their lives can be properly understood only as preparing them for the exercise of rational capacities (cf. Sutton, 1990, pp. 104–119). Even from a “merely” zoological perspective, therefore, the life of a small infant is essentially different from the life of, say, a chimpanzee baby.

But the life of a PVS or severely demented patient, too, is not what some authors bluntly and contemptuously claim it is, viz. the life of a “human vegetable”. Nor is it the life of a brute any more than the life of a hawk with broken wings is the life of

an (undersized) emu. The capacity to fly is no part of an emu's form of life; no emu *fails* to have this capacity—as the wingless hawk does. And this difference has an empirical side; it affects the proper description of the incapacitated hawk and what it does.

The same is true of a demented human being. Unlike a brute animal, he *fails* to have rational capacities. His life is *defective*—it is not an *alternative* form of life. Again, a description of demented people's behaviour will bring this out if it includes enough *context*. Anyone who has been in contact with such people is aware of the peculiar way in which they exhibit traces of a characteristically human mental life.

### 5.9.1.2 Second Reply: Particular Judgements About People Presuppose a Normative Conception of the Form of Life They Belong to

My second reply to the objection of Section 5.9 is more general: It is not possible correctly to classify and describe a non-rational individual animal unless we know whether, in its case, the absence of rationality is an aspect of the species it belongs to, or characteristic of the stage of its development, or rather a defect.

This reply may be needed to supplement the previous one in view of a possible objection—the objection that a human being that does not exhibit rational capacities is properly described as defective, and as somehow would-be rational, *only if compared with healthy adults and viewed in the context of a human population*. The present reply says that this condition simply reflects the way we *must* conceive of a human individual and indeed of *any* living creature: An individual organism can be identified as the living creature it is, only by being assigned to a species, and the concept of a species does bring in a characteristic form of social life as well as a standard that is represented by the life cycle of a healthy member of that species.

In the last decade or so, Michael Thompson has drawn attention to this fact: There is no adequate description of a living creature that is not based on its classification as belonging to this or that species, or form of life. “It is in the light of judgements about the life form that I assign meaning and significance and point and position to the parts and operations of individual organisms that present themselves to me” (2004, p. 54; cf. also his 1995). And with a view to our topic, he might add: Only in the light of judgements about the *life form* of an individual organism can I say what absence of rational operations amounts to in its case.

If he is right, it is only in the light of a baby's, or a demented person's, life form—in the light, that is, of their belonging to the human species—that I can say that they are *not yet*, or *no longer*, endowed with rational capacities. In order to be recognized for what they are, both the non-rationality of the baby and that of the demented, must be held, in different ways, against a *standard* of rationality that is determined by those individuals' being members of a particular species of rational creatures, viz. *homo sapiens*.

In neither case is their non-rationality that of an organism which belongs to a *species of non-rational creatures*. It is part of the human form of life that its bearers *develop* rational capacities. And with that form of life is given a standard by which



we judge the conditions of the insane and the demented as *defective*, as deviating from a norm, or standard, inherent in our idea of what it is to be a human being.

This idea includes conditions of proper functioning, so that we need not explain the *satisfaction* but rather the *violation* of that standard, or norm. There is no answer, e.g., to the question “Why did that acorn grow into an oak tree?”, while there will in principle be an answer (though we may not know it) to the question “Why did that acorn *not* grow into an oak tree?” True, most acorns do not grow into oak trees. But it is a mistake to identify the most frequent case with the normal case. The normal case of acorn behaviour is the one that corresponds to the standard of functioning that is inscribed in the notion of what it is to be an acorn (in the notion of its nature).

We do indeed expect there to be an answer to the question *how* an acorn grows into an oak tree: an explanation presumably in terms of efficient causes. But the acorn’s own characteristic causal dispositions as well as a certain amount of cooperation on the part of the soil, the weather, and so on are included in the notion of an “oak life”, so that it is not the normal growth of a healthy acorn into a healthy oak tree that requires explanation but rather deviation from that course of events.

In the case of human beings, the emergence and continued functioning of rational capacities characterize a normal life. So it is the absence, not the presence, of “personhood” that stands in need of explanation where a human adult does not possess and exercise those capacities. We cannot say what a human being, even a comatose or demented one, *is* without bringing in the kind of life that characterizes our species.

Hence, saying that “rationality is not essential to the human individual” (cf. Section 5.9), is like saying that it is not necessary for any given individual motor car to have a functioning engine. For, even though this or that car may be out of order for a time or even forever, “automobility”—the capacity to be moved by the operation of its own engine—is nevertheless *essential* to every particular car in the sense that we cannot identify it as a car without importing a *norm* on account of which a car should have a properly functioning engine and, if it does not, it is a defective specimen. Similarly, rationality is essential to every particular human being in the sense that we cannot identify an individual organism as a human being without identifying it as a member of our species, and membership of the species imports a norm concerning the possession of rational capacities.

## **5.10 The Previous Considerations May not Show that the Traditional Notion of a Person Has to Guide Our Moral Injunctions Against Murder; the Suggested Alternative, However, Raises Serious Problems**

In calling something a human being you are subsuming it under an animal species, or life form, that is *essentially*, in the sense explained, rational. It is this rationality—not the actual possession, let alone exercise, of rational capacities—that is intended

when the philosophical tradition applies the word “person” to the species *human being*—and therefore to every individual human being. A human being cannot fail to be a person in this sense.

There is nothing ad hoc about this position: it is no more than a particular application to the case of human beings of a general truth concerning the characterization of living creatures. Individual human beings, whatever their actual capacities, are persons in virtue of being human—just as individual hawks are winged animals in virtue of being hawks, whether or not their wings happen to be broken.

However, personists may accept all this and yet insist that it only shows that the traditional notion of a person is *possible* and perhaps even *plausible*. It has not been shown, they may protest, that we cannot, alternatively, use the word “person” in order to signify rational capacities, and then restrict the prohibition of murder to the killing of (innocent) possessors of *personhood*. Why should this not be possible and indeed reasonable (cf. Sections 5.1 and 5.4) even if it should turn out that in attributing personhood to a human being one implicitly classifies her or him as a person in the traditional sense?

There are two problems with this suggestion, both of them relevant to the topic of moral claims and, in particular, the question *why* we should not kill persons. The first of these has already been mentioned in Section 5.2: There is no agreement among the new dualists on *which* capacities or dispositions should count as going to make up the rationality constitutive of personhood. I take this to be, on the one hand, symptomatic of a significant vagueness in the notions of *rational capacity* and, a fortiori, *personhood*—a vagueness that makes these notions unfit to establish a sufficiently sharp boundary between legitimate and illegitimate killing. This troublesome vagueness is enhanced by the vagueness inherent in each of the various notions (such as self-consciousness, sense of value etc.) that have been put forward as providing criteria of personhood. The latter vagueness mirrors the fact that things like self-consciousness are matters of degree. They come about, and cease to obtain, *gradually* and therefore cannot be used to draw a line of far-reaching moral significance.

On the other hand, that very disagreement over *what* rational capacities should be taken to constitute personhood and confer moral claims points to an *arbitrariness* in the new dualism, and to a general futility in the project of *singling out*, from among a whole bunch of transitory properties such as self-consciousness or a capacity to make plans, one property, or a set of such properties, to function as a basis for the right to life.

The second problem is a variant on considerations advanced in Section 5.5: It is not clear why personhood *rather than* personality should provide a human being with moral claims. If such claims are not tied to the *actual* exercise of rational capacities, why should they be tied to these *capacities* rather than the rationality, or personality, that has been shown (in Sections 5.8, 5.9, 5.10, and 5.11) to be essential to members of the species *homo sapiens*?

These two problems amount to questions that have to be answered if personism is to be plausible. They are not intended to deal fatal blows to that position.

### ***5.10.1 Objection: It Has not Been Shown that Rationality Is Always Real in Every Human Individual***

Part of a personist answer to the second problem I have raised in the last section might be as follows: It is reasonable to use *personhood* rather than *personality* as a criterion for something's having a right to life, because the former but not the latter notion ascribes a *relevant reality*. It is indeed impossible to identify a particular human being without implicitly bringing in the notion of rationality. Moreover, rational capacities can indeed be said to be *essential* to human individuals even if they lack them, in the following sense: You cannot say *what they are* without mentioning a norm that lays down what they *should be like*; and this norm contains a requirement of rationality: it lays down that humans should have or develop rational capacities (in the way that it lays down that they have or grow 32 teeth). However, none of this shows that every human being at every time presents us with a *reality*—as opposed to a mere teleological *requirement*—that corresponds to the traditional classification as “*animal rationale*”.

I am afraid the considerations inspired by Gehlen and Thompson do not, as they stand, refute this defence of personism. To counter it, one might argue that the idea of a “reality” that has just been introduced is an obscure one, and the implication that certain moral claims are based on such a reality are rather dubious in any case. Alternatively, one may turn to the Aristotelian tradition in order there to find an account of rational life that does account for human personality and its moral implications in terms of a relevant “reality”. The formulation of such an account would require an investigation of its own that I cannot conduct here. Instead, I shall conclude by sketching in outline the relevance of this tradition to our question.

## **5.11 The Aristotelian Tradition: Human Nature Is Constituted by a Rational Soul**

In many ways, the concept of an oak tree, of a hawk, or of a man resemble concepts like that of a motor car or of any other kind of machine. In both areas we use teleological language to describe their typical operations.

The motor car, however, is a composite in a sense in which the oak tree, the hawk, the human being seem not to be. And this points to a way of ascribing, to a human being, rationality as a reality even when this particular human being shows no signs of rational capacities—while we see no need to ascribe to a car automobility as a reality even when the engine of this particular car is out of order.

The decisive difference is made, according to Aristotle, by the presence of a substantial form or—more particularly, in the case of a living thing—a soul (*psyche*), the principle of the sort of life lived by that thing. The soul gives a distinctive natural unity to the plant, or animal, whose soul it is—a unity that artefacts like motor cars do not exhibit.

The most important aspect of the natural unity of, say, an oak tree is this: The operations that constitute its life must be understood as irreducibly *oak tree operations*: they cannot be explained in terms of operations that manifest the behavioural tendencies of the oak tree's parts; whereas the operations that constitute the working of a motor car *can* be reduced, in this sense, to the operations of the car's parts. As Mary Geach has put it, "an organism is among those continuing things about which we can reasonably form expectations, and [...] these expectations are not a sum of expectations about the parts" (Geach, 1980, p. 51).

The law that governs the movement of a car is nothing over and above the laws of nature that govern the operations of its parts (and, of course, the operations originating in its surroundings). Being an oak tree, however, or a hawk, or a man, is a law of its own, as it were, irreducible to the laws that govern the organism's parts. In the case of living beings, the soul is therefore needed to play the role of those *operational tendencies* that characterize, say, elementary particles in virtue of the laws of physics.

The background to this is of course the Aristotelian theory of form and matter: Where a thing has *substantial unity* in the sense that it has a characteristic way of operating, not intelligible in terms of the laws that govern its parts, the question *what* it is, is answered correctly by mentioning a *form* that it shares with other things of the same kind that differ from it, primarily, by being composed of different *matter*. The thing's *nature* is just its form viewed as accounting for its characteristic operations. Like an elementary particle, and unlike a motor car, an organism has a form, or nature, of its own: an essence, or species, constituted, *inter alia*, by specific operational tendencies. And the presence, or "reality", of such a nature in an individual organism is the organism's *soul*.

Now, human nature is a rational nature; rationality is part of the kind of soul that is the principle of specifically *human* life. This principle, according to at least one Aristotelian tradition, is the same throughout a human being's career; it is, indeed, what determines the direction of this "career" (a characteristic life cycle), thus allowing us to speak of one life, and of a human life. A rational soul is the principle of life in the embryo, the infant not yet capable of using reason, and the demented or comatose person no longer thus capable, as much as in a healthy adult whose rational operations are the most distinctive manifestations of the human form of life.

This tradition, then, has an answer to the question whether, in a human being incapable of using reason, any *reality* is present that justifies us in calling this creature, too, a rational animal. The answer is simply: The reality in question is this being's *rational soul*—a single soul whose manifestations include all vegetative, sensitive, locomotive, affective and rational operations throughout its life.

I say "a single soul" for, as Gehlen has insisted (cf. Section 5.8), these types of operation are teleologically connected; so that, e.g., man's vegetative side does not constitute a nature of its own. The characteristically human soul *manifests* itself, e.g., in the organism's equipment, right from the beginning, with organs permitting speech, and with hands that can be adapted to all sorts of task devised by practical

reason, as well as in the specific ways a human baby that is as yet incapable of using reason *develops* rational capacities. The rational capacities and operations we find in a healthy human adult depend on being prepared, at the early stages of human life, by a kind of growth that already manifests that human being's rational soul.

And it is the very same soul that may on occasion, and perhaps frequently, be *prevented* from manifesting itself in this or that characteristic respect, especially where diseases affecting, in particular, relevant parts of the brain *interfere*. Much as all sorts of diseases and impediments can prevent the human soul from properly manifesting itself in characteristic deployment of a man's vegetative or animal functions such as growth, nutrition, reproduction, perception, or motion, so the defects typical of demented or comatose people are due to diseases and impediments that prevent it from properly manifesting itself in rational operations such as reasoning, speech and action.

### **5.12 If We Reject the New Dualism in Favor of an Aristotelian Account of Human Rationality, We Should not Deny the Right to Life to Human Beings That Lack Personhood**

In the light of this kind of conception, there is no reason to deny personality to a human embryo or baby. The reality responsible for such personality is the specifically human rational soul. It does not come and go in the way personhood is supposed to do. Instead, as we have just seen, it is at work throughout a human life, yet manifesting itself in different ways at different stages and being partially prevented from manifesting itself by interfering circumstances.

If it were right to reject this roughly Aristotelian account of human life, one would, perhaps, be free to say, in the spirit of the new dualism: There is no quality to a newly born baby, or to a PVS patient, that gives them a dignity by which they differ from higher animals. And some philosophers will, with the help of further premises (cf. Müller, 2004), conclude that such human beings have no right to life. In the light of Sections 5.7, 5.8, 5.9, 5.10, and 5.11, however, even the new dualist must admit that it is perfectly *possible* and consistent to have a non-dualistic concept of *person*—a concept that allows us to attribute personality to human beings even when they lack rational capacities.

If it is correct to go further and adopt an Aristotelian position, it is not only possible but necessary to do this. In other words: If the entire life of every human being is the manifestation of a single rational soul, then every human being is *eo ipso* a rational animal and a person. And it would seem that there can be no reason to deny the right to life to any human being on account of the absence of personhood. Hence, in order to show, e.g., that a zygote has no right to life, you would have to show that it is not a *human organism* (and *therefore* not a human person!).

### 5.13 An Organism's Being a Person Is Morally Relevant Chiefly Insofar as it Exhibits a Rational Form of Life That Involves Morality

This last conclusion, however, still shares with personism the presupposition that the moral relevance of rationality lies in the fact that it is, in one way or other, the basis of *moral claims*. But why should rationality be morally relevant in *this* way?

The intuition that Boethian personality is relevant to morality is indeed plausible. Its plausibility, however, seems to rest not so much on the inherent dignity of rational life *qua* basis of moral claims but rather on the fact that morality is a requirement of the life, and in particular the social life, of the kind of rational organisms that we are (cf. Foot, 2001, esp. pp. 52–65; Müller, 2004, 3.1 and 3.5). If rational capacities were morally relevant merely by conferring moral claims, it would be coincidental only, a mere accident, that those creatures *at whom* just (or unjust), friendly (or unfriendly), helpful (or harmful), compassionate (or cruel) conduct is, at least primarily, *directed* are at the same time *subjects of* such conduct.

As I have argued elsewhere (Müller, 2004, 3.5), there is no good reason for conceding, in particular, a right to life to every rational creature there may be, irrespective of its form of life or its connexion with our species. Can we not imagine, e.g., rational aliens for whom human beings are favourite animals of prey? What moral claims do they have on us? “But if it is part of their way of life to feed on us in spite of *our* rationality, this by itself shows that they are not really rational beings!” Well, how does it show this? It certainly does *not* show that such aliens lack the rational capacities intended by the concept of *personhood*!

Our notion of morality seems to be linked to that of a moral community and its flourishing, and it is by no means obvious that we would be rationally required to include other species of rational animals (let alone brute ones) in the moral community that we belong to. There are no good reasons not to be “speciesist”; speciesism need not, in particular, rule out moral demands on our behaviour towards animals (cf. Müller, 2004, 3.5). It is not even clear, *pace* Kant, that we have a species-neutral notion of morality—a notion of morality other than *human morality*.

If morality, like rationality itself, is an aspect of our nature, or of our belonging to the human species, there is nothing surprising about the idea that moral claims on behalf of individual humans are not tied to the possession by them of rational capacities (or any other features) which they might happen to lack. On the contrary, it is highly plausible, that justice requires us to treat all *members of our species* alike. As soon as personism is rejected, there is no good reason why you and I should *now* possess a right to life that *we did not* possess at an earlier, “non-rational”, stage—a stage that we did, after all, have to pass through—and survive!—in order to be there to enjoy that right.

#### Note

1. Cf. Roland Kipke (2001, 85 f.): “In those, however, that are at the beginning or at the end of a human life or, although in the middle of it, no less distant from the human norm, we

find nothing that might rationally be acknowledged as a basis for the status of personhood. They lack the decisive features.“ („An denjenigen Menschen aber, die am Anfang und Ende menschlichen Lebens stehen oder mittendrin ebensoweit vom Normalmaß des Menschlichen entfernt sind, läßt sich nichts finden, das für alle rational nachvollziehbar den Status der Personalität begründen kann. Ihnen fehlen die entscheidenden Merkmale.“)

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# Chapter 6

## Abortion and Virtue Ethics

Mathew Lu

What can contemporary virtue ethics say about the problem of abortion? In what follows I attempt to answer that question by considering both what has been said and what we may further argue from a virtue-focused perspective. We begin by comparing virtue ethics to the two other dominant approaches in normative ethics. I then consider what some important virtue ethicists have said about abortion in particular, especially Rosalind Hursthouse. After recognizing the many contributions her analysis offers, I also note some of the deficiencies in her approach, particularly in her attempt to bracket the problems of fetal status and women's rights. Finally, in light of these criticisms I attempt to extend a virtue ethics analysis to embrace a more robust recognition of the humanity of the fetus and the attendant demand of a near absolute prohibition on abortion.

### 6.1 Outline of Virtue Ethics

Nearly every survey of contemporary virtue ethics traces its origin to G. E. M. Anscombe's seminal essay "Modern Moral Philosophy" (Anscombe, 1958), in which she levies harsh criticisms of the dominant theories of normative ethics and espouses the need for a return to the tradition of the virtues. Nonetheless, the development of virtue ethics as a full-fledged "third way" in normative ethics has primarily been the work of others, such as Philippa Foot, Rosalind Hursthouse, and Michael Slote.<sup>1</sup> Fifty years after "Modern Moral Philosophy" virtue ethicists can reasonably claim a seat at the table in ethical discussions.

Until the rise of virtue ethics the dominant paradigms in 20th century normative ethics were utilitarianism and deontological ethics, with the latter showing a strong Kantian influence in the last few decades. While these two ethical theories differ radically both in how they conceive of right action and the nature of moral goodness, they nonetheless share an emphasis on *right action*. In contrast, virtue ethics is

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generally said to be focused on *good character*. As such, by general consent virtue ethics accounts must work harder to explain how to act in specific situations. On the other hand, with its more holistic approach to the moral situation, virtue ethics can better take stock of certain salient features of the moral life that action-focused moral theories tend to ignore.

Utilitarian moral theories offer an account of moral value that places the greatest weight on achieving a certain outcome, most often understood as an optimal state of affairs in which the greatest overall happiness obtains for all relevant moral patients. This notion of happiness is often understood as pleasure and the absence or avoidance of pain, but some theorists prefer to focus on maximal preference satisfaction, whatever those preferences may be. On a practical level, utilitarians are often forced to act in ignorance of many of the things they would need to know in order to make an effective moral calculation. Still, at least in abstract terms, the utilitarian's course is fairly straightforward. Moral goodness is understood in terms of an optimal outcome and right action is understood in terms of bringing about that outcome.<sup>2</sup> As such, it is fairly clear what the utilitarian is trying to bring about, and given perfect information, it would be fairly clear what the utilitarian agent ought to do. I think it is this great clarity and fundamental conceptual simplicity that appeals to many of the theory's adherents, and it is this transparency that is often contrasted with the putative obscurity of virtue ethics.

Deontological ethics claims a similar advantage of clarity in providing guidance for right action. Unlike utilitarianism, however, a deontological ethics is not focused on outcomes but instead on adherence to a set of rules encompassing the duties incumbent on the moral agent. The dominant deontological outlook in contemporary philosophy has been strongly influenced by Kant's ethical thought and focuses on the duties that attach to the agent in virtue of a particular conception of practical rationality.

For this sort of deontological ethics it is of primary concern to understand what a rational agent is, and how practical reason ought to move him to act in accord with its maxims. Moral duties are binding on all rational agents equally and ultimately derive their authority from our shared rational nature. This in turn generates a demand of respect that each rational agent owes to all other rational agents in virtue of their also possessing such a nature.

A key putative advantage of this ethical outlook lies in how it finds the binding force of moral obligation in reason itself. Moral duties become precepts of practical reason with an objective force analogous to that which attends the conclusion of a geometrical demonstration in theoretical reason. Since it is reason itself that makes these demands on me, and since I am a rational creature, I cannot deny my moral duties without essentially betraying my own rational nature. Thus, in failing to obey moral duties understood as the dictates of practical reason I am being at least unreasonable and perhaps even manifesting irrationality.<sup>3</sup>

As with utilitarianism, there is much more that would need to be articulated to have a tolerably complete account of a deontological ethics, including an account of

the nature of practical reason itself, the nature of the rational agent, and especially the way in which practical reason generates concrete moral duties. What is needful for our present purposes, however, is simply to see that the basic structure of the deontological option in normative ethics is predicated on the priority of duties or rules which ought to be, in principle at least, relatively clear, even if their application in actual concrete cases (much like the maximizing principle behind utilitarianism) remains potentially difficult and unclear.

While these two competing accounts of normative ethics are fundamentally incompatible, they are commonly thought to share a putative advantage over virtue ethics. Each is supposed to be clear about the general goal of morality and the abstract means for achieving it. By contrast, virtue ethics is commonly held to be at a disadvantage because its central moral concepts are accounted vague and obscure, largely because they cannot be adequately captured in terms of rules or laws. Rather than offering a maximizing principle like utilitarianism, or a decision filter like Kant's Categorical Imperative, virtue ethics begins with the virtues: qualities of character or dispositions that have human flourishing (*eudaimonia*) as their ultimate end. For the most part, virtue ethicists have understood this flourishing in terms of a substantive account of human nature.<sup>4</sup> At the heart of this approach is the general principle that a good individual is one that best or most completely realizes the nature (*telos*) of the kind of thing it is. Since human beings possess an intrinsically rational nature, the virtues are essentially the way in which that rational nature is manifested with respect to different objects (e.g. one's passions) and in different circumstances.

Instead of giving rules that can determine right action in an algorithmic way, virtue ethics concentrates on the question of what makes for a virtuous man (or woman).<sup>5</sup> Traditionally, these virtues have been understood as something like stable dispositions (which can be formed by habit) and which are expressive of a rational human nature. Right action is best understood derivatively as how the virtuous man would act in some particular set of circumstances in expressing the virtues of his character.

As in my sketches of the other two approaches, there are many details that must be supplied to give a reasonably complete account of virtue ethics, including a specification of what human nature is, and especially how the virtues represent the perfection of different aspects of that nature. Nonetheless, the general outline of the virtue ethics approach should now be clear, particularly the radically different approach that the virtue ethicist takes to morality. When faced with a concrete moral choice the utilitarian's ultimate concern is what will promote the optimal state of affairs. For the deontologist, the question is what duties are relevant and what they demand in these particular circumstances. For the virtue ethicist, however, the important task is to determine what the virtuous man or woman would do in these circumstances. And this is determined by discerning what relevant virtue(s) ought to come into play (remembering that the virtues are distinguished by their objects) and how those virtue(s) can be prudently applied.<sup>6</sup>

## 6.2 Virtue Ethics and Abortion

Now that we have a sketch of the special character of the virtue ethics approach, let us consider our specific topic of abortion. In this section I want to survey several important discussions of abortion and shed some light on how contemporary virtue ethicists have analyzed the moral significance of abortion. Rosalind Hursthouse's justly famous "Virtue Theory and Abortion" (Hursthouse, 1991) is a touchstone in this field, to which (along with her book *Beginning Lives*) we will need to return at some length in what follows. However, let us begin with Judith Jarvis Thomson's seminal paper "A Defense of Abortion" (Thomson, 1971) with which nearly every commentator on the issue in the last 40 years has had to come to terms. For while Thomson does not adopt a virtue approach, and indeed argues on the basis of a conception of rights that is in some ways deeply antithetical to the virtues tradition, the virtues nevertheless make a strange kind of appearance. Furthermore, it is very important for us to consider how a virtue approach can respond to Thomson's concerns.

### 6.2.1 Thompson

There can be little doubt that Thomson's "A Defense of Abortion" has importantly shaped the structure of the debate on the abortion issue in the 40 years since its original appearance. Part of what makes Thomson's pro-abortion<sup>7</sup> argument seem so powerful is her concession at the very beginning that she is willing to grant (for the sake of argument) that the fetus is a person and thus possesses a right to life. In one fell swoop she seemingly obviates much of the previous debate, which focused on establishing whether or not the fetus is a person. By granting what many on the pro-life side had thought was the only really controversial premise in their argument against abortion, Thomson turned the debate on its head and largely redirected the focus away from the controversy about the status of the fetus and instead pointed it towards a contest of rights between the mother and her fetus.

Thomson's central claim is that one person's right to life does not automatically generate a corresponding duty on others to provide that person with the means to sustain his life. In particular, even if the fetus is a person with a corresponding right to life, that right does not thereby generate a duty on the part of his mother to provide him with a nutritive environment within her own body. Rather, she possesses a right to control her own body that she may legitimately uphold against the fetus' needs, even if doing so will result in the fetus' death. The right to life is primarily a right not to be unjustly killed; it is not a right to be given whatever is necessary to maintain one's life.

To sustain her central claim, Thomson offers her famous violinist analogy, in which she compares a pregnancy resulting from rape to being kidnapped, drugged, and plugged into a famous violinist (a full-fledged person with a right to life) who needs the use of someone else's kidneys to remain alive. She thinks it is more or less

obvious that anyone in these circumstances would have the right to be unplugged even if it results in the violinist's death.<sup>8</sup> Here is a counter-example to the principle that one person's unambiguous right to life includes the right to the use of another's body without her permission.

While the violinist analogy is supposed to be comparable to impregnation by rape, she quickly extends the same general principle to other cases of unintended pregnancy (failure of contraception, negligence, etc.). What really matters to Thomson is not the means by which the pregnancy began, but whether or not, once the zygote-embryo-fetus exists, it has a right to use the mother's body against her wishes. And since she takes it as obvious that one is not morally obliged to supply the (innocent) adult person with the use of one's body, so similarly, the mother of an unwanted fetus is not obliged to supply the fetus with the use of her body.

I want to draw attention to the way in which Thomson's argument turns the question of abortion into a contest of rights between a mother and her offspring. Even if the fetus possesses a right to life, it is not entitled to the use of the mother's body because her right to control her own body is paramount. What is important to Thomson is adjudicating between the various rights-claims that arise, and it is this that determines the moral rightness or wrongness of the act of abortion, at least insofar as can be legitimately regulated by the law.<sup>9</sup>

In making these judgments, Thompson's key strategy is to distinguish between what is strictly owed as a matter of rights and other considerations that might very well affect the way we see the moral situation. Duncan Richter draws attention to this aspect of Thomson's treatment where she considers a hypothetical scenario where pregnancy lasts only an hour. In such a case of such limited inconvenience, ought a woman allow the fetus the use of her body? Thomson writes, "we should not conclude that [the fetus] has a right to [use the woman's body]; we should conclude that she is self-centered, callous, indecent, but not unjust, if she refuses. The complaints are no less grave; they are just different" (Thomson, 1971, p. 17).

Here Thomson introduces a new category of wrong-making properties to the discussion. Even in this case of limited inconvenience the fetus still does not have a claim of *right* against his mother such that she has a duty to give him what he needs. However, a woman who refused to do so would likely be "self-centered, callous, indecent." Interestingly, these terms name something like vices: traits that manifest a bad character.

What is perhaps most surprising is Thomson's allowance that these "complaints are no less grave" than a complaint of injustice. Richter tries to make sense of this by drawing an important distinction: "Thomson's position is that the only moral requirement concerning the exercise of [action under] our control is that we respect moral rights. So there could be two actions, one callous and one unjust, each of which we *ought* not to do, each of which is equally *grave*, where we are only *required* not to do the unjust action" (Richter, 1998, p. 384). Naturally, one might wonder whether it actually makes sense that equally grave wrongs are treated differently, and we are only required to avoid those that violate rights. In what sense, indeed, can such wrongs be *equally grave*?

In the end, Richter is content to point out that Thomson is simply not taking viciousness seriously enough.

Where Thomson goes wrong is to go no further than arguing that abortion in some cases is not unjust. As she recognizes, there are questions of selfishness, callousness, and decency to consider as well, at least in some cases. Even if abortion is not unjust, it may be “self-centered, callous, indecent” to have one. If such charges are really no less grave than that of being unjust, had not we better consider them? (Richter, 1998, pp. 389–390)

This distinction between what is merely gravely wrong (e.g. as manifesting self-centeredness, callousness, indecency, etc.) and what we are forbidden to do as a violation of some trumping right rests on an assumption that, at least with respect to what can be legally regulated, only rights really count. Actions that manifest a vicious character, while contrary to morality in some sense, are not strictly speaking unjust, and thus cannot be regulated by law.

It is here that the virtue ethicist can raise serious questions. How viable is Thomson’s distinction between these two sorts of grave wrongs? And must injustice be understood exclusively in terms of rights? To be fair, Richter notes that Thomson was entering into an existing dialectic focused on rights. Furthermore, we can note that Thomson only applies these “vicious” epithets in a hypothetical case where the inconvenience is quite small (just allowing the fetus the use of the mother’s body for an hour). Of course, in actual pregnancies (given the present state of technology) the inconvenience to the mother would be much greater and so it seems unlikely that Thomson would even grant that choosing an abortion in our present circumstances would manifest these “vices.” Nonetheless, the door is opened here to include the virtues and vices within the proper moral analysis of abortion.

### 6.2.2 *Hursthouse*

Let us now turn to Rosalind Hursthouse’s famous treatment of abortion from a virtue ethics perspective, “Virtue Theory and Abortion.” This paper follows on and reiterates many of the conclusions Hursthouse advanced in her 1987 book, *Beginning Lives*, which features a much more extensive examination of a variety of issues surrounding abortion. The purpose of the later paper is primarily to introduce the structure of “virtue theory” in contradistinction to utilitarianism and deontology, and the treatment of abortion proper is primarily meant as an example of how virtue ethics can help us make progress in advancing a discussion that had become weighed down in interminable debates about personhood and the contest of rights.

After laying out the structure of virtue ethics in the first part of her paper, Hursthouse turns explicitly to the abortion question. She notes that most of the discussion on the question of the morality of abortion had hitherto focused on two issues: “the status of the fetus and whether or not it is the sort of thing they may or may not be innocuously or justifiably killed” and secondly “women’s rights”

(Hursthouse, 1991, pp. 233–234). She then makes a surprising claim: “virtue theory quite transforms the discussion of abortion by dismissing the two familiar dominating considerations as, in a way, fundamentally irrelevant” (Hursthouse, 1991, p. 234). Much as Thompson turned the tables on the pro-life camp by granting and dismissing their central claim, so Hursthouse attempts to transform the debate again by sidelining most of her contemporaries’ arguments on the issue.

In the discussion that follows Hursthouse adopts a distinction similar to the one Richter provides Thomson, in that Hursthouse makes clear that her analysis of the “morality of abortion” is distinct from a question about whether women “have a moral right to terminate their pregnancies” precisely because “in exercising a moral right I can do something cruel, or callous, or selfish, light-minded, self-righteous, stupid, inconsiderate, disloyal, dishonest—that is, act viciously” (Hursthouse, 1991, p. 235). In other words, one can act within one’s rights and still be acting wrongly or viciously. Thus, these are separate questions.

Regarding the status of the fetus, she claims that “it is a metaphysical question” (1991, p. 235) and so it is unreasonable to demand an answer to it as a precondition for a proper moral analysis of abortion. The reason for this is the explicitly undefended assumption that “the sort of knowledge that the fully virtuous person has is not supposed to be recondite” (p. 235).<sup>10</sup> In other words, since the “fully virtuous person” should be able to make moral judgments on the basis of reasonably common knowledge, it simply cannot be the case that a moral judgment about abortion would have to await an answer to an opaque metaphysical question.<sup>11</sup> Rather, she says that a reasonable judgment ought to be made on the basis of “familiar biological facts” which are “the facts that most human societies are and have been familiar with...” (1991, p. 236).<sup>12</sup>

Once she has set aside these two “dominating considerations” she proceeds to offer an analysis of abortion according to her conception of virtue ethics. She turns to the question: “How do these [familiar biological] facts figure in the practical reasoning, actions and passions, thoughts and reactions, of the virtuous and the non-virtuous? What is the mark to having the right attitude to these facts and what manifests having the wrong attitude to them?” (p. 237).

Her starting point is to emphasize that abortion is a *serious* matter simply because it concerns “in some sense, the cutting off of a new human life” (p. 237). To treat it as if it were of little importance reflects a fundamental misunderstanding of what is at stake. Accordingly, “to think of abortion as nothing but the killing of something that does not matter, or as nothing but the exercise of some right...or as the incidental means to some desirable state of affairs, is to do something callous and light-minded, the sort of thing that no virtuous and wise person would do” (pp. 237–238). As is apparent from her reference to some of the central features of the deontological and utilitarian approaches,<sup>13</sup> she considers those approaches inadequate to appreciating the seriousness or gravity of just what is at stake in abortion.<sup>14</sup>

This recognition of the seriousness of abortion is central to her analysis. Anyone who sees that it is an intrinsically important matter will realize that “by virtue of the fact that a human life has been cut short, some evil has probably been brought about” (p. 242). That does not mean, however, that abortion is *always* wrong. Rather

a choice in favor of an abortion in a particular case must realistically weigh the real goods that abortion cuts off against any putative goods that it might make possible. These real goods include the value of the human life that is cut off and the value of motherhood/parenthood, including their contribution towards living a good human life overall. Therefore, in order to be legitimate, a choice for abortion in a particular case must be motivated by a desire to obtain or preserve goods of a similar order of importance as those that are lost.

We should note here that we won't be able to generate "some general rule such as 'You ought not to kill anything with a right to life but may kill anything else'" (p. 236). In other words, a virtues-based analysis necessarily involves the particularities of specific contexts and circumstances. Hursthouse thinks we cannot derive some abstract principle that will always allow us to pick out which are the legitimate abortions from those which are not. Rather we must approach each case individually and ask whether in *this* case the goods being pursued are commensurate with the ones that abortion cuts off.

We can know that abortion will nearly always involve the sacrifice of some important goods.<sup>15</sup> Therefore, for a particular abortion to be justified it must be done in pursuit of some real good or to avoid some real evil. Hursthouse gives several examples of justified abortions: a mother of several children who "fears that to have another will seriously affect her capacity to be a good mother to the ones she has," "a woman who has been a good mother and is approaching the age at which she may be looking forward to being a good grandmother," "a woman who discovers that her pregnancy may well kill her" or even "a woman who has decided to lead a life centered around some other worthwhile activity or activities with which motherhood would compete" (pp. 241–242).

She also gives examples of women in circumstances that are sufficiently unfortunate to make a decision in favor of abortion the "right" one. "To go through a pregnancy when one is utterly exhausted, or when one's job consists of crawling along tunnels hauling coal...is perhaps heroic, but people who do not achieve heroism are not necessarily vicious" (pp. 239–240). At the same time, she is quick to emphasize that "this does not make everything all right...it shows that there is something amiss with the conditions of [these women's] lives, which are making it impossible for them to live well" (p. 240). Such women are to be pitied (and perhaps this even creates a demand to ameliorate their condition); however, Hursthouse thinks that such circumstances can justify an abortion because a woman who chooses to abort in such bad circumstances can still manifest "the right attitude to human life and death" (p. 240).

Hursthouse contrasts this with women who choose abortion for "worthless" goals such as "'having a good time' or for the pursuit of some false vision of the ideals of freedom or self-realization" (p. 242). She criticizes those motivated by an unreasonable dream "of having two perfect children, a girl and a boy, within a perfect marriage, in financially secure circumstances, with an interesting job of one's own" (p. 242). Choosing abortion in pursuit of unrealistic and false visions of the good is vicious precisely because a woman who acts in such a way posits chimerical goods against the real goods of motherhood and child-rearing. As such, a woman

who thinks in this way and acts accordingly manifests a vicious character; she is light-minded and fundamentally unserious.

It should now be more clear why Hursthouse is able to make such seemingly radical claims that the status of the fetus and the issue of women's rights are "in a way, fundamentally irrelevant" according to her virtue analysis. According to this approach, the central issue in evaluating whether or not to choose an abortion turns on whether or not the woman adequately appreciates the nature of the real goods that abortion generally sacrifices. If she is knowingly sacrificing these goods in order to attain "other worthwhile pursuits" incompatible with having this child, or because a pregnancy would place excessive burdens on her (especially in light of difficult circumstances) she is not thereby manifesting a vicious character, and thus her choice may be the "right decision" (1991, p. 242).

Critics often complain that virtue ethics is inherently vague, and this is not without warrant. We get no algorithm that allows us to calculate the proper outcome by assigning some numerical value to motherhood, etc. to be measured against the values of some other goods (or the avoidance of some evils). There is no maximizing calculation as in utilitarianism. Rather, in a way largely dictated by her circumstances, only some of which are under her control and only some of which she may be responsible for, a woman can correctly choose an abortion insofar as she acts in a way consistent with the recognition of the value of the human life she is cutting short.

Hursthouse's analysis is a genuine contribution to the abortion debate, precisely because it brings much needed emphasis to the *seriousness* of abortion. She helps us to understand what goods are sacrificed in abortion and the way in which parenthood/motherhood contributes greatly to a genuinely fulfilling human life. By turning attention away from "recondite" metaphysical questions about the status of the fetus and the nasty contest of competing rights, she allows us to consider anew the real gravity of the matter, and we cannot but admire her sensitivity to the wide array of difficult and complex circumstances that might face a pregnant woman. Even in those cases where she thinks abortion is the "right" choice, she recognizes that "some evil has probably been brought about" (p. 242). She can make sense of legitimately doing evil, because she views certain situations in human life as fundamentally tragic.<sup>16</sup> Thus, she is prepared to acknowledge that sometimes the cutting off a human life is deeply unfortunate, but nonetheless justifiable in light of the alternatives.

For all of these legitimate contributions, however, I think some real concerns remain. While we can embrace Hursthouse's achievement in bringing much needed moral seriousness to the abortion issue, her attempt to bracket both the moral status and women's rights issues must leave us dissatisfied. Indeed, when we look more closely at her position, I think we will find that undefended assumptions affecting both of these issues get smuggled in.

Jo Kornegay<sup>17</sup> has recently argued that despite Hursthouse's insistence that we move beyond these two issues, she nonetheless implicitly adopts a view on the moral status of the fetus. Kornegay claims that a systematic attempt to make sense of the examples that Hursthouse gives in both *Beginning Lives* and "Virtue Theory and



Abortion” will reveal that Hursthouse implicitly employs a relatively concrete view on the moral status of the fetus.

Kornegay argues that Hursthouse’s examples of justified cases of abortion “pre-suppose views about fetal moral status. Clearly, for Hursthouse, the status of the fetus is lower than that of a typical adult or an infant. Her examples of reasons needed to justify an abortion would not be adequate to justify homicide or infanticide” (Kornegay, 2011, p. 55). In other words, many of the examples we considered above (e.g. the woman inadvertently pregnant who is of an age to be looking forward to being a grandmother) would be patently absurd if applied to the killing of an infant. As such, it seems that Hursthouse believes that, at least in some stages of its development, the zygote-embryo-fetus simply does not possess the moral status of an infant or adult.

In considering the cases, Kornegay concludes that Hursthouse “must attribute a sufficiently low status to the fetus to avoid the implication that abortion is *prima facie* an unjust killing (i.e. it violates a robust fetal right to life), which a just woman *ceteris paribus* would not seek” (Kornegay, 2011, p. 57). Kornegay thinks that Hursthouse’s claim that fetal status is largely irrelevant comes from her desire “to contrast her approach with that of many ethicists who . . . overemphasize fetal nature and status at the expense of other vital considerations. Her contention is actually that fetal ontology and status are not *solely* relevant” (Kornegay, 2011, p. 56). Thus, it can be relevant as one issue among others. As we have already seen, Hursthouse is willing to say that an abortion is, generally speaking, the cutting off of a human life and therefore an evil. Thus, while the zygote-embryo-fetus has an inferior moral status to an infant or adult, nonetheless it does possess some value; indeed enough value that it can only be killed for serious reasons.

In trying to specify just how much value the fetus has for Hursthouse, Kornegay notes that Hursthouse embraces distinctions within the gestational development of the fetus. It is true that Hursthouse makes mention of “the well-worn point that clear boundary lines cannot be drawn” (Hursthouse, 1991, p. 238); however, as Kornegay maintains, Hursthouse’s examples show that she clearly distinguishes late term abortions from earlier ones and regards the former as extremely problematic.

Putting this together, Kornegay argues that Hursthouse’s considered view “would be some (coherent) combination of . . . (1) the zygote-embryo-early stage fetus is a potential human being with a unique and significant moral status and . . . (2) the late-stage fetus from around 7 months is an actual human being with the same high moral status of an infant” (Kornegay, 2011, p. 61). This would allow Hursthouse to hold that an early stage fetus is a “potential” human being with enough value that killing it is a serious matter (and that producing embryos for research purposes is immoral, a view that Hursthouse upholds in *Beginning Lives* (Hursthouse, 1987, pp. 86–87)), while at the same time holding that early stage abortion is not tantamount to murder.<sup>18</sup> On the other hand, the late-stage fetus is an “actual” human being such that the killing of it would be comparable to the killing of an infant.<sup>19</sup>

The question now arises whether this combination is, in fact, “coherent.” Kornegay goes on to argue that Hursthouse’s implicit position is defensible within the context of the present state of knowledge about fetal development. In particular,

“actuality [as a human being] consists in inherent features or capacities that emerge in the approximately 24-week old fetus” (Kornegay, 2011, p. 64). These include “the various capacities for conscious experience, social responsiveness, appetites, emotions (including pain and preferential, behavioural responses), memory, learning as well as the foundations for focusing on, and understanding, language” (2010, p. 14). In other words, by that point in its physical and cognitive development the fetus actually possesses enough of these capacities to justify the claim that it is an “actual” human being, as opposed to being merely a “potential” human being as it is earlier in its development.

If Hursthouse does implicitly hold a capacities view of this sort, this gives rise to several concerns. Traditionally, the language of “potentiality” and “actuality” was tied to an Aristotelian metaphysics, and in this particular case we would analyze fetal status in terms of natural kinds. The fetus is (actually) a human being from the moment of its ontogenesis (at conception) because it is (actually) a member of that natural kind. It is true that it is an *immature* member of that kind, and cannot exercise some capacities commonly associated with (or even essential to) that kind, such as rationality. However, the same can be said of an infant (or young child). In this particular individual the essential capacities of its kind are in potentiality; the salient point is that this is so only in virtue of the fact that it (already) *is* a member of this kind.

David Oderberg has very usefully distinguished between intrinsic potentiality and extrinsic factors.<sup>20</sup> Extrinsic “potentiality” is exhibited by something like the ingredients of a cake (flour, sugar, eggs) that might reside in my kitchen. Although if treated in the right way they might potentially become a cake, left to themselves they will not. Intrinsic potentiality, however, is the true sense of *potentiality* because it is the unfolding (or maturing) of what lies (incipiently) in the nature of a thing. The mature capacities of an adult human being are intrinsically potential within the fetus in the same way that they are intrinsically potential within the infant or small child. And this is true, even if those capacities are never realized for whatever reason (e.g. premature death by accident or some developmental defect like Down’s Syndrome).

It is membership in a kind that determines what a particular living thing essentially is, and only members of that kind can properly be said to have the potentiality characteristic of that kind. Therefore, a zygote-embryo-fetus is as much a human being as an infant or adult in virtue of the fact that it (fully) possesses a human nature. Hursthouse herself recognizes this to some degree in *Beginning Lives* when she speaks of the zygote-embryo-fetus as an organism that will develop “of its own accord” into a mature member of its kind.

It is membership in a kind, and not the possession of some sort of capacity, that determines what this thing is. It may help to see this if we focus on an infant. While a newborn does possess more capacities than an early stage fetus, it still lacks almost all of the physical and psychological capacities that we normally think are essentially characteristic of mature human beings. A newborn cannot really control his own body, nor does he exhibit any meaningful rationality. While a newborn does exhibit some of the characteristics that Kornegay mentions (conscious experience,

social responsiveness, emotions, etc.), so do other non-human animals, as some utilitarians are so fond of pointing out. If we are serious about considering newborns to be “actual human beings,” while denying equivalent moral status to other creatures that may possess similar or even superior capacities (e.g. mature chimpanzees, etc.) then I think we have to see that it is not the possession of these capacities that qualify the newborns for moral status, but rather their membership in a certain natural kind.

The point could be further extended by considering older individuals that are somehow incapacitated by trauma or severe congenital defect. In such cases, an adult might lack many or most of the essential capacities we associate with a human being, both physical (e.g. having a bi-pedal, upright posture) and especially psychological (e.g. possessing rationality and language). Nonetheless, such people are just that: human beings. They may be grossly defective (in the literal sense: lacking in form); they may never actualize the potentialities intrinsic to their nature, but they are nonetheless fully human in virtue of their possessing that nature.<sup>21</sup>

Of course, the foregoing analysis assumes a traditional (Aristotelian) metaphysics. However, I think at this point we should be able to recognize that this is no more problematic than Hursthouse’s implicit assumptions about fetal status as reconstructed by Kornegay. In other words, Hursthouse’s analysis, despite her protestation that “recondite” metaphysical speculation about the status of the infant is not necessary, nonetheless makes key assumptions about fetal status. And that is true, even if Kornegay’s particular reconstruction of Hursthouse’s implicit view is incorrect (that is, is not actually held by Hursthouse). For Hursthouse does want to make distinctions between early and late abortions, and it would seem necessary for her to have some sort of view about fetal status (and indeed changes in fetal status over the course of gestation) to make this distinction reasonable.

Furthermore, we see that Hursthouse often makes appeal to common sense. She takes it more or less for granted that infants are “actual human beings” and killing them is generally murder. However, if this claim is predicated on a capacities analysis then it’s unclear that it is justified. As we see from theorists like Mary Anne Warren and Peter Singer, a focus on capacities often leads to an embrace of the permissibility of infanticide.<sup>22</sup> In this case, of course, Hursthouse might make appeal to the capacities that Kornegay outlines (which even a late term fetus possesses), but then the burden of proof shifts to her to defend why those particular capacities ground moral status. It is not enough to start with the infant and work your way backwards, so to speak, precisely because you need a non-*ad hoc* way of picking out the relevant features. On the other hand, if Hursthouse does not hold a capacities view, then we’re left to wonder how she grounds the distinctions she wants to make between early and late abortions. The natural kinds analysis requires us to find no shining line within gestational development, and even regards birth as of no more particular consequence than a 7th, 18th, or 21st birthday.

The natural kinds analysis also fits with similar general common sense intuitions about disabled children and adults, which may lack some or all of the capacities typical of human beings and yet still remain “actual human beings.” Similarly it makes

sense of special cases like sleep, coma, or suspended animation, where a subject's latent capacities are not exercised, and yet the subject still obviously possesses moral status. Finally, in addition to being properly inclusive of individuals that contingently fail to express characteristic capacities, it also excludes non-human creatures that may possess some of the relevant capacities (especially those on Kornegay's list), but which common sense excludes.

We can appreciate how Hursthouse's virtue theoretic approach makes a serious contribution to the abortion debate by bringing us to focus on how much is at stake and on how the actual motives behind so many actual abortions are almost laughably unserious. We can fully embrace this achievement while at the same time acknowledging that Hursthouse is overhasty in ruling the issues of moral status and women's rights to be "in a way, fundamentally irrelevant." Although her analysis leaves this issue mostly unexplored, a serious attempt to bring consistency to her examples reveals that she implicitly accepts a view about fetal status.

Furthermore, on the issue of women's rights she seems to accept, again implicitly, that the morality of abortion can be meaningfully separated from the question of the justice of the laws regulating it. In this, if nothing else, she is far from the virtues tradition. For Aristotle, one important purpose of the state (*polis*) was to provide moral instruction to its citizens through the laws. The laws ought to help the citizen to advance in virtue; indeed that is what makes those laws just. Accordingly, there are no good grounds for laws that allow for, much less promote, vice. If, as Hursthouse allows, abortion is generally speaking an "evil," we should expect a well-ordered polity organized within the virtues tradition to outlaw it.<sup>23</sup> Accordingly, Hursthouse's apparent willingness to separate the morality of abortion from the laws permitting it is out of sync with the broader tradition.

Along similar lines it is surprising that for all the complexity Hursthouse recognizes in an individual woman's decision about abortion, she does not give more consideration to the ways in which broader social circumstances and mores must affect the question of the legal status of abortion. Surely, insofar as abortion involves a real evil, it cannot be merely a private choice of women. It will implicate broader social concerns regarding the regulation of things like contraception, family life and structure (e.g. China's infamous "one child" policy), not to mention social norms in matters like pornography, prostitution, sexual promiscuity, and adultery, which also have legal implications. Indeed, the tradition embraces the specific virtue of chastity which radically impacts almost all of these matters and which does little work in Hursthouse's analysis.

None of these criticisms take away from the value of Hursthouse's concern to show that many, if not most, actual abortions are procured in a fundamentally callous and light-minded way. We can fully accept her conclusions along those lines, while striving to articulate an account of fetal status and women's rights that gives adequate concern for finding the truth about these two issues. Accordingly, we can develop a virtue ethics approach to abortion that encompasses Hursthouse's insights, while nonetheless taking a stronger, explicit position on both fetal status and the rights issue.

### 6.3 Towards a Virtue Ethics of Life

How might we develop a virtue ethics approach that nonetheless embraces a stronger view about fetal status, enough to generate something like an absolute moral condemnation generally equivalent to homicide? Virtue ethics has sometimes been accused of being unable to sustain absolute prohibitions. The charge might seem sensible on the surface. After all, an absolute prohibition can take the form of a rule: *don't do x*, while virtue ethics is supposed to be opposed to moral rules, which are properly the province of deontological forms of ethics. Furthermore, virtue ethics involves an exercise of *phronesis* in which a virtuous person must make judgments that go beyond calculation or the following of an algorithm.

While this misconception is understandable, this view of virtue ethics is mistaken. As Hursthouse has pointed out, the virtues themselves generate a certain kind of rule: act courageously, act temperately, act justly, etc. Of course, one might object that since these rules simply contain the virtues, they are too vague to be action guiding in concrete cases. The virtue ethicist will not necessarily disagree, if this is taken to mean that just anyone can follow these rules. Rather, these virtue rules do require *phronesis* to apply them in the proper circumstances and to determine the actions appropriate to them. Nonetheless, these virtue rules can and do generate prohibitions. *Act courageously* generates a prohibition on acting in either a cowardly or rash manner.<sup>24</sup> All the virtue rules thus generate prohibitions against manifesting the corresponding vices.

If we return to Aristotle, we find another way in which absolute prohibitions make an appearance within a virtues approach. In Book II, [chapter 7](#) of the *Nicomachean Ethics* he notes that

not every action or feeling admits of the mean. For the names of some automatically include baseness—for instance, spite, shamelessness, envy [among feelings], and adultery, theft, murder among actions. For all of these and similar things are called by these names because they themselves, not their excesses or deficiencies, are base. Hence in doing these things we can never be correct, but must invariably be in error. We cannot do them well or not well—by committing adultery, for instance, with the right woman at the right time in the right way. On the contrary, it is true without qualification that to do any of them is to be in error (Aristotle, [1999](#), 1107a10-18).

So for Aristotle there are certain actions (and feelings) whose very names “automatically include baseness” hence “doing these things can never be correct” (1999, 1107a10ff). Unfortunately, Aristotle does not develop the point as much as we might like, and we do not get a clear principle with which to pick out this type of action.<sup>25</sup> At any rate, he thinks that absolute prohibitions are compatible with a virtues outlook in general and the demands of *phronesis* in particular.

Since Hursthouse thinks that at least some abortions are morally justifiable, it's clear that she would not include abortion among the actions whose names “automatically include baseness.” The question is: why not? Presumably, the answer is what we have already discovered; she has an implicit view about fetal status that rates the zygote-embryo-early stage fetus lower than a late stage fetus-infant. As we've seen

above we have real reason to doubt this distinction. In any case, it should be clear that fetal status has to matter in order to make this kind of judgment.

If the natural kinds analysis is correct, then killing the fetus will not count as the killing of a potential human being, but the killing of an actual one. Of course, by itself that doesn't settle the matter. Most of us think that there are at least some cases of justified killing: self-defense, killing in a just war, etc. Thus, establishing the fetus as an actual human being will not determine the case against abortion by itself. It will be necessary to show as well that there are no relevant other conditions that justify the killing. And with this we are returned to Thomson and other similar women's rights arguments. What we need to address is Thomson's central contention that another's need does not create a duty to supply that need.

Can a virtue ethics do this? I think that it can, but what we have to do is reject Thomson's assumption that justice can be separated from a virtues outlook. As Hursthouse points out, in a certain way Thomson is almost a proto-virtue ethicist in her recognition that being "self-centered, callous, indecent" is morally defective. However, she remains keen to distinguish these sorts of "vice" considerations from the demands of justice proper. For Thomson, justice is a matter of rights and even if the fetus has a right to life, it does not have a right to the use of the mother's body to sustain that life.

Thomson makes this distinction particularly clear in another example in which one of two brothers is given a box of chocolates as a particular gift which he then refuses to share with his brother. She is even willing to accept that there is sense in admonishing the boy: "You ought not to be so mean. You ought to give your brother some of those chocolates" (Thomson, 1971, p. 60). However, she thinks that "it just does not follow from the truth of this that the [second] brother has any right to any of the chocolates. If the boy refuses to give his brother any, he is greedy, stingy, callous—but not unjust" (1971, p. 60).

Thomson is interpreting justice entirely in terms of rights, and indeed a rather strong form of property rights. The one boy owns the chocolates, and while it is in some sense vicious of him to refuse to share, properly speaking that is his right as derived from his ordinary property right of ownership. Ownership rights intrinsically include a right to determine how that property is disposed. And while in disposing of that property one may act (to borrow Hursthouse's words) in manner that is "cruel, or callous, or selfish, light-minded, self-righteous, stupid, inconsiderate, disloyal, dishonest" (Hursthouse, 1991, p. 235) that does not change the fact of the ordinary right.

With respect to the abortion case, Thomson is implicitly thinking about the mother's body in terms of something like property rights. The mother has "title" to her own body, and included within that is the right to dispose of it how she pleases, even in a vicious way. Thus, even if another person requires only a very minor inconvenience of her, there is no demand of justice (pursuant to a rights-claim) for her to satisfy that need. Much less does justice require her to satisfy the demand if it is not a minor inconvenience but 9 months of not inconsiderable work.

There are at least two highly contestable assumptions at work here. First, she assumes that the mother owns her body in a way akin to other disposable property.

Leon Kass has powerfully argued that the notion of self-ownership is actually incoherent and rests on an untenable understanding of personal autonomy.<sup>26</sup> Beyond that, however, we commonly accept restrictions on how we may dispose of our own bodies. For instance, at least certain forms of bodily mutilation are prohibited (e.g. limb amputation for merely cosmetic reasons). We also prevent a market in body parts (like kidneys) that would have considerable value in an open market. In short, both for theoretical reasons and in actual practice we do not accept an unlimited right of bodily self-ownership with attendant self-disposability.

As we've already seen, the second assumption is Thomson's conviction that justice is only to be understood in terms of rights, and particularly in analogy to, or perhaps even expressive of, property rights. The virtues tradition has a competing conception of justice. This conception of justice as a virtue is tied together intimately with the other virtues as partially constitutive of *eudaimonia*. As such, the virtues tradition would adamantly reject Thomson's bifurcation of morality between a trumping concern for rights and this other weaker virtues-based normativity.

Instead, the virtue of justice requires giving things what is due to them. John Hacker-Wright has argued for a conception of justice within contemporary virtue ethics, which "is not based on resolving the conflicting claims of rights-bearing agents who engage in reciprocal contractual relations" (Hacker-Wright, 2007, p. 461). Rather,

this alternative conception of justice applies to non-reciprocal relations among unequally situated creatures, as between strong and weak, eloquent and stammering, wealthy and poor. The demands of justice, in this sense, fall exclusively on the former of each pair. The latter of each pair are defined by their vulnerability; they are, in a given situation, powerless and in the thrall of the former of each pair. Vulnerability is not a stand-in for sentience, since I am not talking only about susceptibility to physical or psychological pain. It is a susceptibility to being damaged or wronged, as well as possibly being harmed. . . . Vulnerability does not confer a right, and yet clearly an injustice is committed against the vulnerable when their powerlessness is exploited for its own sake or for the sake of some further benefit (Hacker-Wright, 2007, p. 462).

What is at stake here is a conception of justice not bound to rights (which are, in turn, contingent upon capacities of one sort or another), but instead upon a vulnerability to being damaged or harmed. This normative vulnerability is itself grounded in some sort of objective moral value.<sup>27</sup>

Objective value creates a demand for a certain kind of respect or care to which we are duty-bound in justice to attend. As Hacker-Wright makes clear, this does not depend on some particular capacity. Rather, even inanimate objects like works of art or delicate features of the natural environment can generate this demand of justice. In those cases, their value is grounded in their beauty. In other cases, like dead bodies, their value is grounded in a respect for the deceased. In any case, genuine value or status creates a demand in justice to give to them their due. Something is owed to these things, and it is a violation of justice to fail in obedience to that legitimate demand.<sup>28</sup>

The application to abortion should be obvious. If the fetus is objectively valuable, then a certain kind of respect is owed to it in justice. I've already suggested why

a fetus possesses a value comparable to an infant or adult human being in virtue of being a member of the same natural kind. Justice demands that like things be treated alike. If a zygote-embryo-fetus is actually a human being and fully possesses a human nature, even though it has yet to realize many of the potentialities implicit within that nature it is still owed a respect in justice.

If we can recognize that justice properly goes beyond an abstract conception of rights, particularly a conception grounded in property rights, we can bring to bear these normative concepts of value, vulnerability, and justice as what is owed. We can set them over against Thomson's strict property-rights claims of the woman's bodily self-ownership. Accordingly, we can come to see how this richer conception of justice can make legitimate demands on a mother to give succor to her fetus and this is no more surprising than the way justice can make legitimate demands on my private resources through taxation or on my life and body in conscription.<sup>29</sup>

We must also resist Hursthouse's willingness to concede the distinction between the morality of abortion as grounded in virtue and the issue of women's rights informing the laws concerning abortion and political justice more generally. As I noted above, the tradition from Aristotle makes no such concession and deeply connects the laws (as part of justice) to the promotion of virtue in the citizen. With this more substantive account of justice, we can again connect the personal morality of abortion with the political morality that the laws of the state ought to embody.

It is interesting to note that Hursthouse often evinces something like defensiveness when talking about justice. In the introduction to *On Virtue Ethics*, she writes "[w]hat is wrong with killing, when it is wrong, may not be so much that it is unjust, violating the right to life, but, frequently that it is callous and contrary to the virtue of charity" (Hursthouse, 1999, p. 6). Notice that she immediately ties injustice to a violation of a "right to life," pulling in precisely the sort of rights talk that is unhelpful and misleading. As we've already seen, justice does not have to be considered simply in terms of well-defined rights, but is properly concerned more broadly with a certain kind of care that is owed to something of value.

Christopher Miles Coope has similarly remarked that justice as a virtue has been "sidelined in modern virtue ethics" (Coope, 2006, p. 47), especially in the work of Hursthouse, and particularly in her consideration of abortion. Regarding "Virtue Theory and Abortion" he writes, "what has gone missing in this article is the thought that if an action is unjust then it must be bad, *whatever* else, good or bad, can be said about it" (2006, p. 47). Concerning Hursthouse's bracketing of fetal status as "in a way, fundamentally irrelevant" he avers that "[o]ne of these 'dominating considerations' is of course whether abortion is murder under the description: the killing of a child. If that can be dismissed as irrelevant, if only 'in a way,' this sort of virtue theory is surely bankrupt" (Ibid.).

I think Hursthouse's approach can be legitimately criticized at this point. When she directs our attention away from asking the basic question about fetal status, she is also effectively removing abortion from the realm of justice. What Coope is rightly pointing out is that there are some actions whose very names, as Aristotle says, "automatically include baseness." If abortion is the unjust killing of a human being, then it is one of those actions, and the only way to determine that is to fix



just what kind of thing the zygote-embryo-fetus is.<sup>30</sup> If the natural kinds analysis I've offered above is correct, then the zygote-embryo-fetus is an actual human being and is owed, as a matter of justice, a certain kind of care and concern. That does not necessarily mean the fetus' interests always trump; there may be cases in which his or her interests can be legitimately sacrificed to save the life of the mother.<sup>31</sup> Nonetheless, it does have interests, and justice requires that we give them heed just as justice would require me (potentially a great inconvenience) to attend to an abandoned infant on my doorstep.<sup>32</sup>

It is also natural to observe that the traditional prohibition on abortion and, indeed, murder in general was not grounded in a direct connection to the virtues and *eudaimonia*, but instead in the Natural Law. Of course, the virtue of justice was itself oriented to the Natural Law and the medieval tradition finds in human reason the necessary cognitive faculties to gain access to the Natural Law. It is precisely in the Natural Law that we can make sense of Aristotle's claim that the very names of some actions "automatically include baseness"; these are precisely the sort of things which the Natural Law forbids. Thus, it is somewhat surprising that contemporary virtue ethics very seldom makes connections to the Natural Law tradition.

## 6.4 Conclusion

In closing, we might observe that contemporary virtue ethics, for all the genuine insights it brings to the barren field of contemporary moral discourse, remains in an important way incomplete. In fact, we might observe that the hesitancy many of its practitioners have shown towards connecting a personal account of moral goodness to a political conception of virtue grounded in a substantive metaphysical analysis of the nature of the human person manifests something like a lack of intellectual courage. In Aristotle and the tradition that not only took up his ethical thought but substantively developed and refined it, there is a comprehensive philosophical project that embraces not only a certain account of practical reason, but also an account of how practical reason is grounded in human nature and (ultimately) man's place within the cosmos. In a way, contemporary virtue ethics tries to skim the practical reason cream off the top, without fully buying into the metaphysical and anthropological grounds that sustain the entire project. As such, while philosophers like Hursthouse can offer us genuine moral insights, they will also sometimes be blinded to certain truths that can only be fully sustained in light of the properly accompanying anthropological, political, and metaphysical commitments.

I fear that with the abortion issue Hursthouse has fallen into this trap. Abortion is, in my view, unambiguously the killing of an innocent human being. There may, occasionally, be times when the death of the fetus is justified in defense of other innocent human lives. But it is never permissible to be directly aimed at, and it is certainly not justified by many of the sorts of reasons that Hursthouse gives, any more than infanticide would be. By attempting to bracket the issue of moral status (while seeming implicitly to assume a false view) Hursthouse has allowed herself to

justify (at least in certain cases) what “can never be correct, but must invariably be in error” (Aristotle, 1999, 1107a15). Let us appreciate her work for the real insights that it can offer us, but in her own spirit let us take abortion truly seriously, recognize it for what it truly is, and not shrink away from the demands of both metaphysics and justice.<sup>33</sup>

## Notes

1. See, for example, Foot (1978, 2001), Hursthouse (1999), Slote (2001), Crisp and Slote (1997).
2. This is true even with some more developed forms of utilitarianism (e.g. Peter Railton’s notion of “sophisticated consequentialism” developed in Railton 1984) where the moral agent’s proximate or immediate choice might insulated from an act-utilitarian calculus.
3. While I believe the stronger claim of irrationality is Kant’s own view, some modern theorists following broadly, but not exactly in the wake of Kant (and filtered through John Rawls), would likely be satisfied with a weaker claim of immoral actions merely being unreasonable.
4. Certainly, the tradition of virtue ethics has been dominated by an ethical naturalism. However, there have been some recent virtue ethics accounts that are not so explicitly naturalistic, such as Michael Slote’s “agent-based” approach in *Morals from Motives*, (Oxford: Oxford University Press, 2001) and even some work at the intersection with a revived interest in Kant’s Doctrine of Virtue. Whether these will be fruitful developments remains to be seen.
5. While there will be considerable overlap considering that both men and women possess a rational nature, there may still be some differences in the virtues between them precisely owing both the unique biology of each sex, and perhaps even other natural differences stemming from that biology such as women’s capacity to gestate children. Hursthouse writes: “Men and women are not born ‘equal’; though the differences between them are irrelevant in many areas, they are not irrelevant to moral questions about abortion, pregnancy, child-bearing and having children. Women, even young girls, *are* faced with a greater liability to act wrongly than men are, if abortion is wrong; but this is in virtue of the capacity they have to do something intrinsically worthwhile, *viz.* bear children, which men lack. Women, even young girls, are faced with a greater opportunity to act well and to do something with their lives” (Hursthouse, 1987, p. 330).
6. It is important to note that there is a certain tension in even attempting to bring virtue ethics to the table as a full-fledged alternative theory of normative ethics since, as noted above, it is not properly a theory of right action, but of good character. As such, while we can specify the right action in a given circumstance as the one that a virtuous person would do in those circumstances, strictly speaking the mere performance of that action is not enough to make it truly virtuous. As Aristotle repeatedly insists, the right action must be done *in the right way*, which means it must proceed from the stable dispositions (*hexeis*) that make up a good character. As such, the specification of right action must necessarily include not only a “third-personal” account of the action, but also a “first-personal” aspect which connects the action directly to not only the practical rationality, but also the disciplined passions of the virtuous agent.
7. I use ‘pro-abortion’ rather than ‘pro-choice’ advisedly here. It seems to me that the former term is more accurate, since it focuses on the central issue: the moral permissibility of abortion rather than on a consequence of that permissibility. That is, the ‘pro-choice’ moniker seems to me to beg the central question of the abortion debate, because abortion is a legitimate choice only insofar as it is morally permissible. That said, I don’t think that ‘pro-abortion’ needs to mean that an author so labeled is always in favor of abortion, any more than the pro-life label necessarily means that one is always in favor of doing everything possible to preserve life in all circumstances (e.g. so-called heroic measures in end of life treatment).

8. In his *Applied Ethics: A Non-Consequentialist Approach* David Oderberg (2000a) actually bites the bullet here and argues on double-effect grounds that you would be morally required to remain plugged into the violinist. Nonetheless, I think most people have the intuition that Thomson wants here.
9. There is the additional complication here that what Thomson and others advocating a “women’s rights” position primarily want is legalized abortion. They don’t necessarily need it to be the case that abortion is always morally good; just that it is not so evil as to merit legal abolition. We might note an analogy to lying; even if you think it is morally wrong to lie, you may not think that it should always and everywhere be against the law (though, as in perjury, it may be in some cases).
10. I say it is “explicitly undefended” because Hursthouse herself says as much in her footnote 11 (1991, p. 235).
11. Note that there is a clearly contestable assumption at work here. She seems to be arguing something like as follows:
  - (1) fully virtuous agents do not require recondite knowledge to make moral judgments
  - (2) the status of the fetus counts as recondite knowledge
  - (3) Therefore, the fully virtuous agent does not require knowledge of the status of the fetus.

There is obviously a suppressed premise here: that her fully virtuous person is able to make a (true) moral judgment about abortion. In other words, her argument against the necessity of recondite knowledge only works insofar as we can be confident that her fully virtuous person is actually making true moral judgments about abortion, which frankly seems rather question-begging.

12. She goes on to give examples of the sort of facts she has in mind: “standardly (but not invariably), pregnancy occurs as the result of sexual intercourse, that it lasts about nine months, during which time the foetus grows and develops, that standardly it terminates in the birth of a living baby, and that this is how we all come to be” (Hursthouse, 1991, p. 236).
13. I think it would be safe to say that Hursthouse’s discussion of both the deontological and utilitarian approaches over-simplifies them, perhaps to the point of being unfair. That said, her central point does not really depend on a fully accurate description of those competing theories because even if they were given a more adequate expression, they would still fail to address the gravamen of Hursthouse’s complaint. That is, the approach to morality that they each manifest, particularly in the direct focus on right action, fails to account adequately for the importance of a virtuous character in not only the proper description of right action, but the horizon of the moral life in general.
14. Hursthouse doesn’t develop the point, but this idea of the proper seriousness of a virtuous man is a central aspect of Aristotle’s *phronimos* (one possessed of *phronesis* / practical wisdom, i.e. a “fully virtuous person”), who ought to be *spoudaios*. To be *spoudaios* is (among other things) to give appropriate attention to the right kind of things. It is analogous to a kind of maturity, not merely in age, but in giving more of one’s attention to the sorts of things that legitimately demand it. So politics in its original sense—the proper pursuit of the common good within the *polis*—is a proper subject of concern for an adult in the way that it is not for a child or adolescent.
15. She claims that human life is generally a good, but that there are a few circumstances in which it is not. She notes two such circumstances: “(a) where death is actually a benefit, because the baby that would come to be if the life were not cut short would be better off dead than alive, and (b) where death, though not a good, is not an evil either, because the life that would be led (e.g., in a state of permanent coma) would not be a good” (Hursthouse, 1991, p. 242, n. 15).
16. See her discussion of the sometimes fundamentally tragic nature of some moral choices in (Hursthouse, 1999, chapters 2 and 3).
17. Kornegay (2011). As of this writing Kornegay’s article is available in electronic form, but has not yet gone to press and is lacking final page numbers. As such, my references are to the ordinal page number of the typeset electronic pdf file.

18. It is Kornegay who introduces the terms ‘potential’ and ‘actual human being,’ but she does so out of Hursthouse’s discussion in [chapters 2 and 3](#) of *Beginning Lives*.
19. There is an interesting complication here because much of Hursthouse’s language about the disparity between early and late abortions, which Kornegay uses to generate her distinction in fetal status, focuses primarily on the attitudes or emotions of the adults. For example, Hursthouse writes: “To shrug off an early abortion is understandable just because it is very hard to be fully conscious of the fetus’s existence in the early stages and hence hard to appreciate that an early abortion is the destruction of life. It is particularly hard for the young and inexperienced to appreciate this, because appreciation of it usually comes only with experience” (Hursthouse, 1991, p. 239). In other words, the focus is not on fetal status, but the mother’s (mis-)perception of it. Thus, Hursthouse might claim that a certain level of ignorance has an exculpatory effect, particularly with respect to accusations of callousness. However, as Kornegay points out, “Hursthouse should also insist that there is something quite problematic about the abortion of an *actual* human being. An evaluation in terms of typical attitudes to older fetuses would seem to be less than penetrating. Moreover, to differentiate between justifiable typical attitudes and mere prejudices, one would need to resort to specific facts about the fetus and status in addition to typical maternal psychology” (Kornegay, 2011, p. 69). An analogy might serve to illustrate. We would not consider a deeply held belief that people of a certain race are sub-human as exculpatory for a murderer who possessed such a belief. In other words, the racist could not plausibly claim that the mere fact he (wrongly) believed his victim to be sub-human means that his killing was not murder. In point of fact, he has killed an *actual* human being, whether he understands that or not. The same, Kornegay might say, holds for the woman who procures a late-term abortion.
20. Oderberg (2000a, p. 21). Much of the subsequent analysis follows Oderberg (2000a and 2000b).
21. Strictly speaking, we ought not speak of a “potential human being” unless by that we mean only extrinsic potentiality, as the flour, eggs, and sugar are a *potential cake*. Of course, the only thing that would answer to that description is the set of an ovum and a spermatozoa. Rather from the moment of conception a new being (of the natural kind *human being*) comes into existence (out of the dissolution of the parental gametes), which fully possesses the potentialities associated with that kind. As such, a zygote-embryo-fetus might be (loosely-speaking) a potential infant / child / adult / football player / ballet dancer, but it is not a “potential human being”; it is an actual human being that (contingently) has yet to realize its intrinsic potentialities, and which may (contingently) never do so.
22. See Warren (1973, 1991) and Singer (1999); they have radically different conceptions of moral status (because they have radically different conceptions of morality), and thus they focus on different capacities (Warren, chiefly on rationality, and Singer on the capacity to feel pleasure and pain). What they share, however, is a conviction that it is the capacities an individual has (or lacks) which give him whatever moral status he has. It is no accident that a utilitarian capacities theorist like Singer is also keen to decry “speciesism.” A natural kinds analysis is speciesist; but far from running from this fact it embraces it, precisely because it is only in terms of the natural kind that genuine human moral status is to be found.
23. It is perhaps worth noting that Aristotle himself explicitly allows for abortion in Book VII of the *Politics*. After discussing regulations on the number of children he writes, “if any people have a child as a result of intercourse in contravention of these regulations, abortion must be practiced on it before it has developed sensation (αἰσθησιν) and life (ζωήν); for the line between lawful and unlawful abortion will be marked by the fact of having sensation and being alive” (1932, 1335b24-5). Note that Aristotle’s distinction between lawful and unlawful abortion turns on the “fact of having sensation and being alive.” These are the same terms he uses in the Book I, [Chapter 7](#) of the *Nicomachean Ethics* (1098a1-2) when referring to the characteristic powers of the vegetative and animal souls. In other words, what he’s saying in the *Politics* is that it is unlawful to kill a zygote-embryo-fetus once it has an animal soul. Of course, we know that Aristotle’s embryology is fundamentally wrong; he simply

held false views about what a fetus is and when he or she is alive. Contemporary research shows beyond a doubt that the zygote-embryo-fetus is an independent, living organism (i.e. a creature possessed of an animal soul). Faced with the results of modern embryology, I think Aristotle would be compelled by his own (implicit) principle to extend the unlawfulness of abortion to the moment of conception.

24. Since, as Aristotle says, virtues are an intermediate between two extremes, one can miss the mark of virtue in a variety of ways. With respect to the virtue of courage, one can miss the mark not only by being a coward (failing to stand firm for the sake of the fine), but also by being rash or overly hasty.
25. In fact, I think this is essentially related to his claim in Book I, [Chapter 4](#) of the *Nic. Ethics* that the study of ethics requires us “to have been well brought up in fine habits if we are to be adequate students of fine and just things, and of political questions generally” (1999, 1095b5-8). In other words, his ethical investigations presuppose a certain kind of moral upbringing which is a necessary precondition for moral reflection. Thus, mature ethical reflection presupposes a social and political situation that is largely in accord with the demands of morality. It goes almost without saying that the social and political situation we inhabit is not one in which most people are “well brought up in fine habits.”
26. See Kass (1993).
27. Of course, not everything that is subject to destruction generates a demand of justice. The happenstance structure of my garbage pile is fragile in a certain sense but lacks genuine value and thus is not vulnerable in the sense relevant to create a demand of justice.
28. While something like this conception of justice as what is owed might be embraced by non-virtue theorists, I think that Hacker-Wright is correct in thinking that the connection to the virtues tradition is quite strong. This is because possessing a good character has direct epistemic implications. That is, a man of good character, precisely because of that well-ordered character, is in a position to recognize certain truths about the world that someone else lacking the relevant virtues will miss. The virtues have an epistemic truth-tracking aspect that contributes to disposing one to act (and feel) in the right way. Thus, being *spoudaios* makes it possible for the man of good character to recognize the legitimate demands of relevantly vulnerable objects, and accordingly to be disposed to act towards them in the appropriate way in light of their objective value. Not being morally serious will tend to cause one to over-value (subjectively) objects that (objectively) do not merit such regard. Something like this is at the root of Hursthouse’s complaint against the woman with the unrealistic dream of the perfect marriage, two children, etc.
29. Of course many libertarians will object to these demands as well, but again common sense views them as uncontroversial. The grounds for objecting to them would again be a radical view of personal autonomy which is straightforwardly incompatible with *eudaimonia* (as Hursthouse herself argues). As I noted above, Thomson’s view is greatly weakened insofar as it seems to presuppose this untenable account of autonomy. Unfortunately, exploring this issue is beyond the scope of our concern here; see Kass (1993).
30. I take it that this is the case even if we happen to live in a society which fails to recognize this fact in its use of the term ‘abortion.’ That is, the mere fact that there is controversy about whether abortion is wrong cannot, by itself, rule out the possibility that it “automatically includes baseness.” After all, the example that Aristotle gives of such an automatically base action is adultery, which he says simply cannot be done in the right way, at the right time, etc. If abortion is murder, then it too is something that cannot ever be done in the right way, for there is obviously no right way to commit murder. Thus, if we are able to recognize abortion for what I have argued it is (murder), then it will “automatically include baseness,” even if some quite intelligent people are unable to bring themselves to see this.
31. In these very difficult (and reasonably rare) cases, we would have recourse to a Double Effect analysis which would sometimes allow the fetus to be sacrificed to save the mother’s life (that is genuinely at risk), so long as the death of the fetus is not aimed at.

32. It may be that Hursthouse herself has opened another line of reflection on these matters with her talk of the virtue of charity. Perhaps something like a strong prohibition against abortion as the (generally unjust) killing of an actual human being could be constructed out of Hursthouse's virtue of charity. However, there are considerable difficulties here, not least of which is the specification of charity as a natural virtue. Obviously, such a prohibition against abortion could be constructed out of the understanding of charity as a supernatural infused virtue, but the complete absence of charity as a (natural) virtue in the tradition (both in Aristotle and the medievals) makes it far from obvious how this might be done. Of course, this goes far beyond the scope of our present concern.
33. I owe an enormous debt to Rachel Lu for extensive discussion and comments on earlier drafts. I am also grateful to the anonymous referee, whose comments were truly helpful in refining and improving the final draft. Finally I offer my great thanks to the editor, Stephen Napier, for his comments and allowing me to contribute to this worthwhile project.

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# Chapter 7

## Embryos, Four-Dimensionalism, and Moral Status

David B. Hershenov

### 7.1 Introduction

Philosophy journals have been full of discussions of Four-Dimensionalism in recent years. The rich resources of the Four-Dimensional metaphysics have been brought to bear upon many traditional philosophical problems. Alas, the implications of Four-Dimensionalism for bioethics have gone largely unexplored. Hud Hudson (1999, 2001) is the rare exception. Relying upon a Four-Dimensional metaphysics, he argues that there is little reason to identify the human embryonic animal and human person. He makes the intriguing claim that if abortion is wrong, then it isn't because the human animal within its mother's womb is a person. This he rightly claims "is a very significant result" for "an overwhelming amount of the literature on abortion and infanticide (as well as much of the public debate on these topics) seems to turn on the question of whether or not the human fetus is a person" (2001, p. 153).

Hudson admits that if he were convinced of the truth of Three-Dimensionalism, then he would find it more compelling to identify human persons and human animals than accept that they are distinct entities though composed of the same atoms (2001, p. 130). Such an identification would lead him to claim that the human person is an animal with biological persistence conditions, coming into existence with the onset of life and going out of existence when life is extinguished. So if Hudson were an advocate of Three-Dimensionalism, then he might very well agree with such staunch defenders of human embryonic life as Tollefsen and George who argue that mindless embryos shouldn't be aborted because they are persons (George and Tollefsen, 2008). But if Hudson's favored Four-Dimensionalist metaphysics is true, as well as his claim that the approach removes the reasons to identify the person and animal, then perhaps it is George and Tollefsen who should drop their opposition to abortion for they acknowledge that the exalted moral status of embryos depends upon their identity with persons.

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...embryos clearly cannot yet think, choose and speak. Nor are they (yet) self-conscious or even sentient. Were this to mean that embryos were not the same *kind* of beings as the readers and authors of this book, that they were not *persons*, then it would be difficult to see why they should be accorded the same moral respect that we authors and readers believe we are entitled to. There would be no obvious reason why they should not be destroyed for the sake of beings who really are persons (George and Tollefsen, 2008, p. 61).

However, I'm going to argue that opponents of abortion like George and Tollefsen can accept Hudson's metaphysics without having to abandon their belief that human animals are persons. One doesn't have to deny the truth of the Four-Dimensionalist metaphysics to consider mindless embryonic human animals to be persons. If this claim is correct, it would be good news for the pro-life movement since Four-Dimensionalism is likely to attract many followers given its very able defenders.<sup>1</sup>

The first half of the paper will be a response to Hudson's claim that human persons can't be identified with the animals who are mindless for part of their existence. Hudson argues that if having later thinking stages were sufficient for being a person, then there would be countless entities that are persons. This assumes unrestricted composition, a principle that I will accept for the sake of argument. Hudson understands unrestricted composition to mean that necessarily for any collection of objects, the *x*s, there exists one and only object, *y*, such that the *x*s compose *y*. So there's even an object that is composed of Stonehenge and the reader.

I'll argue for person/animal identity by distinguishing the kinds of entities that have mindless and thinking stages. The causal relationship between the stages of entities that belong to a natural kind will serve to distinguish the embryonic human animal and person from other Four-Dimensional objects that likewise are mindless at one time but later think. This will leave us with two good candidates for the title "human person" —the human animal that's initially mindless and then later self-conscious, and the entity favored by Hudson that's capable of self-conscious reflection at every stage of its existence.

With which of the two candidates are we to be identified? I'll argue that our intuitions about the persistence of persons are best explained by appeal to a biological (or animalist) account of personal identity. Our intuitions that we would survive certain hypothetical changes as indicated by what appears to be prudential concern for the resulting individual can't be accounted for in terms of the persistence of a capacity for self-conscious reflection or ties of psychological connections and continuity. My contention is that only an appeal to a criterion that identifies us with a future thinker in virtue of sharing the same biological life can make sense of such responses. So it will be argued that of the countless Four-Dimensional entities that have thinking temporal parts, we're to be identified with the living human animal. Moreover, if any beings warrant the label of 'person', we do. Then by helping ourselves to Hudson's *maximality principle* which rules out the existence of a person embedded within another person, we can thus judge any entity within the typical human animal that consists solely of self-conscious temporal parts to be not a person but a proper part of the human person.



## 7.2 The Nature and Appeal of Four-Dimensionalism

Before looking at Hudson's reasons for distinguishing embryonic human animals from human persons, there is a need to sketch the core features of the Four-Dimensionalist metaphysics. The Four-Dimensionalist claims that for any period of your life, like the first half of it, there's a part of you that existed only then. Thus the reader has not only such familiar spatial parts as her hands and feet, but such temporal parts as the first half of her existence, the first day of her life, and even momentary temporal parts known as stages. Temporal parts are the distinctive components of Four-Dimensionalism. Informally, a temporal part of an entity will exist only at a time and will then overlap all of the entity's other parts that exist at that time. More formally: something is a temporal part of  $x$  during interval  $T$  if and only if (i) the object exists at but only at times in  $T$ , (ii) it's part of  $x$  at every time during  $T$ , and (iii) at every moment during  $T$  it overlaps everything that's part of  $x$  at that moment (Hudson, 2001, p. 59).<sup>2</sup> So your arm at this moment is not a temporal part of yours because it doesn't overlap all of your other present parts—legs, trunk, head etc. Once temporal parts are understood, Four-Dimensionalism can be defined as the view that “Necessarily, each spatial-temporal object has a temporal part at every moment of its existence” (Hudson, 2001, p. 59). An entity is said to *perdure* if it persists in virtue of having temporal parts.

Three-Dimensionalism is a view that denies that we have temporal parts, are extended in time, and persist by perduring. Rather, we are said to persist by *enduring*, being *wholly present* at each time that we exist. Metaphors abound in accounting for the view. It is said that “we sweep through time” rather than have different parts “spread across time” occupying different periods. However, it won't matter for our purposes to present a precise account of Three-Dimensionalism since our aim is to show that Four-Dimensional human persons are best construed as human animals.

Many reasons have been given to favor Four-Dimensionalism over Three-Dimensionalism. Hudson thinks the best defense of Four-Dimensionalism involves showing how it deals with problems of material constitution like the lump and the statue, fission, and embedded objects (Hudson, 2001, p. 58). I'll just discuss the latter two problems to give the reader unfamiliar with the subject some sense of the appeal of Four-Dimensionalism.

A widely shared intuition is that if your cerebrum is removed and transplanted into the empty skull of your clone where it resumes functioning, preserving your pre-transplant psychology, then you would have switched bodies. Such judgments suggest an implicit acceptance of a psychological criterion for identity: *Person  $x$  is identical to  $y$  if and only if  $x$  and  $y$  are psychologically continuous.*

An even more widely shared belief is that people survive with just one cerebral hemisphere when the other is destroyed by cancer or stroke. Now consider the possibility of your cerebrum being split. Then one cerebral hemisphere is transplanted into the brainless body of a clone while the other hemisphere, along with the rest of the original person's body, is destroyed. A common response is, again, that one has

switched bodies. The person with the cloned body has your psychology and thus seems to be you.

Now consider that neither of your cerebral hemispheres were destroyed but both were separated and successfully transplanted into separate bodies, each a perfect clone of your animal prior to brain division. If each transplanted half is psychologically continuous with and causally dependent upon the pre-division person, then it seems that you would be two people since the pre-fission person is psychologically continuous with both. But one cannot be both persons if they are not identical to each other. So it seems as if the Three-Dimensionalist has to modify the earlier stated psychological criterion and assert either: (a) the rather arbitrary claim that one of the two distinct persons is the original, or (b) that a person can have a divided mind and what looks like distinct persons is each just half of a person, or (c) maintain that the person fissions out of existence like a cell when it divides, despite both products of fission consisting of sufficient psychology to be identical with the pre-fission person in the absence of the other. It is difficult to explain in (c) why the being that fissions out of existence would have earlier expressed prudence-like concern for two beings, neither of whom with which he is identical.

The Four-Dimensionalist avoids these three unappealing options. He can claim that there were two people all along sharing temporal parts prior to fission. They overlapped, just as two roads can overlap before forking off. Since no one goes out of existence with fission, it is unsurprising that prior to fission there is a prudence-like concern for the two persons separated by fission. And the post-fission persons are not in error when claiming to recollect and be responsible for actions they performed prior to fission.

The same notion of temporal part sharing offers a solution to the problem of embedded objects. Consider Tibbles and Tibs. Tibbles is a cat and Tibs is an entity embedded within Tibbles that includes every spatial part of Tibbles but the tail. If Tibbles later loses his tail, then it would seem that Tibbles and Tibs have come to have all their parts in common. If Tibbles is a cat, why then is not Tibs? Tibs can purr and meow and do whatever else Tibbles can. But then we would have two spatially coincident cats, i.e., each wholly occupying the same place at the same time. If there cannot be two objects in the same place at the same time, then they are identical. But Tibbles and Tibs cannot be identical for the former *had* a part that the latter did not.

The Three-Dimensionalist can instead claim there are not such things as undetached parts like tails and thus no problem of Tibs and Tibbles (van Inwagen, 1990). But if there are not undetached tails, why think there are such things as hands, head and brains? However, if Tibbles and Tibs are considered to share a temporal part, then there is no danger of two objects of the same kind being co-located. Tibbles and Tibs have some temporal parts in common after the former loses his tail. But before they came to share stages, they merely overlapped, Tibs's spatial parts being proper parts of Tibbles. The Four-Dimensionalist's acceptance of temporal parts allows him to avoid such unwelcome choices confronting the Three-Dimensionalist: the spatial coincidence of Tibs and Tibbles after the loss of the latter's tail, or denying the existence of undetached parts. Instead, the Four-Dimensionalist claims that Tibs and Tibbles are distinct entities that merely overlap for a time after the tail is detached.

They are, in a sense, a temporal version of the familiar case of two distinct roads merging for a stretch before they fork apart.

Philosophers who affirm the existence of undetached parts and deny that there are spatially coincident objects are likely to accept unrestricted composition. We will see shortly why accepting unrestricted composition poses a problem for Three-Dimensional accounts of persons that fails to trouble Four-Dimensionalist accounts. One might try to reject unrestricted composition but it is not easy to put forth a principle of restricted composition that does not eliminate much of the ordinary world of folk ontology (brains, chairs, mountains etc.)

Hudson thinks a defense of unrestricted composition can be made through analyzing both the intuitions behind those who reject it, and showing the costs of doing so. He suspects that once people become clear about why they find unrestricted composition counterintuitive, as well as come to realize the costs of trying to restrict composition to allow just the objects of commonsense folk ontology, they will recognize that endeavor to be a failure (Hudson, 2001, p. 107). If composition is not unrestricted, then there will be either no composites (only elementary particles exist) or many of the objects posited by commonsense will be denied reality. For example, the best known account of restricted composition, van Inwagen's proposal (van Inwagen, 1990), denies the existence of every inanimate composite! Hudson maintains it is far preferable to keep chairs and mountains in one's ontology than abandon them to exclude something composed of the extant copies of the Guttenberg Bible, the ruins at Stonehenge, and all the silk in the world. There may be no name for the Bibles, ruins and silk, but that is because there is no human interest in them. Hudson insists that there is not a good reason to so anthropomorphically restrict an account of what exists. Not only do our interests change, but there could even be aliens with interests in what we take to be pointless objects.

If revealing people's motives for excluding the uninteresting from their ontology does not convince readers to accept unrestricted composition, Hudson's next strategy is to show that there is no principled way to allow some scattered objects and not others (Hudson, 2001, p. 108). Not only are atoms and molecules scattered objects, but we, as well as the entire animal kingdom, are swarms of scattered microscopic particles. And scattered at the macro level are Hawaii, the various planetary systems, the letter "i", and an hour glass with its sand falling. So once one admits such scattered objects, it becomes very hard to produce a principled distinction that denies the existence of something composed of the ruins, silk and Bible. Better to accept the latter than leave Hawaii and the Milky Way out of one's ontology.

A Three-Dimensionalist is not at liberty to accept unrestricted composition without some very unwelcome results (Olson, 2008, pp. 229–231). The reason is that the parts that compose you at any moment will soon be somewhat dispersed as you exhale, perspire etc. If you do not want to have to conceive of yourself as a scattered object—and one that exists as long as your component atoms do—then it is better to understand yourself as composed of temporal parts. The alternative is either: (a) to modify the principle of unrestricted composition so the same matter can compose spatially coincident entities, thus allowing it to be so that you were never identical with the aggregate of your constituent atoms, or (b) to accept that you are in *human*

form for only a brief part of your existence, somewhat more scattered before and after that time. The former renders it a mystery why two physically indistinguishable objects in the same place at the same time have different properties. The latter runs afoul of commonsense ontology which takes it that you survive a change of parts, rather than become somewhat scattered, your previous location occupied by a distinct object which appears as you did moments earlier.

### 7.3 Why Four-Dimensional Human Animals Do Not Appear to Be Persons

Let's now turn to the reason why if composition is unrestricted, Hudson insists the person cannot be identified with the animal. He maintains that animals are not persons for, at best, they would merely share *some* of the thinking stages composing a person. The normal human animal typically consists of thinking stages through most of its life and non-thinking stages during its embryonic months. There is also a distinct perduring creature, perhaps a large temporal part of the animal, whose temporal parts are all capable of thought. Which one is the person? Hudson finds it more plausible to identify the person with the entity consisting of *only* thinking stages rather than something like the animal which also has non-thinking temporal parts. However, such an unqualified principle would mean that your temporal part that exists for the duration that you are reading this sentence would be a person embedded within you. Since there are countless things that consist of only thinking temporal parts in a Four-Dimensional metaphysics, Hudson contends that the only non-arbitrary selection of stages to be given the label "person" are those thinking stages which are *not* embedded within a larger thinking being. Thus persons are *maximal* thinkers.

And it is not any kind of thinking, such as that produced by *merely* sentient stages, that is sufficient for composing a maximal person. Also needed are self-conscious thoughts appropriately related via psychological continuity and connectedness (Hudson, 2001, pp. 122, 130–131, 144). Even that is not enough because self-conscious Hannah could be vaporized in an atomic explosion and in an incredible cosmic coincidence, a psychological duplicate of her materializes on a distant planet (Hudson, 2001, p. 132). So there must also be the right kind of causal connection, an *immanent cause* involving earlier thinking stages bringing about later thinking stages (Hudson, 2001, pp. 134–136).

Hudson denies that the animal's *potential* to have a thinking stage will succeed in rendering it identical to the person. He acknowledges that might work for a Three-Dimensionalist metaphysics that restricts composition and denies that there exist spatially coincident entities (2001, pp. 125–126, 152–153). On such an account of persistence, it is better to maintain that the mindless embryo is identical to the later minimally sentient newborn, self-conscious adult, senile geriatric and irreversibly comatose patient. But the Four-Dimensionalist typically accepts unrestricted composition and so there will be countless objects that have thinking stages. There will

even be an object that consists of an ancient Babylonian sandal that disintegrated in 8th century BC and President Obama. If mindless embryos are persons because they have later thinking parts, then there was an additional person present in ancient Babylonia in virtue of the sandal that was an early temporal part of an object composed of it and the later thinking Obama stages. But surely that object is not the earlier part of a person endowed with the moral status that typically accompanies personhood. When only the sandal was present centuries ago, if it had gone without repairs, surely nothing of moral status had been neglected. Or if Obama had been aborted, while *he* might have been deprived of a valuable future as Marquis (1989) famously argued, it seems wrong to claim that the ancient sandal/modern president *composite* was deprived of a valuable future. If not, every death will actually be a grave deprivation and rights violation of countless creatures.

## 7.4 Little Persons

### 7.4.1 *Natural Potential*

Some readers might think that certain well-known conditions associated with accounts of diachronic identity such as (macro-level) spatial-temporal continuity or active and intrinsic potential could meet Hudson's challenge. I doubt it, though I would acknowledge that the sandal/Obama composite can be excluded from the ranks of persons if one insists that it is only the potential of *spatial-temporal* continuous entities that will allow something once mindless to be considered a person. Nevertheless, the spatial-temporal continuous object composed of the unfertilized egg stages, the fertilized egg, and its later post-fertilization animal stages would still qualify as a person. It does not matter that the egg does not survive fertilization, for given unrestricted composition, there will be an object consisting of the stages of the unfertilized egg and then the later stages of the animal that begins with fertilization. One might instead deny that the unfertilized egg/animal composite is a person in virtue of its potential for it lacks the *active* potential to develop into a thinking being—the sperm being needed to give it the intrinsic, active power to so develop.<sup>3</sup> However, such a criterion will not rule out the potential for thought (and thus personhood) of the object consisting of the stages of *both* gametes and then the fertilized zygote and its later animal stages. Since the entity consisting of the unfused gametes already exists in the supportive uterine environment that a new embryo needs to develop, it is hard to distinguish it from the fertilized egg being a potential person given that they will both develop into thinking beings in that same environment. It will not help to combine active potential and spatial-temporal continuity because there will be an entity that consists of the sperm and egg in contact, just prior to fertilization, and then the later animal stages.

So the dilemma Hudson presents us with is that if we want to deny that a person exists in ancient Babylonia due to the sandal existing there and it possessing the later Obama thinking stages, then we must also deny that the mindless embryo is

a person in virtue of its future thinking stages. My response is to suggest there are grounds for claiming that some but not all potential thinkers are themselves persons even when they have not yet manifested that potential. There is a way to distinguish potential thinkers via the relations unifying the stages of a natural kind in order to then claim that the animal is also a person while other beings that have thinking stages for just some of their existence are not persons. The idea is roughly that the mindless embryonic stages are the same kind of stages of the latter thinking person—i.e., they are all animal stages. There are mindless animal stages linked by life processes to thinking animal stages. They are all living stages of an animal. Their diachronic (as well as synchronic) unity is due to their parts being caught up in the same life processes.<sup>4</sup> They are stages of the same token of a natural kind, not parts of two things of distinct kinds cobbled together in virtue of the principle of unrestricted composition.<sup>5</sup> The gerrymandered entity composed of the ancient sandal and President Obama does not have later *sandal* stages that happen to think. This suggests an explanation of why it seems much less plausible to ascribe the capacity of thought to the sandal-Obama entity when only the sandal is present than it is to so ascribe it to the mindless stages of Obama. The capacity is not found in the developmental telos of the sandal. It is not the nature of the earlier stages to give rise to later thinking stages. Compare the sandal/Obama composite with Obama himself. One finds a telos programmed into all the stages of Obama, even the mindless ones.

So the idea is that there's a principled distinction between things that have thinking parts at one time in their existence but not at another. The mindless animal stages that are part of a later thinking thing are stages of one and the same animal. The later thinking stages are also animal stages united by life processes. But the mindless sandal stages are not part of an entity that later thinks composed then of sandal stages. I suspect only the human animal will have its *mindless* and *thinking* stages bound by the same unity relation. And the reason there is no *animal* composed of you up to this moment and another reader after this moment is that there is not the appropriate *immanent causation* characteristic of life processes, the earlier stages of a life causing the successive stages of the same life. Likewise for the composite of the scattered gametes and the reader that resulted from their fusion. There are *three* lives involved. The *same* life does not link them diachronically or synchronically.

So we can grant that mindless human animals are persons without having to bestow that title on every object which has mindless stages preceding its thinking ones. However, there may also be a single relation, psychological continuity, unifying all of the thinking stages of the person. So Hudson could appeal to the existence of a non-gerrymandered, 'natural', psychological unity relation in order to apply the label 'person' to the perduring object consisting of only thinking stages. Thus my approach might seem to commit us to there being two kinds of persons—some that are mindless for a time, others that are always thinking. And that admission will run afoul of the maximality principle that persons are not to be found within larger persons (Hudson, 2001, p. 121). However, I shall put forth arguments in part V that reveal the best candidate for the label 'person' to be the one that was once a very little mindless animal. So it will not be, as Hudson claims, "arbitrary and unmotivated" to identify the human person and animal.

### 7.4.2 *Persons Are Composed of Those Parts Contributing to the Production of Thought*

I have so far ignored another Hudson-inspired argument regarding why we should not consider the mindless embryonic animal to be a person on the grounds that it has potential to develop into a thinker. Hudson makes the surprising claim that perduring persons are not temporal parts of animals. Rather, persons are “certain proper temporal parts of the brain and central nervous system of living human organisms” (2001, p. 147). The basis for this claim is that the entire animal does not produce thought, merely part of it does. Hudson writes: “The best we can claim for such an object is that it has some further object, *x*, as a proper part, and that each of *x*’s parts plays some sort of role in furnishing *x* with the full range of features relevant to personhood” (2001, p. 143). This leads Hudson to declare that the person is to be found “within the lifespan and beneath the skin. . . of the human animal” (2007, p. 220). So if no mindless animal is ever going to develop to where it can *directly* produce thought, there is little reason to identify the person with the animal who will, at best, come to think only derivatively in virtue of some of its parts *really* doing the thinking.

Hudson insists that just as it is unprincipled to identify the person with a perduring animal that possesses non-thinking temporal parts, so is it to identify the person with any of the temporal parts of the animal since many of the animal’s spatial parts are uninvolved with thought production. Hudson comments: “Rather, once again, the only non-arbitrary choice would be an object each of whose parts plays a *contributory role* in supporting a psychological profile constitutive of personhood” (Hudson, 2007, p. 224). Even though Hudson cannot say exactly which parts are so involved, nevertheless, he claims that since he can rule out “such parts as one’s forearm (2001, p. 219). . . some parts of the hand. . .” (2007, pp. 224–225), “finger nails and bone-marrow. . .” (2001, pp. 143–144) as making a contribution to thought, that is enough to sustain his thesis that persons are not temporal parts of animals.

I doubt that Hudson can rely upon the notion of “a contributory role” in supporting personhood to so shrink the size of the person. One reason has been presented by Eric Olson, who speaks of *direct involvement* with the production of thought instead of the near equivalent *contributory role*. Olson thinks the real problem with brain-size persons is that little sense can be made of the idea of “direct involvement in a being’s thinking” that motivates the position (Olson, 2008, pp. 91–98). Olson wonders why if the respiratory and circulatory systems are not *directly* involved with thought, we should consider the oxygenated blood vessels in the brain to be so? Olson suggests that someone might maintain that the thought is really produced by the firing of neurons. However, Olson points out that not every part of the neuron is similarly involved in the sending of electrical or chemical messages to other neurons. Some serve other tasks like maintaining structural integrity of the cell or removal of its wastes. This, Olson claims, ought to make “the thinking minimalist uneasy” (2008, p. 92). Moreover, the neurons will not fire without these tasks being performed. Olson cautions that trying to determine what is *directly involved* in the production of thought is as hopeless as trying to determine which of the many

workers, suppliers, managers, tools and materials is directly involved with the factory production of a knife, or which parts of the body are directly involved with walking. He insists that the problem is not even one of vagueness—it is not that we have a clear application and then boundary cases. Instead, the fault lies in the notion of *directly involved* being unprincipled.

My suspicion is that Hudson is led by the truth that our thought could continue if our animal is reduced in size to assert the falsehood that such removals show that it is only some of the parts of the animal that produce thought (Hershenov, forthcoming). The animal needs to be alive to think. The fact that the event of someone's biological life could configure less material than it does is irrelevant. While it is true that one's animal can become smaller, that does not mean that the life processes which make thought possible were not earlier an event of a larger substance. Since one's thoughts depend upon the contribution of such processes, wherever they are located, so is the thinker of those thoughts to be found. And that life is dispersed throughout the body.

The basis for denying that we thinkers are merely parts of animals does not just lie in the fact that the living body contributes the life support necessary for any brain activity. The neuroscientist Antonio Damasio argues that the brain's constant monitoring of the body, its receiving and sending of the messages, is necessary for the working of the normal mind (Damasio, 1994, pp. 223–244). Even *partially* cutting off inputs to the brain in those suffering spinal chord injuries causes changes in the state of mind. Damasio's acceptance of "the idea that the mind derives from the entire organism as an ensemble" (1994, p. 225) leads him to reject the assumptions underlying one of philosophy's most famous thought experiments—the brain in the vat. He claims the disembodied brain floating in a vat of nutrients, without perfect duplication of the inputs and stimuli outputs, might not even be able to think. For similar reasons we should reject Hudson's view which amounts to considering the person to be "a brain in a living vat." Damasio explains:

In brief, neural circuits represent the organism continuously, as it is perturbed by stimuli from the physical and sociocultural environments, and as it acts on those environments. If the basic topic of those representations were not an organism anchored in the body, we might have some form of mind, but I doubt that it would be the mind we do have...the body contributes more than life support and modulatory effects to the brain. It contributes a *content* that is part and parcel of the workings of the normal mind (1994, p. 226).

## 7.5 The Human Animal Is the Only Person

### 7.5.1 *The Collapse of Psychological Continuity into Biological Continuity*

I'll now offer a second line of reasoning for identifying the Four-Dimensional human animal and the human person. I'll show that the psychological continuity and connectedness criterion, some version of which is favored by Hudson (2001, p. 144) *collapses* into animal identity. What I mean by *collapses* is that there are



cases which tend to elicit from us descriptions of one thinking entity being identified with another thinker that cannot be explained by a psychological criterion being satisfied. Such intuitions can only be accounted for by both thinkers being the same animal. So what we want to say are stages of a persisting person in cases involving the dreaming and the awake, the rational and the demented, divided and reunited minds, can only be construed as such if an appeal is made to the biological persistence conditions of animals.

The first problem for the psychological account of identity involves a twist on Reid's famous critique of Locke's memory criterion (Perry, 1975). Locke claimed that one's identity extended as far back in time as one's memories. Reid revealed a failure of transitivity by envisioning an old general who could remember his first military campaign as a young soldier, the young soldier could recall being a schoolboy flogged for stealing from an orchard, but the general could not remember being flogged. Therefore, the general *is not* identical to the boy, yet he's identical to the young soldier, who's identical to the boy. This absurdity could be avoided by appealing to psychological continuity, i.e., overlapping chains of psychological connections (Parfit, 1983, pp. 206–206). Psychological continuity involves the general being able to remember a time at which he could remember being flogged. So an overlap of memories will suffice in lieu of a direct memory connection. But the transitivity problem returns with a modified version of Reid's scenario that Perry named the *Senile General* case (1975, p. 19). The senile general could remember being flogged (or remember a time at which he could remember a time that he was flogged). So he is identical to the boy. The young soldier could remember being flogged, so he too is identical to the boy. But the general could not remember his more recent experience as a young soldier, nor could he remember any other time at which he then could remember his first military campaign. This renders the general identical to the boy but *not* identical to the young soldier, who is also identical to the boy. So if they are to be identified, as it intuitively seems they should, an appeal to their being the same animal can do what an appeal to psychological continuity cannot.

A second scenario where a psychological criterion of identity collapses into a biological one involves a temporary division of a mind. Consider Parfit's *My Physics Exam* scenario where there is just a short term loss of a unified consciousness due to cutting the corpus callosum so different cerebral hemispheres contribute to answering distinct problems (1984, pp. 246–248). The hemispheres are reunited after the dual work is done. As Parfit himself notes, the most plausible response is that there was one person temporarily cut off from himself. To account for that intuition, something other than a single causal chain of psychological continuity must be relied upon. Four-Dimensionalists usually qualify the criterion of psychological continuity for branching cases so the result is that there are two distinct persons continuous with the same earlier stage. They do so by insisting that psychologically continuous  $x$  and  $y$  are stages of the same person if there is no stage  $z$  that is psychologically continuous with  $x$  or  $y$  but simultaneous and distinct from either  $y$  or  $x$  (Brueckner and Buford, 2008). So during the exam there are two streams of thought that have stages that are simultaneous but distinct from each other, thus ensuring that there is

not a single person despite their both being psychologically continuous with shared earlier stages. But this will deliver the counterintuitive result that there is not one person with the briefly divided mind but that there were two persons present at that time since they involve simultaneous but distinct stages. If the intuitive response is to be preserved, then it appears that we must appeal to a rather ad hoc modification of the psychological criterion or claim that it must be because the same animal is doing the thinking.

One can also undermine the psychological continuity criterion for identity by taking issue with Locke's account of Socrates awake and Socrates asleep (Locke, 1975, p. 343). Locke conjectured that if sleeping Socrates was psychologically cut off from waking Socrates then they would not be the same person. Imagine that your waking and dream states are not psychologically connected. You cannot recall your dreams and these dreams do not follow from your waking life. I suspect that few readers would follow Locke and deny that they were states of the same person, interpreting the psychological disconnect as evidence of two people sharing a body. Since there is not any psychological continuity between the waking and the sleeping, then what makes them the same person must be that they are the same living animal. It helps if readers imagine that medical technology reveals horrible nightmares occur when they are asleep though they never recall them. I suspect that if they could prevent these nightmares by doing something when awake, they would, and for prudential reasons, since no moral concerns arise here about the suffering of others.

A fourth scenario undermining psychological continuity theories relies upon our reactions now to the possibility of future pain after the onset of amnesia or even more debilitating impairments (Unger, 2000). Consider the prudential concern many envision having for the individual with their brain after a stroke undermines the brain's capacities for rationality and self-consciousness, leaving a mere sentient child-like mind. If told earlier that the individual with our damaged brain will suffer horrific pains unless we take on almost as much physical pain before losing our memories and capacity for self-consciousness, most of us would consent to the lesser pain to ensure the greater does not transpire. Such a show of apparently prudential concern for an animal in the future, despite the absence of psychological continuity and the reflective capacities associated with personhood, suggests an adherence to an animalist/biological account of our identity.

What I have been hoping to get readers to recognize with the *Sleeping Socrates*, *Physics Exam*, *Senile General* and future pain scenarios is that there is a divergence between the psychological criterion and our intuitions about our survival. Only a reliance upon animalist identity conditions can accommodate our judgments of persistence. I suspect that some readers will offer an alternative interpretation. Their response is that it is not psychological continuity that matters to our persistence, but the capacity for mere sentience—minimal thought and feeling. As long as the same brain sustains sentience, then the individual survives despite memory loss and even some mental fragmentation.

Hudson contends that an individual suffering "profound senility" would not be a person (2007, p. 222). There would not be the requisite self-consciousness and psychological continuity. But our prudential concern in the well-known thought

experiments suggests we would survive such mental incapacitation.<sup>6</sup> So while I think this should lead Hudson to abandon his belief that *we* are essentially self-conscious persons (2007, p. 218), given unrestricted composition, it need not lead him to deny that there are beings that are essentially self-conscious with psychologically continuous stages. However, if anything deserves the title “person”, we do. So given Hudson’s commitment to a maximality principle, he should accept that we persons are not essentially self-conscious psychologically continuous thinkers, merely self-conscious for just a period of our lives. We are persons because of our capacity for self-consciousness, but that capacity is not actualized during all of our stages. Of course, even if Hudson were to admit this, it still would not commit him to identifying the human person and the human animal. He could instead claim we persons are identical to a maximal being composed of all merely conscious stages rather than only self-conscious, psychologically continuous stages. Jeff McMahan and Peter Unger offer Three-Dimensional versions of this thesis (McMahan, 2002; Unger, 2000), claiming that we survive as long as the same brain produces sentience (consciousness). So what I propose to do in the next section is provide thought experiments which suggest that our prudential concern reveals that we persons believe ourselves to be not even essentially sentient. The thought experiments reveal that the future sentient states we are concerned with can be deemed ours only if they are united by a biological criterion.

### ***7.5.2 The Collapse of Brain-Based Psychological Identity into Biological Identity***

I want now to try to offer another argument to show that a Four-Dimensionalist theorist should claim the human animal is the only person by drawing upon our concern for our stages that are devoid of the traits that characterize personhood. I’ll argue that our prudential concern towards our adult conscious animal in the future, including those times when it is without any psychological connections to the present, or even the same brain playing a role subserving our future mental life, suggests that we human people are animals essentially. I’ll maintain that once it is established that we could survive certain brain injuries, we can resist the intuitive pull of two famous thought experiments that have provided considerable support to psychological accounts of personal identity. The first involves your brain being destroyed and replaced by a new brain. The second thought experiment involves you swapping brains with another person. Most people judge it to be that we would not survive in the first hypothetical scenario but would do so in the second, though in a different body. I shall try instead to elicit intuitions that in neither scenario do we cease to exist or obtain a new body.

Consider that you would care prudentially for the individual suffering from the results of a stroke that reduced your brain’s capacities to realizing mere sentience. Many philosophers believe this shows that it is mere consciousness or sentience, not self-consciousness that is essential to our persistence (McMahan, 2002; Unger,

2000). I think instead that our prudential responses in such scenarios should actually be construed as showing that it is the criterion of biological identity across time that reveals our persistence conditions. Ask yourself whether your concern for your post-injury self with just a rudimentary mind really is due to your possessing the *same organ* that underlies consciousness or is it rather that it is just the *same animal* that is conscious? I think it is the latter and this can be seen by pondering the following twist. Consider whether your reaction to the prospect of coming out of a stroke-induced coma with pain and pleasure sectors intact but no cognitive capabilities above this will be different if such sentience is a result of different parts of your cerebrum being rewired during the coma to realize pain and pleasure when you awaken?<sup>7</sup> I suspect that most readers would have prudential concern despite different parts of the brain contributing to such sensations.

If you would have prudential concern for the same animal with different physical structures supporting sentience, then why should you react differently to your animal getting an entirely new cerebrum in the thought experiment in which your original cerebrum is destroyed and a new one imparted? Readers might respond that it matters that the different anatomical structures, without which there would be no sentience, are in the *same* cerebrum. If so, consider a second case where, early in someone's life, in the absence of injury and before a web of beliefs and desires arises, different parts of a developing brain play a role in receiving and processing painful and pleasurable signals. Imagine one is in the brainstem and the other is in the cerebrum. Would it be correct to say there were two thinking beings in one body? And if one is destroyed, is it correct to claim there remains then only one thinking being? My intuitions are that it isn't. And would readers say that there is a new thinking being produced by fusion if there is the later development of a self-conscious person who provides the respective pain or pleasure reports when either the brainstem or cerebrum sector is "stimulated"? I very much doubt it. And for all we know, this is roughly what happens in child development. The initially physically dispersed realization and thus psychologically unrelated fragmented mental states of the baby are only later psychologically united as the older child obtains reflective access to the different states. The child can come to say that "I'm in pain now and earlier had pleasant experiences," reflectively linking what before had been experienced without the capacity for reflection upon those experiences. Even if such conjectured development is not how we actually develop, our reactions to such a counterfactual assumption about ourselves does illuminate what we take ourselves to be: living human animals, rather than brain-unified thinkers.

I do not see any reason to identify ourselves with parts of the consciousness-producing central nervous system (Hudson, 2001; McMahan, 2002), nor with a larger being only if it *continuously* possesses the same functioning brain-like structure (Unger, 2000), rather than holding that these pains and pleasures would be mine because they are subserved by parts caught up in the same biological life and belong to the same animal. It seems arbitrary to insist upon the brain—understood to include brainstem, cerebellum, midbrain and cerebrum etc.—as providing us with ownership of our thoughts given that in the described scenario there are neither causal connections providing psychological connections between the pains and

pleasures nor is it the same part of the brain that realizes both. Perhaps if the very same part of our brains served to multiply realize our pains and pleasures, then it would make a little more sense to insist upon that bit of anatomy as being essential to our persistence. But that is not the case. So to then insist that the thoughts are ours as long as *some* part of the brain produces them is unwarranted. The boundaries of the brain have been rather arbitrarily drawn by the authors of anatomy texts rather than determined by a unified function. The brain does many things, only some which involve the fore-mentioned neurological processing of pain and pleasure sensations. Since such sentient activities are not what unifies all the parts of the brain, there are not grounds for claiming we persist as long as somewhere in that brain are the vehicles of such sensations.

Despite the charge of arbitrariness, perhaps one will still insist upon arguing that you would survive with *any* parts of your existing brain contributing to the production of conscious states, but would perish if your brain ceased to exist. I believe opposing intuitions can be elicited. Imagine that now and after a debilitating stroke that your pain is received and realized (in some sense) by the upper spine while pleasure has a cerebral basis. I assume that pondering this prospect does not eliminate our now having prudential concern for the post-stroke creature in pain that lacks the capacity for self-conscious reflection. It seems that the best explanation of why these would be your pains and pleasures is that the parts involved with producing them are caught up in the same life, i.e., they belong to the same animal.

So it appears that the two most prominent psychological criteria of identity (*self-conscious* psychological continuity or a brain-based *mere* consciousness) cannot deliver the intuitive response—that there is but one and the same thinker in the stroke case. What can do so is the animalist account which identifies human persons and human animals. Thus it makes sense to claim that the only person in the stories is the animal. As long as our animal can have pleasures and pains into the future, we have some prudential reason to obtain the former and avoid the latter.

Our attitudes of prudential concern provide additional reasons to reject Hudson's idea that the person consists of that which beneath the skin directly produces thought. Thus even if some sense can be made of the proper part of the animal being what directly produces or contributes to thought, it does not seem to be the entity for which we have prudential concern. If different parts of our animal would later contribute to painful sensations, we would be prudentially concerned with preventing these feelings.

If you share my attitudes to the individuals with maimed or reduced brains, then why maintain that we would have no prudential reason to care about one's animal if it received a new cerebrum in a thought experiment after the old was destroyed? And if you admit that you have some prudential concern for your animal with a new cerebrum, then you cannot also claim to have prudential concern for the being who would receive your cerebrum in a second thought experiment that involves a brain swap between you and your clone. This is not to deny that you can care about the recipient of your functioning cerebrum even though that person will not be you. I do not even have to endorse the claim that your commitment to the human animal with your original brain ought to be less than your concern for yourself with a new

upper brain. My point is just that you cannot have *prudential* concern for both since prudence is *self* concern. So I do not have to claim you are irrational to care about the other person/animal who receives your functioning cerebrum in the transplant swap scenario where you stay behind as an animal with a new upper brain. Such concern would be no more irrational than caring more about your spouse or your child than yourself. Nor do I have to claim, as my fellow animalist Eric Olson once did, that it is not identity that matters but psychological continuity (Olson, 1997).<sup>8</sup>

So once readers see that thinkers are best individuated by life processes, it becomes arbitrary to claim only part of the animal is a person. One can still, on the basis of unrestricted composition, claim that the person consists of only scattered thinking stages of organisms before and after the stroke-induced coma and injury. But the stages of the animal do not have the right causal connections. Such a 'person' is an artificial gerrymandered product of the principle of unrestricted composition, not an entity possessing either a natural biological or psychological unity between its stages. Calling such an entity a person would be as suspect as claiming the first half of my life and the second half of your life would compose a person. There is no immanent *mental* causation between the thoughts of the person who suffers the stroke-induced brain damage and temporary coma, and the later pains and pleasures. Likewise for the other scenarios discussed. If immanent causation is needed, then it would be in the form of life processes unifying sleeping and waking Socrates, the senile general and the young thief, the later stroke victim and the earlier rational self, the merely sentient newborn and the later reflective child, or the divided and then reunified mind studying for Parfit's physics exam. So we see that our prudential intuitions, our belief that we are persons if any entities are, and the maximality principle all serve to indicate that the human animal is the least arbitrary candidate for the persistence of the person in the above cases.

## 7.6 Harming the Mindless

Hudson makes the conditional claim that if the embryonic animal is a person, then it is presumptively wrong to abort it. He denies the antecedent while I affirm it. Hudson just said he would presuppose without argument that persons and (merely) sentient beings have moral status (2001, p. 151). That strikes me as uncontroversial, given that his perduring sentient being and person possess only conscious stages. I do not want to help myself to his assumption since there will be readers who deny that the mindless can be harmed. So it is not enough to show that there is such a distinction between the potential of animal stages to give rise to thinking animal stages while there is no such potential of sandal stages to give rise to later thinking stages. The appropriate immanent causation unifying stages and the developmental telos might seem not to be enough to establish the possibility of harming or benefiting something with moral status. A further argument will have to be made why mindless fetal animals have interests and can be immorally harmed while the sandal/Obama entity cannot be harmed while the sandal stages are present.

Before encountering Hudson's challenge, I had thought it was part of a sound argument that the mindless would be benefitted and harmed by being identical to a later being whose first mental experience could be good or bad for it. This stood in stark contrast to claims by McMahan (2002) that early abortion was not wrong because there would not be any psychological connections between the mindless and sentient. It seemed to me that if mindless X was identical to a later sentient Y, then if the first mental experiences of Y were good for it, then in virtue of the identity of X and Y, we should also say that it would be good for mindless X to develop and experience such experiences. And it could be a harm if its development was terminated and X never obtained the good experiences.

I did not worry about the sperm or egg, or their scattered composite because, like Marquis and Stone (Marquis, 2004; Stone, 1987), I was working with an ontology in which the latter did not exist and the first two went out of existence at fertilization. So potential mattered, but gametes and contraception did not provide a *reductio* of the view for as Marquis argued "Prior to conception there's no individual that's the same individual as the later human being that has, or would have had, a valuable life. . . . Individual identity doesn't survive fusion. . ." (Marquis, 2004, p. 33). But this is just false if we accept unrestricted composition. Marquis and Stone thus cannot claim only embryos possess a morally significant potentiality on the grounds that there are no such creatures that were once gametes and later thinkers. Nor does it help to argue as Stone does that the *human animal* never existed as a gamete or pair of gametes (Stone, 1987, p. 17). There are still objects that have the gametes and the later human animal as proper parts even if none of them is identical to the human animal.

The line of reasoning that I earlier embraced might now seem to be especially dubious when we are discussing an entity that had a sandal stage earlier in its history and sentient stages much later. While it is true that it is one and the same entity that was a sandal for a period and sentient for a later period, it does not seem that the worm with sandal and sentient stages would earlier have been harmed if the sentient stages were prevented from arising. So it seems that if the mindless can be benefitted or harmed, there necessarily must be more to account for this than the identity of the mindless with an entity that has a valuable future. We need an explanation for why when the sandal/Obama composite existed centuries ago in virtue of its sandal temporal parts being located at that time, it would not then have been bad for it that its later 21st century temporal parts were to have lost the election or to prematurely cease to be conscious.

Why should the mindless fetus have moral status and be capable of being harmed when it seems the ancient sandal/Obama person composite did not have moral status at the time that its temporal parts were mindless? I believe the answer starts with the recognition that mindless animals have *interests*: they have an interest in food and survival and flourishing of a sort. We can speak of things going well for mindless animals, their functioning as they should. They have a good. As creatures with a good, a later mental life can earlier be in their interest. That mental life will serve the animal's interests or telos. Just as other organ systems served to keep the organism alive and flourishing, so will its later cognitive systems. That is not true of

the sandal that is part of a sandal/Obama entity. The sandal's functioning properly does not prepare the way for the Obama stages to flourish. The sandal stages do not serve some end or telos (be it survival, reproduction, flourishing, knowing God) that Obama's stages do as well. One cannot speak of such footwear as having any interests or good, so it cannot have an interest in the later well-being of its Obama stages. Any mention of something being good for the sandal, like polish preserving its leather, is parasitical upon serving its wearer's ends which can be furthered by the polish extending the sandal's longevity. But we can speak of thinking stages of Obama being interested in their later thinking stages and the whole they compose. I suggest that we can likewise speak of the mindless human animal having an interest and benefiting from its later minded states. It does not matter that it cannot be interested i.e., self-consciously desire that those later interests be fulfilled. Nor can the merely conscious late fetus or infant. They lack self-conscious concern for their future. Yet their surviving into the future is in their interest, just as broccoli is in the interest of youngsters who are not interested in it. It would be good for them to realize that future. So it still makes sense to speak of a telos due to an innate development pattern (or design) and an interest in that telos of mindless human animals.

This interest in the welfare of the human animal is lacking in the sandal stages as well as the stages of the gametes. This claim is less evident in the latter. Admittedly, if any gamete has a function or interest, it would be that it gives rise to an organism—though it does not matter which one. But neither an individual sperm or egg, nor the scattered pair of gametes whose chromosomes have yet to fuse, possess a genetic nature that determines the particular capacities whose actualization can make a life good. Contrast that with the living stages of the perduring human animal. We can describe their nature as being such that they immanently produce the goods of later stages. They are parts of the same life, governed by the same genetic constitution. So we can speak of the stages of the animal having interests in the later stages of the animal in a way that we cannot speak of the temporal parts of the gametes serving the interests of the later temporal parts of *the* animal, even though gametes and the human animal are all proper parts of larger worms. Thus I agree with Jim Stone, though he's assuming a Three-Dimensional metaphysics, when he writes:

What the fetus *is* finally, is something that makes *itself* self-aware: that good is the fetus's good – this is its nature. Anything benefits from the good which it is its nature to make for itself. I submit that we have a prima facie duty to all creatures not to deprive them of the conscious goods which it is their nature to realize (Stone, 1987, p. 821).<sup>9</sup>

## Notes

1. Advocates include Bertrand Russell, David Lewis, Alfred Whitehead, W.V.O. Quine, Robert Nozick, David Armstrong, W. D. Broad, Rudolph Carnap, Nelson Goodman, J.J.C. Smart, Mark Heller, Michael Jubien, Yuri Balashov, Robin LePoidevin, Ted Sider and Katherine Hawley.



2. 'Part' in the definition isn't to be construed (circularly) as *temporal* part. The Four-Dimensionalist can construe 'part' as primitive, accept the existence of temporal and spatial parts, and even allow the same object to be both (Sider, 2008, p. 243).
3. See Jason Eberl (2005) for an account of active potential and its Aristotelian-Thomistic roots.
4. I'm assuming that animals go out of existence when life processes irreversibly cease rather than continue to persist as corpses. My reasoning has to do with the different ways that living organisms and corpses initially *assimilate* and then *retain* their parts (Hershenov, 2009). If the living and the dead were temporal parts of the same animal, it would possess (very non-natural kind-like) disjunctive mereological and persistence conditions.
5. Hudson admits that appealing to natural kinds is the best option for his rivals who want to identify persons and animals (2007, p. 233). But he thinks the notion of natural kind is "too obscure" to be effective.
6. Hudson operates on the methodological assumption that the reliance upon personal identity thought experiments ends in a stalemate (2007, p. 217). I find there to be more truth in his later "acknowledge(ment) that my dismissal of the fanciful thought experiment defense may have been uncharitable and over-hasty. . ." (2007, p. 233).
7. I'm not claiming these sectors produce thought, thus providing a piece of the answer to Hudson's question about which parts of the animal compose the person. I only mean that nerves send painful and pleasant signals to those parts of the brain which if knocked out would desensitize the person.
8. What I mean by *identity mattering* is that we must be identical to the future subject of our psychology if there's not to be some drop in prudence-like concern for that thinker. I'm not committed by this thesis to our caring prudentially about our later irreversibly comatose organism. But this thesis and my belief that the human person is identical to the human animal does commit me to caring about my animal's future psychology even if that thinking animal has a new brain and hence no psychological continuity to me now.
9. Thanks to Jason Eberl, Rose Hershenov, Stephen Napier, Adam Taylor, and an anonymous referee.

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## Chapter 8

# The Christian Hypothesis

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A Catholic approach to the abortion debates requires a certain paradoxical attitude that is challenging to maintain. On the one hand, revelation anchors us in a certainty about the sanctity of human life, about which compromise, relativization, or concession is impossible. On the other hand, Catholic anthropology says that even a person holding the diametrically opposite view on this question does not do so because he deliberately chooses something he considers evil. The doctrine of the Fall combines a sternly realistic recognition of sin with an amazingly optimistic anthropology. It does not say our appetites have been so perverted as to desire evil instead of good; it says we confuse a perfective good with an apparent good. St Thomas makes this point repeatedly in his book *On Evil*: “Evil is not the direct object of the will” (Aquinas, 1995, p. 135). “No one acts with evil as his goal” (1995, p. 154). “No one makes evil his object when performing an action” (1995, p. 145). These are three quotations from Dionysius, and when Thomas uses his own voice to assert the premise he says, “The act itself is not willed according as it is disordered, but according to something else, which while the will is seeking it, it incurs the foresaid deordination which it would not will” (1995, p. 30).

We begin this essay, therefore, with the Thomistic assumption that those who defend the right to choose abortion do not believe themselves to be defending an evil, and those who choose abortion do not do so because they believe the act is sinful. According to Catholic anthropology, our willing cannot be so distorted from its created shape that it would perversely desire evil instead of good. However, according to the same realistic anthropology, the will can suffer a disorder when it desires. We do not choose an act because it is sinful, yet we can choose sinfully. No creature chooses evil, not even the demons. Thomas writes, “Sin could not be in demons in the way that they would desire as good for themselves something evil” (1995, p. 461). So we cannot demonize our opponents in the abortion debates; they are defending a set of goods, like obeying an individual conscience, rights and autonomy and self-control, privacy and freedom and choice, the possibilities that science and technology provide man, etc. These are good things, it is

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true. However, their goodness can only be had if they are properly ordered, and not used toward disordered ends. Therefore, it seems to me that the fresh approach to the abortion question represented by this book consists of trying to set these goods inside a more complete hierarchy, and that will be the topic of this essay. The goods that attract us, and cannot fail to attract us—freedom, choice, autonomy, rights, etc.—must be placed within a larger hypothesis if these individual goods are to be properly ordered. The choice for abortion is a sinful choice because all the persons involved (mother, father, child, and the human community in which they live) miss their due perfection.

What is a human being's due perfection? In putting this question, we are asking that ethical and moral debates be directed by a theological hypothesis. The term "hypothesis" is offered in the way that St. Irenaeus meant it in his dispute with the gnostic heretics of the second century. This bishop of Lyon accused them of reading the Scriptures under a wrong "hypothesis." Fr. John Behr explains that in a literary context, hypothesis means the plot or outline of a drama; it is the thesis which "stands under" (*hypo*) all the elements in the story. Or its meaning can be seen in Aristotle, for whom "hypotheses are . . . the starting points or first principles (*arxai*) or demonstrations. The goal of health is the hypothesis for a doctor, who then deliberates on how it is to be attained . . ." (Behr, 2001, p. 32). So Irenaeus concluded that the heretics were like artists who had laid out their mosaic tiles under the wrong hypothesis. The tiles that were meant to make an image of a king turned out to make the image of a fox when they were laid out according to a false hypothesis. According to the hypothesis a doctor had for his patient, he would prescribe different diets and different treatments; and according to the hypothesis a moral philosopher has for a human being, he will prescribe different mores and different morals.

In the pages ahead we will suggest three characteristics of the theological hypothesis: human beings occupy space as material creatures, human beings occupy time and as a result are developing creatures, human beings' redemption occurs through the instrument of time. Created in the image of God (a statement as relevant to their bodily existence as their spiritual faculties), human beings are created with the purpose of developing into the likeness of God.

From his hopeful view of human nature, Thomas was led to the following conclusion, the words taken now from his *Summa Contra Gentiles*. "Sin cannot take place in the will without some sort of ignorance in the intellect, for we will nothing but the good whether true or apparent" (Aquinas, 1975, 92.6). In this essay I would like to explore two questions taken from his conclusion. First, about what is the intellect ignorant? If the sinful choosing of abortion cannot take place in the will without some sort of ignorance in the intellect, then from what ignorance does the intellect suffer? The second question is a practical one: how is the intellect purified? If one does not will a position according as it is disordered (i.e., because it is disordered), and yet sin nevertheless takes place because of an accompanying ignorance in the intellect, then how do we surmount that ignorance? How can we think clearly so that we could will truly? The intellect does not require additional information, it requires healing. More data alone will not cure our intellect, rather an ascetical therapeutic

is required. So the second part of this essay will turn to the ascetical fathers to learn from them the art of purifying the mind.

## 8.1 The Human Hypothesis

If the most prevalent excuse for abortion is to say the fetus is not yet human, the most prevalent reason for abortion is the desire to undo an action, to erase a state of affairs. When the unintended, the unexpected, the unplanned thing happens, we want a “do over,” as children say in their games, and since it is the woman who bears the effects, the right to cancel the consequences of an unintended act is therefore construed as the right of women to control their own lives. I propose that these two arguments—it’s not human yet, and we are able to erase the deed—come from an erring hypothesis of human existence. Here we hope to sketch the true hypothesis, or plot line, in which the goods of autonomy, conscience, freedom of choice, etc., should be organized if they are to be properly fitted toward the human life which they are supposed to serve and favor. Under what conditions do we exist?

### 8.1.1 We Are Material Creatures

The question about the underlying (*hypo*) plot line for humanity brings not only a Christian, but also a philosopher, to the question “Why is there something instead of nothing?” The theologian shares that question with the pre-Socratics, wishes that he could interest the modern secularist in it, and proposes an answer that philosophy suspected but could not confirm. Hugo Rahner, in his book *Man at Play*, supposes that the philosophers had inklings of an answer congruent with Christian revelation. Creation comes from a God at play, by which Rahner means something meaningful, but not necessary. “Everywhere we find [in creation myths] an intuitive feeling that the world was not created under some kind of constraint; . . . rather it was born of a wise liberty, of the gay spontaneity of God’s mind; in a word, it came from the hand of a child” (Rahner, 1972, p. 18). The myths were a way of asserting the metaphysical truth that “the creation of the world and of humankind, although a divinely meaningful act, was by no means a necessary one” (Rahner, 1972, p. 11). That there is something, instead of nothing, is due to a gratuitous goodness. But although the philosophers and myth-makers intuitively felt that creation was the act of a free sovereign, they had a harder time understanding the purpose for matter if that sovereign was Spirit, himself. Life in the body held little charm. They tended to see creation as being a “descent” into matter, which was simultaneously a departure from God, and could only be remedied by a repudiation of matter. The philosophers called the process *exitus* (the fall into matter) and *reditus* (the return to the realm of pure Ideas). The Christian theologian borrowed the philosopher’s terminology, but corrected it as he went along, as Pope Benedict XVI observes.

Christian thought has taken up the schema of *exitus* and *reditus*, but, in so doing, it distinguishes the two movements from one another. *Exitus* is not a fall from the infinite, the rupture of being and thus the cause of all the sorrow in the world. No, *exitus* is first and

foremost something thoroughly positive. It is the Creator's free act of creation. It is his positive will that the created order should exist as something good in relation to himself, from which a response of freedom and love can be given back to him. Non-divine being is not, therefore, something negative in itself but, on the contrary, the wholly positive fruit of the divine will (Benedict XVI, 2000, p. 32).

An action of grace, being gratuitous, has no cause but it has a reason. Why is there something rather than nothing? Not from a paucity, but from an abundance, an ecstatic *exitus*. *Ek* means out, and *stasis* means to stand; material creation happens when God shares being with something that is not-God, when God is beside himself in love. The love that flows between the three persons of the Trinity is what the Greek fathers call *perichoresis* (*peri*, around; *choresis*, dance), and it is extended in an overflow of generosity. Why did God create? Dante answers because it pleased God—it was a playful act.

Not to gain any good for Himself, which cannot be, but that His splendour, shining back, might say *Subsisto* – in His eternity, beyond time, beyond every other bound, as it pleased Him, the Eternal Love revealed Himself in new loves (Dante, Canto XXIX, quoted from Sayers (1962), p. 309).

The God who is Being is also Love and Goodness, and when these three attributes compound, other creatures get willed into existence. Dorothy Sayers writes,

Why are these different things? [Meaning, why do these different things exist?] In order that the divine splendor, shining back in innumerable facets from the face of the finite creation, should be able to stand up before its Creator and say, “look! this is me. I really exist. I am something. I am myself. *Subsisto*.” It can add nothing to the source from which it derives – God gets nothing out of it; but it has pleased Him that every creature – angel, man, beast, beetle, or buttercup – should be able, in its small way, to enjoy itself, to enjoy being a self of some sort, dependent on God and yet distinct from Him (Sayers, 1963, p. 32).

God's name, told to Moses at the burning bush, is “I Am.” When I Am shares his being with other beings, they cry out “Subsisto! I am, too.” We are, because the I Am shares *is-ing* with us—is the word any funnier than *be-ing*? And not only has God shared subsistence with creatures, he has also shared this power to create. God uses man and woman as instrumental agents for bringing what Chesterton calls “a fresh will” into the world. Pope Pius XI says the sacredness of marriage derives from many things, but not least among them is the fact that this is “the means of transmitting life, thus making the parents the ministers, as it were, of the Divine Omnipotence” (Pius XI, 1930, n. 80). A man and a woman make love and make a baby and presto: another being who can say Subsisto! The human race spreads forth like a tree with each twig emerging from inside the body of a human being who pre-existed him.<sup>1</sup>

Being a minister of the Divine Omnipotence is part of the job description of an *imago Dei*. In Hebrew thought, being in the image of God does not merely refer to the capacity of reason, it also involves the physical being of a person, and his or her rule over creation. Gerhard von Rad's *Commentary on Genesis* explains

*Selem* (image) means predominantly an actual plastic work, a duplicate, sometimes an idol; . . . The interpretations, therefore, are to be rejected which proceed from an anthropology strange to the Old Testament and one-sidedly limit God's image to man's spiritual

nature, relating it to man's "dignity," his "personality" or "ability for moral decision," etc. The marvel of man's bodily appearance is not at all to be expected from the realm of God's image. This was the original notion, and we have no reason to suppose that it completely gave way to a spiritualizing tendency. Therefore, one will do well to split the physical from the spiritual as little as possible: the whole man is created in God's image (von Rad, 1972, pp. 57–58).

It is a mistake, therefore, to look at the question of human identity only from the perspective of when the soul starts to exist in the body; the body itself is equally ingredient to the image of God. An example, von Rad goes on to say, would be times when an earthly king might set up an image of himself to indicate his claim to dominion in the provinces of his empire where he does not appear personally. Man and woman are images of the King of kings, and they are scattered widely across the earth to maintain and enforce God's dominion over the earth. Hans Walter Wolff gives another example:

When in the thirteenth century BC the Pharaoh Ramesses II had his image hewn out of rock at the mouth of the nahr el-keleb, on the Mediterranean north of Beirut, the image meant that he was the ruler of this area. Accordingly man is set in the midst of creation as God's statue. He is evidence that God is the Lord of creation; but as God's steward he also exerts his rule, fulfilling his task not in arbitrary despotism but as a responsible agent. His rule and his duty to rule are not autonomous; they are copies (Wolff, 1974, p. 160).

The sovereignty of the human being is expressed in Genesis by strong verbs. "The expressions for the exercise of this dominion are remarkably strong: *rada*, "tread, "trample" (e.g. the wine press); similarly *kabas*, "stamp." (von Rad, 1972, p. 60). "In this connexion it is to be noticed how strong are the expressions describing his lordship ('to trample on,' 'subdue'; 'to tread (grapes),' 'to rule over'). God set man in the word as the sign of his own sovereign authority, in order that man should uphold and enforce his—God's—claims as lord" (von Rad, 1962, p. 146). The Christian hypothesis, therefore, supports man and woman's dominion over the field that is cultivated, in the *polis* that is socially ordered, and in the laboratory where natural laws are discovered and harnessed. Having a God above does not weaken the power man has over nature below, it only places it in context.

However, it is equally understood that an image should be treated with the respect due its prototype. Murder concerns God. If a Jew in the first century were to knock down a statue of Caesar put up by the Roman soldiers to indicate Caesar now ruled the land of Israel, that Jew would be thought guilty of insurrection and treason against Caesar himself, whose image the statue was. Would not, then, by the same logic, the Roman soldier be guilty of insurrection and treason against Yahweh if he knocked down the Jew? And not only the Jew, but if one does violence against any person who is an image of the one who rules the heavens and the earth, one is doing violence against the one whose image that person is. If one gouged the statue of Caesar with a nail and disfigured it, one would be guilty of an act against the Emperor; and if a material *imago Dei* is marred, disfigured, violated, effaced, it is an act against God. Abortion is also an act of blasphemy.

Man and woman are kings and queens, yes, but they are also cosmic priests, and the royal powers are in the service of priestly powers. The dominion granted man

and woman over animal and environment is a dominion that comes from the Creator who gave them the priestly duty of blessing and sanctifying nature. The Christian hypothesis does not curtail human power, but it does insist on coupling that human power to its responsibility. Being a priest-king means that any authority over the chain of being below is assigned from the source of being at the head of the chain.

### ***8.1.2 We Are Homo Viator***

This leads us to a second truth about our human perfection. The human being is unique for being both soul and body, invisible and visible. We are spirits occupying space and time, bodies orientated to the spiritual. Gregory Nazianzus said God produced a being

endowed with both natures, the visible and invisible . . . . Thus in some way a new universe was born, small and great at one and the same time. God set this hybrid worshipper on earth to contemplate the visible world, and to be initiated into the invisible; to reign over earth's creatures, and to obey orders from on high (quoted from: Clement, 1996, p. 77).

No other creature is enrolled as simultaneous citizen in both realms, and as such men and women are *homo viator*: travelers, itinerants, pilgrims on a journey. We have a potential that is only actualized with our cooperation. Other beings are finished as soon as they are made: there is nothing else to add to a dog to make it fully canine, or an angel to make it fully angelic, but men and women are beings-on-the-way to their full humanity. The angel is fully itself upon creation because it is pure spirit; a pure substantial form does not develop in its created existence. Neither is there anything left for the angel to learn; as a spiritual intellect, the angel knows immediately and fully. By contrast, the human being does develop corporeally over time, and does develop a mind slowly, over time, by means of sense experience and mental reflection. The body developing in the womb is the sense organ through which soul will receive sensations from the world (this already beginning in the womb) and by which a personality is formed. Therefore the womb is not merely a preparatory stage. The human being is formed over a whole lifetime and there is no pre-human prelude before real human life begins. Ours is an existence in time that is targeted to eternity, and every experience goes into the person's final identity. A person is always in a constant state of becoming. A person is an accumulation.

From this vantage point, we see a whole human being only by seeing an entire lifespan. No decade, no year, no hour contains the whole human being, because the person is still in process. Every personal actuality is still mingled with an unfulfilled potentiality in such a way that the human being is not entirely finished before death, and even then is invited to fullness of life. We are unfinished in the womb, it is true, but we are unfinished at the grave, too. A human being's existence is constantly on the crest of a wave from potentiality to actuality. True, if we speak about physical growth alone, then a child reaches a final height at a certain age; but we are speaking about personhood, and there is no similar end to a person's potential. The human life is not shaped like a bell curve, with some maximum intelligence and strength at a



middle peak, surrounded by irrelevancy before and after; the human life is made to be shot off the edge of the chart into eternal beatitude.<sup>2</sup> It is therefore a false idea to look for a moment when this developing being becomes human: this developing being is *always* becoming more human.

It is a common argument in the defense of abortion to suppose there is a moment before the fetus becomes a person, but from the hypothesis that man is a *homo viator*, a citizen of time journeying toward a fulfillment that will finally occur in eternity, it is unreasonable to look for such a moment because there is a human-in-development at every point. “A person” is not something that enters into the body as suddenly and completely as Athena came out from the head of Zeus. A person is woven on a temporal warp and a spatial woof, and God uses time as a tool to chisel us into a work of art, viz, a deified person capable of participating in the perichoretic life that circulates between Father, Son and Holy Spirit. This is the reason for time according to the Christian hypothesis: to enable the hybrid citizen of the visible and invisible world to develop the capacity for eternal life. Romanian Orthodox theologian, Dumitru Staniloae, says,

Created beings could not have possessed eternity from the beginning, for this would have meant that they were eternal through their own nature; . . . They had to attain to eternity through an effort of their own, helped by divine grace. From this results the positive necessity of motion and time. Movement in time is thus used by the divine eternity in order to attract the created beings within itself (Staniloae, 1994, p. 155).

Movement in time is used by God. This movement in time begins in the womb, wherefrom beings are drawn across time by the divine eternity, attracted toward participation in the divine life. The same attraction that exerts itself at the tomb to draw new life from the grave, exerts itself in the womb to draw first life from non-being (Subsisto!).

### ***8.1.3 We Are Redeemed in Time***

Any honest observer must admit that along the way there will be missteps and wayward delays. Before we reach the beatitude for which we are being outfitted during this life, we will sometimes miss the mark. Such sins must be dealt with, true, but since we are creatures in time we cannot deal with them by reversing their effects. Once a state of affairs comes into existence, there is no reset button to press in order to return to an earlier state. The word “abort” means to stop the development of something, but, in fact, the person seeking an abortion seems to be seeking something more incredible: to also reverse an event. But this is impossible. A temporal state of affairs cannot be reversed, it can only be redeemed. The movie projector cannot be run backward and the spilled milk jump back into the glass on the countertop, the movement in time can only go forward under the stewardship of eternity. A pregnancy that is “unplanned,” as the saying goes, can be an occasion of grace; indeed, most graces in life are unexpected. An unplanned parenthood can be dealt with as an opportunity for an increase in the perfection of charity.

In the *Divine Comedy*, Dante and Virgil reach the summit of Mount Purgatory at the end of book two, after going through hell in book one. This summit is the Earthly Paradise from which man and woman would have entered the life of perfection, had sin not intervened. Here Dante uses the Greek myths to identify a human hope, and then perfect it. He places one of the five rivers of the Greek underworld at this threshold between paradise and the ascent to heaven. The river Lethe caused complete forgetfulness when drunk from, the word *lethe* meaning oblivion, forgetfulness, concealment. (It is interesting to note the relation of this river's name to the Greek word for "truth," *aletheia*, meaning "un-forgetfulness" or "un-concealment.") The ancient myth-makers knew that at the end of our lives a part of us will wish desperately to make a break with our past and go on without it. We cannot, but Dante evangelizes the situation by pairing Lethe with Eunoe as twin streams. This additional river is thought by some scholars to be a neologism by Dante, from *eu* (good) and *noe* (mind). (The reader should anticipate its relevance to *nous* in part two below.) So Dorothy Sayers describes the scene Dante is trying to draw. Drinking from the first river "destroys all memory of evil and sin with it; the second restores remembrance of the sin, but only as an historical fact and as the occasion of grace and blessedness" (Sayers, 1969, p. 60). A personal history is not forgotten, it is transfigured.

The innocence thus regained can never be exactly what it would have been if Man had not sinned. God wastes nothing – not even sin. The soul that has struggled and come through is enriched by its experiences, and Grace does not merely blot out the evil past but in the most literal sense "makes it good." The sin is not forgotten, either by God or by the soul: it is forgiven, and so made the occasion of a new and still more blessed relationship; Redeemed Man is a creature made more precious to his Creator than unfallen man could have been (Sayers, 1955, p. 68).

The flow of consequences cannot be reversed. Time, like an ever rolling stream, bears all its sons and daughters away, carrying the sum of our actions up to the throne of judgment. *Apocalypse* means to remove (*apo*) a covering (*kalyptein*), and on the day of judgment our *persona* (mask) will be unconcealed by the truth (*aletheia*). The Christian hypothesis of time and eternity suggests that consequences cannot be ignored, forgotten, and least of all discarded, especially when the consequence of an act is on its way to becoming a "fresh will" in the world. But consequences can be forgiven, redeemed, and made the occasion of a still more blessed relationship. Do we believe that? Stemming the practice of abortion would require a witness by Christians to grace as a current within the temporal stream of our lives, secretly placed there by the resurrection which made even the cross good.

In summary, we have tried to point out three facts about the Christian hypothesis under which we read human identity and progress: (i) a positive appreciation of material existence, (ii) a sense of a human being as a *homo viator* who accumulates a personhood, and (iii) an invitation to redeem, rather than ignore or reverse, sin's temporal consequences. Read material existence under a false hypothesis and one might conclude that being in the image of God only concerns a soul about whose time of appearance we can debate. Read temporal development under a false hypothesis and one might produce a philosophical image of a soul in a bottle, a bottle which

can be dashed in the womb so long as this is done before it is filled with that soul. Read redemption under a false hypothesis, and the historical consequences of an action are felt with such high anxiety that one ignores the moral whispers of conscience because of the desire to be rid of the consequence and go back to the way things were before. The Church has seen false hypotheses before, and each presents its unique challenge. Chesterton said the pagans went wrong for worshipping nature, but at least, he says, it was a worship of life.

[The] ancient sin was infinitely superior, immeasurably superior, to the modern sin. . . . It was at least on the side of Nature. It was at least on the side of Life. It has been left to the last Christians, or rather to the first Christians fully committed to blaspheming and denying Christianity, to invent a new kind of worship of Sex, which is not even a worship of Life. It has been left to the very latest Modernists to proclaim an erotic religion which at once exalts lust and forbids fertility. . . .(Chesterton, 1990, pp. 501–502).

If the goal of health were our hypothesis, then we would deliberate on how health is to be attained; if the goal of supernatural health is our hypothesis, then we deliberate on how glory is to be attained. A human being is not created for utilitarian purposes, and so should be neither aborted nor terminated for utilitarian reasons; man and woman are the only creatures on earth which God has willed for itself (*Gaudium et Spes* n. 24), they are playmates of God. God’s loving goodness shares being so there are other creatures to love—and we mean both so that there are other creatures whom God can love, and also that there are other creatures who are themselves capable of loving. Without knowing the omega of a person, we cannot understand the alpha; without the horizon of eternity, the days of this life receive exorbitant attention. To read the sin of abortion accurately, one needs to know the end for which a human being is made, and we have suggested a wider lens that sees the shared subsistence by God with each person to be the beginning of a material, developing, redemptive road to eternal beatitude in the resurrection.

## 8.2 Healing the Mind

It may seem odd to arrive at the resurrection in an article on abortion, but that is the lynchpin of the human hypothesis we are trying to tell. If we are ignorant about our resurrection to beatitude, then the will, which can only want a good, erroneously wants goods insufficient for its happiness. “What does not satisfy when we find it, was not the thing we were desiring” (Lewis, 1977, p. 163). One would evaluate childhood differently if one knew it led to adulthood; one would also evaluate these four score years of temporal (temporary) existence differently if one knew they led to eternal life. What would it mean to believe in the resurrection? Surely it would be different from believing that two plus two is four, or that Columbus sailed the ocean blue in 1492, or that water is made up of hydrogen and oxygen. I’m not suggesting that the resurrection is any less a fact than the subjects of those propositions, I am only suggesting that believing the promise of resurrection will require more of us than is required of us to believe those other facts. There is a cost to the subject

who believes. The resurrection is the sort of truth that, if it was believed, would make *everything* different: our experience of time and history and matter would be different; we would desire differently and perhaps higher things; our work, our play, our vocation would all look different because the temporal is different against the bright horizon of eternity than it is against the dark horizon of nothing more. Our understanding of a landscape is different after we have walked the perimeter to discover we are on an island, and our understanding of history will be different if we take its measure, too. All the facets of our life can be placed in a new coordination.

But how would we come to this belief? The philosopher Ludwig Wittgenstein, self-professed as an agnostic at one point, names the cost with surprising honesty and accuracy.

What inclines even me to believe in Christ's Resurrection? It is as though I play with the thought. — If he did not rise from the dead, then he decomposed in the grave like any other man. He is dead and decomposed. In that case he is a teacher like any other and can no longer help; and once more we are orphaned and alone. So we have to content ourselves with wisdom and speculation. . . . But if I am to be *really* saved, — what I need is certainty — not wisdom, dreams or speculation — and this certainty is faith. And faith is faith in what is needed by my heart, my soul, not my speculative intelligence. . . . Perhaps we can say: Only love can believe the Resurrection. Or: It is love that believes the Resurrection (Wittgenstein, 1980, p. 33e).

This philosopher moves us from speculative intelligence to the realm of the heart, where love must be trained. Being capacitated to see with this kind of sight is a process the Greek fathers called “purifying the *nous*.” What they meant by a healing of the mind involved not so much a liquidation of ignorance, but rather a therapeutic healing of the part of a person they called “the eye of the heart,” or “eye of the soul.” They made a distinction between *nous* and *dianoia*.

Intellect [is the] highest faculty in man, through which — provided it is purified — he knows God or the inner essences or principles of created things by means of direct apprehension or spiritual perception. Unlike the *dianoia* or reason from which it must be carefully distinguished, the intellect does not function by formulating abstract concepts and then arguing on this basis to a conclusion reached through deductive reasoning, but it understands divine truth by means of immediate experience, intuition or ‘simple cognition’ (the term used by Isaac the Syrian). The intellect dwells in the ‘depths of the soul’; it constitutes the innermost aspect of the heart (Glossary entry “*nous*”, *The Philokalia*, 1979, p. 362).

In Evagrius’ famous definition, prayer is the ascent of the *nous* to God,<sup>3</sup> but by this he does not mean our reasoning, logical mind ascending to dissect the philosophical idea of God in its discursion. Spidlik says he means the communion of two spirits.

As the pupil of the eye is, so to speak, the point of intersection between the two worlds, the outer and the inner, so — the Fathers thought — there must be in man a mysterious point through which God enters the human heart with all his riches. We know that for Plato, the *nous*, reason, is “that which is best in the soul,” “the soul’s pilot,” the faculty which is in contact with God. This tradition, corrected and Christianized, persists in the classic definition of prayer, an ascent of the *nous* (mind) to God (Spidlik, 1986, p. 104).

This mysterious point through which God can enter and illuminate has been variously named, as John Romanides observes when he points out that the Fathers' use of the term *nous* is different from what it was in Scripture.

We should point out that there is a difference in terminology between St. Paul and the Fathers. . . . When the Fathers use the word *nous*, the Apostle Paul uses the word spirit. . . . By some strange turn of events, what St. Paul meant by the human spirit later reappeared during the time of St. Makarios the Egyptian with the name *nous*, and only the words *logos* and *dianoia* continued to refer to man's rational ability. That is how the *nous* came to be identified with spirit, that is, with the heart, since according to St. Paul, the heart is the place of man's spirit (Romanides, 2008, pp. 19–20).

Summarizing all the collected meanings the word *nous* has carried, Metroplitan Hierotheos arrives at the most common: "eye of the soul."

Sometimes it is identified with the soul, sometimes it is an energy of the soul, the eye of the soul, sometimes the term suggests the essence of the soul, sometimes its energy, and sometimes it means the attentiveness which is subtler than mind. . . . We shall regard it as the eye of the soul. We shall take the term chiefly to mean the power of the soul as well as the purest part of the soul, which is the eye of the soul, in accord with the words of St. John of Damascus: "It does not have the *nous* as something distinct from itself, but as its purest part, for, as the eye is to the body, so is the *nous* to the soul (Hierotheos, 1994, pp. 125–126).

Beyond the speculative question, the ascetical fathers were interested in the practical question of how to purify this *nous* so that it functioned properly. An eye covered by a cataract will not see, no matter how much light floods the room, and an eye of the soul corrupted by sin will not see, no matter how much grace floods the person. The ascetical tradition is therefore an examination of the therapeutical methods for healing the *nous* so we become able to see anew, see properly, see things truly and unconcealed (*aletheia*). A "new mind" is required for this, a *meta-nous*. This is the basis for the Greek word we translate as "repentance." *Metanoia* means a change of mind, and is a compound of *noeo* (to perceive) with the preposition *meta*, which can mean "after" (meta-physics was Aristotle's chapter after his chapter on physics), but also can mean "beyond" (as in meta-morphosis). For our nation to repent over abortion would mean moving beyond our current mentality to a changed mind.

Borrowing terminology again from the philosophical schools, the ascetical fathers reflected on what hampers the *nous* from contact with God and the true perception of reality. They linked epistemology to asceticism: what we know is linked to our resistance to vice and the practice of virtue. We are so accustomed today to separate morality from knowledge that this is a startling claim, and our minds go immediately to examples of a scoundrel who is nevertheless a good chemist, or a glutton who is nevertheless a good sociologist. But even in these supposedly neutral cases, what one thinks is affected by whether one is courageous or cowardly, calm or irritable, humble or proud. We know that the affections play a role in cognitive activity, but we can take the point to a more profound level, still. Repentance cleanses, heals, and enlightens the eyes of reason. Isaac of Nineveh writes, "Our intellect is not brought into submission unless our body is subject to it. The intellect is not subject to God unless the free will is subject to reason" (Nineveh, 1984, p. 162). He

portrays a series of submissions—of body to intellect, of intellect to God, of will to reason—and suggests they are interrelated.

The ascetical fathers spoke of three faculties in a person. A human being is able to think: this is the intellective faculty. A human being can be moved to action by having his ire stirred up: this is the irascible faculty. And a person has appetites that generate desire: this is the concupiscible faculty. The three work correctly and harmoniously when the intellective faculty rules the other two by prudently imposing temperance, and when it, in turn, is ruled by God through his providential divine law. Maximus the Confessor describes their healthy operation this way: “The soul is moved reasonably when its concupiscible element is qualified by self-mastery, its irascible element cleaves to love and turns away from hate, and the rational element lives with God through prayer and spiritual contemplation” (Maximus, 1985, 4.15). In sin, though, the faculties miss their mark. “Misuse of the rational faculty is ignorance and folly, of the irascible and concupiscible faculty, hate and intemperance.” Maximus’ conclusion is that “nothing created and given existence by God is evil” (Maximus, 1985, 3.3), instead evil comes about when our faculties are misdirected. “Vice is the mistaken use of ideas from which follows the abuse of things” (Maximus, 1985, 2.17). As the whole of Christian tradition has insisted, evil has no positive existence of its own; it is an absence, a parasitic distortion, a deordination. So in the prologue to *Questions to Thalassius* he defines evil as “an irrational movement of the natural energies through a mistaken judgment to something other than their end” (Maximus, 1985, fn. 73, p. 91). Thomas is saying the same when he defines sin as “an act deprived of due order” (Aquinas, 1995, p. 45); and “a disordered act in nature, art, or morals” (1995, p. 50); and “a sickness or disorder in the soul” (1995, p. 253). He defines evil in the same vein, as the “the privation of order” (1995, p. 39), and “privation of a due perfection” (1995, p. 15). Evil is not something, it is the lack of something that should be. To take one of his examples, it is not evil that I cannot fly, because flight is not a perfection due to a human being; it is not evil that a bird cannot speak, because speech is not a perfection due to a bird; but a flightless bird and a mute person is an evil, a disorder. However, one would only know this if one knew what was the perfection that belonged to each creature, viz, that birds should fly and persons should speak.

How does it happen that the faculties move irrationally? Ultimately that is a spiritual question, i.e. it concerns a spirit’s free will. Satan seeks to draw human spirits into his willed rebellion, and is all too successful at it. The tempter stirs what this tradition calls the passions. “Passion is a movement of the soul contrary to nature” (Maximus, 1985, 2.16), says Maximus; it is a movement of the faculty toward a disordered end. It was Evagrius of Pontus, who provided a taxonomy of the passions based upon what he learned from the monks in the Egyptian desert. The seed of a passion is a demon’s disturbance in the mind called a *logismos*.

The *logismos* is not a ‘thought’ in the true sense of the word: it is a mental ‘image’ which arises in a person endowed with sensibility. This image appears not in the *nous*, the mind, but in the inferior part of the human cognitive faculty, the *dianoia*, where reasoning for and against something takes place. This image, meanwhile, proves attractive; it stirs the mind; a passionate movement then arises which incites the person to a secret decision against God’s

law, or at least to some sort of dialogue with this image, which presents itself as some sort of idol, and should instead be driven away (Spidlik, 1986, p. 239).

Evagrius identifies eight *logismoi*.

There are eight general and basic categories of thoughts in which are included every thought. First is that of gluttony, then impurity, avarice, sadness, anger, *acedia* [sloth], vainglory, and last of all, pride. It is not in our power to determine whether we are disturbed by these thoughts, but it is up to us to decide if they are to linger within us or not and whether or not they are to stir up our passions (Evagrius, 1981, p. 16–17).

The first three passions in Evagrius' list are distortions of our concupiscible faculty (gluttony, lust, avarice), the second three of our irascible faculty (sadness, anger, *acedia*), and the last two of our intellectual reason (vainglory, pride). Since the three faculties in a person are symbiotic, and work congruently and cooperatively, a clear intellect depends upon overcoming the irascible and concupiscible passions. Maximus says, "All passionate thoughts either excite the concupiscible, disturb the irascible, or darken the rational element of the soul. From this it comes about that the mind is hampered in its spiritual contemplation and in the flight of prayer" (Maximus, 1985, 3.20). The *nous* flits about like a hopping bird, from one temporal thing to another, and never ascends in prayer from which it could see itself and creation in the proper light. Asceticism, then, is a battle against the passions; or more properly, a battle to prevent the *logismos* from growing into a full blown passion from which it is difficult to be extracted. The word *askesis* means "discipline" or "training," of the type an athlete undergoes, and it was used specifically of athletes in preparation for a competition. The monks were "desert athletes," but even if I am not going to run the Boston Marathon like a professional athlete, a training discipline is incumbent upon me for basic good health.

It would appear, then, that we do not do nature naturally. The pun intended in that remark is another way of saying that our faculties are God-given, but can be misdirected. Evagrius spoke of three faculties; Thomas makes the same point using four faculties (reason, will, irascible, concupiscible) paired up with the four natural virtues (prudence, justice, fortitude, temperance).

Therefore in so far as the reason is deprived of its order to the true, there is the wound of ignorance; in so far as the will is deprived of its order to the good, there is the wound of malice; in so far as the irascible is deprived of its order to the arduous, there is the wound of weakness; and in so far as the concupiscible is deprived of its order to the delectable, moderated by reason, there is the wound of concupiscence (Aquinas, 1981, I-II, q 85, a 3).

Our nature doesn't function naturally. This means that we don't will naturally. The Greek fathers distinguished between a natural will and a gnomic will (from *gnome* which means willing in accordance with an opinion, or intention, or inclination). Andrew Louth explains its use in Maximus the Confessor.

Willing is, for Maximus, something that is rooted in the nature of rationality, something underlined in several definitions he cites from Clement of Alexandria: "Willing is a natural power, that desires what is natural. Willing is a natural desire that corresponds to the nature of the rational. . . ." But with fallen creatures, their own nature has become opaque to them, they no longer know what they want, and experience coercion in trying to love what cannot

give fulfillment. For in their fallen state, rational creatures are no longer aware of their true good, which is God. Various apparent goods attract them: they are confused, they need to deliberate and consider, and their way of willing shares in all this (Louth, 1997, p. 60–61).

Willing is a natural power that desires what is natural, except in fallen creatures who no longer know what they want. Fallen human beings therefore deliberate (*gnome*) with difficulty about whether to do the good, and the sixth ecumenical council said there was no gnostic will in Christ. He possessed both a divine will, and a human will, but they were perfectly aligned, and Christ did not have to deliberate whether to do the will of the Father.

This invites us to an ascetical understanding of natural law. Natural law chafes us when it conflicts our will. We must learn how to put our will in order because even though no one chooses sin, we often sin when we choose. In everyday language, “natural” is taken to mean “the way we find it lying there, without human fingerprints,” and so “natural law” is popularly understood to mean a law that lies in us at birth, unformed by human culture. So an argument against abortion that claims to be based upon natural law might be wrongly taken to mean that we will prove everyone feels a certain way about abortion. But we find they do not. The perspective changes, however, if we acknowledge the distortions caused by the passions, and that we do not do nature naturally, and our will must be repaired. We find this evident in a more complete definition of natural law, one that doesn’t suppose a separation of grace from nature, theology from natural morality.

All things are subject to Divine providence, Thomas says, and therefore “all things partake somewhat of the eternal law, in so far as, namely, from its being imprinted on them, they derive their respective inclinations to their proper acts and ends” (Aquinas, 1981, I–II, q. 91, a.2). In other words, divine providence imprints upon things in a way appropriate to the thing it imprints upon. “Now among all others, the rational creature is subject to Divine providence in the most excellent way” (I–II, q. 91, a. 2). The human being, being rational, is subject to Divine providence by partaking of a share of providence and by “being provident for itself and for others” (I–II, q. 91, a. 2). We conjoin our self-legislation with God’s legislation, our prudence with God’s prudence, our care for ourselves and animals and earth with God’s care for all his creatures. In other words, the rational creature “has a share of the Eternal Reason, whereby it has a natural inclination to its proper act and end: *and this participation of the eternal law in the rational creature is called the natural law*” [emphasis added] (I–II, q. 91, a. 2). To summarize, natural law is not a mood that pre-exists society’s influence, it is what occurs when Divine Reason imprints itself upon nature and the rational creature participates in it. “[T]he light of natural reason, whereby we discern what is good and what is evil, which is the function of the natural law, is nothing else than an imprint on us of the Divine Light. It is therefore evident that the natural law is nothing else than the rational creature’s participation of the eternal law” (I–II, q. 91, a. 2). Divine providence extends to all things, but we must note that there is a special meaning for providence in reference to intellectual and rational creatures, over and above its meaning for other creatures. So in *Summa Contra Gentiles* Thomas connects natural law and a given divine law.



It is apparent, next, that it was necessary for law to be divinely given to man. Just as the acts of irrational creatures are directed to God through a rational plan which pertains to their species, so are the acts of men directed by God inasmuch as they pertain to the individual. But the acts of irrational creatures are directed to God through natural inclination, which goes along with the nature of the species. Therefore, over and above this, something must be given to men whereby they may be directed in their own personal acts. And this we call law (Aquinas, 1975, Bk. III, Pt. 2, chapter 114.2).

Animals are directed by instinct, but rational man (and angels, too, I presume) has something over and above instinctual inclination; a rational creature receives laws speaking to its reason.

Furthermore, since law is nothing but a rational plan of operation, and since the rational plan of any kind of work is derived from the end, anyone capable of receiving the law receives it from him who shows the way to the end. Thus does the lower artisan depend on the architect, and the soldier on the leader of the army. But the rational creature attains his ultimate end in God, and from God, as we have seen. Therefore, it is appropriate for law to be given men by God (Aquinas, Bk., III, Pt. 2, ch 114.5).

Natural law does not mean law derived from the workings of nature, or from our own minds, or enacted apart from God, or even discovered deep within apart from social influence. Natural law is the law of God as it is found in nature, as it operates in nature, the law of the Uncreated One as found in Created Things, and because man is a rational being he can detect that natural law. Detecting it, he should obey it, but it is God's law he is obeying, not his own inclinations.

So long as I see the world through the cataracts of sin, I see the world falsely. If I look at my neighbor enviously, or at my neighbor's wife lustfully, or at his goods avariciously, I am seeing the cosmos in distortion. Likewise, the sinful choice to abort a being who has been given subsistence by God in order to develop its potential to become a child of God is a sin that occurs because of an ignorance which organizes its goods by a false hypothesis in the intellect. The sanctity of the person should outweigh the circumstances of the pregnancy, or the family situation, or the economic factors, or the utility of the moment. It is a matter of getting first principles first, as Chesterton regularly said

Now a child is the very sign and sacrament of personal freedom. He is a fresh free will added to the wills of the world; . . . He is also a much more beautiful, wonderful, amusing and astonishing thing than any of the stale stories or jingling jazz tunes turned out by the machines. When men no longer feel that he is so, they have lost the appreciation of primary things, and therefore all sense of proportion about the world. People who prefer the mechanical pleasures, to such a miracle, are jaded and enslaved. They are preferring the very dregs of life to the first fountains of life (Chesterton, 1990, p. 441).

The training of our faculties is a matter of recovering a proper sense of proportion about the world. Our concupiscible desire will not be satisfied if it is directed to anything short of eternal glory; if we are made irascible, it should not be at the inconvenience of a child, but at an unjust economy that makes a child inconvenient; and our intellect must be liberated from its vainglory if we are to be ministers of the divine omnipotence. To will correctly requires knowing what we want; to know

correctly what we want requires not letting the passions corrupt our faculties; and to keep the faculties free of the passions is the purpose of asceticism.

Asceticism is not masochism, nor disgust with matter, nor a pasty puritan fear of pleasure; it is a daily, disciplined conformation of a self to Christ. Asceticism is the discipline required to become an icon of Christ and make his image visible in our faces. Although this asceticism was perfected in the sands of the desert, it is born in the waters of the baptismal font, where the neophyte is joined to Christ, giving the little Christian a new mind through the Holy Spirit, a renewed mind, a mind set upon the Father's generous love as was Christ's own mind at every moment, a good mind: a *Eu-noe*. Purification of the *nous* through a life-long *metanoia* is simply the ascetical process of growing into greater conformity with Christ. Every saint who has undergone this purgation finds himself or herself increasingly filled with the compassion of Christ toward every creature that is, and every creature that is coming to be. John Climacus says on the final rung of the *Ladder of Divine Ascent* that "Love, by its nature, is a resemblance to God, insofar as this is humanly possible" (Climacus, 1982, p. 288). The question standing behind the abortion debate is a question about what kind of God stands behind the world. We have tried to say that the Christian plot-line operates with a divine character involved in it who is self-giving, creative, generous, forgiving, redeeming, and if we struggle to resemble this God, insofar as this is humanly possible, these traits will become our traits. Overcoming the passions was called the "first resurrection," to be followed by the second resurrection of the body after death. In the first resurrection, the soul is raised up from sin and vice and passions, to be given new life, and with this conversion of mind a purified *nous* grows closer to God and we find ourselves increasing in love—the sort of love that can believe the resurrection, as Wittgenstein said. It is God's concluding exclamation point on our declaration of Subsisto: "I am." "And you shall be forever!"

## Notes

1. This paragraph derives from Fagerberg, "On Liturgical Marriage," for the USCCB. Online at <http://www.nccbuscc.org/laity/marriage/Fagerberg.pdf>. The image of the tree is from C. S. Lewis. "[Human beings] look separate because you see them walking about separately. But then, we are so made that we can see only the present moment. If we could see the past, then of course it would look different. For there was a time when every man was part of his mother, and (earlier still) part of his father as well: and when they were part of his grandparents. So if you could see humanity spread out in time, as God sees it, it wouldn't look like a lot of separate things dotted about. It would look like one single growing thing – rather like a very complicated tree. Every individual would appear connected with every other. And not only that. Individuals aren't really separate from God any more than from one another. Every man, woman and child all over the world is feeling and breathing at this moment only because God, so to speak, is 'keeping him going.'" Mere Christianity, *The Complete C. S. Lewis Signature Classics* (San Francisco: HarperSanFrancisco, 2007), 146.
2. "[F]or Catholics it is a fundamental dogma of the Faith that all human beings, without any exception whatever, were specially made, were shaped and pointed like shining arrows, for the end of hitting the mark of Beatitude." Chesterton, "Is Humanism a Religion?," in *The Thing: Why I Am a Catholic, Collected Works*, vol. 3 (San Francisco: Ignatius Press, 1990), 149–150.

3. See “Chapters on Prayer,” #35, in *Evagrius Ponticus: The Praktikos & Chapters on Prayer*, ed. John Eudes Bamberger (Kalamazoo: Cistercian Publications, 1981), 60.

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# Chapter 9

## Fetal Interests, Fetal Persons, and Human Goods

Christopher Tollefsen

### 9.1 Introduction

The geography of the debate concerning practices destructive of the youngest members of the human species is by now rather well worked out. Of the questions to be answered, there is first the following: are you, the readers of this essay, and I, the author, and others substantially like us, essentially human beings, living biological organisms of the species *Homo sapiens*? Or are we some other kind of entity, a person, perhaps, or a mind, a brain, or a soul? This is a question of metaphysics.<sup>1</sup>

A further key issue on the landscape concerns whether the zygote and embryo are themselves human beings, trans-temporally identical to the later fetuses, infants, adolescents and adults they will develop into. Many philosophers have denied this, either because of the so-called “twinning” argument (Ford, 1988), or because the embryo is deemed in some other way lacking in the unity necessary to be an individual (van Inwagen, 1990; Smith and Brogaard, 2003). Such questions are, ultimately, of a biological nature, although metaphysical considerations enter into the discussion as well; but questions of ethics should be rigorously bracketed in addressing these issues (Tollefsen, 2009).

Beyond these two domains, however, the geography is largely dominated by ethical issues. At *some* point, surely, the embryo or fetus is a human being; at *that* point it becomes essential to ask whether the unborn human being is a subject of moral rights (as you and I are), whether he possesses full moral worth (as you and I do), and whether he should be accorded fundamental forms of moral respect (as should you and I be). More pointedly, is it morally imperative, at precisely that point at which the zygote or embryo or fetus is a human being, to avoid intentionally killing that being, and to provide the protection of the laws for that being?

Robert P. George and I have argued elsewhere that you and I and others substantially like us are indeed living individuals of a biological kind, *Homo sapiens* (George and Tollefsen, 2008). We have also argued that the one-celled zygote is

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a complete human being; that the cleavage of its single cell and division into a two celled organism does not bring about a change in either the kind or number of substances, and that, except in cases of twinning, the zygote is trans-temporally identical to the later multi-celled embryo and fetus that it will become, as well as the later infant, child, adolescent, adult, etc. I will not argue for the truth of these judgments here, but will instead concentrate on the ethical terrain. In particular, I will map out the four major domains of the ethical part of the map of the ethics of unborn life. My primary focus in this paper will then be on the two of those domains which are most notably hostile to a morally respectful treatment of unborn human life, viz., the Interest View, and the Person View; I shall contrast their demerits with what I shall argue are the merits of one of the two remaining positions, The Substantial Identity View; the comparative merits of that view over its rival, the Future of Value View, I leave for another time.<sup>2</sup>

## 9.2 Four Views

Let us assume that we are addressing the moral status of an embryo 2 or 3 weeks into her development. There is little question that the embryo is indeed a human being. I am concerned with the question of whether that embryo should be held to possess full moral worth—the kind of worth, roughly, that entitles its possessor to moral, and indeed legal, rights against intentional harm.<sup>3</sup>

### 9.2.1 *The Interest View*

According to the first view, this embryo is not so entitled, for the embryo at this stage has no interests. Possession of interests is, on this view, a necessary condition for welfare; and thus a necessary condition for the possession of rights, for rights protect an agent's welfare or well-being (not all interests, nor all interest-possessing beings, are protected by rights, however).

Such an account must address at least the following four concerns. It must: (1) say more about what an interest is; and (2) identify why it is that an embryo or fetus should not be considered to have interests. It must further (3) specify why the possession of interests is necessary, and, on some views, sufficient, for the existence of an entity's welfare; and (4) show why interest-generated forms of welfare are the only justifications for protective rights. In Section 9.3, I indicate the direction followed by defenders of the Interest View on each of these counts and criticize their approaches; however, I argue that modified versions of these claims are acceptable.

### 9.2.2 *The Person View*

According to the second view, the embryo is again not entitled to moral or legal rights because the embryo is not a person (Harris, 1999). Persons are, on this account, entities which possess some set of developed mental capacities, such as

the capacity for consciousness, self-consciousness, reasoning, self-motivated activity, and language, to use Mary Anne Warren's list (Warren, 1994). 'Person' is not, on this view, a metaphysical notion; the effort of person theorists is not, generally, to identify the substantial kind to which you and I belong, but rather to identify at what point we should be considered beings worthy of full moral status.

Person views must, notably, address at least the following two concerns: they must (1) identify grounds for thinking that their favored list of criteria is the correct one; and they must (2) identify why only developed capacities count, rather than counting, as a marker of personhood, the underlying capacity or capacities whose development through time eventually renders an individual capable of, e.g., consciousness or self-consciousness. Since the possession of that underlying capacity is presumably an essential property of any beings with that underlying capacity, consideration of the Person View leads naturally to the third view, the Substantial Identity view.

### ***9.2.3 The Substantial Identity View***

According to this view, individuals possess full moral status as a result of their being individuals of some particular substantial kind or other. In particular, individuals are entitled to full moral and legal rights if they are individuals of a rational kind, and thus possessed of a rational nature. Accordingly, since "human being" indicates a kind of being, individuals of which possess a rational nature, then any individual of this species is entitled to full moral worth. However, on the supposition that other kinds might also be rational kinds, the Substantial Identity View holds out the principled possibility that there exist non-human beings who also possess full moral status and deserve fundamental moral respect.

The Substantial Identity View must address the following questions: (1) What does it mean to say that a species, and individuals within that species, has a rational nature? Further (2) on what grounds do defenders of the Substantial Identity View hold that *all* members of a rational species have a rational nature, in the face of apparently obvious counter-examples? Additionally, (3) they must show that membership in a rational species is sufficient, and not merely necessary, for full moral worth, understood so as to preclude intentional killing. Finally, (4) they must address skepticism about the concept of a species; if species designations do not pick out, at an ontological level, genuine natural kinds, then the Substantial Identity View's dependence on the concept is problematic.

### ***9.2.4 The Future of Value Account***

According to a fourth view, the wrongness of killing is derivative from the wrongness of being killed, or dying, which in turn is a function of the amount or extent of valuable future lost by dying (Marquis, 1989). Since a fetus has, under most circumstances, an extensive future of value, killing that fetus is, again, under most circumstances, wrong.

The Future of Value (FOV) view has, I think, the following particularly difficult questions to address: (1) the FOV account seems to license treating different human beings differently as regards killing: those at the end of life, and those with little capacity for value in their life, seem not to have fundamental moral status; does this introduce arbitrary differences into the ethics of killing? Moreover, (2) the Future of Value account seems to hold the view that those human beings with fundamental moral status have the value that they do because of the value of their future experiences; the Future of Value account must show that this does not reduce those valuable entities which may not be killed to mere vessels for what is really valuable.

As mentioned above, in this paper, I do not address the Future of Value Account. Rather, I will examine whether the Interest, Person, and Substantial Identity Views can adequately address the questions I have raised. I will argue that only the Substantial Identity View provides an adequate account of moral status, and the wrongness of intentionally killing human beings.

### 9.3 The Interest View

Interest theorists such as Joel Feinberg and Bonnie Steinbock take the possession by some X of an interest I in O to amount to X's having a stake in O—a stake in O's happening, in X's coming to possess O, and so on (Feinberg, 1974; Steinbock, 1992, 2009). This, in turn, is possible only if O *matters to X*. As Steinbock notes, in responding to Tom Regan's criticism of this notion (Regan, 1976), it is true that we can distinguish something, O, being in X's interest, from X's taking an interest in O, but it is only in the latter sense that X has an interest in O. And this is the sense of interest of concern to Interest theorists. While good blood flow might be said to be in the interest of the heart, a heart has no interests, for no heart can take an interest in its blood flow—no heart considers itself to have a stake in that flow.

Steinbock identifies as both a necessary and sufficient condition for anything having interests in this sense that the thing in question be sentient. Thus embryos, to take an example raised by Steinbock, do not have interests, for “[w]ithout experiences of any kinds, embryos cannot have wants. Without wants, they cannot have a stake in anything. . .” (Steinbock, 2009, p. 430). Without being able to have a stake in anything, embryos have no welfare; and without a welfare, they have nothing for rights to protect; for welfare protection just is the function of rights.

Before criticizing this set of claims, it is worth noting that there are at least two directions that a theorist could take the notion of interests. First, a theorist could claim the morality of interests to be the only framework for assessing moral questions. Actions would be wrong insofar or to the extent that they violated an entity's interests. This would put wrongs done to animals and wrongs done to human beings on essentially the same sliding scale; and indeed, some wrongs to some animals would accordingly be graver than some similar wrongs to some human beings, such as those with less significant interests.

But second, a theorist could, as Jeff McMahan has, identify a two-tiered morality, one part of which was related to interests, and thus existed on a sliding scale, and one

part of which was indexed to “persons”—currently autonomous rational beings—and which was absolute (McMahan, 2002, 2005). On the first part of morality, the gravity of similar wrongs, such as killing, would slide with the degree to which the entity was capable of taking an interest; on the second part of morality, the gravity of similar wrongs would be more fixed: it is no more wrong intentionally to kill Einstein than to kill his driver.

McMahan’s view is even more complicated, for he identifies the relevant interests in the first part of morality as “time-relative” interests. An entity’s time-relative interests are greater to the extent that the entity is psychologically connected to its own future; thus, when “the prudential unity relations that would bind an individual to himself in the future world would be weak, death matters less *for that individual at that time*” (McMahan, 2002, p. 172). In this way, McMahan attempts to vindicate the “intuition” that it is worse for an adolescent to die than for an infant, for the latter’s prudential unity relations to her future are weaker than are the former’s.

Such epicycles aside, McMahan’s approach, as regards unborn human beings, remains an instance of the Interest View; early embryos and fetuses, since they are not sentient, have *no* interests; by way of the train of thought identified above, they thus have no welfare, and no moral rights; nor should they be given legal rights.

Recall the four burdens of proof on the Interest theorist. Such theorists must (1) identify what they mean by an “interest”; they must (2) identify why it is that non-sentient beings, and thus embryos and fetuses, should not be considered to have interests. They must (3) specify why the possession of interests is necessary and sufficient for the existence of an entity’s welfare; and (4) show why interest-generated forms of welfare are the only justifications for protective rights. As will become clear, these questions are inter-related, and are not often addressed in a piecemeal fashion by Interest theorists.

Consider the most obvious objection that could be raised to the Interest View, Regan’s version of which was mentioned above. While it is true that a rock does not have interests, it seems that a plant does. It is in the plant’s interest to be in the sun (usually), to receive adequate water, to be in nourishing soil, and so on. Don Marquis has also raised this kind of objection to Steinbock’s view (Marquis, 1994). But Steinbock denies that plants have interests of the sort that are connected to the notion of welfare:

From the fact that plants can flourish or wither, I do not think it follows that they have a welfare of their own. To say that a being has a welfare of its own suggests that one can act on its behalf, or for its sake. Clearly, one can do this for sentient beings, to whom it matters how their lives go. It does not matter to mere things, or to living non-sentient beings, like plants. For this reason, I do not think that they have a welfare or sake of their own. . . We may have reasons to make sure plants do not die, but the reasons do not refer to *their* welfare. In seeking to preserve them, we are not acting on their behalf (Steinbock, 2009, p. 430).

The structure of the dialectic here is worth noting. Recall that interests are both a necessary and sufficient condition for something’s having a welfare. Thus, if plants can be shown to have a welfare, then they must have interests as well, as Marquis argues. But if they do not have a welfare, they accordingly do *not* have interests, as



Steinbock argues. And plants do not have a welfare, on her account, because it is not the case that *we* can act for the sake of a plant itself.

But why should human action on behalf of a plant, or some other thing, be the mark of whether that thing has a welfare? Steinbock seems to me to be in the right ballpark in thinking that there is a relationship between agency and welfare, but confused in thinking that it is always *our* agency that matters. Rather, keeping in mind Aristotle's understanding of "good" as "that at which all things aim," it seems that of any entity with a welfare, it is true that that entity will, if all goes well for it, be able to act for the sake of that welfare.

It is important here to make an obvious qualification: across the range of all entities with a welfare—with a good at which those entities aim—"agency", "act", "aim," and indeed "good" are analogous, not univocal, terms. Thus, mature human beings aim at, and act for, their good when they deliberate and choose to make a trip to the doctor's office for the sake of their health; their carrying out of this plan manifests their agency. But dogs aim at and act for their good when they groom themselves, and thereby manifest canine agency, without those aims, acts, or agency being of precisely the same sort as human agency. Moreover, a host of biological processes—involving nutrition, respiration, circulation and, at a deeper level, a variety of cellular and molecular activities as well—that are going on within both the dog and the mature human being are also aimed at the good of the dog and the human respectively, without the aiming or acting or agency being *the same as* the aiming, acting, and agency of the dog when he grooms, or the human being, when she decides to go to the doctor's office.

Nevertheless, it seems reasonable to hold that the canine organism aims at its biological health, and acts for the sake of its health through the appropriate functioning of its organs, its tissues, its cells, and its sub-cellular parts. It is thus no error to say of an organism, for example, that it maintains its respiratory functions by means of its generating red blood cells, and by the work of those cells in delivering oxygen. (Steinbock thus seems correct in denying that a heart has interests; but an entity with a heart does, and it is in part by the heart's agency that such an entity's welfare is pursued; perhaps we could speak here of a derivative welfare that the heart has.) But, by this reckoning, a plant too has a good at which it aims and acts, again in analogous ways. The plant's roots seek water, its leaves seek the sun, and its cellular and sub-cellular parts pursue the plant's somewhat limited good by, e.g., seeking, by means of chlorophyll, to convert light into energy, and pursuing the task of reproduction.

It seems sufficient, then, in order to say of some entity that it has a welfare, that it have a good, or goods at which it in some sense aims and acts or can aim at or act for. This requires a second qualifying remark. All entities with a good are such that they can be deficient at, or prevented from, aiming at and pursuing their good. The relevant forms of deficiency vary: a dog which has lost its legs will be unable to groom; a dog with a genetic deficiency will be unable to develop its legs adequately; a moral agent of bad character will cheat on his wife; and a plant in bad soil will be prevented from obtaining water and nutrients. But an entity's inability at some time to pursue its good does not rule out the existence of a welfare for that entity. By contrast, a rock, Steinbock's favored example of comparison with plants and embryos, in no sense acts, and in no sense has a welfare. It is not *prevented* from

acting for the sake of its welfare; it simply does not have one. I will return to the question of the embryo shortly.

On Steinbock's account, the existence of a welfare is sufficient for the existence of interests. But, we have now seen, there are good reasons for thinking that any living thing has a welfare—a good at which it in some sense aims. Indeed, it seems that one of the main ways in which we identify some convergence of matter and energy as a particular living thing is precisely by our ability to see it as the subject of a certain (analogically understood) kind of agency. Thus any living thing has interests in the sense that is connected to the concept of a welfare. The upshot of this, then, is that we are enabled to see the truth, but also the error, in Steinbock's claim that only beings that *take* an interest in something *have* interests that are connected to welfare. It is not necessary, in order for an entity to have interests, that it take an interest in something in a sense univocal to the sense in which I am currently taking an interest in the completion of this paper; but, in the analogous ways in which all entities with a welfare act for the sake of that welfare, all such entities may be said to take an interest in that welfare.<sup>4</sup>

Assessing Steinbock's response to the first question for the Interest theorist, regarding the nature of interests, brings us much of the way towards an assessment of her claims regarding the connection between sentience and interests. Those claims are, it should be clear, overstated, or, perhaps, misstated: the connection is not between sentience and interest/welfare, but between life and interest/welfare. Thus, the question whether zygotes and embryos have a welfare is to be settled not by reflection on whether they are sentient, but on whether they are indeed individual living organisms, rather than mere aggregates of human cells.

*This* question—the question about the ontological status of the zygote and embryo—is, in fact, not easily detached from questions about whether the zygote or embryo acts for, or aims at, its good. Consider, for example, the behavior of the embryo in the very first moments following penetration of the ovum by the sperm. There is immediately a radical change in the operation of what is often, misleadingly, called the fertilized egg. The *zona pellucida*, a glycoprotein shell surrounding the ovum, immediately undergoes a zona reaction, the first of two transformations that will render it impenetrable by further sperm; polyspermy would result at a minimum in grave harm to the developing organism and possibly to its demise.<sup>5</sup> In other words, the zona ceases to act as the permeable boundary of a gametic cell engaged in the process of reproduction and begins to act as the impermeable boundary of an individual whose biological welfare is now distinct from that of the mother (or father).

There are many additional reasons to consider the zygote an individual member of the species *Homo sapiens*; I have rehearsed a number of them elsewhere (George and Tollefsen, 2008; Tollefsen, 2009). But the point to note in the previous paragraph is that the embryo's existence as an individual organism is tied up with its being a something with a discernible good for the sake of which *it* acts. The embryo thus has a welfare; and the embryo thus rightly can be said to have interests, even though it does not “take” an interest in a cognitively directed way.

Is possession of interests both necessary and sufficient for the possession of a welfare? I believe the claim that a being's possessing welfare is sufficient for its possessing interests is true, provided that welfare is understood as described above:

as the good toward which a living being is oriented in its agency. A being with such a welfare has an interest in that good; thus, sun is in the plant's interest even though it does not apprehend that interest.

Is a welfare necessary for a being's having interests? Perhaps not much turns on the question, but consider a famous painting such as the *Last Supper*. Is there a good for this painting? Given the analogical nature of good, I suspect there is: a certain kind of light, and certain kinds of care, are good for the painting as a painting. But the painting does not have a welfare on the account above, for it is not the case that the *Last Supper* manifests any agency for its good as a painting. If, then, having interests is linked to welfare specifically, then it has no interests; but if, instead, interests were linked merely to the existence of a good, then we could say that it was in the painting's interest to be treated in the right sort of ways. However, here it seems reasonable to accept some of Steinbock's earlier claims as applying: the painting's good *as a painting* is so clearly able to be understood only in terms of our own—it is because of our purposes that the painting has a good—that the location of the interest seems to be in the being with agency, viz., in us. So something's having a welfare is both necessary and sufficient for that thing's having interests; but in some cases, an entity can be said to have a good, even though, because there is no agency for that good on the part of the entity, it would not be right to say that it has a welfare. Such goods are, it seems to me, to be understood in a highly anthropocentric way, as the goods of living beings need not be.

Finally, what of the idea that interest-generated forms of welfare are the only justifications for protective rights? It should be noted that this claim need not be accepted by all Interest theorists; McMahan holds, for example, that the rights of persons are linked to their autonomy, and not to their interests. But, if the bi-conditional link between interest and welfare is accepted, and welfare is understood as I have argued it should be, as the good of a living being, then I believe that having interests is necessary but not sufficient for having rights. The explanation of this claim is as follows.

There are many views about what it means to have "a right." Following Raz, however, I hold that a person has a right if and only if a different person has a duty grounded in some "aspect of the well-being" of the right holder (Raz, 1986, p. 180). Such an account seems plausible, for it does not leave agents with merely two term rights for the satisfaction of which no one is responsible; nor does it leave rights as foundational and unexplainable properties (a view that seems to have been the target of Alasdair MacIntyre's famous claim that rights are like witches (MacIntyre, 1982)). We could understand Raz to be saying that the foundation for rights claims is in the demands that an agent's, or group of agents', or all agents', *welfare needs* make on some agent or agents. And it is impossible to understand the notion of such a welfare need without reference to the entity's good, and hence interests.<sup>6</sup>

But here we should notice a shift that has crept into my understanding of interests. What interests an entity has are based on its welfare, which is the good the entity does or can act for the sake of. This is an objective understanding of good and welfare which in turn affects the understanding of interests: a entity's interests are not *simply* what it happens to be interested *in*, or what it happens to desire, but

its genuine good, insofar as it is in some (typically species specific) way or other oriented towards that good. Accordingly, a true account of an entity's rights must be predicated on a true account of that entity's good. But that account could just as well be articulated in terms of the entity's genuine interests.

Not, however, *any* entity's interests, no matter how genuine. While plants, and, of course, mice, cats, and dogs, have interests, I do not hold that they have rights. On the other hand, you, the reader of this text, and I, the author, do have rights. On what is the difference founded?

The answer is that you and I share, but dogs and cats do not, either with one another or with us, a *common* good, that is, a set of goods, perfective of us as human beings, which thus provide reasons for our action for their sake, and which are not agent relative, but are rather agent neutral—fully held in common by all human agents. The good of human life, towards which human beings are manifestly disposed in action, is *one* good, although it is instantiated across multiple agents. In consequence, you are capable of pursuing the good of life in my person, and I in yours.<sup>7</sup>

The agent neutrality of the good is essential for the account of rights given earlier, for that account requires that if you have a right against me, then the good in your person must be capable of grounding a reason *for me*, whether to protect or promote your good, or, more minimally, to refrain from harming or destroying the good in your person. But here we see a way in which Steinbock was basically on track in her discussion of our relation to the good of plants: because plants do not share a common good with us, *their* good does not itself provide a reason for us for action. It is only when their good is seen as somehow important to us from *our* standpoint as good seeking beings that the plant's good can be integrated into our structure of reason, and give us reason for action on its (though ultimately *our*) behalf.

A version of the Interest View is correct, then: rights are protective of interests, which reflect the welfare of beings who share a common good with one another such that individuals of the relevant sort can act for the sake of the welfare of other individuals of that sort.

What is the relevant kind of being? Only *rational* beings can share a common good in the sense just discussed: individuals whose agency is exclusively determined by subrational motives, such as instincts or desires, each have their own good, to which their nature orients them; and, to the extent that their nature is common to other con-specifics, they have a common good *in a sense*. But the good of life in and for Rex does not seem to be a reason that motivates Rover, even if Rover acts in such a way as to benefit Rex, e.g., by pulling him out of raging waters.

By contrast, when Ray pulls Roger out of the water, he can, in so doing, act precisely for the sake of a reason common to both agents, for he can act for the sake of Roger's life, a good which is clearly also a reason for Roger. Ray and Roger operate, in a way that Rex and Rover do not, within a shared space of reasons, a privilege available only to rational agents. Further, precisely because Roger's good is now a good for Ray when Ray pulls Roger out, success in saving Roger's life is a benefit to Ray: the good is common not just in providing a shared reason, but in providing shared benefit as well.

If the account of Rex and Rover, above, is correct, then it likewise follows that Ray and Rover, like Rex and Rover, also cannot operate within a shared space of reasons, for Rover's lack of a common good with Rex results from Rover's inability to act for reasons at all: Rover operates in accordance with instinct, not intellectually perceived good, and there is thus no common good for the sake of which both he and Ray can act. Thus, I hold that Steinbock was incorrect in thinking that human beings can act solely for the sake of the welfare of non-human animals; as is the case in our relationship to plants, we do not share a common good with animals. Our action for their good thus needs to be integrated into the set of *our* fundamental reasons for action.

We are thus led, by means of this discussion of the Interest View, to the dialectical engagement of the Person View with the Substantial Identity View; one might hold, for example, that the common good that made the possession of rights possible was available only to *persons* in the sense designated by thinkers such as Warren and Tooley: beings who right now possess the active capacities for reason, self-consciousness, and so on. Or, one could hold that all individuals of a rational *kind* or *species* were such as to share a common good; demands of this good(s) could thus generate rights claims.

Before turning to this debate, I should identify a way in which I may seem to have somewhat subverted the ordinary structure of the issue. Earlier in this paper, I identified the issue separating the various positions as concerned in part with the question of full moral status. So framed, the debate invites questions such as the following: what properties are necessary for full moral status, and do embryos and fetuses possess those properties? But I now may seem to have bypassed that question, going from a discussion of goods, welfares, and interests, to a discussion of the conditions necessary for the possession of rights, without explicitly asking what properties were necessary for a being to *deserve* rights, or *possess* full moral status.

However, I hold that the discussion so far can be seen as dealing with *precisely* that issue: a being with full moral status possesses fundamental rights, and something can possess such rights only if it has such status. But I have identified the following as both necessary and sufficient for the attribution of rights: that the beings to which the rights are attributed share a common good, a status for which a shared rational nature is in turn both a necessary and, I will argue, a sufficient condition. A shared rational nature will thus be shown to be necessary and sufficient for full moral status.

## 9.4 Persons and Substances in a Rational Nature

The question, then, is this: what does it mean for two entities to share a rational nature, to both be individuals in or of a rational kind? Is it necessary, for example, that such entities have occurrent, or roughly occurrent abilities to exercise the powers of rationality? Is it, in other words, necessary that the entities be "persons" in the sense popular among contemporary philosophers?<sup>8</sup> Or is it sufficient that the entities be individuals of kinds whose members ordinarily develop to the point of being able to exercise such capacities?

One could read “personist” thinkers such as Warren and Tooley as holding the former of these two views, according to which only persons in the modern sense are part of a full moral community (Warren, 1994; Tooley, 1972). But there is another aspect of Warren and Tooley’s positions worth noting. Their ultimate justification for the claim that entities must be persons in order to have rights is similar to the reason that Steinbock believes entities must be sentient to have interests. For on their view, some of the properties of personhood make possible the existence of desires, satisfaction of which constitutes the foundation of axiological deliberation. That is, just as interests—what an entity takes an interest in—plays the fundamental value role in Steinbock’s work, so in Tooley and Warren *desire* plays the fundamental value role.<sup>9</sup> And all, but not only, persons can be known to have desires. However, since the desires of rational, self-conscious beings are more significant, are more likely to hold together in sustained ways, and are more likely to include desires for autonomy, the desires of persons are more significant, other things being equal, than are the desires of sub-human animals. So personhood designates a set of conditions, including sentience, that are necessary for any moral status, and a further set of conditions, including rationality and self-consciousness, that are sufficient for *full* moral status. Again, following my earlier claims, we could say that personhood, in the contemporary sense, is necessary and sufficient for being part of the sort of moral community in which there are basic rights, full moral status, and fundamental forms of moral respect.

It is this second claim that interests me here: the claim that occurrent “personal” mental states are necessary for possessing a shared good with other persons, which, as I have argued, is a condition both necessary and sufficient for the attribution of rights and, for that matter, moral status. Against this, I hold that it is both necessary and sufficient that one is a co-member of a species with a rational nature in order to be a right bearer and a possessor of fundamental moral status.

The question, then, is this: is it necessary, in order to act for the sake of the good in another, for the other’s own sake and not merely instrumentally to one’s own good, that the other have actualized her capacity for rational thought? I will approach this question in two ways, first addressing it at the level of practice, and then at the level of metaphysics. I will then address the apparent arbitrariness of the Person View.

### ***9.4.1 The Practical Argument***

It is sometimes held, with regard to patients in a persistent vegetative state (PVS), that because they are no longer capable of pursuing human goods, they cannot be subjects of benefit by the action of other human agents (O’Rourke, 2008). Yet such claims seem falsified by reflecting on the experience of their caregivers: those caregivers can imagine futures in which their charges are ignored, abandoned, mocked, or starved, and in those futures they see the absence of the goods of sociality, perhaps of aesthetic experience and play, and of life. By contrast, those goods all seem available as generating other options for action, on the part of the caregiver, but for the sake of the patient. So the caretaker can consider preserving the patient’s life in a

loving way, in an attractive environment, surrounded by loved ones, in an atmosphere of at least some joy and laughter. An active ability to exercise the powers of reason on the part of the beneficiary does not seem necessary here for the caregiver to recognize the attractiveness of this possible future.

Similarly, pregnant mothers can readily imagine futures in which their fetuses are unloved, unprepared for, and done violence to; and in all such cases, they can recognize a deficiency of goods *for* the fetus, not just for themselves, and act to ensure that their unborn children are *not* deficient in respect of those goods. The active ability to exercise the powers of reason on the part of the fetus again does not seem necessary for action for a shared good in the person of the fetus.

Defenders of the personist view are likely, at this juncture, to argue that the treatment of at least fetuses and embryos in this case is entirely anticipatory: that the goods sought for the unborn are not goods now for them, but only will be goods for them later. Such claims are often made, for example, in explaining why it is not impermissible to abort a fetus, but is wrong to take drugs or alcohol that will cause developmental disabilities for that fetus. And on the part of patients in a PVS, they are likely to argue that person-oriented treatment is entirely symbolic.

The first set of claims does not seem fully capable of explaining all action taken for the sake of the fetus, however. For example, mothers (and fathers) can care for their in-utero fetus in a loving way even when they know that their child is afflicted with a disease that will lead to death shortly before or shortly after birth. Moreover, if asked to identify when their particularly parental form of friendship with their child began, many parents will identify a time in utero, perhaps even the moment they first heard they were expecting, as the initiation of their relationship to their child. By contrast, suppose that right now I do not have friends, but am preparing in various ways for the possibility—moving to a more populated place, working on my personal grooming, and developing virtuous habits. These preparations are truly only anticipatory: they do not themselves begin any friendship, and when I do make friends, I will date the beginning of that good in my life from the time of the friend's first presence, not the time of what was done in advance.

Similarly, parents, siblings and spouses often see themselves as *maintaining* a previously existing relationship with the PVS patient, not simply *honoring*, in a symbolic way, a relationship that has in fact ended. Putting flowers on a gravestone is likely to be seen as a symbolic act done in remembrance; bringing flowers, perhaps of a favorite kind, to the room of a patient in a PVS is likely to be seen as a loving, not a remembering, act.

Here again, however, I want to hold that there is *something* to the claim made by the Person theorist. What makes possible our treatment of the fetus, or the PVS patient in these good oriented ways? In part, our understanding of what goods we can *now* pursue with our not yet or no longer actively rational con-specifics is made possible by our anticipatory understanding of what goods will be available for our mutual pursuit in the future (or, in the case of PVS patients, by an analogous but backward looking understanding). We recognize the possibility of future (or past) friendships, future (or past) shared action for the sake of life, knowledge, or other

goods, and this shapes our awareness of what possibilities are open to us now with our unborn children or our dying grandparents. Our relationship to such human beings is shaped by a horizon of shared goods that extends beyond the present moment. But this is, primarily, an epistemic point concerning our *understanding* of shared goods.

The upshot of all this is that the unborn and the no-longer cognitively capable can be integrated in our space of shared goods, and hence reasons for action, without their needing to be able to exercise cognitive capacities occurrently, and without that integration being merely anticipatory or symbolic.

### 9.4.2 *The Metaphysical Argument*

The previous argument proceeded by reflecting on human practice and identifying the ways in which a pursuit of shared goods for the sake of not yet, or no longer cognitively capacitated human beings was possible. The argument concluded with what I consider an epistemological claim: that in part our awareness of the pursuit of shared goods with such humans is made possible by reflecting in an anticipatory way on possibilities to come, or in the past.

In this section, I lay out the metaphysics of such a claim, i.e., the claim that all members of a rational species are part of a community made possible by a shared common good. In the next, I turn to the problem of arbitrariness in the Person view. Finally, at the end of this section, I raise three objections, two of which were originally flagged in Section 9.2.3: (1) how can the picture given here accommodate what seem to be counterexamples to the claim that all individuals of the species *Homo sapiens* have a rational nature; and (2) *is there* really such a species? A third arises naturally from the account I have defended so far: (3) is there not something massively suspect about reliance on natural teleology as I have in my account of the welfare and interests of living things? I cannot hope adequately to address these three issues in this paper, but I will briefly indicate the directions I believe reasonable answers could take.

The very Aristotelian starting point of my arguments in this paper was the claim that the good is that at which all things aim, and the subsequent interpretation of that claim as being primarily about living things. Each living thing has a good or goods, at which it aims in some sense; I stressed the analogous nature of this “aiming” and all other attributions of agency.

What is it in fact that determines what is to be the good of any particular living thing? A simple answer is: the nature of that thing determines, and is mutually determined by, that thing’s good (Lee, 2001, 2009). Across the animal kingdom we can identify common generalities: animals pursue their lives, they attempt to reproduce, many exist in some form of animal community. But for particular kinds of animal, the shape that these “goods” take is determined by their nature, as is the mode of apprehension of the good. Thus, some animals, such as bees, pursue highly complex and even social forms of behavior more or less from the beginning of their lives, without instruction. Other animals, such as dolphins, require something like



instruction into the way of life of their kind, although they are clearly also well disposed to that form of life (MacIntyre, 1999).

Human beings are unique among the animals we know in that they may pursue their good in a way that is dependent upon their having cognized that good as giving them reasons for action. With other adherents of the so-called “New Natural Law” theory, I do not think that this apprehension is based on an inference from nature; rather, practical reason apprehends certain basic forms of goodness in an intellectual act that is of a different kind from the acts of theoretical reason.<sup>10</sup>

Nevertheless, *what* is, *in fact* able to be apprehended as good has ontological underpinnings in human nature. For a being’s nature just is a kind of physical realization of a variety of potentialities, the fulfillment of which would be that being’s good. Were human beings not to have potentialities for, and a directedness toward, the goods of life, knowledge, aesthetic experience, play, and friendship, to name a few, these could not, metaphysically, be goods for human beings. The notions of nature and good thus cannot be detached from one another in humans, any more than they can be in sub-human animals, even though the good is not known, in the first place, by theoretical reflection on nature (rather, our nature is known in large part by reflection on our goods, for which our nature must provide adequate potentialities).

Now, I am not here asking how the goods are known to be shared by humans who are not yet capable of exercising their rational capacities; I addressed that issue to some extent in the previous section. Rather, here I am asking how it can be the case that the goods which mature human agents recognize, deliberate in regard to, and act on behalf of, are shared with agents who are not yet capable of such recognition, deliberation, and action. And the answer is that if those beings share a rational nature with us, then that is only because those beings are a physical realization of potentialities for precisely *those* goods, and no other. For if those beings were not such a realization, or if they were a physical realization of potentialities toward some *other* set of goods, then those beings would not be *human* beings, and their entrance into that community *with us* would involve a change of species, a substantial change.

Thus, from the moment of shared humanity, living beings of our species are, by that fact, sharers with us of a common set of goods, and hence a common good. But *that* condition is precisely what I earlier identified as necessary and sufficient for possession of the full moral status that accompanies basic human rights and fundamental forms of moral respect; necessary, because absent such as shared nature there would be no shared good; sufficient because having such a nature just is having a good that is common to other individuals with the same nature, a good which can thus make the sorts of demands well characterized by attributions of fundamental moral rights.

### 9.4.3 Arbitrariness of the Person View

The Substantial Identity View draws the following correlation between fundamental moral worth or moral status and basic human rights, on the one hand, and human nature, on the other: although some non-basic rights depend upon some achievement

or status of the right possessor, as the right to vote depends upon achieved age and the status of citizenship, our most basic and fundamental rights—the ones necessary for the possession of any other rights—depend on what we most fundamentally and essentially are. The previous sections have articulated a long argument for that view: that beings that share a rational nature share a common good and thus can make the sorts of moral claims on one another that generate basic rights, such as the right to life.

The symmetry here is not just neat or pleasing; it is not, that is to say, merely academic. Beings who consider themselves to have fundamental moral worth, and to be owed the forms of respect well characterized by the attribution of basic rights should, as a matter of fairness, take great care to ensure that they acknowledge that same worth, and respect those same basic rights, in all other beings that can reasonably be held to possess them. But this obligation in fairness is contravened whenever an agent arbitrarily denies worth, status, and rights to other beings who can make a plausible claim to possess them. And this, it has been often pointed out, is precisely what the Person View does.<sup>11</sup>

The Person View's arbitrariness is multiple. First, rather than focus on what essentially differentiates some beings from others—their nature—the Person View focuses on accidental properties of such beings: the degree to which they have developed a set of capacities that are possessed as well by other beings of the same kind. Second, because the development of such capacities is always a matter of degree, the Person theorist must either specify a threshold of development above which all individuals are to be treated equally; or it must acknowledge the rationality of gradations of “respect” in accordance with gradations of development. The latter course requires an abandonment of any semblance of equality of persons; the former requires, again, an arbitrary choice of one threshold rather than another. Finally, because, ultimately, rationality is a complex notion, capable of being analyzed into a variety of sub concepts, the Person theorist must arbitrarily settle upon a list of those features of developed rationality that she thinks are of most significance for “personhood.” This fact explains why the criteria of personhood are generally not shared across any two lists of features, such as Tooley's and Warren's. As Alan Donagan notes, this “is the nature of our contemporary concept of personhood: it is a do-it-yourself kit for constructing a ‘moral community’ to your own taste” (Donagan, 1977, p. 170). The Person View is thus both morally and philosophically flawed.<sup>12</sup>

## 9.5 Challenges and Directions for the Future

To recapitulate: all beings that share a nature with you and me share an orientation towards a shared set of goods; and this common orientation sets the boundaries of the key moral notions with which this essay is concerned: moral status, moral respect, basic rights, and so on. Any *human* being shares a nature with you and me; and thus any and every human being exists within the boundaries of these most fundamental moral notions. But this then raises the three challenges that I said I would close this essay with an all too brief discussion of.

Those challenges are: first, that some human beings in fact *lack* a rational nature; therefore, they lack the shared orientation to a common set of goods that would suffice to make them part of the same moral community as you or me. Second, that there are no boundaries in nature that demarcate a set of individuals that possess a common nature, or at least, that the concept of “species” does not help to pick out such boundaries.<sup>13</sup> And third, that the forms of natural teleology on which my account has been so dependent have been vitiated by contemporary science.

The first challenge is important because it marks a rejection of the claim that our nature, as members of the species *Homo sapiens*, is rational; that is, it rejects the claim that rationality is an essential property of human beings. An entity could be a human being but fail to possess the capacity, in any sense, for rational thought.

Examples given to support this claim include cases such as the following: anencephalic children; end stage Alzheimer’s patients; patients in a persistent vegetative state; and brain dead patients. In each case, it is certainly true that the entity in question is not occurrently capable of rational thought. Is it true that they have *lost* the basic capacity for such thought?

As mentioned, I cannot address this or the next difficulty with anything approaching adequacy. My goal is more modest: to identify a number of strategies that could be pursued in answering this, and the next, objection. With regard to this, four strategies must be pursued in tandem.

First, it must be noted that even if *all* the problem cases were such that the Substantial Identity theorist should acknowledge that the individuals in question had *no* capacity for rationality, and thus were *not* within the scope of the moral community delineated by shared human goods, this would nevertheless have no bearing at all on the question of healthy zygotes, embryos, and fetuses, all of whom do have that capacity, albeit in an undeveloped form.

Second, with respect to some of the problem cases, the Substantial Identity theorist should be willing to undertake the burden of showing how the entities in question really do have a fundamental capacity for rationality the exercise of which is being, temporarily or even permanently, blocked by some environmental, genetic, or medical factor. Matthew Liao has undertaken some of this work in a recent essay; it is worth pursuing his suggestions regarding genetic diseases that are caused, not by defects in genes that are responsible for what he calls “rational agency”, but by genetic defects that undermine the development of that (genetically underwritten) attribute (Liao, 2010).

Third, in some cases, such as that of brain death, it may be the case that there is in fact no longer any kind of underlying capacity for rationality; if so, Substantial Identity theorists should acknowledge that what appears to be a living human being is no longer one; if there is any living being at all in such cases, it is something other than a human being (Lee and Grisez, 2011). Such acknowledgement would appear to be justified in the case of entities of human provenance produced by Altered Nuclear Transfer in such a way as to have, *ab initio*, no capacity at all for self-development to the point of rational thought (Brugger, 2005; Hurlbut, 2005).

Finally, the Substantial Identity theorist should rely on the argument from fairness and against arbitrariness in all cases where epistemic humility is called for.

Perhaps in some cases we just cannot tell whether a being of human origin truly lacks any capacity for rational thought, including the capacity to develop to the point of being capable of (even one) rational thought. Fairness requires that epistemic humility in almost all cases be translated into moral generosity: the possibility that a being is a part of our moral community creates a presumption in favor of treating that being *as* a part of that community.

I will treat the second and third challenges even more briefly. The Substantial Identity View is sometimes also referred to as the Species Membership View: moral status is held to be founded on membership in a particular species, in particular, the species *Homo sapiens*. Under this name, the view is often accused of itself being guilty of arbitrariness: why should mere species membership have anything to do with moral status, any more than race or gender membership?<sup>14</sup>

I have given reasons in this essay for thinking that “mere” species membership is not the ground on which the Substantial Identity View attributes moral status. But the “Species Membership” name is also used to accuse the Substantial Identity View of trafficking in a notion that has no intellectual credibility, that of “species” itself.

In the philosophy of biology literature, and bioethics work dependent on that literature, the notion of species is often considered to be on shaky ground. Among biologists, the meaning of the concept is contentious, with a number of different possible meanings: the phenetic species concept, the biological species concept, and the phylogenetic species concept being among the most significant contenders.<sup>15</sup> Among philosophers of biology, as Louis Guenin has pointed out, there are additional arguments over the ontological status of species: are species universals? Are they sets? Some other kind of individual (Guenin, 2008)? Philosophers who wish to identify species as natural kinds, and to explain their status as natural kinds in terms of some form of essentialism can seem stymied by the various biological species concept, for in the biological groupings dictated by those concepts, it can be difficult to find an essential property shared by all individuals in a species and not found by any individuals in another species. The resulting skepticism, it is thought, bodes ill for any view that relies, as does the Substantial Identity thesis, on the claim that membership in the species *Homo sapiens* suffices for fundamental moral worth, etc.

How can the Substantial Identity theorist respond to this? Again, I merely sketch some of the directions that future thought could take; unlike my responses to the first challenge, I doubt here that all responses are mutually possible; and they certainly do not exhaust all the possible options.

First, Substantial Identity theorists can robustly defend the existence of natural kinds among biological organisms. Such an approach goes head to head with the prevailing skepticism, yet it does not seem destined for failure: recent work on natural kinds, while perhaps more successful in dealing with stuff kinds like gold and water nevertheless hold out promise that natural kinds can be vindicated (Putnam, 1975; Kripke, 1980).

In a related approach, the Substantial Identity theorist could then say either that “natural (biological) kinds” and “species” are two different concepts, and that Substantial Identity theorists are concerned only with the former; or, she could hold that species terms should, ideally, mark off natural kinds, but that, because

of epistemic limits, we are not yet, as a knowledge community, capable of using species concepts in this way.

A third approach would be to soften up what is meant, where biological entities are concerned, by “essential properties,” and “natural kinds,” and thus allow for some of the flexibility that scientists find in species membership as currently understood to permeate these concepts. Consider the following range of *mutually exclusive* properties to be found in every mammalian species: male or female. Clearly, an attempt to identify a species must allow for such disjunctive properties in the account of what individuals belong to the species; disjunctive accounts of essential properties, and allowance for vague properties, might enable the Substantial Identity theorist to make use of the notion of natural kinds and species in a way more or less consistent with scientific practice but also with the moral view defended in this essay.

Finally, and in this context, most crucially, a Substantial Identity theorist may hold that even if a very general skepticism about the idea of species as essential kinds is justified in most cases, it is not justified in the one case of critical concern to this essay. Perhaps, across the range of kinds of animals that exist other than the human, species boundaries are vague, socially constructed, or incapable of carving nature at its joints; perhaps, that is, there are no sub-human natural kinds. Nevertheless, the category of the human is a robust natural kind, for all (and, on earth, only) human beings have a radical capacity for rational thought. All human beings thus possess two essential properties—animality and rationality—that rigidly mark them off from all other beings on the planet. Human beings therefore form a natural kind of precisely the sort needed for the Substantial Identity thesis.

Arguments against the possibility of natural teleology are, like arguments against the existence of species, *prima facie* blocks to the sorts of claims I have made about human goods and the goods of non-human living things. For if the “agency” and “teleology” of living things is merely apparent, then the claims about “natural” or “objective” goods, welfares, and interests that such things have will need to be abandoned.

The basic presupposition behind the denial of natural teleology seems to be, as Luke Gormally has recently argued (Gormally, 2010), the idea that all forms of behavior of a whole can be reductively explained by appeal to the physical nature and relations of the parts of those wholes. By contrast, natural teleology clearly relies on the idea that *some* activities of parts of natural wholes such as organisms are to be explained at least partially by appeal to the nature of the whole of which they are parts. Defenders of natural teleology also typically hold that such wholes themselves have natural ends; thus, their behavior is not to be explained entirely by appeal to the properties of their parts as, for example, is the behavior of an artifact such as a watch. Indeed, it is characteristic of organisms that they exist as wholes before the differentiation of many of their future parts; thus, an embryo exists as a one-celled zygote and determines its own course of development towards its telos as a many-celled organism.

I suggested in Section 9.3 that it is our ability to recognize natural agencies and teleologies that enables us to identify particular convergences of matter and energy

as living, unified beings, i.e., organisms. This would suggest that natural teleology is an indispensable framework not merely for our common sense conceptualizing, but even for scientific understanding, for scientists are interested not simply in life, in the abstract, but in living things. To make this case is well beyond the scope of this paper, as is showing *how* such natural agencies and teleologies are to be understood in relation to a broadly Darwinian account of evolution by natural selection. Yet the possibility of such a case seems demanded by the facts: the agency and ends of natural wholes such as living organisms seems as much a fact in need of incorporation into a sound philosophy of biology as any other.<sup>16</sup>

No doubt these reflections on the difficulties faced by the Substantial Identity Theorist only scratch the surface of a full response. Yet they reveal that the Substantial Identity theorist is thus not without options in defending her claims against the claims of the Interest View or the Person View, both of which, I have shown, are themselves severely deficient accounts of what morality demands where human zygotes, embryos, and fetuses are concerned.<sup>17</sup>

## Notes

1. Dualist thinkers include Descartes (1979), Locke (1995), McMahan (2002), and Baker (2000). See, for a critical discussion of these various possibilities, Lee and George (2008) and George and Tollefsen (2008).
2. Or for another author; that debate has been enjoined in an exceptionally helpful way, by Don Marquis (2011), arguing for the Future of Value View, and Patrick Lee (2011), for the Substantial Identity View.
3. Since, as I note in the text, I believe that the one-celled zygote is a human being, and is identical to the later multi-celled embryo and the even later developing fetus, it will be clear that I hold that everything I say about the moral status of the unborn human being is in fact applicable from the moment of fertilization. The title, with its reference to “fetal” interests and persons, should not be thought an attempt to conceal this.
4. This, in conjunction with the claims that follow about embryos, show just how far off the mark is Ronald Dworkin when he writes, “If the arguments of this book are sound, people cannot have the thought that a fetus has interests of its own from the moment of conception, because *there is no such thought to be had*. If people were to carry placards announcing a belief in square circles, we would not do well to understand them as thinking that circles could be square. . .” (Dworkin, 1994, p. xi). Dworkin’s claims are not constitutive of conceptual understanding of the terms “interest”; and they are not only possibly false; they are actually so.
5. For further details, see George and Tollefsen, 2008, Chapter Two, and the sources there cited.
6. Raz’s own discussion reveals the close relationship between all these terms; he goes from discussing welfare to discussing interests within the space of a paragraph.
7. For discussion of agent neutral goods, see Nagel (1978) and Parfit (1984). The specific account of agent neutral goods I here draw on may be found in Finnis (1980).
8. Locke’s definition of “person” has become, in any number of variations, close to a contemporary orthodoxy: “a thinking intelligent being, that has reason and reflection, and can consider itself, as itself, the same thinking thing, in different times and places” (Locke, 1995, Book II, chapter 27, section 9).
9. This is clearer in Tooley, who writes, for example, “To ascribe a right to an individual is to assert something about the prima facie obligations of other individuals to act, or to refrain from acting, in certain ways. However, the obligations in question are conditional ones,

- being dependent upon the existence of certain desires of the individual to whom the right is ascribed" (Tooley, 1972, p. 44). And it is a conceptual truth, he writes, that things that are not conscious do not have desires (1972, p. 45). Warren identifies sentience as the ground for any kind of moral status and affiliates her view with that of Singer and Steinbock (Warren, 2000, p. 353)
10. For further details on the "New Natural Law" theory, see especially, Finnis (1980, 1998), Boyle, Finnis and Grisez (1987), and Grisez (1993).
  11. This claim has been argued at length in the work of Patrick Lee and Robert P. George, including work they have done with me. See, e.g., George and Tollefsen (2008), Lee and George (2008), and Lee (2011).
  12. The hybrid nature of this charge against the Person View might seem problematic (as it did to one anonymous referee). But consider a "racist theory" of moral status, i.e., one that arbitrarily divides classes of beings who share an essential nature according to accidental characteristics such as skin color and advocates a differential treatment of the two classes. Such a theory's arbitrariness is both morally and philosophically objectionable in ways that cannot be entirely separated out from one another.
  13. Versions of these two objections together work to generate the position that James Rachels called "moral individualism," concerning which he wrote: "The basic idea is that how an individual may be treated is determined, not by considering his group membership, but by considering his own particular moral characteristics" (Rachels, 1990, p. 173; quoted in McMahan, 2005, p. 354).
  14. Peter Singer is most notably associated with this objection: Singer (2002).
  15. For helpful discussions of these notions, and the problems associated with them, see Sterelny and Griffiths (1999) and Garvey (2007).
  16. My thinking on these matters has been considerably influenced by Thompson, 2008; the defense of natural teleology is the focus of several essays in Zaborowski (2010).
  17. I am grateful for helpful and provocative comments from two referees.

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**Part II**  
**Scientific Considerations**

## Chapter 10

# Fetal Pains and Fetal Brains

A.A. Howsepian

There has been a groundswell of recent scholarship on the question of whether or when unborn humans become capable of feeling pain.<sup>1</sup> (Anand and Hickey, 1987; Colette, 2003; Commission of Inquiry into Fetal Sentience, 1996; Derbyshire, 2006, 2008; Glover, 1999; Glover and Fisk, 1996; Kolenc, 2006; Lagercrantz and Changeux, 2009; Lee, Ralston and Drey et al., 2005; Lowery, Hardman and Manning et al., 2007; Mellor, Diesch, Gunn and Bennet, 2005; McCullagh, 1997; Myers, 2006; Royal College of Obstetricians and Gynaecologists, 2010; Saunders, 1997; Savell, 2007; Sonfield, 2005; Stahle, 2007; and Wenger, 2006, among others.) The reason for this rapidly growing literature is not difficult to discern: if unborn human beings are capable of feeling pain, this fact would have potentially enormous implications for how unborn humans ought to be treated, whether in the context of fetal surgery, embryonic and fetal experimentation,<sup>2</sup> or induced abortion (hereafter, ‘abortion’). At least for the time being, the practical issues concerning fetal surgery and fetal experimentation have been largely settled. In the first instance, *whether or not* fetuses are capable of feeling pain while undergoing surgical procedures, *not* providing anesthesia during fetal surgery appears to have enough *other* untoward (stress-related and behavioral) effects on the fetus that anesthetizing human fetuses who are undergoing surgery (thanks, primarily, to the work of Anand, Sippel and Aynsley-Green, 1987) has quickly become the standard of care. In the second instance, potentially destructive research on unborn humans has, thus far, only seriously been entertained in *very* early human embryos that, everyone agrees (or at least everyone *should* agree), are too young to feel pain. The primary issue, therefore, currently controlling this discussion concerning fetal pain sentience is the issue of *abortion*. Because methods devised for killing unborn humans include some (e.g., ripping, scraping, burning, breaking, crushing, poisoning, and cutting) that might elicit pain in those beings on whom these methods of killing are employed, the question concerning whether or when human fetuses can feel pain has become a matter

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of significant clinical, ethical, and, more recently, legal urgency.<sup>3</sup> (Collett, 2003; Stahle, 2007)

I plan, in Part I of this essay, to argue that *whether or not* one concludes that human fetuses are capable of feeling pain (i.e., whether or not one concludes that human fetuses are ‘pain sentient’), *or* whether one concludes that there remains radical (even *ineliminable*) uncertainty regarding whether or not human fetuses can feel pain, *any* one of these three conclusions can be profitably recruited in the service of various ethical arguments against the intentional killing of unborn humans. In Parts II and III, I argue that there is good reason to believe that unborn humans as early as the latter half of the first trimester of pregnancy, are capable of feeling pain based on (i) demonstrable early fetal behavioral responses to noxious stimuli, (ii) an acceptable threshold of neurobiological maturation under conditions of uncertainty regarding the presence, degree, or absence of fetal subjectivity, and (iii) an application of arguments concerning the general problem of ‘other minds’ specifically to the brains and pains of fetuses. In Part IV, I provide some concluding reflections on fetal pain sentience and abortion.

## 10.1 Part I

According to the Committee on Taxonomy of the International Association for the Study of Pain (IASP), ‘pain’ is defined as, “An unpleasant sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage” (IASP, “Pain”). Lowery and colleagues (2007, p. 275) call this “[t]he most commonly accepted definition of pain.”<sup>4</sup> For reasons that differ from those of Anand and Craig (1996), I find this proposed definition to be inadequate. First, it is unclear what the term ‘sensory’ adds to the definition. In fact, in light of there being well-described cases of *psychogenic* pain, it is clear that not all pain is (at least proximally) derived from sensory receptors. Second, it is unclear how the term ‘emotional’ is to be understood in this context and, depending on how it is understood, its inclusion in any definition of pain could be profoundly misleading. Our emotional life is very rich and highly complex. Just how much of this richness and complexity is being presupposed in the IASP definition of ‘pain’? If one builds in *too much* richness and complexity, then many lower brute animals that do not appear to have a rich and complex emotional life would not be considered to be *pain* sentient in spite of the fact that they appear clearly to be sentient in *other* experiential domains (sight, for example or hearing, or echolocation). On the other hand, perhaps, if we accept the IASP definition’s commitment to there being an emotional component to pain, we might also be committed to attributing an emotional life to frigate birds or Northern Pike or terrapins. If we do this, to *how much* of an emotional life in these creatures would we be committed?

The *JAMA* authors (2005),<sup>5</sup> for example, go to great lengths to emphasize the ‘emotional content’ of pain in a manner that significantly distorts the discussion concerning investigations into fetal pain, pushing it forcefully in the direction of endorsing only *late third trimester* fetal pain sentience. They state, “Because

pain is a *psychological construct with emotional content*, the experience of pain is modulated by changing emotional input and may need to be learned through life experience,” adding, “Regardless of whether the emotional content of pain is acquired, the psychological nature of pain presupposes the presence of functional thalamocortical circuitry *required* for conscious perception” (2005, p. 949, emphasis added). The only ‘presupposing’ going on here is the *JAMA authors’* presupposing that the presence of functional thalamocortical circuitry is *required* (as opposed to being, for example, a *normal concomitant* of pain perception in *adult* humans) for conscious pain perception (a thesis that, as I see it, appears to have been thoroughly discredited) *and* presupposing that, in some sense, pain is a “psychological construct with emotional content. . .” (2005, p. 949). What, precisely, do they mean by this latter locution? Well, they gesture toward how pain experience is modulated by emotional inputs. That there is such *modulation* of pain by emotion is uncontroversial, but how is this *relevant* to the issue of pain’s being a “psychological construct” with specifically emotional *content*? Well, the *JAMA* authors (2005) go on to add that pain experience “*may* need to be learned through life experience” (2005, p. 949). Of course, *naming something a ‘pain’* as opposed to a ‘tickle’, for example, is something that is “learned through life experience.” But what does it mean to say that *pain experience itself* might need to be learned in this way?

Stuart W.G. Derbyshire (1999, 2006, 2008) has argued vigorously that *relatively extensive exposure to, and interaction with, the extrauterine world after birth*, including appropriate interactions with linguistically competent interlocutors, is *required* for pain sentience. In other words, Derbyshire seems to believe that a *more general* form of (preconscious) exposure and interaction is required for more specific (conscious) *pain* sentience—postnatal exposure and interaction that provide *essential contents* of general consciousness required for later pain experience. He writes, “A proper *understanding* of pain must account for the *conceptual content that constitutes* the pain experience” (2006, p. 911, emphasis added). He then goes on approvingly to cite the IASP, adding that, by its “definition pain is not merely the response to noxious stimuli or disease” (as if anyone would think otherwise), “but is a conscious experience,” (as if there could not also be *unconscious* pains<sup>6</sup>) after which he notes, “The definition further states that ‘pain is always subjective. *Each individual learns the application of the word through experiences related to injury in early life*’” (2006, p. 911, emphasis added). Derbyshire, thereby, hand in hand with the IASP, confusedly slides from the *experience of pain* to the *application of the word ‘pain’*, and, in part, as a result of this conceptual confusion concludes that, “The limited neural system of fetuses cannot support such cognitive, affective, and evaluative experiences; and the limited opportunity for this content to have been introduced also means that it is not possible for a fetus [of any developmental age] to experience pain” (2006, p. 911) Q.E.D.

Mellor and colleagues (2005) appear to commit a similar error, stating, in the opening sentence of their essay, “Whether the fetus can truly experience pain, at least in some way analogous to how adults emotionally *understand* pain, has been debated extensively over recent years” (2005, p. 456, emphasis added). Not surprisingly, Mellor et al. go on to claim that, “There are both a physiological and an

emotional or cognitive aspect to pain perception, and indeed a significant element of learning” (2005, p. 456), at which point, not surprisingly, they approvingly cite Derbyshire (1999).

How did Derbyshire (2006) and Mellor (2005) make such an apparently enormous conceptual mistake in this domain? How did they go from the raw feel *of* pain (an aversive experience that tends to result in avoidant behavior), to a cognitive *ascription* of some sort *to* this feel? Perhaps the answer can be found in Derbyshire’s attempts to explain the origin of conscious experience more broadly, a developmental milestone which he considers to be a prerequisite to pain sentience. According to Derbyshire consciousness requires proper psychological *content*, and proper psychological content requires an appropriate postnatal environment: “It is also necessary to assume that conscious function can only emerge if the proper psychological content and environment has been provided” (Derbyshire, 2006, p. 911). But what, precisely, does he mean by proper ‘content’ here? He states, “Before infants can think about objects or events, or experience sensations and emotion, the contents of thought must have an independent existence in the mind. This is something that is achieved through continued brain development in conjunction with discoveries made in action and in patterns of mutual adjustment and interactions with caregivers” (2006, p. 911). What Derbyshire means by “an independent existence in mind” is unclear—does not just *any* mental act or event have “an independent existence in mind”? According to Derbyshire it seems not. What he *appears* to imply here, instead, is that such “independent existence” essentially involves “representational memory”: “The development of representational memory, which allows infants to respond and to learn from stored information rather than respond to material directly available, may be considered a building block of conscious development” (Derbyshire, 2006, p. 911). He goes on to say that, “Representational memory begins to emerge as the frontal cortex develops between 2 and 4 months of age, supported by developments in the hippocampus that facilitate the formation, storage, and retrieval of memories” (2006, p. 911).

What is critical to appreciate is that Derbyshire appears to require of consciousness *simpliciter both* one’s *thinking about* what almost everyone else calls the *contents* of consciousness *and* one’s having the ability to perform certain (‘representational’) memory functions. Obviously, the ability to think about mental elements and to exemplify representational memory functions are later cognitive developmental milestones, so one who, like Derbyshire, requires these higher mental functions for *the very existence* of consciousness will, predictably, claim that consciousness, and hence pain sentience, does not appear on the scene until an appreciable time after birth.<sup>7</sup> In fact, according to Derbyshire’s (1999) calculations, pain sentience in humans is reached at *approximately 1 year after birth* (although he does not want to rule out “the possibility of a rudimentary, or impoverished, awareness, at an earlier age,” (1999, p. 27). It is, however, left wholly mysterious why representational memory would be required for one of the things that pain appears to do best, viz. act as a *constant reminder* that (in most cases) one’s body is damaged.<sup>8</sup>

Derbyshire (relying heavily on Leventhal, 1984), in this way, *builds in* highly sophisticated cognitive capacities into the *very notion* of pain, then, lo and behold,

points out that fetuses could not possibly possess such psychological sophistication and, therefore, fetuses (and neonates, and infants until they are approximately one year of age) cannot feel pain. Derbyshire's confusion is elementary; except that he (and others that have appeared blindly to follow him, including the *JAMA* authors who approvingly cite him twice in this regard) does (do) not seem to be conscious of it. One wonders why Derbyshire does not just require an ability to do the calculus as an essential element of consciousness in which case, most of humanity would not be conscious. Clearly, neither consciousness, more broadly, nor pain, more narrowly, require either representational *memory* or the ability to perform metacognitive acts (such as thinking about elements of one's mentation) *even if the further* development of, or elaboration of, or structuring of human consciousness in the direction of maturity clearly *does* require one's achieving these mental milestones.<sup>8</sup> Whether consciousness requires any content at all (in the usual sense of 'content') is itself a disputed issue. But even assuming that it does, the required content need not be nearly as elaborate as Derbyshire imagines. Rather the content of one's consciousness might be simple *unpleasant experience* that in more extreme cases is also *awful* (but need not be), and that, in virtue of its unpleasant feel, *tends* to drive an organism away from its source (or result in one's inserting a barrier between an organism and the source of pain, or one's disabling or destroying the source).

Merker (2007), on the other hand, provides, in clear language, the traditional, sober-minded alternative to Derbyshire's view of consciousness, stating that, "the attribution of consciousness is not predicated upon any particular level or degree of complexity of the processes or contents that constitute the conscious state, but only upon whatever arrangement of those processes or contents makes experience itself possible. To the extent that any precept, simple or sophisticated, is experienced, it is conscious, and similarly for any feeling, even if vague, or any impulse to action, however inchoate" (Merker, 2007, p. 63). *The very idea* of a 'minimally conscious state' (Boly et al., 2004), for example—a severe hypokinetic neuropsychiatric disability widely recognized in the medical community, that bridges the initial part of the gap between states of unconsciousness and states of robust consciousness, depends on there being *levels* of consciousness some of which are barely suprathreshold. There is, after all, *something it is like* to be minimally conscious, just as there is something that it is like to be an echidna, a caiman, and a bat (Nagel, 1974).

Perhaps, therefore, a binary 'emotional' capacity comprised merely of pleasantness and unpleasantness is required for an experience's being a pain. If we mean by 'unpleasantness' an (aversive) experience that *ceteris paribus* translates into a tendency toward behavioral *avoidance* and by 'pleasantness' an experience that translates *ceteris paribus* into a tendency to behavioral *approach*, without building in any further 'emotional' components, then it might be appropriate, after all, to retain the term 'emotional' in one's definition of pain. However, judging from the richly textured emotional categories that have been recruited by contemporary writers on fetal pain such as Derbyshire, Mellor and his colleagues, and the *JAMA* authors, categories which have resulted in specious arguments for the early fetus' being *incapable* of feeling pain, I would recommend not including the term

‘emotional’ in any adequate, general definition of ‘pain’. Finally, it merits stating that there is no good reason of which I am aware to link the very definition of ‘pain’ to tissue damage, whether actual or potential. Of course, most pain is, in fact, associated with actual or potential tissue damage, but some clearly is not (e.g., psychogenic bodily pain, or emotional pain).

Pain, then, is a variety of *unpleasant experience*.<sup>9, 10</sup> There is something aversive about pain, something that organisms tend to avoid, something—in more severe cases, but *only* in more severe cases—that is *awful*. Notice that I do not believe that pain is *essentially* awful. Some pains, at least when one focuses on them, or attends to them, are *merely* annoying or unpleasant or unwanted, much like an itch is annoying or unpleasant or unwanted. (Of course, some itches, too, can be *awful*.) But itches are not pains.<sup>11</sup> How do they differ? In at least two ways: by qualitative, raw feel and by their functions. Pains simply *feel different* than itches, and this difference in feeling is reflected in a difference in function insofar as pain has a unique role to play in our survival, driving us, often forcefully, (when we are functioning properly) *from* those circumstances that could result in our mutilation, maiming, or murder, or driving us to protect ourselves while still in those circumstances.

Clearly, *ceteris paribus* causing (a non-guilty) organism S pain is morally worse than refraining from causing S pain. And, of course, intentionally causing pain, or at least not relieving pain when one can (even if this pain is not intentionally caused), is what underwrites the practical link between fetal pain sentience and fetal surgery, experimentation, and abortion. If there is a good (sound, non-question-begging) argument for the conclusion that human fetuses of a certain developmental age can feel pain, and if there exist ways of relieving or preventing this pain that are not burdensome, not a serious danger to the mother’s health, and are just, then it appears that abortionists would be obliged to provide unborn humans this pain relief while killing them.

But what if there is no such argument? What if, in fact, someone proposes a good argument for the *opposite* conclusion—an argument demonstrating that early unborn humans are in fact pain *insentient*? Well, how much better, if at all, is it to kill a pain *insentient* human *ceteris paribus* than one that is pain *sentient*? This question is importantly different than asking whether it is morally worse to cause pain while killing a (hereafter understood to be ‘non-guilty’) human than not to cause pain while killing a human. The answer to this *latter* question can be read off of the above proposed *ceteris paribus* statement. If *ceteris paribus*, causing someone S pain is morally worse than *not* causing S pain, it is clearly morally worse *ceteris paribus* to cause pain while killing a human than to kill a human without causing him to experience pain. The *former* question, however, says nothing about causing pain, but asks only whether killing a human that is pain sentient is *ceteris paribus* worse than killing one that is not, even if *neither* human experiences pain in the process of being killed.

Some children are born pain insentient, ‘suffering’ from ‘Congenital Insensitivity to Pain’ or ‘CIP’ (Manfredi, Bini, Cuccu et al., 1981). These children are, in virtue of having CIP, in many ways, *more vulnerable* than those children that are pain



sentient. When attacked, for example, they are not in a position to respond optimally in ways to fend off their attackers or to protect themselves. They are not, in other words, responsive to certain unpleasant aspects of assault that might allow them more adequately to defend themselves. They are, therefore, more likely to be mutilated, mauled, maimed, mangled, and murdered. They are also (like those with advanced leprosy) more likely to hurt themselves and not know it. Correlatively, one might argue that if the human fetus is pain insentient, and if pain (not mere lower central nervous system reflex withdrawal), even in utero, has *survival value*, then *ceteris paribus* one who intentionally kills the more vulnerable insentient unborn human, acts more viciously than one who intentionally kills unborn humans who are capable of feeling pain.

But *does feeling pain* (as opposed to the mere reflexive, spinal cord-mediated, defensive responses to noxious stimuli) have survival, or any other positive value in utero? Well, it would *if* the aversive stimulus perception amplifying effects of pain experience mobilize fetuses to evade or defend themselves against threats, or if these experiences facilitated one's protecting one's injured body part, or if these experiences somehow mediated changes in one's physiology (e.g., one's hormonal environment) that conduced to survival. Perhaps pain sentience results in greater evasive maneuvers or more vigorous attempts to neutralize threats or to protect one's injuries even if there is no *voluntary control* (of which, certainly, at least early unborn humans are incapable) over these responses, or perhaps it mediates a persistent change in physiology (e.g., involving elevations in stress or related hormones) that somehow conduces to healing or to vigilance regarding future threats or improves reaction time. In other words, in line with the former suggestion, possibly, pain sentience might in some way that is *disconnected* from voluntary action, augment adaptive responses to threats (whether defensive or evasive) or to damage from the consequences of tissue damage.

I have suggested elsewhere that it is reasonable to believe that developmentally primitive consciousness is what I call *disconnected consciousness*, i.e., disconnected from playing any role in the performance of voluntary action, and that such disconnected consciousness might be present outside of the normal fetal context (for example, in anencephalic neonates, unresponsive adults in hypokinetic states, or in those undergoing general anesthesia). (Howsepian, 2011) This disconnection is quite plausible in fetuses in light of the uncontroversial claim that, developmentally, consciousness temporally precedes voluntary control over one's actions (an achievement in control that likely occurs only after a significant amount of time in one's postnatal environment). Now, suppose that the fetus is physically harmed in utero, i.e., suppose that he suffers tissue damage of some sort to one of his limbs. Then suppose that at the time of this tissue damage, reflexively (at the spinal cord level) the fetus withdraws the injured limb (an evasive maneuver) *and* pushes away the source of damage with the uninjured limb (a defensive maneuver). Once the injury stimulus is withdrawn, suppose that the spinal cord level reflex actions subside, only to reanimate the fetus when the stimulus is reintroduced above a certain threshold. But now suppose that higher level 'reflexive responses' were in play, ones that were

mediated by higher brain centers involving persistent pain *experience*. Such experience would be expected to *persist* after the spinal cord mediated reflexive motor acts are performed *making present in experience* the injury that no longer mobilizes the spinal cord to participate in lower level reflexive movement. This injury persistently made present by consciousness might then, through higher level reflexes, sensitize and mobilize motor acts resulting in limb protection, for example, that would facilitate healing or prevent future injury.

When adults hurt a limb, they tend to hold it in a manner that tends to protect it, and this holding (at least in most cases) is not a matter of spinal cord reflexes. What I am suggesting is that, although this altered holding of one's limb by us might largely be due to voluntary motor acts, it is not implausible to imagine that such changes in limb position in unborn humans with even disconnected consciousness might be mediated, not by voluntary acts (of which unborn humans are incapable), but by higher order reflexes centrally involving persisting, present, pain experience. Not all reflexes, after all, are *spinal* reflexes. There are also cranial nerve reflexes and other subcortical reflexes mediated by the brain rather than by the spinal cord. If one is uncomfortable calling that to which I am referring a 'reflex', no harm would be done. One in that position may call it whatever one wishes, so long as the referent of the term picks out a set of involuntary motor acts in response to a noxious stimulus that is mediated by persisting (pain) experience. Of course, as succinctly pointed out by Saunders (1997), "The *absence* of reflex movement does not mean that pain has *not* been felt, any more than the *presence* of reflex movement proves *conscious perception* of a noxious stimulus" (p. 303, emphasis added).<sup>12</sup>

The above argument is speculative. I do not pretend to know or even have good reason to believe that pain has *in utero* survival value to fetuses in the manner specified. My above reflections were drawn from the modal well of mere (physical) possibility. They are meant for future reflection and for expanding our thinking about the range of possible roles that pain *might* play in the fetal economy (including a possible role in increasing the fetus's probability of survival).

There is, however, one line argument for how fetal pain has in utero survival value that is more to the point. In fact, it goes beyond fetal survival itself, for if it is sound, then fetal pain sentience conduces not only to *fetal* survival, but it, in some instances, also conduces to *maternal* survival. The line of argument relies simply on one of the primary reasons that the issue of fetal pain sentience is so contentious in the abortion arena, namely, that advising women who are seeking abortions that their unborn children are pain sentient is likely (based on maternal responses informed by empathy, caring, intersubjective attunement, compassion, and benevolence) to decrease the number of women who are willing to follow through with an abortion procedure. This would clearly conduce to the greater survival of human fetuses worldwide. And conveying to mothers that their unborn children are pain sentient will also, in some instances, conduce to maternal survival (specifically, in those instances in which certain women *would have* died as a result of an abortion, but in which they in fact survive the process of childbirth).<sup>13</sup> Fetal pain sentience, therefore, indirectly, i.e., in virtue of our suspecting or discovering that it exists, increases fetal survival by way of our communicating this suspicion or discovery to women

seeking abortion who then, in many instances, would refrain from going through with the abortion procedure.

There is at least one other line of argument concerning fetal sentience beside the two that we have already considered, one that has been discussed in various ways by multiple authors (Glover and Fisk, 1996; Saunders, 1997; McCullagh, 1997; Myers, 2006). Suppose that there is *radical*, even *ineliminable*, *uncertainty* concerning this issue of whether or when the human fetus is capable of feeling pain. A common, and prudent, response to such uncertainty is to say one of the things the Roman Catholic tradition has said about similar matters for quite a long time relating to abortion and personhood, viz. if one is uncertain whether unborn humans are persons, the most prudent moral course of action is to *refrain* from intentionally killing unborn humans, for if we intentionally kill them and we happen to be wrong about what unborn humans are, we would be committing seriously morally wrong acts, and it is best to avoid committing such acts.<sup>14</sup> Similarly, if one is uncertain whether unborn humans feel pain, the most prudent moral course of action is, if one insists on following through with such killings, *ceteris paribus* to avoid intentionally killing human fetuses in a manner likely to cause pain but, rather, to presume that pain can be experienced and to take reasonable measures—measures that acknowledge multiple competing factors, including distributive justice, maternal health, and burdensomeness—to safeguard the pain sentient fetus from exposure to pain.

## 10.2 Part II

After having reviewed dozens of studies concerning fetal sentience, the *JAMA* authors (2005) conclude that it is unlikely that unborn humans prior to approximately 30 weeks gestation can feel pain because, prior to that time, they would not have developed the requisite functional neurological architecture for pain sentience. The claim here at least appears distinctively different from Derbyshire's since, for Derbyshire,<sup>15</sup> the requisite functional *neurological* architecture might be in place, but the preparatory period of *extrauterine exposure and interaction* that provides what Derbyshire calls the (preconscious) 'contents' of consciousness might not yet have taken place. Specifically, according to the *JAMA* authors (2005), pain *requires* consciousness, consciousness *requires* a functional cerebral cortex, and pain processing *requires* functional thalamocortical (or corticothalamic) connections. Mellor et al., among others, concur, stating, "In brief, however, it is generally agreed that an integrated [nociceptive] pathway exists by 24–28 weeks of gestation and that it includes the critical cortico-thalamic connections deemed to be essential for the experience of pain" (Mellor et al., 2005, p. 456). Furthermore the *JAMA* authors (2005) claim that that electroencephalographic data "suggest the capacity for functional pain perception in preterm neonates probably does not exist before 29 or 30 weeks" (2005, p. 947). Sonfield (2005) correctly notes that the *JAMA* authors "determined that signs of activity in fetuses and premature babies often cited as evidence that they perceive pain sooner [than approximately 30 weeks gestation] are more likely to be reflex motions and hormonal responses" (Sonfield, 2005, p. 1).

The signs to which many are now pointing, of course, can be observed by way of 4D ultrasound technology images of in utero unborn humans that are quite realistic and, very early in postconception life, reflect apparent behavioral responsiveness involving relatively complex behavioral sets. Savell (2007) importantly points out how these images have shifted the ground underneath the abortion debate in two important ways, first, by focusing on fetal *sentience* as opposed to fetal *viability* as setting the legal threshold for abortion regulation (as had, notoriously, been the standard set in *Roe v. Wade*) and, second, by thereby shifting the conceptualization of abortion itself from *pregnancy termination* to *feticide*.

In the course of their investigations, the *JAMA* (2005) authors (as do Mellor et al., 2005) clearly help themselves to analogies between the behaviors exhibited in the face of nociceptive stimulation of unborn humans prior to approximately 30 weeks and the behaviors exhibited by anencephalic children. In addition, these authors help themselves to analogies between the behaviors exhibited in the face of nociceptive stimulation of unborn humans prior to approximately 30 weeks and the behavioral responses of seriously neurologically disabled adults, for example, those adults in vegetative (or what I suggest are more appropriately termed ‘hypokinetic’) states (Howsepian, 2006), as well as those adults who are under (what is believed to be adequate) general anesthesia (Howsepian, 1994, 1996). Call anencephalic infants, those in other purported vegetative states, and those adults under general anesthesia, ‘the inferred pain *insentient* known sample’. The general strategy of the *JAMA* (2005) authors’ argument is something like this. Begin your inquiry with normal mature postnatal humans who we are certain (or at least as certain as we can be in light of ‘other minds’ concerns) are capable of feeling pain. Call this ‘the inferred pain *sentient* known sample’. Examine their nervous systems. Compare fetal nervous systems with the nervous systems of the inferred pain *sentient* known sample. Then, attribute pain *sentience* *only* to those unborn humans who have nervous systems that are *relevantly similar* to the inferred pain *sentient* known sample. If fetuses whose nervous systems that are *not* *relevantly similar* to those organisms in the inferred pain *sentient* known sample *act like* organisms who *are* in the inferred pain *sentient* known sample, then this finding is explained *by analogy* to those in the inferred pain *insentient* known sample: they *also* are *not* pain *sentient* but, like those in the pain *insentient* pain sample, in various circumstances *act as if* they are pain *sentient*. We will call this the ‘*JAMA* strategy’ (in spite of the obvious fact that this strategy is not only *not unique* to the *JAMA* authors, but is nearly ubiquitous in the fetal pain literature among those who deny pain *sentience* to any but late developmental age human fetuses).

There are multiple deep problems with this strategy. I will discuss only three. First, *the JAMA strategy presumes to know quite a lot about the neural substrate for consciousness, but this presumption is highly suspect*, to say the least. Simply put, *the neural basis of consciousness, including pain consciousness, is not known*. The neurological architecture and functional status that is *essential* to human consciousness is a vexed issue. This problem can be approached from at least two directions. First, we still have no reliable way of judging whether mature humans who *appear conscious* (for example, those in certain hypokinetic states) are *in fact*

*conscious*. Second, correlatively, we also have no reliable way of judging whether mature humans who appear *unconscious* (e.g., those under general anesthesia, or those judged to be in coma or in certain other hypokinetic states) are in fact *unconscious* (Alkire et al., 2008; Howsepian, 1994, 1996, 2006). These perspectives on (un)consciousness differ in subtle ways. In the first instance, one is attempting to detect *consciousness* when a suspicion of *consciousness* is present, while in the second instance, one is attempting to detect *unconsciousness* when a suspicion of *unconsciousness* is present.

More narrowly, the frequently relied upon claim by multiple authors in this discussion (primarily those who argue for fetal insentience except in late third trimester fetuses or infants) that a (properly structured and properly functional) *cerebral cortex* is required for human consciousness, is not only contested but arguably has been refuted by both empirical and more theoretical considerations. The *JAMA* authors (2005), for example, insist that a functional cerebral cortex is essential for consciousness. Others (e.g., Mellor et al., 2005; Rokyta, 2008; Lagercrantz and Changeux, 2009) concur. (Derbyshire (1999) opts, instead, for a functioning anterior cingulate cortex).<sup>16</sup> Mellor et al. (2005), for example, state,

Several commentaries suggest that once the nociceptive pathway is complete the fetus may experience pain and that various behavioral and physiological responses may reveal fetal awareness or subjective consciousness of pain. For instance, the human fetus responds to intrahepatic needling (versus umbilical cord sampling) by moving away and with an increase in the levels of circulating stress hormones such as cortisol, corticotrophin releasing hormone (CRH), catecholamines, and beta-endorphins (hormonal responses that are routinely mounted in more mature human organisms in response to pain reports). These responses are independent of maternal responses. . . It is noteworthy, however, that these responses are elicited at the subcortical and brainstem level and do not require cortical input. Thus, they cannot be said to represent evidence for cortical awareness<sup>17</sup> (p. 457).

However, according to other voices in this discussion, including, McCullagh (1997),

The dismissal of fetal withdrawal from noxious stimuli as ‘only reflex’ is a secondary inference that is naïve unless one can confidently exclude suffering. Independent verification of that exclusion requires comprehensive understanding of the structure of pain pathways in the developing nervous system. Accepted correlations between structure and function in this context, however, are unreliable (p. 302).

In fact, alternative, well-established central nervous system loci involved in consciousness in general and pain sentience in particular (as opposed to perceptions of specific pain qualities) *include* the entire thalamus and brain stem *or* merely the ‘upper brainstem’ *independent* of thalamocortical mechanisms (*excluding* the cerebral cortex altogether).<sup>18</sup> The primary sources for this alternative understanding of the neuroarchitecture of consciousness and pain sentience can be found *inter alia* in the important clinical observations of pediatric neurologist, D. Alan Shewmon, M.D., and colleagues (1999) and in the careful theoretical work of neuroscientist, Bjorn Merker (2007). Merker (2007) summarizes his position as follows,

[A]n upper brain stem system organized for conscious function. . . maintains special connective relations with cortical territories implicated in attentional and conscious functions, but

is not rendered nonfunctional in the absence of cortical input. This helps explain the purposeful, goal-directed behavior exhibited by mammals after experimental decortications, as well as the evidence that children born without a cortex are conscious. Taken together these circumstances suggest that brainstem mechanisms are integral to the constitution of the conscious state, and that an adequate account of neural mechanisms of conscious function cannot be confined to the thalamocortical complex alone.” (p. 63).

Correlatively, Shewmon et al. (1999) and Lewin (1980) supply compelling clinical examples of consciousness in hydranencephalic children (i.e., children, at least some of whom, clearly do not possess a functional cerebral cortex) and (as described by Professor John Lorber of Sheffield University) in an otherwise normally functioning university student with hydrocephaly resulting in a cerebral cortex that is approximately one millimeter thick (an estimated 45 times thinner than normal), respectively. Finally, damage to the thalamus of Karen Ann Quinlan, who, for over a decade lay in a Permanent Vegetative State, was shown to exhibit a relatively preserved cerebral cortex and a substantially damaged thalamus (Kinney et al., 1994).

Notice that the views of Merker and Shewmon et al., and the evidence they provide for these views do not rely at all on the ‘specificity theory’ of pain, i.e., a theory that locates pain sentience in some single brain location. They simply provide powerful reasons to think that consciousness does not *require* cerebral cortical function, even if it *normally* does in more mature organisms. In addition, multiple studies (including those by Brooks et al., 2005; Craig, 2003; Nandi, Aziz, Carter et al., 2003; and Nandi, Liu, Joint et al., 2002) demonstrate that *cortical* manipulations do not, for the most part, change pain perception in adult subjects while *thalamic* manipulations more consistently do.<sup>19</sup> Furthermore, Stephen G. Waxman (2000), in one of the most well-respected and longest lived neuroanatomy reference works (first published in 1945 as the first book in the ‘Lange’ series), clearly states that it is *the thalamus*, not the cerebral cortex, that is believed to be crucial for pain perception. Based on these considerations (and multiple others in the medical and scientific literature), there is very strong reason to believe both that the cerebral cortex is not essential to *pain sentience* in particular and that the cerebral cortex is not essential for *consciousness* in general.

Second, *sufficient conditions for pain sentience are often confused with necessary conditions for pain sentience*. This point is stated succinctly by McCullagh, “Two questions—whether the cortex is *normally* involved in the appreciation of pain and whether it is *necessary* for this—are regularly conflated” (1997, p. 302, emphasis added). The important point here is that *adult* human brain structures that are claimed to mediate, or to be involved in, or to generate consciousness—even if these structures actually *do* play a role in mediating or generating consciousness—need not also be the brain structures that mediate or generate consciousness in *unborn* humans. It is possible, of course, for consciousness in unborn humans to be mediated by *none* of those sufficient conditions for consciousness in adult humans. What would need to be established, in order to show otherwise, is that some or all of those conditions in adult human brains are also *necessary* for mediating or generating consciousness *in unborn human brains*. Unfortunately, not only

has this not been established, but we do not even know (as discussed above) those conditions that are *necessary* for mediating or generating consciousness in *adult* human brains. The claim of the *JAMA* authors that, “the presence of thalamocortical fibers is *necessary* for pain perception” (2005, p. 952, emphasis added), whether in fetuses, neonates, infants, children, adolescents, or adults is, therefore, pure fiction.<sup>20</sup> Similarly, although Derbyshire is correct when he says that, “Pain is suggested to arise with development of the necessary neurological. . . structures,” (1999, p. 1), it is pure fantasy on his part to imagine that he actually knows, or even has a good idea, what these necessary neurological structures *are*.<sup>21</sup> The neural basis of consciousness in human organisms of any developmental age remains deeply mysterious.

*Third, if unborn humans feel pain, the pain felt is likely to be more intense, not less, than the pain felt by older, more mature humans exposed to equivalent nociceptive stimuli.* This is suggested by studies of neonatal pain neurobiology and behavior that have established pain hypersensitivity in early neonates (compared to more mature humans) in virtue of the immaturity of pain inhibiting neural mechanisms in younger neonates (see Fitzgerald, 1987; Fitzgerald, 2000).<sup>22</sup>

### 10.3 Part III

Perhaps the most common strategy in the fetal pain literature engaged in by those who manage to find pain sentience only in late-term fetuses or in infants is to begin with neurobiology and then work analogically from neurobiology (whether directly, or indirectly by way of psychology) to pain sentience. Nothing, however, requires that one proceed in this fashion. A preferable, time-honored alternative, as I see it, is to begin with typical behavioral responses to noxious stimuli and to argue, *also by analogy*, in the manner that one typically proceeds when arguing for the existence of ‘other minds’. The ‘problem of other minds’ involves the question of how we can know that other individuals in the world exemplify mental states. How do we *know*, or more weakly but still helpfully, how is it that we can be *rationaly justified* in believing that other human beings have thoughts, feelings, and other mental properties? The standard response to this question is based on an argument from analogy: insofar as I can know, or be rationally justified in believing, that *I* have mental states and that my mental states are associated with certain behavioral responses, and insofar as I notice that *you* exhibit behavioral responses that are similar to mine, this licenses the inference that you, too, have mental states similar to mine.<sup>23, 24</sup>

Arguments from analogy are, of course, *inductive* arguments and, therefore, their conclusions do not follow from the truth of their premises with the force of necessity. But, although desirable, no such tight connection between the premises and conclusion are needed. What *is* needed is *some good reason or other* to think that, like me, others have mental states. The analogy gives me this good reason. I might be wrong, of course. It might be the case that I have mental states with correlated behaviors but that others with similar correlated behaviors have no such mental states. I cannot be *certain* that others have mental states based on this kind of argument. All of this

is true, but not relevant. What is important at this level of inquiry is not *certainty*, not a *guarantee* that others have minds like I do, but a *good reason to believe* that others have mental states, something that raises the probability to even some modest degree for the conclusion that others have minds (or exemplify mental attributes, or are thinking, feeling, or perceiving things, or possess mental properties, or perceive or feel or think x-ly<sup>25</sup>, or whatever your favorite way happens to be for referring to something's perceiving, feeling, or thinking), something to break the skeptical stalemate with which we are presented in virtue of our not having direct access to anyone else's mental life.

The raised probability in the case of a fetus is, arguably, something less than the raised probability in the case of adult humans for, arguably, the complexity of, for example, speech and affective behavioral outputs in adult humans is substantially greater than the behavioral outputs of human fetuses exposed to noxious stimuli. Still, there is an analogical edge provided by the behavioral similarity of human fetuses exposed to noxious stimuli and adult humans exposed to noxious stimuli who in fact report being in pain. Why, then, can we not simply infer, from analogy, that any fetus that exhibits pain behavior (such as withdrawal, grimacing, crying with appropriate changes in heart rate or blood pressure) in response to a noxious stimulus is, like us when we are exposed to noxious stimuli, likely in pain? Or, more weakly, why cannot we at least *begin* our examination of the question of fetal pain sentience with *pain behavior*, rather than from the starting point of *functional neuroanatomy* and other aspects of neurobiology. Having a *neurological starting point* tends to drive the inquiry in a direction that, first and foremost, makes relatively *mature nervous system development* the standard for sanctioning an inference to fetal pain sentience. On the other hand, having a *pain behavior starting point* tends to drive the inquiry in a direction that, first and foremost, makes *similarities in behavior* the standard for sanctioning such inferences. Both strategies have their benefits and their moral and medical risks. The former strategy risks treating as pain *insentient* humans who are pain *sentient*; and the latter strategy risks treating as pain *sentient* humans who are pain *insentient*.

The primary and predictable objection to the proposed strategy (to be discussed below) is, interestingly, itself an objection based on analogy, but an objection based on analogy that, I believe, can be defeated insofar it is an objection based on two fundamental errors that have already been introduced. *First*, the objection is based on the mistaken presumption that consciousness of any sort, including consciousness of pain, is incompatible with conditions such as anencephaly, being *adequately* generally anesthetized (as opposed to being *inadequately* general anesthetized and, thereby, being prone to 'awareness episodes' under anesthesia), being in comatose, vegetative, or other hypokinetic states, or with any condition in which one is missing a functional cerebral cortex (e.g., hydranencephaly).<sup>26</sup> *Second*, it is based on a confusion between sufficient and necessary conditions. Clearly, the entire neuroanatomy and neurophysiology of normal adult humans exposed to noxious stimuli is *sufficient* for pain sentience, but this does not imply that it is also *necessary*. Insofar as we have no clear idea concerning the neural correlates of either consciousness or unconsciousness, we also have no clear idea concerning either which



*specific aspects* of normal adult human neurology (i.e., which *proper subset* of neural circuitry) are (is) *sufficient* for pain sentience or which aspects of normal adult human neurology are *necessary* for pain sentience. In light of our current epistemic position, how then ought we to proceed?

Consider the following proposal: in order for us to be justified in believing that a human fetus F, at a certain stage of development, is pain sentient, F's nervous system must be structured in such a way that there is an unbroken functional neural link between nociceptive receptors and some brain region or other that it is reasonable to believe plays a significant role in consciousness, more broadly, or pain experience, more narrowly.<sup>27</sup> Without any such unbroken (except, of course, by synaptic clefts) functional link, let us agree, there cannot be pain sentience (understood here as pain sentience of *peripheral origin*, leaving open the question whether there might be pain sentience of *central origin* in the absence of peripheral nociceptive stimulation). As long as such a functional link exists, if a noxious stimulus results in pain behavior in F that is relevantly similar to normal adult human pain behavior, then F is at least more likely than not to be pain sentient and, therefore, F ought to be treated as if F is pain sentient. The functional neural circuitry in such cases (or some proper subset of this functional circuitry) could be rationally believed to be at least *sufficient* for pain sentience, leaving open the question of whether such circuitry is also *necessary* for pain sentience.

Although many psychologists and psychiatrists have undertaken fruitful research programs and have found novel clinical applications for ideas that depend on making certain kinds of inferences (including analogical inferences) to other minds (viz. those involving 'mentalization' and 'theory of mind'), some philosophers have not been content with analogical arguments for the existence of other minds, instead seeking stronger, deductive justification for the existence of others' mental states. I know of no such arguments that are not open to skeptical objections—objections that result in these arguments' not being convincing to everyone.<sup>28</sup> There are clearly, for example, empirical challenges to the analogical argument that one cannot easily deflect. There are, for example, apparently emotional behavioral displays in adult humans which, based on inquiries with those who exhibit such displays, are devoid of the emotional experience that typically accompanies such behaviors. Certain strokes, for example, can result in affective displays characterized by weeping and wailing or by laughing (commonly referred to as 'pseudobulbar affect' or 'emotional incontinence') that are not accompanied by sadness (or some related negative emotion) or happiness (or some related positive emotion), respectively. Nevertheless, the vast majority of the time, when person S is weeping and wailing, S is sad, and when S is smiling and laughing S is happy.

Similar considerations apply in the case of the fetus. If a fetus displays pain behavior following noxious stimulation, and if that fetus has the functional neural substrate that could, given all we know, support pain sentience, then it is reasonable to infer that the fetus is pain sentient and, in light of this reasonable inference, unless this is overly burdensome, unjust, or seriously harmful to the mother, to treat that fetus as if he or she is pain sentient. In the estimation of the Commission of Inquiry into Fetal Sentience (1996), a human fetus can be plausibly believed to be

pain sentient at 5 weeks postconception. It has been known since the 1960's, for example, that human fetuses respond to trigeminal stimulation as early as 7 weeks gestation (Humphrey, 1964). And it is widely agreed that some spinal cord (afferent) projections from fetal skin free nerve endings (nociceptors) reach the thalamus at 5 weeks postconception.<sup>29</sup> In light of this data, unless countervailing data declares itself, it is rational, and safe, to believe, and act on the belief, respectively, that unborn humans are capable of feeling pain by the latter part of the first trimester of pregnancy.<sup>30</sup>

It is, therefore, *irrelevant* that temporary thalamocortical connections are believed to begin to form at approximately 17 weeks and that they become established at 26 weeks (as cited by Glover and Fisk, 1996), or that thalamic nuclei approach *maturity* at approximately 12 weeks, or whether or not 'subplate' neurons—neurons comprising a transient fetal brain structure that is constituted by thalamic afferent fibers on their way to the cortical plate, about which much has been written ( see, for example, Lowery et al., 2007)—play any role in pain perception, or that thalamic afferents reach the subplate zone at 20–22 weeks (*JAMA* authors, 2005), or that somatosensory evoked potentials have distinct, constant components at 29 weeks (*JAMA* authors, 2005). None of this is relevant in light of all that we currently have very good reason to believe, viz. that *neither* a mature thalamus *nor* a cerebral cortex are necessary for consciousness or pain sentience *in fetuses*, just as *the cortex appears not to be necessary for consciousness or pain sentience in older children or adults*. Similarly, given all that we currently know, neither fetal hormonal responses (which some suggest begin by 23 weeks gestation) nor Doppler blood flow redistribution to the brain (which some suggest begin by 18 weeks gestation), nor any other proposed biological indices of pain sentience that have been proposed, are relevant to this discussion. What *is* relevant is some functional connection or other from peripheral nociceptors to somewhere or other in the fetal brain that is currently a reasonable candidate for either playing a significant role in consciousness generally or pain sentience, more narrowly, *and* appropriate behavioral responses to noxious stimuli.

But what about the important work on fetoplacental-generated endogenous neuroinhibitors (such as adenosine and the neuroactive steroids, pregnenolone and allopregnanolone as, for example, expounded upon by Mellor et al., 2005) that are believed to suppress fetal behavior and cortical activity *even if* the proper cortical neuroarchitectural structure has developed? These compounds are hypothesized to promote sleep in utero, thereby contributing to the suppression of fetal awareness. Certainly a sleeping fetus could not possibly feel pain, could it? Well, Mellor et al. acknowledge that their "observations demonstrate that sleep, or unconsciousness, is the dominant fetal state for at least 95% of the time" (2005, pp. 457–458). They then go on to state that, "The obvious and critical question is what state late-gestation fetuses are in during the 5% of the time that they are apparently *not* in REM [Rapid Eye Movement] or NREM [Non-Rapid Eye Movement] sleep?" (2005, p. 458, emphasis added). Mellor and colleagues' answer is that fetuses are, at those times of 'wakefulness', in a "transition phase between sleep states, a state which in the newborn is called indeterminate sleep" (2005, p. 459). 'Wakefulness' in this sense

(as the term ‘wakefulness’ is used in discussions of chronic hypokinetic states, such as the ‘Persistent Vegetative State’) is not the same as “[f]ull arousal from sleep” or “waking up” (p. 459) which, according to Mellor et al., is “a caudal-rostral brain process which originates in the ascending reticular activating system of the brainstem, spreads to the thalamus, *and finally to the cortex*” (p. 459, emphasis added). This ongoing commitment to an essential role for the cerebral cortex is central to Mellor and colleagues’ hypothesis concerning fetal and neonatal consciousness and finds its way into chains of inferences that can be confusing. For example, they go on to say that, “Importantly, however, arousal can also occur without cortical activation and waking; this is termed sleep-arousal. In the infant, sleep-arousal without waking is common” (p. 459). The presumption here is that arousal without cortical activation *must* be an aspect of something like a *sleep* state (hence, ‘sleep-arousal’), because ‘full arousal from sleep’ (i.e., ‘waking up’) *requires consciousness and consciousness requires a functional cortex*.

Of course, even if the fetus were in either REM or NREM sleep at every moment of his *ordinary* intrauterine existence, this does not imply that the fetus is pain insentient *simpliciter*, for some aspects of intrauterine life might be *extraordinary* in virtue of being marked by especially violent actions taken against the fetus. Being slashed across the face and eyes by a scalpel while asleep in utero, for example, is one extraordinary event that might occur, either unintentionally during fetal surgery, or intentionally during an abortion. Might this cause the fetus to ‘wake up’? Ever the scientists, Mellor and colleagues (2005) state that, “This question [concerning the possibility of pain experience as a result of extreme fetal violence] has not been directly tested” (p. 460). Although Mellor and his colleagues go on to discuss fetal responses to hypoxia and vibroacoustic stimuli, they have no experimental data to rely upon when faced with queries concerning whether sleeping fetuses of any intrauterine age might respond if they were slashed or chemically burned or twisted or crushed or broken into pieces. It is very difficult for Mellor and his colleagues to say whether it is reasonable to believe that slashing, burning, twisting, crushing, or breaking into pieces might awaken a sleeping fetus. Perhaps one of the most illuminating probes regarding whether scientists such as Mellor and his colleagues are at least *suspicious* that extreme violence to sleeping fetuses might awaken them and cause pain is querying these scientists concerning whether this ‘question that has *not* been directly tested’ *should* be tested, and if it should, to ask whether these scientists would participate in such direct testing by being the ones who slash the face and eyes, burn the skin, twist off the head and limbs, crush the neck and head, and break the sleeping fetuses into pieces, to see whether they then ‘wake up’ and, at some time or other during this vivisection, respond as if they are in pain.

## 10.4 Part IV

Fetal pain sentience has relevance for how those whose business it is to kill unborn humans ought to go about their business. It also has relevance for pregnant women considering abortion, and for legislation, or simply best ethical practice in the

absence of legislation, regarding what women should be told by abortionists prior to these killings, during the ‘informed consent’ process. Making appropriate adjustments to how abortion is carried out, given that, currently, the law of the land continues to permit it, with the aim of minimizing fetal pain, constitutes a humane undertaking. Reflecting carefully on fetal pain sentience transforms the discussion concerning what the human fetus *is* from a relatively abstract, ‘experience-distant’ matter that involves the fetus’s ontological structure (specifically, questions concerning whether the human fetus is or is not a human *person*) to a relatively more concrete, immediate, ‘experience-near’<sup>31</sup> matter that involves fetal *psychology*. In the process, the fetus is transformed from an *object* of *metaphysical* inquiry into a *psychological* being, a *subject*, with whom we can enter into *intersubjective relations*. This is clearly a move in the right direction—humanizing our relationships with some of the most vulnerable among us who continue, relentlessly, to be dehumanized. It is, apparently, not uncommon for women (as noted by McCullagh, 1997) to “seek assurances that fetal pain will not occur” (p.302) during the abortion process. Destroying one’s unborn child would be at least a little easier if it were believed to be painless. Conveying uncertainty to mothers seeking abortions regarding fetal pain sentience would be predicted to make following through with this course of action somewhat more difficult. And, predictably, conveying to mothers seeking abortions that there are good reasons to believe that one’s unborn child is in fact pain sentient, in the face of those abortion procedures likely to cause pain, might, for some, prove to be an insurmountable barrier to pursuing this course of action at all, for those who do not wish to cause their children also to suffer in the process of having them killed, and for those whose ultimate aim is compassion and love for all sentient beings.

## Notes

1. ‘Whether or when,’ because some commentators (e.g., Debyshire, 2006) deny that humans can feel pain at *any* time prior to and for a considerable time *after* birth, because they are not, at those times, in the relevant sense, *conscious*. In vivid contrast, Shewmon (1988) points out both the striking behavioral similarities noted between normal and *decerebrate* neonates and the “*traditional* (usually unspoken) *assumption*” that *normal* neonates, especially if premature, although awake, are not conscious “because of their relative lack of cortical function.” (p. 14, emphasis added).
2. I will, for the remainder of the essay, for purposes of ease of expression, use the term ‘fetus’ and its cognates to refer to an ‘unborn human’ at any stage of his or her (intrauterine) development.
3. Legislation has been passed recently in several U.S. states that requires abortion providers to alert women seeking abortions, as part of the informed consent process that, depending on developmental age, their unborn children have the capacity to experience pain. More recently, in 2010, the state of Nebraska passed the historic ‘Pain-Capable Unborn Child Protection Act’ which limits abortion, under ordinary circumstances, only to fetuses under 20 weeks based on fetal pain sentience considerations.
4. Clearly, what Lowery and colleagues (2007) mean (or *should* mean) here is that this definition of ‘pain’ is the one that is most commonly accepted *by clinicians and scientists* who specialize in pain management or in pain research, respectively. It is clearly *not* the most commonly

- accepted way of understanding what pain is by philosophers, who prefer conceptualizations of pain that involve notions such as ‘awfulness’, ‘privacy’, ‘qualia’, ‘in corrigibility’, ‘raw feels’, and the like. See, for example, Kaufman (1985), and Fiser (1986).
5. I will refer to Lee and colleagues (2005), who authored the very important article on fetal pain in one of the world’s most prestigious and influential medical journals, the *Journal of the American Medical Association (JAMA)*, as ‘the JAMA authors’ (2005).
  6. As, for example, discussed by psychoanalysts, psychologists, psychiatrists, and others who ascribe to a wide range of unconscious mental processes in humans.
  7. The process by which consciousness develops, to which Derbyshire subscribes, involves a relatively extensive preparatory period during which there is a rich elaboration of preconscious mental elements, including preconscious pains, it seems, or preconscious elements that, counterfactually, *would be*, or *result in*, pains *if conscious*.
  8. As succinctly noted by The All Party Parliamentary Pro-Life Group (1996), lacking the cognitive capacity to communicate or remember pain precludes pain *reports*, but not pain *experience* itself.
  9. Even this is not uncontroversial. Noren (1974) argues that not all pain is unpleasant and that not all pain is avoided. (The latter conjunct is certainly true, and is consistent with my position. I claim only that pain *tends* to be avoided, not that it always is.) He gives multiple purported counterexamples to buttress his dual claim that not all pain is unpleasant and that not all pain is avoided (including the very existence of *masochists*), none of which, I believe, succeed. (Masochists, for example, invite the infliction of pain not because pain is *not* unpleasant, but precisely because it *is*.)
  10. A similar view is defended by Benatar and Benatar (2001)—although they propose an analysis of pain along the *quantitative* axis of ‘severity’ as opposed to its *qualitative* features—who insist (incorrectly, in my view) that pain must be conscious, and claim (again incorrectly, in my view) that “pain is by definition worse than non-painful unpleasant feelings” (p. 59). Some itches and some tickles, for example, are clearly more unpleasant than some pains.
  11. Other unpleasant experiences that are not pains and that can be awful include tickles, relatively extreme temperature changes, and having one’s limbs fixed in awkward positions. None of these experiences, however, share either the raw phenomenology of pain or pain’s functional role.
  12. Also, cf. Glover and Fisk (1996), “From 14 weeks most of the body responds to touch by moving away, but this is probably a subcortical reflex response” (p. 796). Consistent with this, the All Party Parliamentary Pro-Life Group states that, “A reflex response, in its simplest form, is a movement following a stimulus: it is an automatic reaction” (1996, p. 8), adding that the development of reflex movement (that depends on functional efferent connections to muscle) in fetuses likely develops *after* sensory nerve endings make their afferent connections in the brain, “suggesting that it is more likely for the fetus to experience pain before it has the capacity to move” (1996, p. 9).
  13. This claim about fetal pain sentience’s role in maternal survival is framed, counterfactually, as its conducing to the survival of certain *specific* women seeking abortions. It might also conduce to the survival of a *greater proportion* of pregnant women either overall or in certain locales or among certain cohorts or at certain times, depending on what the differential mortality rates of abortion versus childbirth happen to be overall, or at those locales, or among those cohorts, or at those times.
  14. See the Sacred Congregation for the Doctrine of the Faith’s ‘Declaration on Procured Abortion’ (1974).
  15. Derbyshire makes quite clear that he does not endorse a ‘specificity theory’ of pain, i.e., a theory that attempts to locate some central brain region that subserves pain experience. He writes, “The basic failure of medical techniques based on specificity theory has led to the widespread abandonment of ideas based on a specific pain centre and led instead to the suggestion that there is a widespread pain system involving many different neural structures” (Derbyshire, 1999, p. 7). For Derbyshire, therefore, the importance of the cerebral cortex is not that it is the ‘place in the brain’ in which pain is experienced, for, he holds, there *is* no such place.

Rather, the cerebral cortex is, for him, a necessary structure involved in *consciousness* and it is *consciousness* of one's postnatal world that provides the essential cognitive ingredients for pain sentience. (Additionally, and very importantly, Derbyshire readily acknowledges that, "[T]here is surprisingly little consensus regarding the involvement of the cerebral cortex in pain processing" (1999, p. 9)). One might, therefore, have all the essential *neurological* hardware in place, but still not be pain sentient if the proper *psychology* is not delivered by that hardware's (or its software's) proper interface with the world. For this reason, for Derbyshire, postnatal exposure to the world, including appropriate interactions with linguistically competent caregivers, is essential for pain sentience. (He is, therefore, committed to the highly counterintuitive view that feral children, or even adults, for example, would be pain insentient. It is not clear what Derbyshire would say about a brute animal's experience of pain since, of course, brutes would not be expected to require linguistically adorned consciousness in order to experience pain.) The *JAMA* authors (2005), however, at least appear to rely more on the proper neurology's being in place independent of any reliance on proper psychology, insofar as they endorse pain sentience in utero (prior to the kind of interface with the extrauterine world, and the psychological structure that this provides, that Derbyshire requires) but only for late-term fetuses.

16. And, according to Benatar and Benatar, "pain seems impossible prior to the formation, at 18 weeks gestation, of synaptic connections in the cortical plate," i.e., the precursor to the cerebral cortex" (2001, p. 64). Eventually, based on this cortical requirement for pain sentience, Benatar and Benatar conclude that, "It is certainly the case that the perception of pain as a result of external noxious stimuli would not be possible until a *complete* neuronal connection is established from peripheral nociceptors to cerebral cortex (via spinal cord, brain stem and thalamus). This occurs by about 28–30 weeks gestation" (2001, p. 64, emphasis added). They later go on, appropriately, to distinguish wakefulness (a state of arousal) from consciousness, but then mistakenly conclude that, "While consciousness is supervenient on the function of the cortex, it is only possible in the wakeful state" (2001, p. 65). Ignoring their claim concerning supervenience, as opposed to some other relation between consciousness and cortex, *lucid dreamers* clearly provide counterexamples to Benatar and Benatar's claim that consciousness requires wakefulness.
17. Of course what Mellor et al. (2005) say here is literally true: without *cortical* inputs there can be no *cortical* awareness. What they *mean*, however, is that, in virtue of their belief that the cerebral cortex is essential for awareness, and hence pain perception, there can be no *other*, i.e., *non-cortical*, awareness or pain perception either.
18. That pain results from certain thalamic lesions has long been recognized. This is not to say that others have not found that some cortical manipulations *can* result in pain perception and, hence, that such manipulations are sufficient for pain perception in intact organisms. See, for example, the very early work of Penfield and Bolder (1937). This finding, however, does not imply that the cerebral cortex is *necessary* for pain sentience. Penfield (1952) later notes (as quoted by Merker, 2007), that "*the highest integrative functions of the brain are not completed at the cortical level, but in an upper brainstem system of central convergence supplying the key mechanism of consciousness*" (Merker, 2007, p. 64). It is important to note that what Penfield and Jasper (1954) call the 'upper brainstem' includes the midbrain reticular formation and its connections with the midline, intralaminar, and reticular thalamic nuclei.
19. Curiously, the *JAMA* authors' reliance on electroencephalography (EEG) for establishing whether or not existing thalamocortical fibers are *functional* is, on their own terms, misplaced, insofar as they readily admit that "no electroencephalographic 'pain pattern' exists... EEG activity alone does not prove functionality, because neonates with anencephaly who lack functional neural tissue above the brainstem may still have EEG activity" (2005, p. 950).
20. According to Derbyshire, "[A] 'neuromatrix' of regions, incorporating structures such as the anterior cingulate cortex which shows a plasticity with learning and development, is proposed as necessary for the experience of pain" (1999, p. 15).

21. Benatar and Benatar (2001), in a very commonsense sort of way, elegantly underscore this point by noting an illuminating analogy between children and fetuses in this regard, stating, “Children, after all, sometimes react to pain more vigorously than adults. Although it is hard to say whether it is simply the reaction that is greater or also the qualitative feel of the experience, the latter possibility cannot be discounted” (p. 75).
22. The traditional ‘problem of other minds’ as discussed in the philosophical literature has intimate connections with what is, in the current clinical literature, referred to as the process of ‘mentalization’ (Fonagy, Gergely, Jurist and Target, 2002) on the one hand, viz. the ability to understand, perceive, or interpret others’ and one’s own mental states based on inferences drawn from observable behaviors (with a richly textured appeal to the affect-laden social and interpersonal grid in which such states occur, culminating not only in important social or interpersonal growth, but also in the development of one’s sense of self), as well as with what is referred to as ‘theory of mind’ (Baron-Cohen, 1991), on the other (of which theories of mentalization are rich extensions and elaborations), viz. one’s ability to attribute mental states to others and to understand that these mental states are distinct from one’s own.
23. A similar illuminating discussion of the problem of other minds applied to the discussion concerning fetal pain can be found in Benatar and Benatar (2001, pp. 61 ff.) who rely on a combination of appropriate pain behavior in “the presence of the neurological anatomy and physiology required for bringing about pain” (p. 61) as a foundation from which to infer fetal pain sentience (what Benatar and Benatar call “the problem of fetal minds” (p. 75)). Benatar and Benatar (2001), however, appear to overreach here. Because it is *not known* what anatomy and physiology is *required* for bringing about pain, something like a ‘reasonable candidate’ neuroanatomy and neurophysiology standard is more plausible in this domain.
24. For a spirited defense of ‘adverbialism’ regarding visual perception, see Tye (1984).
25. The claims here are that (1) there is reason to believe that those who are diagnosed to be, for example, in vegetative states are often *misdiagnosed* (in fact, 37% in the study by Andrews and colleagues, 1996) *and* that even the ‘proper’ diagnosis of vegetative state is compatible with some level of consciousness (unless, of course, the presence of consciousness, no matter how fleeting and minimal, and undetected or undetectable, is itself taken to be *sufficient* for one’s *not* being in a vegetative state) (Howsepian, 1994, 1996); (2) there is reason to believe that some patients under general anesthesia who are ‘properly anesthetized’, i.e., who do not have ‘awareness episodes’ while anesthetized for purposes of surgery (during which they are fully awake and alert, but unresponsive, like a ‘locked-in’ patient would be), are in fact *conscious* (as discussed by Alkire and colleagues, 2008) albeit *unresponsive and amnesic* for their experiences (as revealed by data from research involving the ‘isolated forearm’ technique under anesthesia that shows that patients can be *aware and responsive* during surgical procedures *in spite of bispectral values that suggest that they are unconscious*); and (3) properly diagnosed anencephaly, like properly diagnosed hydranencephaly, as discussed by Shewmon (1999), is compatible with the presence of consciousness (Shewmon, 1988; Shewmon et al., 1989; Howsepian, 2011).
26. Putting aside, for now, the contentious issue of what, precisely, should count as a *brain*. For some preliminary reflections on this issue, see Howsepian (2008, and 2011).
27. See, for example, P.F. Strawson’s now classic treatise, *Individuals*, (1959, chapter 3); and Alvin Plantinga’s seminal *God and Other Minds* (1967) for intense critical scrutiny of the analogical argument.
28. This point is even acknowledged by the most ardent of fetal sentience skeptics, including Derbyshire (2006), who sets “the lower limit for the experience of pain at 7 weeks’ gestation” (p. 909). The fact that the thalamus is immature at this time, as Derbyshire also points out, in virtue of not being layered as it later becomes, is irrelevant to this discussion insofar as it is unknown whether such layering is *necessary* for pain sentience.
29. This conclusion is consistent with The All Party Parliamentary Pro-Life Group’s opinion (1996)—an opinion based on a methodology (viz. hormonal and behavioral responses to nociceptive stimuli, the intensity and nature of the stimuli, and nervous system development)

- relevantly similar to the one employed here: “The balance of evidence at the present time indicated that these [anatomical] structures [subserving the appreciation of pain] are present and functional before the 10th week of intrauterine life” (1996, p. 6). It goes on to state that, “the practice in veterinary and human medicine is to presume that the subject may be able to feel pain from any given procedure, unless this can be excluded with reasonable confidence” (1996, p. 7), adding that, “In Australia this includes the fetus of any given species” (p. 7) that is used in animal experimentation. Who, after all, would accept the claim that the withdrawal of a dog’s leg that a researcher immersed in boiling water is ‘mere reflex’? (p. 9).
30. I borrow this terminology from Kohut (1977).

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# Chapter 11

## A Biological Definition of the Human Embryo

Maureen L. Condic

### 11.1 What Is an Embryo and When Does Embryonic Life Begin?

Attempts to define what an embryo is and when it comes into being face significant challenges due to the complexity of human development. Unlike mature humans, embryos are constantly in flux, with their composition and form changing dramatically over time. No obvious property or action defines an embryo at all stages of development.

In addition to the intricacy of development, the task of defining a human embryo is made more challenging by the continuous nature of life; i.e. because all living entities arise from other living entities and exhibit some degree of complexity, how can the level of organization required to be a human being or the precise moment at which life begins be accurately defined?

Definitions of what is and what is not a human embryo frequently rely on the presence of specific molecular components, or on where the entity originated, or on whether the entity has achieved specific developmental landmarks. Yet these definitions all suffer from either the lack of objective criteria, the lack of precision or both. Moreover, they do not easily account for the various entities that occur naturally or are produced in the laboratory (Table 11.1). Thus, a comprehensive definition of an embryo is required; one that accommodates the complexity of development, the continuous nature of life and the range of entities that actually or potentially exist.

Here, four problems encountered in defining an embryo are briefly discussed, and three commonly proposed definitions are considered in light of these problems. Finally, a new definition of the embryo is proposed, and applied to the question of when human life begins.

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**Table 11.1** Status of entities that share some features in common with embryos

Entity	Human nuclear genome?	Arise by fertilization?	Organismal development? <sup>a</sup>	Human embryo?
Human zygote	+	+	+	Yes
Human-human chimera	+	–	+	Yes
Human-animal chimera <sup>b</sup>	Partial	–	+/?	No
Monozygotic twins	+	–	+	Yes
Cybrid embryo <sup>c</sup>	+	+	+	Yes
Triploid or Tetraploid embryo	+	+	+	Yes; defective
Partial hydatidiform mole	+	+	+	Yes; defective
Complete hydatidiform mole	+	+	–	No
Parthenote	+	–	?	Insufficient data
Activated enucleated egg	–	–	–	No
h-ESCs	+	–	–	No
h-iPSCs	+	–	–	No
Embryonal carcinoma	+	–	–	No
Teratoma/pluripotent tumor	+	–	–	No
Tissue explant	+	–	–	No
Adult stem cells	+	–	–	No
<i>Entities made in animals<sup>d</sup></i>				<i>Animal embryo?</i>
Cloned embryo	n/a	–	+	Yes
Tetraploid complementation	n/a	–	+	Yes
Embryo splitting	n/a	–	+	Yes
Fusion of ESC-produced gametes	n/a	+	+	Yes
ANT product	n/a	–	–	No

<sup>a</sup>“Best case” scenarios are given; i.e. if there are *any* reported cases of this kind of entity forming TE/ICM, it is listed as a positive. <sup>b</sup>Human/animal chimeras containing a minority of human cells have been made, and they develop along an animal trajectory. Whether shifting the ratio to a majority of human cells would alter this result is unknown. <sup>c</sup>Embryos made from an enucleated animal egg and a human somatic nucleus. <sup>d</sup>Entities made thus far only in animal models. Comparable human entities are likely to exhibit similar behavior

## 11.2 Four Kinds of Problems Encountered in Defining an Embryo

### 11.2.1 The Circle of Life

Life is a temporal continuum, with all living entities arising from other living entities. Most human beings are produced from the union of two preexisting cells: sperm and egg. Sperm and egg cells arise from living cells that preceded them in the testes and ovaries, and so forth, back indefinitely to the beginning of all life. In light of the continuous nature of living cells, asserting that a “new” human being arises at any point appears arbitrary to many.

Yet, if there is no meaningful point at which a new human life can be said to begin, we are left with two serious dilemmas, one ethical and one scientific. The ethical dilemma arises because in both intuition and in practice, we make distinctions

between living *cells* (e.g. sperm and egg) and living *human beings*. No one objects to the destruction of ordinary human cells for biomedical research, but the use of human beings for such purposes is universally condemned. If this strong intuitive distinction is to have any meaning, some non-arbitrary criteria must be established to determine when living human cells give rise to a new human being.

The scientific dilemma arises because scientific investigation *requires* distinctions between living entities with different properties, including distinctions between cells and organisms.<sup>1</sup> While the scientific profession keenly appreciates the continuous nature of life and the ease with which one cell type can be converted to another<sup>2</sup> this very appreciation rests on the understanding that a *conversion* has indeed happened; e.g. that changing a stem cell into a heart cell actually does change the nature of the cell in a real way.

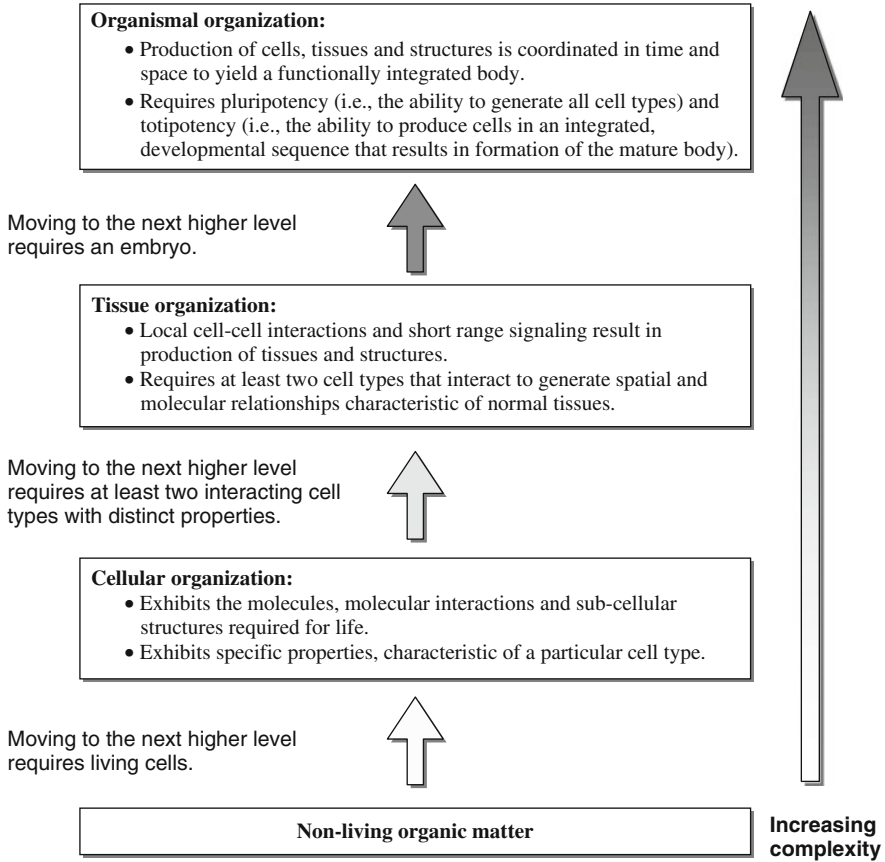
### 11.2.2 Different Levels of Organization

Living entities exhibit a range of structural and functional complexity, which can also be seen as a continuum (Fig. 11.1). On the simplest level, all cells have internal organization; i.e. they contain molecules and organelles that support the functions required for life. This kind of “cellular organization” is required for any entity to be alive, but is clearly not sufficient to classify a living entity as an embryo.

One specific type of cellular organization is that of a pluripotent cell. Pluripotent cells, such as those found in embryos and in some tumors, can produce a wide range of new cell types that have distinct properties. This can give rise to a higher level of organization, due to interactions between different cell types that allow them to assemble spontaneously into tissues and multicellular structures. This kind of organization, with local, cell-cell interactions and short-range signaling giving rise to locally integrated patterns of cell differentiation can be viewed as “tissue organization” (Fig. 11.1).

Tissue organization can be quite complex. For example, pluripotent tumor cells can generate multiple cell types and array them in complex ways to form teeth,<sup>3</sup> bones and even eyes.<sup>4</sup> Yet tissue organization arises *solely as a consequence of the inherent properties of the cells comprising these tissues and their local, cell-cell interactions*. Thus, the ability of a cell or group of cells to form complex relationships on a local level, giving rise to organized structures, is also not sufficient to distinguish mere human cells from human embryos.

Embryos exhibit an even more complex level of organization. Embryos are able to coordinate the production of multiple cell types in a coherent, global pattern that is directed towards the formation of a functionally integrated, self-sustaining body. While tumors may produce structures similar to those found in embryos, they do not integrate these structures into a temporal sequence that generates functional systems capable of sustaining the tumor as a whole. The global integration of tissues into a functional whole is the hallmark of a developing *organism* that distinguishes it from cells or tissues (Fig. 11.1).



**Fig. 11.1** Different levels of biological organization and what is required for an entity to exhibit a specific level of organization

Importantly, living entities exhibit significant discontinuities, or thresholds between different levels of organization that preclude the existence of intermediate states. Single-cell organisms (like bacteria) do not spontaneously assemble into tissues, because their inherent properties do not support the cell-cell interactions required to form distinct cell types.<sup>5</sup> Tissues do not spontaneously assemble into organisms, again because the intrinsic properties of cells within tissues do not allow for the generation of an entire coordinated system. Conversely, organisms do not spontaneously dissociate into cells or tissues.

**11.2.3 Individual Entities Exhibit a Range of Properties Over Time**

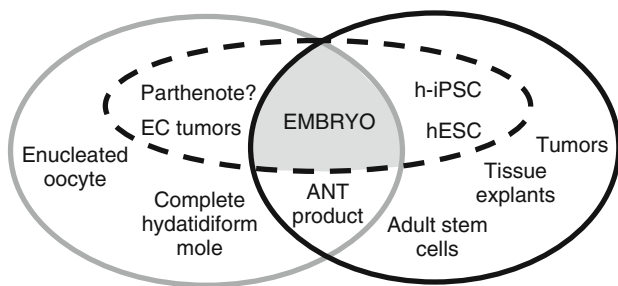
Development is a temporal sequence of events, with the properties of an organism at the beginning being different from those it exhibits at the end. The fact that both structure and function change continuously over time raises two kinds of

complications for determining what constitutes a human embryo and when it comes to be.

As human development proceeds from a single cell to increasingly more complex states, it seems intuitive to many that a human being exists only once a specific functional or structural maturation has been obtained. In this view, a “pre-human” (either a group of human cells or a non-human organism) with the potential to *become* a human being may exist at early stages of development, yet it is not an “actual” person until some later time. Conversely, some argue that an entity can *begin* as a human embryo and spontaneously convert into something else, ultimately exhibiting non-human properties. For example, the fact that tumor cells share many properties in common with developing organisms (Fig. 11.2) leads some to question whether such tumors might be “defective” human organisms.<sup>6</sup>

However, both of these views are incompatible with the scientific facts. At fertilization, two cells fuse to produce a new cell (the zygote) that has the properties of an organism. The formation of a new organism by sperm-egg fusion is observed throughout the animal kingdom and is, with few exceptions,<sup>7</sup> the only way a new animal naturally forms. Once the zygote forms, it immediately begins developing towards a mature state,<sup>8</sup> and remains the same *kind* of entity across its entire

- Produces the first two embryonic cell types, TE and ICM
- Derived from an oocyte (normal, altered, or abnormal) and exhibits some of the organized properties seen in embryos
- Locally organizes tissues and forms structures
- Globally organizes a functionally integrated body



**Fig. 11.2** The requirements for an animal embryo. A range of entities exist that share some of the properties of an embryo. Many tumors, stem cells, and isolated tissues are able to form structures using processes that are similar or identical to those seen in embryos (*black circle*). Some types of cells, including human induced pluripotent stem cells (h-iPSC), human embryonic stem cells (hESC), embryonal carcinomas (EC tumors) and possibly parthenotes can also produce all of the cells of the body, including both TE and the ICM (*dashed circle*). Finally, entities produced from normal, abnormal or manipulated gametes can replicate some of the processes observed in early embryos (*gray circle*). Only embryos (*shaded*) exhibit all of these traits, and also exhibit the defining feature of an *organism*; the ability to undergo development by generating cells in a specific sequence and integrating them into a functionally coherent body. Whether parthenotes are non-embryos or defective embryos cannot be resolved based on the limited data currently available [see: *White paper*]. “ANT product” refers to the product of Altered Nuclear Transfer (see: Condic, 2008a)

lifespan (e.g. human babies do not naturally “mature” into baboons or into tumors as a consequence of a normal developmental process).

This is not to say that a substantial change from organism to non-organism cannot occur. Organisms die, and are transformed by the process of decay into non-living organic matter. If embryos are placed in an environment that supports cellular, but not organismal life, they can die while some of their cells persist as a disorganized growth.<sup>9</sup> Disease can kill parts of the organism, or transform them into tumor cells. Yet, all of these kinds of transitions are clearly different from an entire, living entity (e.g. an embryo) in a supportive or neutral environment *spontaneously* turning into a different kind of living thing (e.g. a baby transforming into a baboon or a tumor), as a consequence of an intrinsic developmental process.

Given that some kinds of transitions from organism to non-organism can occur, how does one distinguish between entities that are initially organisms and then die as a consequence of defect or disease, compared to those that are non-organisms from the beginning? In other words, how does one view an entity that appears to be undergoing a similar trajectory to an embryo for some period of time and then diverges? Should it be considered an embryo initially? Does the ultimate divergence in development tell us it was never an embryo? In considering these questions, it is important to appreciate that simply because two living entities share some common elements or overlap in a sequence of biochemical events, they are not necessarily the same *kind* of entity.

Distinct biological entities that share some initial molecular events are similar to two musical works that begin with the same notes (Fig. 11.3). For example, “Twinkle, twinkle little star” and “The alphabet song” are identical until the fourth measure, yet they are distinct (albeit, very similar) songs. While listening to a CD recording, it would be impossible to determine which work is being performed until the first distinguishing note is heard, yet once this point is past, all prior notes provide clear evidence that a particular song was indeed recorded on the CD and was being played out from the first note. The CD does not begin playing random notes that resolve into a specific song, nor does it begin with one song and later “transform” into the other, nor does it begin playing “both” or “neither” song until the first distinguishing note is produced. From the beginning, it plays *the single, specific song that is recorded on the CD*. Indeed, prior to the CD being played, a sufficiently detailed examination of the recording (for example, analyzing the data encoded on the disc using a scanning probe atomic force microscope) would determine the precise song it contains without any ambiguity.

Because both embryonic development and music play out over time, it is tempting to give excessive weight to a limited, “first impression” view; i.e. if something initially looks like an embryo (or sounds like “The alphabet song”), this must be what it is. Yet, precisely *how* a developing entity (or a musical recording) will play out in time is entirely predetermined by the structures and relationships existing at its initiation. Just as the music produced from a CD reflects the nature of the recording itself (its properties and the information it contains), the pattern of molecular events a biological entity undergoes reflects the nature of the biological entity itself; its potencies, structures and molecular composition. A sufficiently detailed description



**Twinkle twinkle little star**

Twinkle twinkle little star, how I wonder what you are! Up a - bove the world so high,  
 like a dia - mond in the sky. Twinkle, twin - kle, lit - tle star, how I won - der what you are!

**Alphabet song**

A B C D E F G H I J K L M N O P Q R S T U V  
 dou - ble U X Y and Z. Now I know my A, B, Cs. Next time won't you sing with me?

**Baa baa black sheep**

Baa baa black sheep have you an - y wool? Yes sir, yes sir three bags full. One for my mas - ter, one for my dame,  
 one for the lit - le boy who lives down the lane. Baa baa black sheep have you an - y wool? Yes sir, yes sir three bags full.

**Fig. 11.3** What something is cannot necessarily be determined by the initial sequence of actions it undertakes. For example, “The alphabet song” and “Baa, baa black sheep” begin with the same notes as “Twinkle, twinkle little star”, diverging in the fourth measure and second measures, respectively. Yet they are distinct (albeit, very similar) songs

of the biological entity at its initiation would accurately *predict* the outcome of subsequent molecular events.<sup>10</sup>

In cases where an entity shares some initial overlap in morphology, composition or behavior with an embryo, yet subsequently dies or exhibits disorganized (non-organismal) behavior, two key questions must be asked to resolve the status of the entity. First, is the transition driven by intrinsic or extrinsic factors; i.e. does the transition reflect the nature of the thing itself, or a limitation in the environment? Second, if the transition reflects the nature of the entity itself, what is the highest level of organization the entity *inherently* exhibits; i.e. does it ever demonstrate organismal behavior? This second question resolves the status of the entity: *the level of organization an entity intrinsically exhibits allows us to determine the kind of entity it is.*

**11.2.4 Individual Entities Belonging to the Same General Class Exhibit a Range of Properties**

A final problem for defining what is an embryo and when it comes into existence is a problem common to defining *any* living entity: specific examples of a particular kind of entity are not *identical* to other entities of the same kind. For example, human

beings show a wide range of variation in both form and function, reflecting a wide range of underlying variation in molecular components. Accounting for the variation among members of a particular class is particularly problematic when attempting to distinguish between closely related entities; for example, if one attempts to describe the characteristics of human embryos that distinguish them from pluripotent tumors. Both types of entities show a range of variation on many specific traits, and there will undoubtedly be considerable overlap between these ranges (Fig. 11.2). Thus, knowing where the class “embryo” ends and the class “tumor” begins is complicated by the variation inherent between entities of the same general kind.

## 11.3 Problems with Proposed Definitions of the Embryo

### 11.3.1 *Definitions Based on Molecular Properties: Systems Biology*

One proposed method for defining what is and what is not a human embryo has been to base a definition on some aspect of an embryo’s molecular composition. The clearest example of this method is that of systems biology.<sup>11</sup> This is a general approach to understanding living entities by describing all of their component molecules and how they interact to form a system.<sup>12</sup> In this view, an embryo could be defined by a thorough examination of all the proteins it contains (its “proteomic profile”), all of the genes it is currently using (its “transcriptional profile”), all of the modifications to its DNA (its “epigenetic state”) and all of the interactions between these factors. This would, of course, be an enormous undertaking. Yet even if such an analysis were possible, it would be fundamentally inadequate to define an embryo due to two essential problems.

The first problem presented by a systems biology approach reflects the variation among individual entities of the same general kind (the fourth problem noted above): How does one determine which specific entities to include in the analysis? If, for example, entities derived from the fusion of an egg and a sperm were selected as “embryos” for molecular analysis, then this selection itself constitutes a definition of an embryo. However, this definition is both not a definition from systems biology and is also inadequate. If an “egg” that has abnormally lost all of its DNA fuses to a sperm, the resulting cell will have only half the characteristically human amount of DNA, and it will either die or produce a tumor. Can the molecules, structures and interactions observed in such an entity legitimately contribute to the definition of an embryo? To analyze, and thereby define, the molecular composition of an embryo one must start with embryos, which requires an *independent definition* of what is and what is not an embryo.

The second problem with a definition based in systems biology is that this approach is incapable of determining the status of entities that share some, but not all of the properties that have been defined as characteristic of an embryo. Even if embryos could be identified confidently for analysis by some independent criteria,

and a comprehensive description obtained, how would one view an entity that fell outside of the measured range on one or more parameters? It would be impossible, based on this kind of analysis, to determine whether this entity was a non-embryo or merely an “atypical” embryo that fell outside the range of variation already observed in the population. Resolving the status of such an entity would require either resorting to a purely arbitrary criteria (“any entity within one standard deviation of our existing data is an embryo”) or again appealing to an independent criteria for what is and what is not an embryo.<sup>13</sup> Thus, a systems biology approach would undoubtedly tell us many interesting things about the molecular composition of embryos, but it is fundamentally incapable of *defining* an embryo.

### 11.3.2 Cell-Type of Origin

A second broad approach to defining what is and what is not a human embryo has been to focus on the type of cells that give rise to the entity. Thus, a human embryo is defined as an entity arising from the fusion of a human sperm and a human egg or from cloning using a human egg and a human somatic cell nucleus. Based on this kind of definition, many have objected to proposed scientific experiments involving egg cells that have been manipulated in the laboratory, because *any* entity arising from an egg could potentially be an embryo.<sup>14</sup>

While defining an embryo as the product of a natural process (sperm-egg fusion) is intuitively appealing, such a definition is inadequate for the same reason a systems biology approach is inadequate; without clear molecular and (more importantly) *functional* criteria for what is and what is not a gamete, *any* cell “could” be a sperm or an egg, if it exhibits *any* feature of a normal gamete. This kind of superficial similarity would include virtually all living cells and many entities that are not cells at all (such as an “egg” without a nucleus).

A definition based solely on the tissue of origin (i.e. a cell produced by the ovary or testis) or on appearance (i.e. a cell that “looks like” a gamete) or on a specific molecular feature (i.e. a cell that contains molecules normally found in gametes) is not a scientifically tenable definition, simply because it does not distinguish between entities with similar properties or appearance (the fourth problem noted above). Indeed, in modern biology, cells with specific properties can be manufactured in the laboratory,<sup>15</sup> entirely circumventing “tissue of origin” as a defining feature of cell type. Moreover, distinct kinds of cells have (or can be made to have) similar appearance and similar composition, without being the same cell type.<sup>16</sup> Thus, defining an embryo by the type of cells that give rise to it either pushes the definition back one step to the question of “what is a gamete” (and thereby encounters the problems inherent in the circle of life, in addition to the problems inherent in the variation among entities of the same kind) or it creates a circular definition: an embryo is an entity produced by gametes, and gametes are those cells capable of producing an embryo.

### ***11.3.3 Structural or Functional Maturation***

As noted earlier, it is frequently argued that human life begins when an entity achieves a certain developmental landmark.<sup>17</sup> Such a definition ignores the real distinctions between organisms and non-organisms, preferring to focus on some structural or functional ability, often some feature of brain maturation or mental function. However, the point at which the nervous system is thought to be mature enough to consider an entity a human being varies considerably, from the onset of neural function at approximately 10 weeks (Himma, 2003), to the onset of “coordinated neural function” at approximately 23 weeks (Penner, and Hull, 2008, p. 174), to the establishment of more complex brain connections that are capable of supporting “consciousness”, between 30 and 35 weeks (Burgess, and Tawia, 1996). The variation in these figures illustrates the fatal flaw in such a definition; unlike the distinction between an organism and a non-organism, there is no clear point at which “landmarks” capable of distinguishing between a human being and a non-human being are achieved. Indeed, some have argued that the brain is insufficiently mature at birth to warrant calling a newborn a person (Kuhse and Singer, 1988). Thus, using brain development (or any other aspect of maturing form or function) as a basis for determining what is a human being and when human life begins is necessarily arbitrary, and therefore inadequate. Moreover, identifying a level of maturation as the point at which human life begins does not define the nature of the human embryo.

## **11.4 What Is an Embryo? A Definition from Composition and Function**

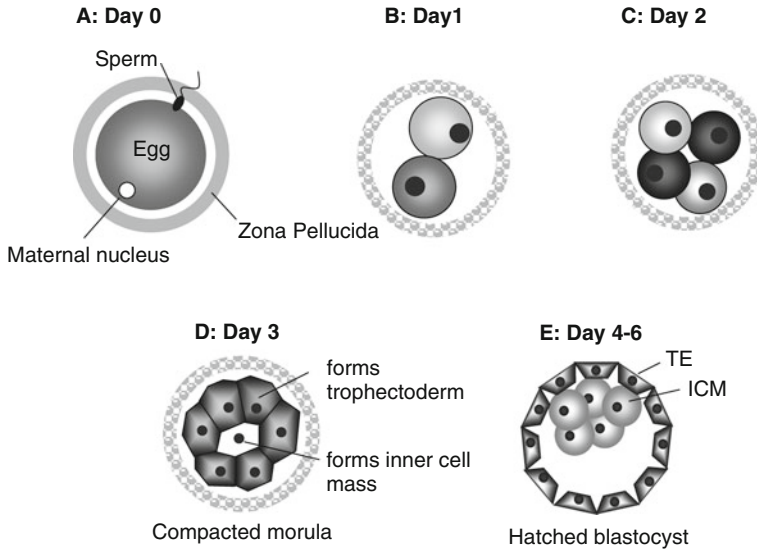
### ***11.4.1 Proposed Definition of a Human Embryo***

Human development is normally initiated by sperm-egg fusion, and progresses over the 6 days to form the first two cell types and the first primitive structures of the embryo (Fig. 11.4). To address the problems discussed above, and to provide a clear classification of naturally occurring entities as well as those produced in the laboratory (Table 11.1), the following working definition of a human embryo is proposed:

A human embryo is a discrete, living, biological entity with a human nuclear genome that

- (1) initiates a globally organized and coordinated (i.e. “organismal”) developmental process having the potential to proceed up to or beyond the stage at which the trophoctoderm and inner cell mass are formed, and
- (2) has arisen from either,
  - (i) the fusion of the plasma membranes of a human oocyte and a human sperm or
  - (ii) any other event or procedure that initiates such an organized developmental process,

and



**Fig. 11.4** Events occurring during the first 6 days following sperm-egg fusion. (a) The embryo is formed by the fusion of sperm and egg. The zona pellucida is an acellular, protein coat that protects the egg and the early embryo. (b) At the two-cell stage, cells have a distinct developmental bias, and tend to contribute to different tissues in the embryo. By this stage, the zona pellucida has been modified by the embryo to prevent additional sperm binding. (c) By the four-cell stage, molecular differences between cells emerge, and help to segregate cells into one of the first two cell types in the embryo. By the eight cell stage, the embryo consists of loosely associated cells, and is referred to as a morula. (d) Between the eight and 16 cell stage, the cells of the embryo express new molecules that cause them to adhere tightly and thereby alter the shape of the embryo in a process called compaction. The cells in the outer layer will eventually form the trophectoderm (TE) and the inner cells will go on to form the inner cell mass (ICM). (e) Over the next several days, cells of the embryo differentiate into TE and ICM. The embryo enlarges to form a hollow ball called the blastula. Once the embryo “hatches,” or escapes from the zona pellucida, the outer TE cells bind to the uterine lining to mediate implantation. TE cells will generate the placenta and embryonic membranes. ICM cells will generate the majority of the postnatal body

- (3) has not yet proceeded through 8 weeks of development since initiation of such an organized developmental process.

### 11.4.2 What Is the Basis of This Definition?

Throughout the scientific enterprise, distinctions between cell types are made based on only two criteria: differences in cell composition and differences in cell behavior. Based on these criteria, we can confidently state that a new one-cell embryo (the zygote) is formed upon sperm-egg fusion.<sup>18</sup> The events of the first few days of human life (Fig. 11.4) are initiated by the embryo and sequentially produce the complex structures and relationships required to generate the mature human form.

This global organization is continuously manifest throughout life, ending only in the death of the organism.

As noted above, many cells resulting from the fusion of sperm and egg are not embryos. Therefore, the definition of a human embryo proposed here relies on a further, key characteristic of the embryo: the production of the first two cell types. Forming distinct cell types is critical to the definition of an embryo because human beings are *multicellular animals*. Although humans begin life as a single cell, the mature state of the body is to be comprised of many cell types that interact in complex ways to form tissues and organs. Only an organism sequentially generates distinct cell types in a coherent manner so as to produce a mature body; i.e., *only an organism is capable of development*.

An important aspect of this definition is that the process of development does not *produce* a human being, it is accomplished *by* a human being. Development involves sequential maturation of an immature human being into successively more mature states, but it does not convert a mere human cell or collection of human cells into a human organism.

### ***11.4.3 How this Definition Addresses the Problems Encountered in Defining an Embryo***

In agreement with a large body of scientific evidence,<sup>19</sup> this definition proposes that a human embryo is initiated at a specific time (“a moment of conception”). In natural fertilization, this point would be the fusion of sperm and egg plasma membranes. Alternatively, other processes that initiate a developmental sequence of events (such as cloning or splitting an embryo to generate monozygotic twins) would also constitute a single event that marks the onset of human new life for one of the twins, or the death of the original individual and the onset of life for both of the twins. Importantly, assigning the beginning of life to a specific point is both precise and objective. Thus, this definition addresses the first continuum problem by providing a clear, discontinuous point in the “circle of life” at which a new organism is indeed formed.

Second, this definition proposes that a human embryo is not merely *any* cell formed by the fusion of gametes, but only those entities that undergo a developmental sequence *as an organism* (Fig. 11.1). Appealing to the *behavior* of an entity as a means to understand its nature reflects a long intellectual tradition. Aristotle proposed that to know the nature of something, we must look at its “potentialities”; i.e., its powers or capacities. Potentialities are revealed by acts; by what the entity does.<sup>20</sup> To determine whether an entity is an embryo, we must examine its *behavior* to see whether it exhibits the defining feature of an embryo; an organismal level of organization (Fig. 11.1). Thus, this definition addresses the second continuum problem by providing a clear criterion for what level of organization an entity must exhibit to be an embryo.

Third, this definition proposes that an embryo is capable of *initiating* development, but is not dependent on the embryo achieving any specific level of maturation,

thus addressing the changing nature of organisms over time. An entity capable of initiating a developmental sequence is one that will mature in structure and function, but the capacity to *undergo* development exists as soon as the entity itself exists. Moreover, this definition applies both to normal embryos that complete the full developmental sequence as well as to abnormal or defective embryos that may initiate, but not complete this sequence (or complete it imperfectly).

Finally, this definition relies on a unique feature of all embryos that distinguishes them from all other biological entities; only embryos undergo development. While there is likely to be a range of molecular and genetic variation among entities that are capable of undergoing a developmental sequence, the sequence itself can be objectively observed. Thus the definition addresses the variation among individual embryos, and does not require an independent criterion for including specific entities in the class of those to be considered “embryos.”

## 11.5 The Starting Point Matters

### ***11.5.1 Not All Cells Capable of Making Trophectoderm (TE) and INNER Cell Mass (ICM) Are Embryos***

During normal development proceeding from the fusion of sperm and egg, the formation of TE and ICM is both necessary and sufficient to conclude that a human embryo is present. Yet it is important to note that formation of TE and ICM is not sufficient for *any* cell to be considered an embryo. Human embryonic stem cells, for example, have the ability to form both TE-like and ICM-like cells, and are able to produce complex tissues (Fig. 11.2 and Table 11.1). However, stem cells are *not* able to establish the appropriate spatial, cellular and molecular interactions required to be an organism (Fig. 11.1); i.e., they do not produce specific cell types in an ordered sequence and they do not organize the cells they produce into a coherent, functionally integrated body.

While it is theoretically possible that stem cells or tumors could produce a short lived embryo that proceeds to the formation of TE and ICM and then arrests and dies, in practice this is never observed. Stem cells and tumors produce cells with TE- or ICM-like features in a chaotic, disordered manner as part of a cellular process, not a *developmental* process.<sup>21</sup> Thus, tumors and stem cells cannot be considered normal embryos or defective embryos; they are non-embryos.

### ***11.5.2 Special Consideration Must Be Given to Germ Cells***

The proposed definition of an embryo presumes a specific starting point; one that is capable of initiating “a globally organized and coordinated (i.e., “organismal”) developmental process having the potential to proceed up to or beyond the stage at which the trophectoderm and inner cell mass first appear.” In normal fertilization, this process is initiated by fusion of sperm and egg; unique cells that are naturally

predisposed to forming a human embryo. Gametes make a number of specific contributions that are necessary to form an embryo. Both sperm and egg contribute haploid genomes that are properly configured to participate in development (i.e., appropriately “imprinted”<sup>22</sup>). Moreover, the oocyte contributes a large number of factors required for embryogenesis (many of which have specific spatial distributions in the egg), including factors that will appropriately modify the sperm and egg DNA following fertilization to establish an epigenetic state that is capable of development. These three gamete-dependent components (appropriately imprinted DNA, essential molecular factors in the oocyte and an appropriate epigenetic state of the DNA) constitute the “program” for human development—the biological factors that distinguish a zygote (i.e., a one-cell *organism*) from all other cells.

Cloning, or the transfer of a body-cell nucleus into an egg that has had its own nucleus removed, can also initiate a developmental sequence, precisely because it starts with an egg cell. Somatic cells retain the imprinting that existed in the zygote. Yet, unlike the nuclei derived from egg and sperm, a somatic nucleus does not exist in an epigenetic state that is naturally predisposed to participate in development. However, a somatic nucleus can be “reprogrammed” by egg components to an epigenetic state that supports development. Thus, in the rare cases where cloning successfully produces an embryo,<sup>23</sup> the developmental “program” (imprinting, oocyte components and epigenetic state) is artificially established.

Because germ cells are naturally predisposed to make an organism, entities derived from germ cells (Fig. 11.2; grey circle) must be viewed with considerable caution, particularly in cases where there is insufficient data to resolve the nature of the entity (e.g. human parthenotes). In contrast, entities derived from other sources (for example, h-iPSCs from direct reprogramming; Fig. 11.2) that do not show globally coordinated behavior can be confidently determined to be non-embryos, because they lack the elements required for an organism to be present.

## 11.6 Integrating this Definition with the Changing Nature of Embryos Over Time

### 11.6.1 *Why Not Earlier? Is Cell Specification Sufficient to Define an Embryo?*

Relying on the production of TE and ICM to provide conclusive evidence that an embryo exists raises a number of concerns regarding the stages of human development prior to the formation of the first two cell types (Fig. 11.4). Molecular differences between TE and ICM are not detected until at least the 4-cell stage, and stable cell differentiation occurs even later, at the blastula stage (approximately 5–6 days post sperm-egg fusion). There are many coordinated events (molecular and cell interactions) that occur prior to formation of TE and ICM.<sup>24</sup> Why is the coordinated production of stably differentiated cells (TE and ICM) sufficient to define an entity as a human organism, while these earlier coordinated events are



not? If entities that arrest after the production of TE and ICM are to be considered defective embryos,<sup>25</sup> why should an entity that apparently initiates a developmental sequence, yet arrests prior to the formation of the first differentiated cells, not *also* be considered a defective human embryo? If an entity derived from fusion of sperm and egg does not progress to the point of producing TE and ICM, can it not be supposed that this entity possesses the “program” for human development, albeit with a defect of some sort?

To address this concern it is important to recall that biological processes can share common elements without being the *same* process (Fig. 11.3). As noted above, some entities derived from fusion of sperm and egg are not organisms, and some are not even cells. If an entity produced by gamete fusion undergoes *some* of the normal processes of early development yet fails to replicate others, it is important to consider the nature of such “failures” carefully. Is there evidence for a globally coordinated whole (i.e., an organism) being present, or not?

In normal development (Fig. 11.4), production of new cell types and their integration into a coordinated pattern occurs in a sequence of steps, with the initial step being “specification.” A cell is specified when it has received information that directs it into a specific developmental path that is different from its neighbors. Scientists detect specification by differences in cell composition (i.e., gene expression). Despite these molecular differences, cells with differing specification remain functional equivalents; i.e., they are able to change their gene expression and switch from one developmental path to another. In contrast to specification, *commitment* occurs when a cell has progressed along a particular developmental path to a point where it is no longer able to spontaneously revert to an earlier state or switch to a novel path. Commitment is a normal consequence of specification, and is detected as a restriction in “potency” of a cell; i.e., a limitation in what a cell can do if isolated or experimentally challenged with a new environment. In human development, the coordinated events of the first 5 days of life largely reflect the process of cell specification that ultimately results in the production of the first two committed cell types (TE and ICM).

There are two reasons why cell specification alone is not *sufficient* to define an embryo, while it is nonetheless a *necessary* feature of an embryo. First, an entity that undergoes a sequence of molecular events associated with specification is not necessarily undergoing a *developmental* sequence. Molecular changes occurring in individual cells are well within the province of *cellular* organization (Fig. 11.1), and do not require a higher, tissue or organismal level of organization to be present. Indeed, changes of this type are routinely observed in cell cultures, in tumors and in unicellular bacteria. The natural state of the human body is to be a multicellular animal. A molecular change that does not result in production of differentiated cells is a *cellular* process, not a *developmental* process.

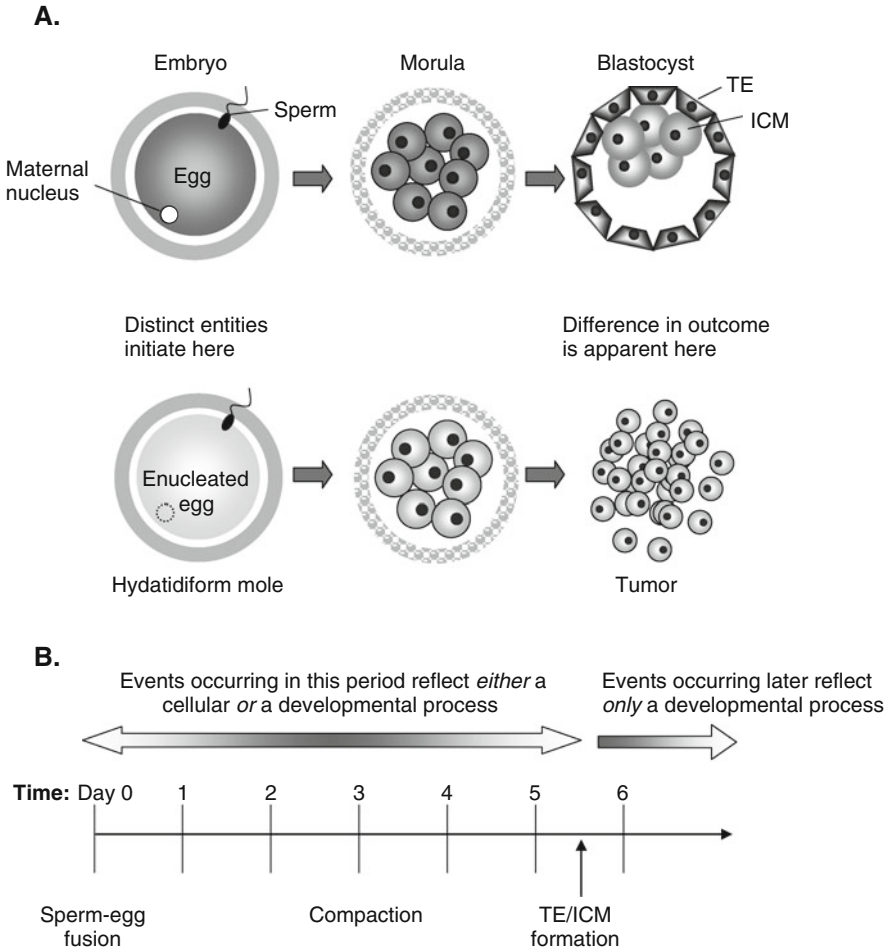
Second, because the molecular differences characteristic of specification do not involve a restriction in cell potency, specified cells remain functional equivalents. Even simple “tissue organization” requires the presence of distinct, interacting cell types (see Fig. 11.1). Thus prior to cell differentiation, a group of functionally equivalent cells are interacting in a manner that *can reflect* an organismal pattern

of development, but does not *necessarily* reflect this kind of underlying process. Once cell differentiation has occurred, these two possibilities can be distinguished. Therefore, cell specification is necessary for cell differentiation to occur, but in and of itself, it is not sufficient to indicate that a *developmental* sequence is underway until *definitive* evidence for such a sequence is obtained.

As noted earlier, the level of organization an entity is capable of achieving allows us to determine the kind of entity it is. An important aspect of this line of reasoning is that the *outcome* of a biological process is critical to interpreting the *nature* of that process. *Even if an initial sequence of molecular events appears to be identical in two entities, when the outcome is different, the entities producing the two processes also have different molecular composition* (Fig. 11.3). Importantly, entities with different outcomes do not *become* distinct at the point at which the first difference is observed, they have different natures from the beginning. Detecting differences between similar entities prior to observing differences in outcome may be challenging, but clearly such entities are not identical; intrinsic differences in their molecular composition *produce* the difference in outcome.

For example, complete hydatidiform moles are formed by fertilization of an egg that has abnormally lost its genetic material, and therefore contain only paternally-derived nuclear DNA (Fig. 11.5a). Hydatidiform moles initially undergo many of the processes seen in a normal embryo, yet they fail to produce TE and ICM, instead generating a chaotic mass of tissue. Despite an initial (superficial) similarity to embryos, hydatidiform moles do not start out as embryos and later transform into tumors, they are *intrinsically* tumors from their initiation. Moreover, they are not frustrated embryos that are “trying” (yet unable) to develop normally. Just as a CD recording of “Twinkle, twinkle little star” is not somehow thwarted in its attempt to play the “Alphabet song” by a deficiency of notes in the fourth measure (Fig. 11.3), hydatidiform moles are not “blocked” from proceeding along an embryonic path of development by a lack of maternally-imprinted DNA. Rather, hydatidiform moles are manifesting their own inherent properties—the properties of a tumor.<sup>26</sup> Even in the optimal environment for embryonic development (the uterus), hydatidiform moles produce disordered growths, indicating they are not limited by environment, but rather *by their own intrinsic nature*; a nature that does not rise to the level of an organism.

The end result of a sequence of molecular events is not incidental to the interpretation of what kind of sequence is occurring. Formation of distinct cell types is not merely “the next step” of an ongoing developmental process that begins with earlier molecular events. Formation of distinct cell types enables us to determine whether a developmental process or a mere cellular process is underway (Fig. 11.5b). Without the production of distinct cell types, even “tissue organization” is not possible, much less the organization characteristic of a developing embryo (Fig. 11.1). *If the necessary structures (molecules, genes etc.) required for development (i.e., an organismal level of organization) do not exist in an entity from the beginning, the entity is intrinsically incapable of being an organism and is therefore not a human being.* Such entities are undergoing a cellular process that is fundamentally different from human development and are not human embryos.



**Fig. 11.5** Entities sharing *some* cellular events are not necessarily the same kind of entity. (a) Overlapping events in embryonic development (*top*) and formation of a hydatidiform mole (*bottom*). Although the entities *appear* similar for the first 5 days, critical intrinsic differences exist at their initiation. (b) Intrinsic defects operating within the first 5 days following sperm-egg fusion that prevent formation of distinct cell types are defects in an entity undergoing a *cellular* process. Defects manifesting later affect a *developmental* process. Cellular entities and organisms are intrinsically different from their initiation, and these differences would be detected by a sufficiently detailed analysis

### 11.6.2 Why not Later? Is the Generation of TE and ICM Sufficient to Define an Embryo?

As already noted, the formation of TE and ICM alone is only sufficient to define an entity as an embryo when these tissues are formed as part of an ordered,

developmental sequence. The proposed definition of an embryo argues that some events normally seen during development can occur in an entity that is *not* an embryo (Figs. 11.2, and 11.5). Using a similar logic, many have argued that the defining characteristics of an embryo are only evident much later in development; at implantation (Agar, 2007, p. 198), at formation of the primitive streak (Findlay et al., 2007), or at acquisition of higher brain functions, such as consciousness.<sup>27</sup> Under these views, all of the prior developmental events are necessary, but not sufficient for a human being to be present—just as the molecular events characteristic of cell specification are necessary, but not sufficient to define a human embryo.

Formation of TE and ICM are clearly not unique features of humans (like rationality); these tissues are common to all developing mammals. Why then, is formation of these two primitive tissues sufficient to conclude that a human embryo is present, without appealing to later developmental events that produce specifically human traits?

There are several reasons why it is both misleading and inaccurate to define what is and what is not an embryo based on later developmental events (implantation, formation of the primitive streak, brain function, etc.). First, development results in the *maturation* of an existing organism; it does not transform an entity from one kind of thing into another kind of thing. Just as a CD playing “The alphabet song” is not transformed from a “pre-alphabet song” state at the fourth measure, but rather plays this song from the beginning (Fig. 11.3), embryos are not transformed into human beings once some developmental event occurs. Thus, if a later event is considered a more reliable indicator of an organismal pattern of development, it does not *produce* an embryo (any more so than formation of TE and ICM “produces” an embryo), it merely provides more reliable evidence for an embryo’s existence. We may have greater confidence that an entity that has formed a brain, for example, is indeed a human embryo progressing along a normal developmental path, but such an entity was clearly an embryo from its initiation, well prior to the gradual emergence of a functional brain.

Second, it is important to establish the *earliest requirement* for what is and what is not a human organism. While later events are clearly important for the generation of characteristic human form and function, if such late events are part of an ongoing *developmental* sequence, they do not serve to define an embryo or distinguish it from a non-embryo. As soon as an entity capable of initiating a human developmental sequence exists, a human organism is present, and appealing to later elements of this sequence is not required.<sup>28</sup> If later events are invoked as the earliest clear indication that a human organism is present, there must be some reason to consider the ordered production of two interacting, differentiated cell types *insufficient evidence* for an organismal pattern of development.

An argument could be made that because some tumors produce TE and ICM (Fig. 11.2, dashed circle), generation of these cell types provides sufficient evidence for “tissue organization” yet it does not constitute evidence for “organismal organization” (Fig. 11.1). However, based on what is known about human development, this argument is unconvincing. Development is typically initiated by gametes; cells that are naturally structured to participate in the formation of a new organism.

Gametes contribute the necessary elements of the “program” for human development, elements that are not present in other cell types. Consequently, the ordered production of TE and ICM in the course of development is quite different from the random and uncoordinated production of these cell types by tumors and stem cells. In embryos, TE and ICM exist in a specific spatial relationship to each other; they interact in coordinated ways. Together, TE and ICM will produce all of the structures of the body, and therefore constitute the “whole” body in a rudimentary form. Coordinated formation of these two generative, interacting tissues reflects coordinated, organismal development, not mere tissue organization.

### 11.7 Integrating This Definition with the View of Humans as “Rational Animals”

The unique feature of human beings is that they are capable of reason, an observation that forms the basis of the classical definition of human beings as “rational animals.” The claim being made here is that included in the group “rational animal” are those organisms having the active and proximate potency to manifest rationality. A human organism at an embryonic stage is this sort of being; namely, a thing that actively self-develops into a rational animal and hence *is* one, even if specific defects prevent the rationality from ever becoming operative.

Active and proximate potency is comparatively easy to define philosophically, but difficult to determine biologically. Philosophically, having an “active and proximate potency” is to possess the power or capacity to engage oneself in some activity or to direct oneself toward an end. Aristotle uses the example of the man who knows the rules of grammar; such a man is properly called “grammatical” because he has the active and proximate potency to speak grammatically, even if he is not presently speaking, or if some impediment (e.g. a sore throat) prevents him from doing so. In contrast, a young boy *could be* grammatical, but currently is not, because he does not yet know the rules of grammar and will only be “grammatical” following some intervening event (acquisition of the rules of grammar). In this case we would say that the potency is active, but not proximate (i.e., “remote”), and the boy is “grammatical” only in a remote sense.<sup>29</sup>

Biologically, having an “active and proximate potency to manifest rationality” is to possess the necessary structures and to engage in the necessary, self-directed and coordinated sequence of molecular interactions that are inclined towards the production of a mature human body; i.e., to be a human organism. Such an organism is analogous to Aristotle’s grammatical man in that what is needed for rationality is *already present*, even though the current state of development does not support the actual *operation* of reason. While a young boy has to *acquire* the rules of grammar to become “grammatical,” the embryo already possesses the rules of development, and (in an appropriately supportive environment) will, of its own inherent power, manifest rationality. Returning to the musical analogy, even before the first note is played, a CD recording contains all the information, structures and relationships

required to produce a specific song and therefore, it *is* a recording of “Twinkle, twinkle little star”; it does not *become* such a recording as a consequence of producing a specific sequence of notes over time.

It is important to note that the philosophical definition of a human being as a “rational animal” is *formal* in character, while the biological definition proposed here is a *material* definition. Where the philosophical definition specifies the *end* that something must achieve in order to be considered a member of the group, the biological definition specifies the observable structures and activities required for this end to be achieved.

The biological/material definition of a human being is met by those entities capable of forming the first two cell types (i.e. by human organisms). This is so because the coordinated production of the first two cell types provides evidence that *the structures and activities required for human development are present*. Producing TE and ICM requires a prior cascade of molecular events, and also prefigures a future cascade of events—all of which are characteristic of human development. While there may be thousands of molecular interactions required ultimately to produce a brain capable of a rational act, the initial subset of those interactions is undertaken by the first two cell types of the embryo. Moreover, these early interactions between TE and ICM initiate a cascade of events that (if uninterrupted by external factors or internal defect) will result in production of the brain. Importantly, the ability to participate in these early interactions and the potential to undergo the subsequent events of development (i.e., to produce appropriate cell types in a correct developmental sequence) are *intrinsic properties* of the first two cell types of the organism. Consequently, making a brain capable of a rational act is *implicit* in the initial set of interactions that are taking place between the TE and ICM and in the developmental potencies of these two, interacting cell types. Being a human organism is equivalent to having the active and proximate potency to develop a brain capable of a rational act, and production of the first two embryonic cell types is necessary and sufficient evidence to conclude that a human organism exists. This is not because production of the first two cell types is itself a direct act of forming the brain, but rather because this act provides evidence that the embryo is *the kind of entity* that directs its own development along a human trajectory, one component of which is to produce a nervous system capable of rationality.

Given that “rational animal” is the formal definition of a human being, how are we to consider embryos that do not successfully develop to a stage where rationality is operational? If an entity contains all the necessary elements to undergo a self-directed, coordinated developmental sequence that proceeds up to or beyond the point of forming the first two cell types (i.e., it has the human developmental “program” consisting of (1) appropriately imprinted DNA, (2) necessary oocyte-derived components and (3) an appropriate epigenetic state), and yet it is prevented from completing this sequence in a normal manner due to a specific defect, it is still a human being. A specific defect may prevent an organism from manifesting its developmental powers (just as a sore throat may prevent a grammatical man from speaking grammatically), but the complex molecular structures and relationships that form the basis of a normal developmental program are still present; the “active,

proximate potency to manifest rationality” still exists. An embryo with a genetic defect may arrest (or its development may go awry), but outside of this isolated limitation, the molecular and cellular relationships required for normal development remain intact.

## 11.8 Limitations in Our Ability to Identify Embryos

Based on this proposed definition, embryos, defective embryos, and non-embryos can be clearly distinguished in many cases (Table 11.1). Yet given current technology, it may be impossible in some cases to know with certainty whether a specific entity is or is not an embryo until the entity itself gives conclusive evidence of its nature by either producing TE and ICM or failing to do so. For example, in most cases of cloning, reprogramming of the somatic nucleus is incomplete, and no embryo is produced. Yet the cell produced by cloning will “look” very much like a zygote, and undergo many of the molecular and cellular events normally seen in early embryonic development. In practice, it is impossible to know with confidence the nature of the entity produced by cloning until it either forms TE and ICM or fails to do so. This practical limitation suggests that if an entity “could” be an embryo (i.e., it is either derived from gametes and/or exhibits some elements of organized behavior prior to the stages at which TE and ICM are produced) it should be given the benefit of the doubt until its status is known with certainty. This inherent uncertainty argues strongly for a prohibition against creation of entities with such uncertain status.

Similarly, entities with “hybrid” genomes are inherently ambiguous. If an entity with a substantially human genome contains a significant number genes from another species (or entirely novel genes), its status will be difficult or impossible to determine in advance. The proposed definition of an embryo will reliably allow us to determine whether such an entity is an *organism* (i.e., whether it develops as an embryo) but the *kind* of organism it is would be unclear. Again, the inherent ambiguity of such entities raises significant ethical issues that argue strongly for a prohibition against this kind of experimentation using human cells or human nuclear DNA.

## 11.9 Conclusions

All living entities exhibit some degree of organization, either at the cellular, tissue or organismal levels. While cells and tissues are capable of many complex molecular processes and interactions, only organisms are capable of *development*; the coordinated production of specific cell types, resulting in a functionally integrated body.

Although embryonic development is initiated by events occurring at the one cell stage, many of these events can also occur in entities that are not embryos. The earliest clear indication that an entity is undergoing a *developmental* sequence, as

opposed to a mere *cellular* sequence, is the formation of the first two interacting cell types of the embryo; the TE and the ICM. Formation of these tissues does not “convert” a non-embryo (i.e., a collection of human cells) into an embryo, but rather it reveals the embryo for what it is. Conversely, later occurring events such as implantation, primitive streak formation or the onset of brain function are part of an ongoing developmental process that is initiated by sperm-egg fusion and clearly manifest by formation of TE and ICM. These later events also do not *produce* an embryo, they merely confirm that an embryo has been present from its initiation and is developing normally.

The proposed definition accommodates the complexity of development and the continuous nature of life. Moreover, it provides a specific time at which an embryo is formed and specific criterion for distinguishing embryos from non-embryos.

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## Notes

1. An organism is defined as “(1) a complex structure of interdependent and subordinate elements whose relations and properties are largely determined by their function in the whole and (2) an individual constituted to carry on the activities of life by means of organs separate in function but mutually dependent: a living being.” <http://www.merriam-webster.com/dictionary/organism> (accessed 10/1/2008; definition on file with the author). The second definition is also given verbatim by the National Library of Medicine, administered by the National Institutes of Health (<http://www.nlm.nih.gov/medlineplus/medlineplusdictionary.html>).
2. See Anderson and Condic (2008). Professor Lee Silver’s Vast Scientific Conspiracy. *First Things*. <http://www.firstthings.com/onthesquare/>?. Accessed December 1 2008.
3. See Cavenaile et al. (2001).
4. See Ehemann et al. (1999).
5. A fascinating exception to this general rule is that of *Dictyostelium discoideum*. These organisms typically exist as independent, soil-dwelling amoebae. Under specific conditions, the amoebae will aggregate and form a surprisingly complex, multicellular structure known as a fruiting body. This amoeba has been widely studied, largely because its behavior is an *exception* to the behavior of the vast majority of uni-cellular organisms.
6. See Melton et al. (2004) and De Wert and Mummery (2003).
7. The most common exceptions being the formation of new organisms by splitting of an existing organism, as occurs in monozygotic twinning or in some animal species that reproduce naturally by splitting (e.g. planaria, or flat worms).
8. See Condic (2008b). Hereafter *White Paper*.
9. If embryos are placed in an abnormal location, the capsule of the kidney, for example, they can “transform” into tumors. In this case, the most reasonable interpretation is that the embryo has died, and its cells have continued proliferating, showing only cellular and tissue organization. See: Kirby (1960).
10. For biological entities, this kind of detailed analysis is not currently possible because of the complexity of living cells and the limited technology available for analyzing their properties without destroying the cell. However, if cells are intentionally produced with known properties, their subsequent behavior can indeed be predicted with accuracy.
11. See Austriaco (2002) and Elliot (2005).



12. See Robert (2004).
13. For example, the world's shortest man, He Pingping, is only 2' 5" tall. Without an independent criteria, such an unusual height would certainly exclude him from the class "adult human being."
14. See Walker (2004) and Schindler (2005).
15. See Zhou et al. (2008).
16. For example, both heart and brain cells share many molecules involved in production of electrical impulses required for heart cell contraction and neural signaling, respectively. See: Cui et al. (2009).
17. For a more thorough discussion of this argument see: George and Tollefsen (2008) and Condic (2011).
18. See *White Paper*.
19. See *White Paper*.
20. See Aristotle, *De Anima*, (415a14-22).
21. Formation of structures that resemble embryos (hollow balls of cells that "look" like a blastocyst, for example) by stem cells or tumors must be interpreted with caution. Although it has been claimed that embryo-like entities can form in stem cell cultures (pluripotent cell lines derived from common marmoset (*Callithrix jacchus*) blastocysts). See Thomson et al. (1996.) The evidence supporting this claim remains both entirely descriptive (i.e., a structure that "looked like" an embryo formed) and unreplicated since initially reported. There are no reported cases of stem-cell derived structures meeting the proposed criteria for being an embryo.
22. "Genomic imprinting" is defined by the National Institutes of Health as meaning "genetic alteration of a gene or its expression that is inferred to take place from the observation that certain genes are expressed differently depending on whether they are inherited from the paternal or maternal parent" (accessed 1/15/2010, definition on file with the author; <http://www.nlm.nih.gov/medlineplus/plusdictionary.html>). Imprinted genes are chemically modified in a sperm-specific or egg-specific manner to give different expression patterns.
23. Most cloned embryos do not develop normally, and even those animals that are born exhibit significant gene dysregulation in multiple tissues. See, for example: Humpherys et al. (2002), Kohda et al. (2005), Ogura et al. (2002), and Yanagimachi (2002).
24. See *White paper*.
25. Clearly, human beings can persist for long periods, and then arrest due to an internal defect. For example a patient with a genetic defect resulting in Huntington's syndrome will function normally for 40–50 years before developing fatal neurological problems.
26. It is important to guard against the natural tendency to ascribe a "motive" or "intention" to biological entities. While biological processes can be normal or defective, cells do not have intentions, and therefore cannot be "frustrated."
27. Different authors assign the point of "brain function" quite differently, ranging from 10 weeks post sperm-egg fusion up to 28 days post birth. For a range of opinions, see: Himma (2003, p. 89), Penner and Hull (2008, p. 174), Burgess and Tawia (1996, p. 1), and Kuhse and Singer (1988).
28. For a detailed discussion of *when* human life begins (i.e., when an organism is first present) see Condic (2008b), *White Paper*.
29. *De Anima*, Bk. 2, c. 5. A general discussion of potency may be found in *Metaphysics*, Bk. 5, c. 12.

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**Part III**  
**Perspectives from Law**  
**and Political Philosophy**

## Chapter 12

# Public Reason and Abortion Revisited

David Thunder

For better or for worse, abortion has become a touchstone for the so-called “culture wars” between liberals and secularists on one side, and conservatives and religious believers on the other. Few issues have been more divisive or passion-inducing, whether in the law courts, legislatures, or popular culture. This is perhaps nowhere more evident than in the United States, where the abortion controversy has continued virtually unabated since 1973, when the Supreme Court recognized a constitutional right to abortion.<sup>1</sup> One need not embrace any particular view of abortion to recognize that this issue has the potential to divide society into conflicting factions and corrode citizens’ capacity for mutual cooperation and trust, as accusations, resentment, and frustration accumulate in the face of what would appear to be insurmountable moral and philosophical differences. In this essay, I investigate whether an ideal of public reason might have something constructive to say about the abortion controversy. I argue for two principal claims: first, that the highly influential Rawlsian ideal, with its focus on epistemic constraints and contractual virtues such as toleration and fairness, can neither settle the abortion dispute, nor significantly mitigate the social and political dangers associated with it. Second, I argue that the Rawlsian ideal should be supplanted by a virtue-ethical ideal, which relaxes Rawls’s epistemic constraints and draws on a richer canon of virtue. The virtue-ethical ideal of public reason, though unable to decide policy outcomes directly, may have the potential to mitigate some of the political distrust and conflict that divides prochoice and prolife citizens, and to facilitate cooperation and trust in less contested political domains.

I begin by presenting the main tenets of John Rawls’s doctrine of public reason, in particular as advanced in *Political Liberalism* (henceforth PL). Second, I explore the implications of Rawlsian public reason for the abortion controversy, arguing that on a plausible interpretation, it leaves the abortion standoff largely just as it was before. Third, I set out the basic parameters of a virtue-ethical ideal of public reason, and suggest that it can go further than the Rawlsian ideal in mitigating the distrust

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and resentment associated with the abortion standoff, and facilitating cooperation on less contested issues. I conclude by underlining some of the limits inherent in any theory of public reason, pointing out that it is dependent on a set of social and political practices without which sustained constructive political deliberation would be impossible.

## 12.1 The Rawlsian Ideal of Public Reason

The term “public reason” is most typically used to pick out a set of moral standards governing public deliberation about law and policy.<sup>2</sup> At the heart of John Rawls’s doctrine of public reason is the principle of “reciprocity,” according to which “our exercise of political power is proper only when we sincerely believe that the reasons we offer for our political action may reasonably be accepted by other citizens as a justification of those actions” (PL, 1993, xlvi).<sup>3</sup> As Rawls interprets the notion of reciprocity in deliberation, it entails what he calls the “duty of civility,” according to which citizens have “a moral, not a legal, duty...to be able to explain to one another...how the principles and policies they advocate and vote for can be supported by the political values of public reason” (PL, p. 217). “Political” values, as Rawls understands them, have three features: they are (i) already implicit in our political culture; (ii) of limited scope, applying exclusively to the political domain or the “basic structure” of society; and (iii) “freestanding” from or not presupposing the truth or validity of any particular comprehensive doctrine (PL, pp. 11–15). They encompass the “values of political justice” (PL, p. 224) which are supposed to be reflected in the basic structure or fundamental institutions of society, in particular the State and the economy; and the “values of public reason (PL, p. 224),” which provide moral standards for political inquiry and deliberation among citizens.

The values of political justice, at least on Rawls’s account, include equal political and civil liberty, equality of opportunity, and social equality. More specifically, they include freedom of conscience and expression, freedom of the press, the right to a fair trial, and the general freedom to pursue one’s favored conception of the good within the limits of justice. The values of public reason, on the other hand, include the virtue of reasonableness, which involves general epistemic responsibility and competence (for example, a willingness to consider relevant evidence and observance of basic logical canons), moral responsiveness to the interests and rights of others, and a willingness to observe the “duty of civility,” by offering “political” arguments for conclusions about matters of fundamental law or basic justice.

Examples of arguments that probably wander outside the domain of public reason, and thus violate the duty of civility, are arguments against homosexual marriage grounded in the authority of scripture; arguments for special political treatment for persons of religious faith based on the notion that they are the “chosen people”; and arguments against abortion based on a doctrine of ensoulment. But nonreligious arguments, e.g. an argument in favor of homosexual marriage grounded in a Kantian doctrine of autonomy, or an argument for the death penalty based exclusively on utilitarian principles, or an argument against abortion based on natural law theory, might potentially violate the duty of civility, at least insofar as their

foundational values are widely contested and are not part of the shared patrimony of public reason in a liberal democratic political culture.

But this raises the question, why are arguments that fail to rally “public” reasons in their defense morally suspect on the Rawlsian view? One answer could be that they are simply false or unsound. But this is not Rawls’s answer—on the contrary, Rawls goes to some length to avoid making any such controversial claim.<sup>4</sup> Rather, the reason these arguments are morally suspect is that they advocate coercive interference in another person’s life-plans without offering arguments that could reasonably be expected to appeal to the shared reason of the speaker and his addressee. The fundamental premise of Rawlsian public reason is that we are required to respect people’s autonomy, understood as their ability to pursue a conception of the good of their own choice, subject only to constraints that they could approve, assuming they are both rational (i.e., capable of more or less competent reasoning about ends and means) and reasonable (i.e., minimally sensitive to the basic interests of others). Respect for autonomy so understood is at the bedrock of the duty of civility (i.e., the duty to offer political or public reasons when advocating laws and policies affecting the basic structure of society).<sup>5</sup>

To sum up: since each of us is free and equal, no one of us has any right to dispose of another or wield control over another’s life (special circumstances aside<sup>6</sup>) without providing grounds for that intervention that are accessible to the other, i.e., grounds that are not only intelligible, but minimally cogent and capable of legitimizing the intervention in the eyes of the other without stretching his current belief system to a breaking point. In other words, I owe you a *justification* for impeding your freedom to pursue your life goals, and not just any justification, but one you could reasonably and voluntarily view as legitimate. Otherwise, I am showing scant regard for your moral status as free and equal to me, and it will appear, from your standpoint, that I am just acting on reasons that I happen to believe (but have no weight for you), rather than appealing to our shared reason. I might as well say to you, “You really ought to obey this law, because *I* believe it’s good for you to do so.”<sup>7</sup> In short, the duty of civility reflects the requirement to respect the equal autonomy of other citizens, by justifying laws on grounds they can view as legitimate.

Finally, it is important to keep in mind that the duty of civility has a restricted scope, and thus does not apply to all political arguments. It only applies to arguments that: (a) direct the use of the coercive power some citizens wield over others; (b) pertain to matters that affect the “basic structure” of society, or what Rawls calls “constitutional essentials and matters of basic justice.” The first condition, that the argument directs the use of coercive power by some over others, is straightforward enough. On the presumption that individual autonomy deserves special protection, any rule backed by coercive force requires some special justification. The second condition, that it pertains to society’s “basic structure,” is a little less obvious. When Rawls speaks of matters affecting the basic structure of society, he has in mind the principles governing the distribution of tangible benefits and burdens, e.g., basic rights and responsibilities, social status, opportunities, and wealth, by society’s fundamental social, political, and economic institutions. Once the basic “rules of the game,” the constitutional essentials, are laid down, Rawls believes that local instances of policies democratically enacted need not adhere so stringently to

the requirements of public reason, since these simply do not shape people's lives in as fundamental a way.<sup>8</sup>

## 12.2 Public Reason and Abortion Through a Rawlsian Lens

Now, let us consider the relevance of Rawlsian public reason to the abortion controversy. Most of us are familiar with the depth of resentment, anger, and alienation that the abortion debate can evoke, and how difficult it can be to find instances of constructive and respectful deliberation across the pro-choice/pro-life divide. Pro-choicers often suspect that pro-lifers want to impose their theological worldview on the rest of society by means of laws that heavily restrict people's lifestyles and choices, and have little or no interest in entertaining rational arguments that transcend scripture and faith; while pro-lifers often view pro-choicers as "baby killers" with little or no regard for the values of religion, community, and family life.

This ideological and social rift has some troubling implications for democratic politics: insofar as bitterness, resentment, distrust, and blame are directed at particular persons or groups, it becomes much more difficult to cooperate with them and converse with them in other domains, even in domains where cooperation might otherwise be possible, e.g., in the fight against crime, or in attempts to extend educational opportunities to previously underprivileged classes of persons. When rational argumentation breaks down on issues dear to people's hearts, there is a danger that the parties will come to view each other as somehow beyond rational persuasion on *any* important moral or political issue, and therefore be disinclined to address serious arguments to each other not just on highly contested issues, but in general. When the attempt at rational persuasion is abandoned, even if only in reference to a particular section of the population, the politics of persuasion and compromise is quickly replaced with the politics of power and majoritarianism. And this approach to democratic politics, to the extent that it becomes the order of the day, can cast doubt over the legitimacy of the entire process, at least in the eyes of the losing parties, who feel disenfranchised by the unilateral and majoritarian strategies of their opponents. Indeed, it seems plausible to speculate that the frequency with which political controversies have been litigated in the courts, especially in the United States, is a sign that the ordinary politics of democratic persuasion and compromise has been displaced by the politics of power and litigation.<sup>9</sup>

Assuming I am right, and the standoff between pro-lifers and pro-choicers can result in lost opportunities for political cooperation, as well as displacing the politics of persuasion with the politics of power and majoritarianism, what can Rawls's doctrine of public reason do about it? Abortion, insofar as it involves contested claims about basic justice, whether on the side of a woman's freedom of choice, or the unborn's right to life, seems to fall squarely under the category of "questions of basic justice." Consequently, at least according to Rawls, it ought to be settled in the political arena in accordance with "political" values. But what might such values be, and would they likely favor one side of the abortion debate over the other?



In a much discussed footnote in *Political Liberalism*, Rawls suggests that “any reasonable balance” of the political values relevant to the abortion dispute, in particular “the due respect for human life,” “the ordered reproduction of political society over time,” and “the equality of women as equal citizens,” would give a woman “a duly qualified right” to abortion in the first trimester of her pregnancy, and that a comprehensive doctrine that denied such a right would be, to that extent, “unreasonable” (PL, p. 243, fn. 32), even if it was reasonable in other respects.

Now, Rawls may interpret the political values of a constitutional democracy as licensing abortion in the first trimester, but it seems more than a stretch to suggest that “any reasonable balance” of political values would line up with his interpretation.<sup>10</sup> The difficulty with directly inferring a right to abortion from political values such as equality and liberty is that the issue at stake between pro-life and pro-choice citizens is precisely how we are to interpret such values and how we ought to rank them in case of conflict. While in certain cases, citizens may overcome deep philosophical differences through rational conversation and deliberation, an ideal of public reason designed to regulate the conversation cannot preemptively settle citizens’ disputes for them. For that would be to smuggle the author’s own robust conception of justice and the good into his ideal of public reason, and effectively render the hard work of moral reasoning and deliberation superfluous. But this would be to vastly overestimate the role of a theory of public reason, which can arguably propose general principles, norms, and virtues of discourse, but possesses neither the philosophical resources nor the authority to preemptively settle major political and moral controversies. These points apply with even more force to Rawls’s theory of public reason, which claims to be more or less impartial among citizens’ competing comprehensive doctrines.

To bring out the limits of public reason as a solvent for the abortion debate, consider the sorts of arguments we most frequently hear for and against abortion. Pro-lifers will argue that the unborn child is a human being deserving of legal protection, on account of the dignity and/or sacredness of human life, which comes into existence at the moment of conception or fertilization.<sup>11</sup> But given their epistemic and moral commitments, which they have adopted, let us assume, in good faith, pro-choice citizens might, not unreasonably,<sup>12</sup> reject the pro-life conception of human dignity as overly expansive—why, they might object, should the dignity of a month-old fetus trump the freedom of an adult woman? Surely, the objection might go on, the woman is more fully a “person,” a bearer of rights and interests, than a human embryo or fetus which as yet has little or no history or life in the world? Insofar as they fail to advance reasons that *could be accepted* by reasonable citizens with diverse comprehensive doctrines, it would appear that pro-life arguments fail Rawls’s test of reciprocity.

But pro-choice arguments for abortion do not fare any better under Rawls’s reciprocity test. Pro-choicers are likely to defend the legality of abortion based on some idea of personal autonomy. The embryo may be living and human, they will argue, but it is insufficiently developed to be the subject of human interests and rights. The mother, in stark contrast, is fully formed and has a life and interests of her own. She deserves the right to choose to either embrace or reject the burdens of pregnancy,

even if this requires the termination of the life of the developing embryo or fetus.<sup>13</sup> This argument has had a powerful presence in our legislatures, courtrooms, and popular culture. But a pro-lifer would likely object that the decision to treat the embryo as a second class human is ultimately arbitrary—that physiological and neurological development are accidental features of a human being, not features that define its basic worth or dignity. He would go on to point out that we routinely restrict people’s choices when they impinge on the welfare or life of others, and that a mother’s autonomy pales by comparison with the survival and bodily integrity of the human being within her. Are these objections any less “reasonable” than the pro-choice objections cited earlier, given the epistemic and moral commitments of pro-life citizens? It would seem rather question-begging to dismiss pro-life arguments as “unreasonable” while admitting the reasonableness of pro-choice arguments, which are no less controversial among philosophers and ordinary citizens alike.<sup>14</sup>

We are left, then, at a bit of an impasse: neither pro-life nor pro-choice arguments are likely to pass Rawls’s test of reciprocity—in other words, neither side of the debate can justify its position in terms other reasonable citizens of diverse philosophical and religious persuasions could accept. Yet ultimately, the State must come to *some* decision on abortion, somewhere between total prohibition and unrestricted permission. Since none of these positions appears to be defensible in line with Rawls’s principle of reciprocity, abortion policies are doomed to be illegitimate, and the political conversation about abortion is bound to end in an impasse between mutually unacceptable, and therefore illegitimate, arguments.

Even in cases where both sides of the abortion controversy ostensibly appeal to “political” values such as dignity, equality, freedom, and rights, the appearance of a common language is highly misleading. The two sides remain profoundly divided on the meaning and implications of political values, and in many cases, they continue to view each others’ conclusions as fundamentally illegitimate or immoral. For example, the fact that a pro-lifer frames his arguments in terms of human rights may not convince his pro-choice adversary that he has given due regard to the rights of women. Conversely, the pro-choice advocate’s appeal to time-honored values like liberty and equality may well be perceived by pro-lifers as rationalizations of an inhumane and barbaric practice. Thus, adherence to Rawlsian public reason, while it may generate a common political vocabulary, does not seem likely to reduce the accumulated tensions and distrust between pro-lifers and pro-choicers.<sup>15</sup> These tensions cannot be healed, let alone substantially diminished, by simply cleaning up the content of people’s arguments to filter out the “interference” of comprehensive doctrines. A more challenging and difficult transformation, not in the words, but in the *character and relationships* of the interlocutors, is required. Enter the virtue-ethical conception of public reason.

### 12.3 The Virtue-Ethical Ideal of Public Reason

The aretaic or virtue-ethical approach to public reason distinguishes itself from rival conceptions, in particular from Rawls’s, not because it sees virtues as making an essential contribution to a functional deliberative process (after all, Rawls himself

appeals to virtues such as reciprocity, reasonableness, and civility), but because it puts substantially more weight on character than on moral rules or hypothetical contracts as a tool for securing just outcomes. To adopt an aretaic perspective on political discourse is not to disregard questions of freedom, obligation, and legitimacy, but to focus one's attention and imagination, for the most part, on other questions deemed more fundamental and fruitful, in particular questions pertaining to the character or virtues of interlocutors.<sup>16</sup> The basic intuition is that when we reflect on what makes a political conversation respectful, fair, constructive, and non-manipulative, our attention is drawn less to the strict duties or obligations of interlocutors, and more towards their attitudes, dispositions, and temperament. What makes for a constructive and respectful conversation is not primarily compliance with obligations (though the fulfillment of obligations clearly plays a role), but the participation of persons of just, resourceful, tactful, imaginative, intelligent, sensitive, magnanimous, courageous, and sincere character.<sup>17</sup>

Any successful and stable deliberative process is marked by mutual trust and goodwill. Citizens must trust each other to keep their agreements and refrain from taking advantage of the other's goodwill;<sup>18</sup> and they must have sufficient regard for each other's welfare and moral standing to seek out voluntarily a mutually acceptable compromise rather than impose their own will at the first opportunity. Mutual trust is clearly fostered by virtues such as honesty, generosity, forgiveness, and gratitude. Honesty, or the disposition to be truthful with others about one's beliefs, perceptions, and feelings, is essential in order to generate trust. As soon as one is caught in a serious and consequential dishonesty or lie, those who witness it, and in particular those directly affected by it, are much less likely to trust one in the future. Acts of generosity emanating from different sections of society that might ordinarily be in conflict with each other prevents the political process from descending into a mere bargaining tool for protecting private interests rather than a process for solving common problems in an equitable manner.<sup>19</sup> Similarly, gestures of forgiveness, when received with gratitude and humility rather than contempt or indifference, can serve to defuse long-standing feuds among citizens, and have a cathartic effect that preempts the emotional need for vengeance, clearing the air among warring factions, and opening a space for the gradual restoration of mutual trust.<sup>20</sup>

Mutual respect and goodwill are fostered by the virtues of justice and empathy. Start with justice: only those who have learnt to act justly towards others, giving each person his due irrespective of their own bargaining strength or other advantages, will act in a way that fully acknowledges the moral status and legitimate claims of others on a regular basis. The habit of acknowledging the status and entitlements of others, especially when these are not exhaustively settled by the letter of the law, is not acquired overnight, but learnt from one's parents and later in dealings with one's friends, colleagues, and peers in a variety of contexts.<sup>21</sup> The virtue of empathy also plays a critical role in fostering mutual respect: to both recognize the legitimate claims of one's peers, and have some genuine regard for their interests, it is extremely helpful, and arguably essential, to be able to identify oneself with the perspective of another, to make that perspective one's own, at least imaginatively, and thus come to have some emotional stake in the welfare of another. Without

the capacity to empathize with one's fellow citizens, it is extremely difficult, and perhaps impossible, to show them the sort of consideration that seems to keep the civic bond alive and well.<sup>22</sup>

At first sight, it may appear that there is little to distinguish the virtue-ethical approach from Rawls's: after all, Rawls himself appeals to virtues such as reasonableness, fairness, toleration, and reciprocity, so surely he would welcome this attempt to flesh out the discursive virtues and explicate their benefits. Perhaps he would. But appearances are deceptive. I part company with Rawls in at least two important respects: first, I reject Rawls's "duty of civility," which attempts to contain acceptable reasons within the limits of a "political" conception of justice and delegitimate reasons grounded exclusively in "comprehensive" doctrines. While few would deny the importance of a fair-minded and empathetic disposition in democratic deliberation, the aretaic conception of public reason maintains that citizens of diverse ethical and religious persuasions are fully entitled to engage in candid political deliberation on terms that do not presuppose a marginal role for "comprehensive doctrines" in the deliberative process, provided they exhibit a due measure of respect, fairness, courtesy, and thoughtfulness in their interventions.<sup>23</sup>

Secondly, my account of public reason departs from Rawls's in attributing the successes and failures of public discourse to a substantially broader catalogue of virtues and vices. Rawls traces the failures of public discourse either to reasonable disagreement among comprehensive doctrines, or to the unreasonableness (unfairness, irrationality, intolerance) of some participants who are insufficiently cooperative or accommodating towards the rights or interests of others. Concomitantly, he prescribes reasonableness (fairness, rationality, tolerance) and epistemic restraint (i.e., refraining from relying on one's comprehensive doctrines in public advocacy) as the remedy to discourse failure. I do not wish to deny that some virtues of reasonableness and some vices of unreasonableness can play a role in accounting for the successes and failures of public discourse. However, my account advances beyond the concepts of the *reasonable* and the *unreasonable*, attributing the failures of discourse not only to philosophical differences, but to vices such as arrogance, selfishness, dishonesty, injustice, cowardice, tactlessness, and imprudence; and the successes of discourse to a broad range of virtues such as honesty, justice, charity, humility, empathy, generosity, forgiveness, and tact, which go far beyond the Rawlsian ideal of a "reasonable" citizen.

## 12.4 Public Reason and Abortion Through a Virtue-Ethical Lens

Now, what does the aretaic view of public reason have to say about the abortion controversy? Neither side of the abortion debate is likely to give up, or substantially compromise, their core political and moral commitments anytime soon. Nevertheless, some sort of interaction will likely continue as long as these two groups inhabit the same polity, and that interaction may be more or less hostile, acrimonious, angry, alienating, disrespectful, and counterproductive, not just with

respect to principled disagreements, but even with respect to disagreements where compromise or cooperation might otherwise be possible. It seems hard to deny that self-righteousness, arrogance, selfishness, insensitivity, carelessness about the truth, thoughtless demonization of one's opponents, uncharitable construals of one's adversaries' motives, and dishonesty in one's arguments, all exacerbate the mutual suspicion and distrust that have festered for so long between pro-life and pro-choice citizens. And neither side can claim immunity from these vices.

The way to mitigate this tension, from a virtue-ethical standpoint, is not to rule out reliance on comprehensive doctrines—which is only likely to alienate citizens who wish to candidly discuss foundational issues—but to advance a moral ideal that can help reform the *character* of interlocutors. If vices tend to exacerbate the tensions between pro-life and pro-choice citizens, then it stands to reason that virtues may eventually ease those tensions, at least to some degree. This relaxation of tension may then permit both sides to cooperate in less contested political domains and form coalitions that might have been unthinkable at the height of their mutual distrust and enmity. A range of virtues may counteract the vices that intensify and reinforce the abortion standoff, including humility, charity, honesty, and tact. At least some of these virtues appear to be reflected in a 2006 speech by Barack Obama, in his capacity as Senator of Illinois. Rather than giving a point by point analysis of the speech, which spoke in a general way to the “mutual suspicion that sometimes exists between secular and religious America,”<sup>24</sup> I would like to consider the conclusion of the speech, in which Obama (then Senator Obama) discusses an exchange between himself and a pro-life doctor who had voted for him in the primary election. The doctor had read an entry that Obama's campaign had posted on his website, which suggested that he (Obama) would fight “right-wing ideologues who want to take away a woman's right to choose (Obama, 2006).” As Obama reports the story, the doctor sent him an email, writing

I sense that you have a strong sense of justice...and I also sense that you are a fair minded person with a high regard for reason...Whatever your convictions, if you truly believe that those who oppose abortion are all ideologues driven by perverse desires to inflict suffering on women, then you, in my judgment, are not fair-minded...You know that we enter times that are fraught with possibilities for good and for harm, times when we are struggling to make sense of a common polity in the context of plurality, when we are unsure of what grounds we have for making any claims that involve others...I do not ask at this point that you oppose abortion, only that you speak about this issue in fair-minded words (Obama, 2006).<sup>25</sup>

Having reported the doctor's call for a more fair-minded spirit, Obama goes on to admit that he felt a “pang of shame” upon re-reading the doctor's email. “It is people like him,” he observes, “who are looking for a deeper, fuller conversation about religion in this country. They may not change their positions, but they are willing to listen and learn from those who are willing to speak in fair-minded words.” Obama wrote back to the doctor, and “thanked him for his advice.” He then removed the offending statement from his website. The speech concludes as follows:

And that night, before I went to bed, I said a prayer of my own—a prayer that I might extend the same presumption of good faith to others that the doctor had extended to me.

It's a prayer I think I share with a lot of Americans. A hope that we can live with one another in a way that reconciles the beliefs of each with the good of all. It's a prayer worth praying, and a conversation worth having in this country in the months and years to come (Obama, 2006).

It is of course possible that this was a cynical exercise in self-promotion dressed up in high-minded words. But in the absence of evidence to the contrary, I will assume the speech is sincere and well-intended. On that assumption, there are a number of virtues exhibited on both sides of the exchange, and each of these virtues promotes an atmosphere of mutual trust and respect in which some degree of mutual collaboration may be realistic, at least on less contentious issues than abortion. In particular, both interlocutors exhibit charity in construing each other's motives as well as the circumstances permit. They exhibit tact in appealing to each other's best motives and building from common ground, without papering over their disagreements. Obama exhibits humility and honesty in taking personal responsibility for a serious error in judgment on the part of his campaign staff, and not just a technical error, but a moral error. The doctor is honest about his own feelings and judgments, but manages to combine this honesty with a charitable reading of his interlocutor's character. This helps to build up a platform of mutual trust and respect, and mitigate feelings of resentment and hostility.

Notice that in this particular case, no clear-cut solution is reached to the issue of abortion, nor is one likely to emerge that will satisfy both parties. However, by evincing virtues such as generosity, humility, charity, and honesty in the course of the conversation, each party walks away with at least some modicum of mutual trust and respect. Discursive virtue does not guarantee immediate resolutions to political disputes, but it does keep the door open for further conversation, and it does help to prevent the relationship between citizens from descending into a bitter and resentful feud in which each views the other as the enemy of truth and justice, not only with respect to abortion, but across the board. Preserving some minimum level of mutual trust and respect, even in cases where citizens remain deeply divided on major political and moral questions, is vitally important if democratic politics is to remain a rational and deliberative enterprise, rather than descend into "civil war carried on by other means" (MacIntyre, 1981, p. 253).<sup>26</sup>

## 12.5 The Limits of Public Reason

So far, I have argued that the Rawlsian ideal of public reason is of limited value as a tool for mitigating the political and social costs of the abortion standoff, both because it underdetermines the outcome of the dispute, and because it offers a relatively impoverished conception of discursive virtue; and I have suggested that a virtue-ethical ideal of public reason may fare better, in particular on account of its expanded repertoire of virtues. Specifically, I have argued that it may lay the groundwork for greater cooperation among citizens on less contested areas of public policy, and it may arrest the slide towards mutual distrust and resentment, at least to some

degree. The virtue-ethical ideal of public reason thus promises a more impressive practical payoff than the Rawlsian ideal, especially in the context of the ongoing abortion dispute. But lest we get carried away and overestimate the power of a theory of public reason, it seems fitting to conclude this analysis by highlighting some of the limits inherent in *any* theory of public reason, conceived as a guide to political and social conduct.

First, it is worth keeping in mind that a theory of public reason is just a theory of public reason, not a theory of political order. So in spite of the undeniable centrality of speech to the political enterprise, no account of public reason, even one that has a major institutional component, can function as a full explanation of politics, nor can it usurp the role of a theory of justice. Public reason cannot fully explain politics because political outcomes (abortion policies are no exception) are driven by many factors falling outside the domain of public reason, including the rearing and education of children, the values and goals of citizens, and the norms and attitudes embodied in numerous institutions, whether political, economic, religious, or cultural. It cannot serve as a general guide to politics because political norms are derived from a conception of justice, which is much broader than an ideal of public reason. Consequently, this essay's conclusions, insofar as they are addressed primarily to the practice of public reason, fall far short of a comprehensive political strategy for addressing the abortion question. The overall approach one takes to abortion at the political level will inevitably be informed by a much broader and deeper range of considerations than a theory of public reason can hope to provide, including principles of political morality, some account of the value of human life, and some view of the proper scope of human liberty. The fact that I have not addressed these questions should not be interpreted as a sign of disinterest or skepticism, but as a reflection of my insistence upon the philosophical limits of an ideal of public reason.

Second, a theory of public reason is just a *theory*, and however inspiring and exalted its call to virtue may be, this sort of ideal cannot be instantiated in our society without the right institutional and sociological conditions. From an institutional perspective, the deliberative process is shaped not merely by character, but by institutions such as courts, legislatures, town halls, churches, the mass media, schools, universities, and corporations. Consequently, a useful ideal of public reason cannot function effectively without appropriately designed and well-run deliberative forums. From a social psychological perspective, the virtues of public reason must be engendered in citizens and preserved from decay, through an intergenerational process of habituation and instruction. This would presumably occur in families, professional institutions, and voluntary associations, as well as in the political culture at large. No ideal of public reason will have sufficient purchase in the real world unless the relevant moral habits have already begun to take root in citizens *before they have even entered the deliberative arena*.

If my remarks have served their purpose, then I hope to have persuaded the reader that the most valuable function of an ideal of public reason is not to settle public policy issues—and certainly not to settle the abortion dispute—but to specify the conditions under which tendencies towards mutual distrust, animosity, and resentment can be checked, and in certain cases even reversed. Of course, in an ideal world

all parties to the abortion dispute would be completely reasonable and rational, and would come to the same correct views about abortion and other matters upon mature reflection. But in the world we live in, political disagreement over abortion is likely to persist for some considerable time. While a good dose of humility, charity, justice, and procedural propriety may in certain cases help to narrow or even close the moral chasm between pro-life and pro-choice citizens, in most cases the best we can hope for, at least in the short to medium term, is that more honest, charitable, humble, and fair-minded deliberation on abortion and other heated issues will open up a space for greater cooperation and trust in less contested political domains, and perhaps pave the way for a public and morally credible resolution of the controversy many years (and probably several generations) hence.

## Notes

1. *Roe v. Wade*, 410 U.S. 113 (1973). Decided January 22nd 1973.
2. Though I focus in this paper exclusively on the Rawlsian account, my analysis may be extended, with due qualification, to other accounts that take their cue from Rawls's, including Stephen Macedo, *Liberal Virtues: Citizenship, Virtue, and Community in Liberal Constitutionalism* (Oxford: Clarendon Press, 1990) and Samuel Freeman, "Public Reason and Political Justification," *Fordham Law Review* 68 (2004).
3. John Rawls, *Political Liberalism, The John Dewey Essays in Philosophy* (New York, NY: Columbia University Press, 1993), xlvi. From now on, references to this work will occur in parenthesis as "PL."
4. "We try, so far as we can, neither to assert nor to deny any particular comprehensive religious, philosophical, or moral view, or its associated theory of truth and the status of values..." (PL, 150). But cf. Joseph Raz, "Facing Diversity: The Case of Epistemic Abstinence," *Philosophy & Public Affairs* 19, no. 1 (1990) and David Estlund, "The Insularity of the Reasonable: Why Political Liberalism Must Admit the Truth," *Ethics* 108, no. 2 (1998) for arguments skeptical of this move.
5. Admittedly, Rawls is not altogether forthcoming on this point. He may be interpreted as political "all the way down," that is, as arguing that it is the political acceptance of autonomy than makes autonomy a salient value. However, this interpretation has a hard time explaining the fundamental rationale for the search for common political values—it is hardly convincing to say that finding common political values is worthwhile "just because it happens to be a goal valued around here." For a defense of political liberalism that is unequivocally grounded in the autonomy of moral agents, see Charles Larmore, "The Moral Basis of Political Liberalism," *The Journal of Philosophy* 96, no. 12 (1999).
6. For example, the relation between adults and children, as well as between adults and the mentally incompetent, are not relations between equally competent and responsible agents, and as such, respect here takes on a different hue.
7. See PL, 247: "In recognizing others' comprehensive views as reasonable, citizens also recognize that, in the absence of a public basis of establishing the truth of their beliefs, to insist on their comprehensive view must be seen by others as their insisting on their own beliefs. If we do so insist, others in self-defense can oppose us as using upon them unreasonable force." Cf. Christopher Eberle, *Religious Convictions in Liberal Politics* (Cambridge: Cambridge University Press, 2002), 52–54, for a concise articulation of the Rawlsian understanding of the relation between respect and public reason.
8. See PL, 230: "Here I remark that if a political conception of justice covers the constitutional essentials and matters of basic justice—for the present this is all we aim for—it is already of enormous importance even if it has little to say about many economic and social issues



that legislative bodies must regularly consider [. . .] [S]o long as there is firm agreement on the constitutional essentials and established political procedures are reasonably regarded as fair, willing political and social cooperation between free and equal citizens can normally be maintained” (from now on, I will abbreviate *Political Liberalism* to PL).

9. I have in mind issues such as same-sex marriage, abortion, and the free exercise of religion.
10. In a later essay, “The Idea of Public Reason Revisited,” Rawls appears to take a more ecumenical line on abortion, asserting that “when hotly disputed questions, such as that of abortion, arise which may lead to a stand-off between different political conceptions, citizens must vote on the question according to their complete ordering of political values” (605). He suggests that his abortion footnote was meant to “express [his] opinion” about the implications of public reason, not offer an argument for first-trimester abortion. The purpose of the footnote, he says, “was only to illustrate and confirm the following statement in the text to which the footnote [was] attached: ‘The only comprehensive doctrines that run afoul of public reason are those that cannot support a reasonable balance [or ordering] of political values [on the issue].’” (John Rawls, in *John Rawls’ Collected Papers*, ed. Samuel Freeman (Cambridge, MA: Harvard University Press, 1999), 605, fn. 80).
11. For a recent defense of the pro-life position, see Robert P. George and Christopher Tollefsen, *Embryo: A Defense of Human Life* (New York, NY: Doubleday, 2008).
12. Here, I have in mind a relatively procedural, Rawlsian conception of reasonableness, consisting roughly of some minimal threshold of epistemic and moral conscientiousness. A “reasonable” belief so understood might be erroneous or deeply flawed, provided it was formed in a morally and epistemically responsible fashion. A more robust conception of reasonableness, say a conception derived from Thomistic or Aristotelian ethics, would be inclined to view substantive deviations from truth and goodness as “unreasonable,” even if the agent happened to follow appropriate belief-forming procedures and generally adhered to basic principles of morality.
13. For one version of this argument, see Ronald Dworkin, *Life’s Dominion: An Argument About Abortion* (New York, NY: Alfred A. Knopf, 1993).
14. Gutmann and Thompson, who are no champions of the prolife cause, concur: “We have to face up to the fact,” they say, “that reciprocity is powerless to resolve [certain conflicts among citizens]. . . both pro-life and pro-choice advocates argue from fundamentally different but plausible premises to conflicting public policies. Both make generalizable claims that are also recognizably reciprocal” (Amy Gutmann and Dennis Thompson, *Democracy and Disagreement: Why Moral Conflict Cannot Be Avoided in Politics, and What Should Be Done About It* (Cambridge, MA: The Belknap Press of Harvard University Press, 1996), 74). The only quibble I have with this formulation would be that a “reasonable” belief may not necessarily be “plausible,” from a more objective standpoint or from a standpoint that is less distorted (at least along certain moral dimensions) than the agent’s. Even *reasonable* people, after all, may become blinded by the prejudices and preconceptions of their surrounding cultures, and thus adopt premises a more informed or morally advanced culture might recognize as implausible.
15. For example, conservatives have become increasingly willing to bracket their religious claims and advance their case in the public square based on what they take to be public and broadly secular reasons (I have in mind groups like the Family Research Council and the Heritage Foundation, not to mention the popular evangelical radio host James Dobson). But this development does not appear to have ushered in a new era of mutual trust and cooperation across the abortion divide.
16. Cf. Stephen G. Salkever, “Virtue, Obligation and Politics,” *American Political Science Review* 68, no. 1 (1974), which helpfully distinguishes “two basic ways” of interpreting the meaning of politics: “politics conceived as a problem of moral and intellectual virtue, and politics conceived as a problem of obligation and legitimacy” (78). I do not believe the aretaic approach need ignore or disregard the problem of obligation and legitimacy—it just interprets it in a broader moral context and gives it a less dominant theoretical role.

17. While a Rawlsian might readily concede this point in principle, the extent to which he seeks to control the conversation by means of a priori rules and the limited extent to which he elaborates a conception of discursive virtue, indicate that his approach is not deeply informed by these premises. Gutmann and Thompson go further than Rawls in fleshing out the virtues of public reason, in particular what they call reciprocity, civic integrity, and civic magnanimity (Gutmann and Thompson, *Democracy and Disagreement*, 52–94). But even their account represents a relatively narrow spectrum of the virtues of public reason.
18. For accounts of the critical role of trust in maintaining the cohesion of political and economic institutions in a free society, see Francis Fukuyama, *Trust: The Social Virtues and the Creation of Prosperity* (New York, NY: Free Press, 1996); and Adam B. Seligman, *The Problem of Trust* (Princeton, NJ: Princeton University Press, 2000).
19. See Danielle S. Allen, *Talking to Strangers* (Chicago, IL: University of Chicago Press, 2004), for a persuasive case that voluntary sacrifice (which is ordinarily impossible without a generous spirit) played a vital and underappreciated role in ameliorating racial tensions in the South in the mid twentieth century. Other conflicts whose resolution benefited from the generous sacrifices of civic leaders and ordinary citizens include the struggle over apartheid in South Africa, and the conflicts between unionists and republicans in Northern Ireland.
20. This is one of the premises of South Africa's Truth and Reconciliation Commission (1995–1998), which provided an institutional structure through which perpetrators of injustice associated with the apartheid regime could publicly repent and seek forgiveness from their victims. Even Thomas Hobbes, not known for his idealism, lists "Facility to Pardon" as one of the laws of nature conducive to peace, and ultimately, to one's self-preservation (Hobbes 1994 [1651], chapter 15, p. 96).
21. Rawls (1971, chap. VIII) has a thoughtful account of the development of a sense of justice from infancy to adulthood. Indeed, from a virtue-ethical perspective, this is clearly a strength of Rawls's early work, although even here, his attention to virtue is narrowed to contractarian virtues such as fairness and toleration.
22. The modern *locus classicus* for the essential contribution of empathy (or "sympathy") to a decent social order is Adam Smith, *The Theory of Moral Sentiments* (New York, NY: FQ Classics, 2007 [1759]). Rawls's notion of reciprocity, which involves an imaginative role reversal, clearly requires some degree of empathy. However, rather than viewing empathy as an aspect of reasonableness, I view it as a virtue in its own right, that can be acquired and developed to differing degrees. For example, some people are remarkably sensitive to other people's feelings, while others, even "reasonable" people, may be much less sensitive, through no obvious fault of their own.
23. A similar approach to deliberation is adopted by Jeffrey Stout, who rejects Rawls's prior moral restraints on speech and urges citizens instead to "cultivate the virtues of democratic speech, love justice, and say what you please." (Jeffrey Stout, *Democracy and Tradition* (Princeton, NJ: Princeton University Press, 2004), 85).
24. I do not mean to imply that the pro-life position is uniquely associated with "religious America," but this was the context in which Obama addressed the abortion issue.
25. As reported in then Senator Obama's "Call to Renewal Keynote Address" on June 28th, 2006 in Washington, DC.
26. This is how MacIntyre characterizes judicial disputes over abortion and other contested issues in a modern liberal regime (Alasdair MacIntyre, *After Virtue: A Study in Moral Theory* (London: Duckworth, 1981), 253).

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# Chapter 13

## Abortion, Sexual Markets and the Law

Helen M. Alvaré

### 13.1 Introduction

There can be little doubt that information and evidence regarding the shared humanity of the unborn child has moved citizens and lawmakers in the United States to oppose abortion and to take steps to protect unborn children. Evidence about the development of unborn human life is a regular part of hearings before legislative bodies considering legal restrictions on abortion. Fundraising dinners for “crisis pregnancy centers” inevitably feature personal testimony from client-mothers, who speak about how they came to understand and accept the value of their child’s life.

At the same time, arguments concerning the humanity of unborn children make little to no impression upon audiences committed to abortion rights on the grounds of women’s sexual autonomy. At a large, 2010 abortion conference at Princeton University, one late-term abortionist called the possibility of being prevented from performing an abortion on a distressed woman her “worst fear.” A second abortionist described how very rewarding it felt to receive gratitude from a newly aborted woman. In reaction to these remarks, I offered during my presentation the next day the possibility that women’s actual needs are after be in conflict with their short-term wants in the case of abortion. Abortion activist Frances Kissling wrote later in Salon.com that this remark “set pro-choice feminists’ teeth on edge” and was quoted by them “over and over again in bewilderment and annoyance in conversations” (Kissling, 2010). In other words, in their view, it is out of bounds to question women’s autonomous judgments, even in the course of thinking sincerely about women’s long-run good. This response suggests a sort of glass ceiling limiting progress toward convincing sufficient numbers of people to support laws restricting abortion further. A ceiling likely composed of a belief in the absolute autonomy of women’s choices about this or that sexual encounter, or this or that choice about the fate of their unborn child.

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In the context of an inquiry about legislation restricting abortion, both types of arguments matter: arguments of the type most frequently advanced in this book—which for purposes of convenience I will call warrants concerning the child’s humanity—and arguments about women’s well-being and freedom. The former arguments already undergird an important variety of laws restraining or conditioning abortion, to the extent these types of laws are permitted following *Roe v. Wade*<sup>1</sup> and *Casey v. Planned Parenthood*.<sup>2</sup> They are likely to continue to play an important role.

The latter types of arguments, however, merit explication beyond what they commonly receive. In part, they have been pursued over the last several decades in the form of evidence about the various negative physical, psychological and spiritual effects of abortion on women. Yet an important portion of the “pro-woman, pro-life” case, has not been taken up sufficiently in popular or scholarly literature. Certainly, it has not been integrated into laws and policies with the potential for widespread impact. I am speaking of the argument that legalized abortion has helped create and perpetuate a “mating market” for women which is deeply at odds not only with their objective good, but also with their preferences. Several economists and sociologists have offered lengthy, persuasive treatments of the subject in recent decades. Were their arguments better known and better accepted, they would provide a powerful warrant for laws and policies both to reduce abortion’s availability in order curb its “insurance effect” in connection with uncommitted sexual encounters, and to reduce women’s participation in nonmarital sexual relations, which have become the required “currency” for women’s participation in this mating market.

In order to treat the question of the warrants for legislating about abortion within the current U.S. context, this chapter will proceed as follows. First it will discuss how the variety of state and federal abortion restrictions and regulations extant today are related to proposals about the common humanity of the unborn child. Second, it will suggest that while it is essential to continue to mine philosophy, theology and various empirical sciences for additional insights concerning the child’s humanity, another intellectual project is warranted in order to reduce abortion rates substantially. It is the project of convincing judges, legislators and citizens generally that abortion is the enemy of women’s true autonomy, particularly insofar as it helps structure a mating market in which women are pressured to engage in nonmarital sexual relations with no promise of marriage in the event of a pregnancy. Currently, this project is considered quixotic at best, retrograde and anti-feminist at worst. Yet, unless it is taken up, it is difficult to see how the volume of abortion can be reduced in a world where Justice Sandra O’Connor’s observation in *Casey* is only too true: that people have “organized intimate relationships and made choices. . . .in reliance on the availability of abortion in the event that contraception should fail” (*Casey v. Planned Parenthood*, 856).

Finally, I will suggest both continuing to press laws reducing the availability of abortion, and crafting laws and policies for drawing women away from participation in the mating market as currently structured. The latter project would be explicitly presented in the context of a “new feminism.”

## 13.2 A Common Humanity

There is no doubt that evidence pertaining to the humanity of the unborn child, including evidence about the features he or she shares with born human beings, and evidence of the child's vulnerability, has played an important role in the passage of legislation regulating and constraining abortion since 1973, when the U.S. Supreme Court issued *Roe v. Wade*. Of course, the Court's abortion decisions in *Roe* and in *Casey v. Planned Parenthood*, left very little room for legislation effectively limiting either the abortion industry or any individual woman's decision for abortion. But to the extent legislation was permitted—for the limited purposes of safeguarding women's health, or expressing the state's respect for unborn life<sup>3</sup>—the legislative project depended upon acceptance of the notion that unborn life merits some degree of respect. Possibly, this notion drew increasing support over the last 40 years from coincident scientific developments showcasing the objectively stunning processes of human development prior to birth. Ultrasound technology had become widespread by the late 1970s.<sup>4</sup> Today, 3-D ultrasound is increasingly popular.<sup>5</sup> Also, scientific knowledge about gene sequencing began to accelerate in the 1970s, to the point that by 2001, scientists could publish a draft sequence of the human genome.<sup>6</sup> And the commercial practice of assisted reproductive technologies, which began in the 1970s, is now a commonplace staple of the popular media and the medical experience of tens of thousands of infertile couples.<sup>7</sup> In 2010, the book *Origins: How the Nine Months Before Birth Shape the Rest of Our Lives*,<sup>8</sup> garnered a great deal of popular media attention with its theories about the possible relationships between children's well-being, and their mothers' internal (mental and physical) and external environments during pregnancy.

Furthermore, over the last 40 years, pro-life advocates have continued unabated to expose to the public the reality of various abortion methods, thereby making the unborn child visible and "one of us." Several of these attempts have garnered significant media attention, including nurse Jill Stanek's public exposure of Illinois' Christ Hospital's "abortion procedure" for Down's Syndrome babies; this involved live birth followed by abandoning the children in laundry closets and elsewhere in the hospital, starvation and dehydration.<sup>9</sup> Perhaps the most sustained and successful pro-life effort to expose an abortion procedure as a form of homicide was the campaign to ban "partial-birth abortion," begun in the 1990s and continuing into the early 2000s. This is the procedure whereby an abortionist drags a late term unborn child, feet first, out of the mother, until only the head is lodged in the mother's cervix, after which the head is stabbed, suctioned and crushed.<sup>10</sup>

In reaction to widespread education and media coverage of partial birth abortion, many states passed Partial Birth Abortion bans from 1997 through 2000.<sup>11</sup> After the Supreme Court in *Stenberg v. Carhart*<sup>12</sup> invalidated the Nebraska law, and by extension, the laws of every state with similar language, states, including Nebraska, passed new laws<sup>13</sup> responsive to the constitutional problems identified by the Supreme Court. Nebraska's new law was upheld by the Supreme Court in *Gonzales v. Carhart*.<sup>14</sup> According to the Kaiser Family Foundation and the Guttmacher Institute, the following states have functional partial birth abortion bans as of

August 2010: Arizona, Arkansas, Georgia, Indiana, Kansas, Louisiana, Mississippi, Montana, New Mexico, North Dakota, Ohio, Oklahoma, South Carolina, South Dakota, Tennessee, Utah and Virginia.<sup>15</sup>

The federal government and many states have also passed laws to prevent the killing of infants born after “failed abortions,” known as Born Alive Infant Protection laws. Arizona, Alabama, Arkansas, and other states accomplish this with a brief provision along the following lines: “In addition to the physician performing the abortion, there is another physician in attendance who shall take control of and provide immediate medical care for a living child born as a result of the abortion” (*Arizona Revised Statutes* § 36-2301.01(A)(4)). Some states have even more explicit and enhanced protection for the child born alive after an abortion. Maine’s, for example, states:

Whenever an abortion procedure results in a live birth, failure to take all reasonable steps, in keeping with good medical practice, to preserve the life and health of the live born person shall subject the responsible party or parties to Maine law governing homicide, manslaughter and civil liability for wrongful death and medical malpractice (22 M.R.S. §1594).

Many states have been responsive to the plight of the “born alive” aborted child from the 1970s<sup>16</sup> to today. Illinois’ law, passed in 2005, became effective January, 2006.<sup>17</sup> The federal government passed its “Born-Alive Infant Protection Act” in 2002.<sup>18</sup>

Other laws respond to the humanity of unborn children by recognizing a separate criminal charge for the homicide of an unborn child, or allowing a tort recovery for an unborn child accidentally but wrongfully killed, even if the child died in utero and was never born alive. It might be fairly observed that such laws respond both to the fact of the child’s membership in the human race, and to the subjective connection forged between mother and child. Many states provide a civil recovery for an accidental death of an unborn child, even if the child is pre-viable. Illinois,<sup>19</sup> and Rhode Island<sup>20</sup> allow a wrongful death suit regardless of the age of the unborn child when he/she dies. A footnote in a 2001 Arkansas opinion *Aka v. Jefferson Hosp. Ass’n, Inc.*,<sup>21</sup> summarized the wrongful death laws pertaining to the unborn as follows:

32 jurisdictions permit a wrongful-death action on behalf of a viable fetus. Of those 32 jurisdictions, four permit an action for an unviable fetus (Connecticut, Missouri, South Dakota, and West Virginia)). Four jurisdictions permit an action, even for unviable fetuses, but have a live birth or stillbirth requirement (Louisiana, Maryland, Oklahoma, and Pennsylvania). One jurisdiction permits an alternative remedy by allowing an action for damages resulting in stillbirth caused by negligence (Florida). One jurisdiction noted in dicta that a wrongful-death action might be permitted but declined to reach the merits on procedural grounds (Utah). Three jurisdictions prohibit an action for an unborn nonviable fetus but have not reached the issue of whether a viable fetus may maintain an action (Alaska, Oregon, and Rhode Island). Four jurisdictions have no case law on the issue (Colorado, Guam, Puerto Rico, and Wyoming). Only nine jurisdictions, including Arkansas, rejected a wrongful-death action for a viable fetus (*Aka v. Jefferson Hospital*, n. 2).

In recent years, two additional types of legislation having specific reference to the humanity of the unborn child are succeeding at the state level: fetal pain and ultrasound laws. Fetal pain laws generally require abortion providers at least to offer women information about the possibility that an unborn child of a certain age will experience pain during an abortion. According to a report compiled by the Guttmacher Institute, the following ten states have some version of fetal pain laws: Alaska, Arkansas, Georgia, Louisiana, Minnesota, Missouri, Oklahoma, South Dakota, Texas and Utah. Arkansas, Minnesota, Oklahoma and Utah only require that the information regarding fetal pain be given to women who have reached 20 weeks gestation, and Missouri requires this dispensation of information only for women at 22 weeks.<sup>22</sup> Alaska, Texas and South Dakota have incorporated their fetal pain requirements into their informed consent requirements.<sup>23</sup> Additional states are considering passage of fetal pain laws as of the time of drafting this chapter.

This activity at the state level has inspired discussion about a possible federal fetal pain law. In 2010, Nebraska's Sen. Mike Johanns introduced a bill to the U.S. Senate, to "require women seeking abortions after 20 weeks to be told the fetus could feel pain and allow them to request anesthesia for the fetus."<sup>24</sup>

Informed consent laws also rely indirectly upon some level of belief in the humanity of the child. Such laws assume that an abortion decision is weighty not only medically, but also morally and emotionally. Informed consent laws tend recently to provide mothers not only with medical information concerning the abortion itself, but also with information about the child's developmental stage, and about the kinds of public and private assistance available to the mother should she choose to forego abortion.

In July 2010, for example, Missouri replaced its longstanding informed consent law with a new one requiring that an abortionist give a woman who has reached 22 weeks gestation, printed materials that must include specific information about the child's ability to feel pain, the mother's alternatives to abortion (including the geographic locations of agencies that can assist her) and the father's financial duties toward the child.<sup>25</sup> Michigan allows a woman to review a series of web pages with information about the fetus' gestational development and about specific abortion procedures.<sup>26</sup> The woman must view at least one abortion procedure page before she can obtain a consent form, which page will include the maternal death statistics associated with that procedure, as well as alternative options to abortion. The state sponsored website then leads the mother to a page with a list of gestational ages. The mother must choose one of these and view the page corresponding with the age of her unborn child. She is then led to a new webpage with a detailed, colored picture of her child at this stage of gestation and a few facts about the child's development.<sup>27</sup> Few states are without informed consent laws. According to LexisNexis 50 State Comparative Legislation/Regulation summary on abortion (as of the summer of 2010), these include only: California, Colorado, Hawaii, Iowa, Maryland, New Jersey, New Mexico, New York, North Carolina, Oregon, Washington, and Wyoming.<sup>28</sup>

Several other types of laws appear to recognize abortion's uniquely negative character and what might be loosely termed the "unsavory" character of the "business"



of abortion. Each type is likely related at the very least to the perception that abortion does not treat human life well, either the child's or even the mother's. These include laws allowing conscientious objection to abortion, and laws mandating particular medical standards for abortion clinics. States and the federal government began enacting conscience provisions immediately after *Roe* (or even before in the case of states legalizing limited categories of abortion pre-*Roe*).<sup>29</sup> A few more states enacted conscience protections in the 80's and 90's, including Maryland (1982),<sup>30</sup> Pennsylvania (1982),<sup>31</sup> Indiana (1993), California (1995),<sup>32</sup> Delaware (1995),<sup>33</sup> and West Virginia (1984),<sup>34</sup> and Washington (1992).<sup>35</sup>

As for doctors who perform abortions regularly, and the abortion business generally, neither enjoys widespread public regard. Recently in Ohio, when an abortion practice rented facilities very close to a group of pediatricians, the latter were moved to write a public letter to the *Cincinnati Inquirer* "vocaliz[ing] our personal disgust with [the abortionists'] mission" (Brinn, 2010).

This is reflected in the rise of laws specifically requiring abortion clinics to operate more like other medical facilities. These are responding to the steady stream of news reports about negligent, reckless and grotesquely unsanitary practices at abortion clinics, often resulting in grave harm to their female patients. Some states have responded with laws requiring abortionists working at clinics to possess admitting privileges at local hospitals. Others require abortion clinics to conform to standards similar to those applicable to other surgical clinics or even hospitals.<sup>36</sup> Ohio, requires physicians attending abortions to file detailed (confidential) health reports about each abortion patient.<sup>37</sup>

In sum, it seems clear that the body of abortion laws and regulations passed in the 38 years since *Roe* might be understood as a response to evidence of the humanity of unborn children. Were *Roe* and *Casey* overturned, and the states once again free to establish meaningful limits on abortion, it is quite likely that some states would pass more laws like those described above. Some states would go significantly further, and ban whole categories of abortions, categories based for example on the stage of pregnancy, or the rationale for the abortion.

At some point, however, legal progress toward halting abortion would likely be slowed or stopped in many states on the grounds that women will continue to seek abortions whether or not it is legal. Almost certainly, these will be the same categories of women who are seeking abortions today in the largest numbers: single women who report that they want an abortion on the grounds that "having a baby would dramatically change my life" (Finer et al., 2005, p.). In the U.S. today, "marital status is the strongest single factor influencing the probability" (Sullins, 2003, p. 33) that a woman will abort a pregnancy. Since 1997, single women have steadily obtained from 83 to 87% of all U.S. abortions. They have about five times the abortion rate (abortions per 1000 women) and nearly 7 times the abortion ratio (abortions per 100 pregnancies),<sup>38</sup> of married women. In related figures, while from 1958 to 1960, only 27% of 18 years old women had sex (and many of these were married), by 1999, only 25% of women and 20% of men remained virgins throughout their teen years.<sup>39</sup>

With regard to the acceptance of abortion as a backstop for current sexual practices, the most blunt acknowledgement of this thinking appeared, as noted above,

in the plurality opinion in *Casey v. Planned Parenthood*, which she acknowledged that people “have organized intimate relationships and made choices. . . in reliance on the availability of abortion in the event that contraception should fail” (*Casey v. Planned Parenthood*, 856). Furthermore, the current White House website of President Barack Obama refers explicitly to a “need for abortion,”<sup>40</sup> without further elaboration, very likely referring to abortion scenarios far beyond the tiny percentages linked to rape, incest, or threats to the life or physical health of the mother.

In sum, then, in order to respond to abortion as currently practiced in the United States—and as likely to be practiced somewhat even post-*Roe*—arguments about the humanity of the unborn child need to be supplemented with arguments about abortion and women’s well being. Realistically speaking, this will require a willingness to question quite critically the terms of the current “mating market” for women, which involves uncommitted sexual intimacy without any marriage guarantees in the event of pregnancy. Abortion fuels this market and abortion is its outcome. Both abortion itself then as well as various aspects, correlates and outcomes of the mating market shaped in part by abortion immiserate women. Laws and policies, in addition to reducing access to abortion, should also therefore empower women to avoid entering such a market *ab initio*.

### 13.3 The Case Against Women’s Participation in Nonmarital Sex

Well respected economists and sociologists have delineated the relationship between legal abortion and the creation of a mating market relatively disadvantageous to women, as will be described in some detail below. Speaking very generally, they propose that the greater availability of both contraception and abortion reduce the “risk” of nonmarital sex, leading even reluctant women to engage in premarital sex with no (shotgun) marriage guarantee as a perceived condition of entering the mating market. This phenomenon then interacts with a decline of the stigma previously associated with a nonmarital pregnancy or birth, to produce high rates of nonmarital pregnancies, births and abortions, in addition to sexually transmitted diseases.

In such a situation, were the availability of contraception and abortion reduced, presumably the market would shift in a direction more advantageous to women, and to children. There are no efforts to reduce the availability of contraception, and none likely forthcoming. But efforts to reduce the availability of abortion continue apace, and give evidence of producing the predicted effect. Studies show, for example that parental involvement laws<sup>41</sup> reduce the quantity of minors’ abortions,<sup>42</sup> while also reducing risky sexual activity among teenage girls (measured by rates of sexually transmitted diseases).<sup>43</sup> Informed consent laws appear to help reduce the number of adult women’s abortions.<sup>44</sup> Reducing state-supplied abortion funding correlates with a lower number of abortions.<sup>45</sup> Perhaps it is even possible that the declining number of abortion clinics in the United States over the past two decades is related to the decline in the numbers of abortions recorded over a similar time period. Abortion

rates fell approximately 33% from 1990 to 2005<sup>46</sup>; Operation Rescue claims that two-thirds of clinics closed from 1991 to today, from 2200 to 689.<sup>47</sup>

Some will claim that *increasing* the availability and supply of contraception is the surest route to a reduced rate of abortions (and nonmarital pregnancies and births too). This appears, however, to be contradicted by the pattern of the last several decades. While it is not possible precisely to identify the reasons for the twin rise in the availability of contraceptives and abortion, economist Timothy Reichert offers the highly plausible account that contraception and abortion rates will rise together because of mating market effects similar to those summarized immediately above, until “equilibrium” levels of sexual activity are reached “after which abortion rates should remain constant” (Reichert, 2010, p. 25). This is indeed what happened after abortion was legalized in 1973 (about 8 years after the Supreme Court declared access to contraception a constitutional right).<sup>48</sup> Rates of abortion climbed, and then beginning in the late 1980s and continuing to today, abortion rates began to decline, and then to stabilize. Needless to say, women not only most often pay the financial costs, but also the physical and psychological costs of abortion. Additionally, of course, there has always been a high rate of contraceptive failure particularly among young women, due to misuse, method failure, intention to avoid contraception in order to communicate “trust” to a sexual partner, and any implicit or explicit intention to become pregnant.<sup>49</sup> Furthermore, there is the logical possibility that the availability of contraception helps induce a mentality that sex ought to be unrelated to babies, thus making an *unintended* pregnancy an *unacceptable* pregnancy. Certainly, this is one possible implication of the persistent fact that women using contraception in the month they became pregnant account for more abortions than women who were not, year after year.<sup>50</sup>

It seems, then, that for purposes of thinking about laws to reduce abortion, one cannot avoid the task of understanding and communicating the argument about women’s immiseration in the current mating market. It should be noted *ab initio* that such a project requires an intrepid spirit. For the current, prevailing ideology in the United States can fairly be described with the term “sexualityism,” coined by Harvard University economist Lant Pritchett. Sexualityism, in his words, is the position that the “expression of human sexuality is *in and of itself* a positive good and limitations on that expression are *in and of themselves bad*” (Pritchett, 2008). One can see this ideology very clearly on display in the series of claims made in a recent filing with the U.N on behalf of several international sexual rights groups, including the Sexual Rights Initiative and Youth Coalition for Sexual and Reproductive Rights. Such groups insist that “sexual and reproductive health is intimately linked to and dependent on the realization of other sexual and reproductive rights, including those that may not typically be thought of as health issues. . .” (Sexual Rights Initiative, October 18, 2010), including a “right” to a “satisfying and safe sex life,” and to “the enhancement of life and personal relations” (2010, p. 2 and 7). It highlights the “evolving capacities of children and young people” respecting sex, and promotes the protection and promotion of individual sexual rights during “childhood” (2010, p. 3 and 4). It endorses adults’ rights to buy and sell sexual services, without criminal penalties, (see 2010, p. 5 and 7) and concludes that individual sexual rights

trump even the conscientious objections of institutions and individuals (see 2010, p. 3).<sup>51</sup> Sexualityism is also very apparent in the arguments for same-sex marriage regularly forwarded in the United States: these insist that sexual expression, including intrinsically nonprocreative sexual expression, merits state recognition simply because some citizens choose to engage in it.<sup>52</sup> An argument of this kind has found a foothold in constitutional jurisprudence in Supreme Court Justice Kennedy's now infamous reflection in the Texas sodomy case *Lawrence v. Texas*: "When sexuality finds overt expression in intimate conduct with another person, the conduct can be but one element in a personal bond that is more enduring. The liberty protected by the Constitution allows homosexual persons the right to make this choice" (*Lawrence v. Texas*, 567).<sup>53</sup>

In an environment characterized by sexualityism, some authors, such as economists George A. Akerlof, Janet L. Yellen and Michael L. Katz, discussed below, think that we are past the point of curbing nonmarital sex. Others, like Timothy Reichert, also below, are pessimistic about any effective role for the law. While I appreciate the inherent difficulty of the task, I would not concede this point too quickly. I would agree rather with sociologist Norval Glenn who reminds us that a "resurgence of the ideal of premarital chastity . . . is not inconceivable" (Glenn, 2008), particularly if one considers the progress made respecting abstinence and abortion in the 1990s.<sup>54</sup> There is also progress on divorce, although more progress among more privileged versus less privileged Americans.<sup>55</sup> Other fundamental shifts have occurred respecting men and women in relationships: the sexual double standard is beaten down, and the equality of wives in marriage is far more widely acknowledged.

Furthermore, pessimism should be avoided because the cause is worthy. Women's well-being is seriously compromised, and with it, the well-being of children for whom women have highly disproportionate responsibility. And the time is right for a new feminism which, like its predecessors—responds to the particular forms of oppression and disadvantage plaguing women in our times. The evidence of these new forms of oppression and disadvantage is persuasive, and it is to that we now turn.

First, speaking generally, it appears that the widespread participation of women in nonmarital sexual relations is detrimental to women's well being. This is indicated, first, by the fact that the current mating market looks more like a mirror of men's preferences than women's. It involves sex with a variety of partners, without any type of commitment (marriage or even engagement), and accompanied by the risks of pregnancy which are borne in very large part by women. How is this a male-oriented mating market? There are more than a few telling indications. First, very recent surveys confirm men's overall larger number of lifetime sex partners. Men have nearly twice the number of women; also, the percentage of men who have had over 15 partners is more than 2.5 times that of women.<sup>56</sup> Far more women than men report that they regret casual sexual encounters<sup>57</sup> regret early sexual encounters, or wish they had waited until they were older,<sup>58</sup> or suffer depression after uncommitted sexual intimacy.<sup>59</sup> Additionally, women, more often than men, express negative opinions about cohabitation,<sup>60</sup> and report that they understand cohabitation as a

precursor to marriage, (Men), more often understand it as another stage of dating.<sup>61</sup> Finally, it is apparent that women take on disproportionate burdens within the framework of the current mating market, given that they alone become pregnant, they alone undergo abortions, they unduly suffer from post-abortion distress, and they far more often rear children alone than do men, by a ratio of about eight to one.<sup>62</sup>

And for what? For what do single women contradict their preferences and their long-run well-being, by having sexual relations with men who will most likely not marry them? For what do they jeopardize the well-being of their potential children? For a temporary feeling of “cool” or for a temporary “status” as a girlfriend? For some degree of temporary sexual pleasure? For the misguided notion that this sex will lead them to marriage? A recent interview with the youngest member of the celebrity Kardashian family (Khloe, at 17), is illustrative:

Looking back, I think that’s not a normal thing [to lose one’s virginity at 14]. [I was], not conned, but persuaded, because he was older and I felt I wouldn’t be accepted or cool or whatever. I felt so disgusted with myself. I stopped talking to him and actually didn’t have sex for three years after that because I knew I was young and I knew I wasn’t ready (ABC News Entertainment, Slide2).

The dearth of public discussion of the current realities of the mating market for women indicates the presence of sexualityism, pure and simple. It is as if we are expected to accept the notion that if apparently consensual sex is happening, there can be no objection. Rather sexual expression—the more the better—is a good in itself.

Happily, a few brave scholars of the “dismal science,” economics, have applied their methods to the question of this market. Using the lenses of supply and demand, scarcity and abundance, risk and reward, their analyses appear to confirm that the current market immiserates women. They agree that abortion, in particular, both structures the current market to pressure single women toward sexual relations, and then immiserates them relative to men, by burdening them disproportionately with the consequences of these relations.

In perhaps the most well-known paper on this subject—*An Analysis of Out-of-Wedlock Childbearing in the United States*—economists George A. Akerlof, Janet L. Yellen and Michael L. Katz (Akerlof, Yellen & Katz, 1996) describe the path of women’s increased participation in nonmarital sexual relations as a result of “technical changes” the increased availability and legalization of both contraception and abortion (1996, p. 279). The authors claim that, as compared with other explanations of nonmarital pregnancies and births—including but not limited to welfare theory or job theory—their “technology shock” hypothesis, combined with the declining stigma of a nonmarital birth—can better explain the magnitude and timing of changes in the numbers and rates of nonmarital pregnancies and births (1996, 304). Although the authors do not favor constraining the availability of either technology, they conclude that the current sex and mating market enabled by abortion and contraception operates to the disadvantage of women, and the relative advantage of men, due to a series of incentives structured by their availability. First, “when the cost of abortion is low, or contraceptives are readily available, potential male partners can

easily obtain sexual satisfaction without making . . . promises [to marry in the event of pregnancy] and will thus be reluctant to commit to marriage” (1996, p. 290). Single women thus feel “pressured,” because if they do not participate in sex, they are at a classic “competitive disadvantage” because “sexual activity without commitment is simply increasingly expected in premarital relationships” (1996, p. 280). “If they ask for a guarantee [of marriage in the event of pregnancy] they are afraid that their partners will seek other relationships” (1996, p. 290). Even women who want children, reject contraception and/or abortion, and want a marriage guarantee as a condition for sex, have nonmarital sex anyway, because it is the price for entering the mating market (1996, p. 280). Such a market is therefore likely to produce higher rates of sexual activity, nonmarital pregnancy, nonmarital births, and abortions all at the same time. This is indeed what has happened since the widespread legalization and availability of both contraception and abortion, despite predictions by pro-choice groups that widespread contraception would reduce all other named outcomes, and that legalized abortion would reduce nonmarital births.

Ackerloff, Yellen and Katz briefly mention another finding in the course of explicating their main thesis, which finding bears on the relationship between abortion and women’s well-being. They conclude that the widespread availability of contraception and abortion also correlate with a decline in “intimacy” between sexual partners. They base their conclusion upon a survey of college students in 1994 wherein the majority of students opined that a man and a woman who were sexually intimate for one year were insufficiently compatible to marry in the event of a pregnancy (1996, pp. 307, 312). I would suggest that this lack of intimacy is particularly detrimental to women, given studies showing that women experience depression in connection with less committed sexual relations.<sup>63</sup>

Ackerloff, Yellen and Katz do not, however, recommend reducing the availability of abortion or as a response to women’s plight. They fear that removing abortion or contraception from unmarried women would not only be ineffective for reducing nonmarital births, but might also increase these as women who “would have obtained abortions or used contraceptives instead give birth to unwanted babies” (1996, p. 282). This conclusion relies upon their additional assumption that “the change in sexual customs . . . has been accompanied by a decline in the stigma attached to out-of-wedlock childbearing,” and “there is no reason to believe that the destigmatization is reversible” (1996, p. 282). Consequently, they would respond to the current market by making contraception more easily accessible.

Economist Timothy Reichert brings additional insight to the question of the effects of the current mating market as he depicts women’s current situation vis-à-vis sex and romantic relationships as a case of what economists call the “prisoners’ dilemma” (Reichert, 2010, p. 25). A prisoners’ dilemma is any “social setting wherein all parties have a choice between cooperation and noncooperation.” All parties would “be better off if they chose cooperation” (2010, p. 33), but—like prisoners being held for questioning in separate chambers—none can “effectively coordinate and enforce cooperation” (p.33), and so all parties opt for the best individual choice, which is non-cooperation.” As a result, everyone involved is worse

off. (A classic prisoners' dilemma involves fishermen who, as a group, overharvest to their overall detriment because they do not cooperate to prevent this outcome for one or another reason. Perhaps they believe they cannot afford the transaction costs of cooperation; perhaps they are simply unwilling (Reichert, 2010, p. 33).) Reichert further observes that prisoners' dilemmas are "exceedingly strong social equilibria," such that. "absent very powerful social mores or laws against the behavior . . . they are nearly impossible to avoid" (Reichert, 2010, p. 34).

According to Reichert, the prisoners' dilemma operates for women in the mating market as follows: first, contraception "lowers the cost of premarital and extramarital sexual activity below the level necessary for a separate sex market to form" (2010, p. 26). In other words, sex without the "cost," of pregnancy becomes the norm, such that sexual partners don't even have to consider the possibility of marriage. To this point, Reichert's analysis is quite similar to the Akerlof, Yellen and Katz's. Next, however Reichert takes a new, albeit not contradictory, approach, and claims to explain yet another negative consequence of the current mating market—women's marital unhappiness. He claims that more women than men begin populating what he calls the "marriage market" at a younger age because women generally want to have children sometime during their lives, but are biologically constrained to have them when they are younger. Women also know that stable marriage is better for children. By their early 30s, therefore, most women have entered the marriage market. Men have no similar, inbuilt impetus to leave the sex market and enter the marriage market. Thus, women have more "power" in the sex market, where they are relatively scarce, but face more competition in the marriage market, where they are competing with more women for fewer men. Reichert reasons that this translates into women more often striking "bad deals" at the margins in the marriage market, leading to a later desire for divorce (2010, pp. 26–28). In fact, it is well-established today that women file for divorce approximately two times as often as men (Brinig and Allen, 2000). Reichert suggests that women will eventually go along with attaching a lesser stigma to divorce, too, since they may want to exercise this option some day. This, in turn, leads to their entering marriage with less commitment, and with more concern to invest in income-producing skills in the event they need to support themselves and their children alone. Men respond rationally by doing the same.

In sum, according to Reichert, women are disadvantaged in the current mating market at least respecting their hopes to marry, to marry in time to have children, and to remain stably married. He further suggests this they are disadvantaged with respect to abortion because contraception leads to greater demand for abortion. Contraception promises to allow women "to rationally plan their investments into the labor market" (p. 30), but if things go awry and threaten their investments, abortion appears necessary. He calls contraception and abortion "complementary forms of insurance that resemble primary insurance and reinsure once. If contraception fails, abortion is there as a fail-safe" (Reichert, 2010, pp. 30–31).

The data bears Reichert's theory out. His theory predicts a rise in the resort to both contraception and abortion until "equilibrium" levels of sexual activity are reached after which abortion rates should remain "constant." This is what happened after abortion was legalized in 1973 (about 8 years after the Supreme Court

declared access to contraception a constitutional right).<sup>64</sup> Then beginning in the late 1980s and continuing to today, abortion rates began to decline, and then to stabilize. Needless to say, women not only most often pay the financial costs, but also the physical and psychological costs of abortion unduly.

Reichert would agree with the conclusion of this chapter, that a new expression of feminism might ameliorate women's situation, and help to overturn the "massive redistribution of wealth and power from women and children to men" (2010, p. 25) brought about by the current mating market.

One additional research conclusion addresses the relationships between the current mating market and women's well-being. Economist Bruce Wydick observes in his piece "Grandma Was Right: Why Cohabitation Undermines Relational Satisfaction But is Increasing Anyway," (Wydick, 2007), that cohabitation appears to be associated with a decline in marital satisfaction. But cohabitation is a regular feature of the current mating market. It also has its own internal disadvantages: more domestic violence,<sup>65</sup> and lower stability than marriage,<sup>66</sup> resulting in harms to women and to the children increasingly born today to cohabitating parents. As noted above, it is also less favorably regarded by women than men, and continues to be associated with higher rates of divorce if the cohabitation is not begun in the context of an engagement.<sup>67</sup>

Finally, there is speculation that the current mating market might account for a phenomenon recently dubbed "The Paradox of Declining Female Happiness," in an article<sup>68</sup> of that title by economists Betsey Stevenson and Justin Wolfers. In it they argued that "women's happiness has declined both absolutely and relative to men," (Stevenson and Wolfers, 2009, p. 191) over approximately the last 35 years. This can be documented across "various datasets," and "measures of subjective well-being," and appears to be pervasive across demographic groups and industrialized countries" (Stevenson and Wolfers, p. 193). Its magnitude, according to its authors, is roughly "comparable to the effects of an 8.5 *percentage point rise* in unemployment" (Stevenson and Wolfers, p. 201, italics added). It is hard to imagine that this decline in female happiness is unrelated to the above-described changes over the last several decades in the fundamentals of male-female relationships—the very stuff of life, consisting in some of the most basic elements of human aspirations, human progress and growth. Shifts in the very ground beneath each of these cannot fail to affect human happiness. If this is true, and economists' reading of the events of the last four to five decades is credible, which I believe it is, then there is a powerful argument that abortion and the mating market it has helped to construct, need to be deconstructed. The final section of this chapter offers very preliminary thoughts on how this task might be approached.

### 13.4 A New Feminist Response

The "common wisdom," in the United States seems to be that while abortion rates might realistically be reduced by this or that measure, nothing can be done about high rates of nonmarital sex. I believe that the latter conclusion is, at the very least,



premature. The argument about the losses women suffer as a consequence of participation in the modern mating market is neither sufficiently joined nor sufficiently publicized to conclude that it has failed. The potential reasons for its relative invisibility are legion. Perhaps the economists are right and “market equilibrium” is very stubborn; *re*-stigmatizing *de*-stigmatized behavior is very hard. Maybe the males who still lead major commercial, educational and political institutions like the status quo. Maybe the media need the image of the sexually-available women to sell stuff. Maybe it’s hard to talk people out of short-term gratification in the name of long run goods. Maybe established feminists feel threatened by too much talk about women’s preferences for marriage, marital stability, and babies, as if this would threaten all the gains made for women in prior years by means of talking nearly exclusively about their rights to equality, education and employment. Perhaps sexualityism is just too strong; uttering a word against the “intrinsic good” of any sexual expression is tantamount to siding with the religious fanatics and the severely sexually repressed or hypocritical. Think of the cautionary examples of Anita Bryant, Christine O’Donnell, and every disgraced preacher eventually caught in adultery.

But the empress really has no clothes and must be urged to don them. Women are suffering, and their children with them. American society has been experimenting with this new sexual “equilibrium” for over 40 years, and the negative results are statistically significant. If high-volume sexual experience produced tangible benefits for women, we would have seen evidence of this by now. Instead, data about female happiness, sexually transmitted diseases, nonmarital pregnancies, abortions, post-abortion distress, cohabitation and divorce tend to point in the same direction. Women—and by extension their children—are suffering unique harms, with the poorest, most vulnerable groups of women losing the most ground.<sup>69</sup> Furthermore, recent evidence indicates that the scale of negative outcomes is increasing for the middle class, whose experiences in the mating market are beginning to mirror the most disadvantaged groups more than highly educated groups.<sup>70</sup>

The goals of a new movement for women, a “new feminism” addressed to the mating market, would certainly be different from the goals of older feminisms, but this is not enough to doom it. Times have changed, and forms of oppression with them. Gains from older feminisms need not be traded away; in fact, it is more likely than not that restructuring the mating market to protect the interests of women and children will *consolidate, not undercut*, the real gains from earlier feminist movements. Women are more likely to finish school, pursue interesting work, marry well, and maintain financial security if they avoid uncommitted sexual relationships, and all the negative trends that accompany them.

There is evidence of positive changes in human sexual and marital behavior even in the past few decades, as described above. The age of sexual debut among teenagers was delayed, divorce rates eased, etc. Furthermore, it seems that women—even as they have changed their behaviors respecting education and employment—continue to aspire to marriage, children, sex as part of a commitment, and birth versus abortion. The extant mating market threatens these preferences. To repeat, on its face, the current mating market looks suspiciously like the dream of an undisciplined, unaccountable male.

Before turning to more specific recommendations about laws and policies designed to curb single women's participation in sexual relations, one observation is in order with reference to women's "prisoners' dilemma." It would seem that whatever message or strategy is adopted, it should seek to move women as a "horde," or at the very least, try to overcome hurdles to their cooperating in service of their own common good. It might even be helpful for constituting women's groups to describe the prisoners' dilemma upfront to women, in the style of the essays of Reichert, or Ackerlof, Yellen and Katz above. Certainly group "consciousness raising" was a well and frequently used tactic of earlier feminisms.<sup>71</sup> It appears to be again necessary.

There are natural communities within which to begin such a project. Families come first, as these are proved again and again to have a great deal of influence upon the adolescents' behavior.<sup>72</sup> Peer groups are also important. Family scholar Margaret Brinig has demonstrated the important influence wielded by adolescents' peers in connection with a variety of risky choices available to teen girls.<sup>73</sup> Finally, religious communities, or, if they exist, other integrated and comprehensive communities, have the potential to help shape young women's view of matters such as sex, parenting, and marriage.<sup>74</sup> The actual practice of religion has been correlated with a good number and variety of healthy practices and outcomes for women in the sexual arena.<sup>75</sup> In the Catholic tradition, John Paul II's "theology of the body" should be specially highlighted, as it is a powerful response to the ideology of sexualityism. It explores the *telos* of human sexual behavior so as to distinguish powerfully between what is genuinely healthy and what is harmful.

Potentially, an influential cadre of women—academics, celebrities, politicians, business and other public leaders—might successfully advance an argument against the current mating market. This is also a strategy well-employed by the feminism of the latter half of the twentieth century.<sup>76</sup> The current times are not lacking for candidates for such a role. Women have assumed elevated positions in every kind of public and private institution, and social hierarchy. Various talented and well-known groups including the Anscombe Society, Best Friends, Students for Life, the Susan B. Anthony List, ENDOW (Educating on the Nature and Dignity of Women), and Feminists for Life, are promoting a vision of women's well being coincident with the themes of this chapter in one or more aspects.

Finally, we turn to the role of government. Immediately, one can see the state's potential for influencing "hordes" of women. Its reach is vast, and it is already quite active both in promoting messages and programs about the equality between the sexes, and about sex education. The government is not likely to withdraw from either arena anytime soon. There is also the government's successful record—either alone, or alongside interest groups—of stigmatizing behaviors once deemed more or less acceptable: pollution, smoking, wife beating; drunk driving. How then might we harness the power of government in favor of women's interests respecting the mating market? Several ideas come to mind.

First, the state ought to desist from messages and programs arguably fueling the mating market as we have it. These include state-sponsored sex education which does not posit the natural connection between sex and the marriage commitment,

or even sex and procreation. In reviews of leading sex education curricula I have conducted elsewhere,<sup>77</sup> I conclude that state-sponsored programs regularly treat sex independent of any discussion of marriage or children, communicating instead that “unprotected sex makes babies,” and that nonmarital sex is essentially inevitable.

Second, the state ought to desist from sex education which treats sex as a matter strictly of individual rights or choices, versus an inherently “community-facing” enterprise. In prior treatments of state-sponsored sex-ed, I concluded that such programs regularly promote the ideas that sex is about making choices about performing this or that sexual act with a sexual partner, which choices ought to be influenced only by factors such as consent, pleasure, or maximizing future possibilities for individual economic or educational well-being. But this is neither accurate nor even terribly persuasive, especially to females. Sexual choices intrinsically implicate the good of the other partner, and the good of any children conceived. Furthermore, women regularly think about sexual choices in a “community” context. By this I mean many things: they might be influenced to engage in sex as a way of compensating because of a dearth of a sense of community within their own family or group of friends. They regularly hope that their sexual partner will have a longer-term emotional relationship with them. They think of potential children as a way of making community, with the father, and for themselves. Particularly in the case of disadvantaged women, they think of the sacrifices and hardships associated with single parenting as a potential “success narrative” in the eyes of their community.<sup>78</sup> State messages failing utterly to account for any of this might easily fall on deaf ears. Writer and activist Maggie Gallagher has written similarly about this phenomenon, concluding that state sponsored sex-ed often underestimates young women’s abilities to think communally and altruistically about the well-being of their children and others.<sup>79</sup> Incorporating messages about the community goods associated with sex—beginning with the needs of children—is a crucial part of any state effort to curb the current mating market facing women.

The state should also take care to avoid promoting “sexualityism” in any arena. Currently, some state and federal officials have embraced or are moving to embrace same sex marriage, a movement based upon the conviction that sexual expression of *any* kind between *any* set of consenting adults merits government recognition and benefits. In this view, nonprocreative sex is identically valuable to procreative sex. But this view tends to support the mating market which immiserates unduly the fertile-half of the human race. The same-sex marriage question should instead be approached, not as a “gay rights” issue, but strictly as a subset of questions about which types of intimate relationships merit state recognition and support. The short answer to this question is relationships which are procreative and stable and permanently link parents with each other and with their children. Marriage meets each of these standards, as compared with all other possibilities.

The state should also begin speaking to women and men over 19 years of age about the important link between sex and procreation. Presently government programs regarding human sexuality are aimed at reducing teen pregnancy, whether these programs encourage abstinence or the use of birth control. But single 20-somethings are even more sexually active than teenagers, and account for a far

greater share of nonmarital pregnancies and abortions.<sup>80</sup> Legislators and bureaucrats are not the only representatives of the state making this mistake. Judge-made law concerning sexual “rights” places these rights under the heading of “privacy.” But the interests of children and the well-being of society are firmly interwoven with the sexual behaviors of 20-somethings. Sexually transmitted diseases, nonmarital pregnancies, abortion, post-abortion distress, premature births and sterility—all of which are related to sexual intimacy—are no less public health concerns when suffered by women in their 20s or older, than when suffered by younger women.

Finally, while there is almost no realistic possibility of persuading state and federal governments to stop funding contraception, it might be possible to imagine increased state promotion of an abstinence message—particularly as envisioned in this article. This is to say an abstinence campaign accompanied with the relevant empirical data regarding the resultant goods for women, children and society, and framed within a “new feminist” context. Decent but unduly negative government slogans currently used—e.g., “‘Virginity’: teach your daughter not a dirty word,” and “I’m not giving it up and I’m not giving in”—need to be replaced with more pro-women abstinence messages.

There are also several abstinence programs with proven results which could rationally attract greater government support.<sup>81</sup> Over time, and at the very least, a new feminist approach could aim for a greater proportion of good to bad government programs about human sexuality. The current balance,<sup>82</sup> which favors an individualistic view of human sexuality, and ignores marriage and the good of children, might be altered.

## 13.5 Conclusion

During the nearly four decades of legalized abortion in the United States, the pro-life movement has advanced the “visibility” of the unborn human being, philosophically and medically speaking. At the same time, however, popular culture in the United States has embraced an ideology of “sexualityism”—sex as valuable without regard to its context, purpose or outcome. In this complex environment, even moving and intellectually persuasive arguments pertaining to the shared humanity of the unborn cannot likely move the electorate to adopt sufficiently protective restrictions on the practice of abortion; the mating market for women and men will simply continue apace to produce high numbers of nonmarital pregnancies. In such a situation, therefore, it appears that a legal and cultural movement overtly exposing and opposing sexualityism and its consequences for women is a necessity if we are to meaningfully reduce abortion rates and move toward popular embrace of more restrictive abortion laws.

## Notes

1. 410 U.S. 113 (1973).
2. 505 U.S. 833 (1992).

3. See *Casey* at 869-77.
4. See Oakley (1986).
5. See, e.g. Michailidis, Papageorgiou, Economides, 2002.
6. See, Lander ES, Linton LM, Birren B, et al. (February 2001).
7. Center for Genetics and Society, History of Human Genetic and Reproductive Technologies, at <http://www.geneticsandsociety.org/article.php?id=3157>
8. Annie Murphy Paul (2010). See also, Kristof (Oct 2, 2010).
9. Testimony of Jill Stanek before the Subcommittee on the Constitution, Committee on the Judiciary, U.S. House of Representatives, Hearing on H.R.4292, The “Born-Alive Infant Protection Act of 2000,” Thursday, July 20, 2000.
10. See Haskell (1992).
11. See, e.g., *O.C.G.A.*, § 16-12-144 (2010); Georgia’s statute withstood a constitutional challenge when it stipulated that its partial birth abortion ban only related to D & X abortions, and only prohibited this method of abortion on viable fetuses. *Midtown Hosp. v. Miller*, 36 F. Supp. 2d 1360 (N.D. Ga. 1998); Idaho Code § 18-613. Enacted in 1998.; 720 ILCS 513/10; 513/99 (2010); Enacted in 1997, but enjoined following *Stenberg*; *Burns Ind. Code Ann.* § 16-34-2-1(b); Indiana chose to incorporate their partial birth abortion ban as an amendment to its law legalizing other forms of abortion. It enacted this partial birth abortion amendment in 1997; *Iowa Code* § 707.8A; Enacted in 1998, enjoined in 1999 by *Planned Parenthood, Inc. v. Miller*, 195 F.3d 386, 1999 U.S. App. LEXIS 23166 (8th Cir. Iowa 1999), writ of certiorari denied by 530 U.S. 1274, 120 S. Ct. 2801, 147 L. Ed. 2d 1004, 2000 U.S. LEXIS 4519, 68 U.S.L.W. 3797 (2000); *K.S.A.* § 65-6721 (2009); enacted in 1998; *KRS* § 311.765 (2010); effective 1998. *Miss. Code Ann.* § 41-41-73, enacted 1997; *Mont. Code Anno.*, § 50-20-401; enacted 1999; *R.R.S. Neb.* § 28-328; first enacted in 1997 with amendments in 2007 and 2008; *N.J. Stat.* § 2A:65A-6; enacted in 1997; *N.M. Stat. Ann.* § 30-5A-3 (2010); enacted in 2000; *N.D. Cent. Code.*, § 14-02.6-02; enacted in 1999 *ORC Ann.* 2919.151, effective August 2000.
12. 530 U.S. 914 (2000).
13. See, e.g. Steven Ertelt, “Louisiana First to Ban Partial Birth Abortions After Supreme Court Ruling.” Washington, DC: Lifenews.com, July 16, 2007. <http://www.lifenews.com/2007/07/16/state-2375/>. Accessed November 15 2010; A.C.A. § 5-61-201 (2010); A.C.A. § 20-16-1203 (2010); Kathleen Gilbert, “Arkansas Enshrines Partial Birth Abortion Ban into State Law.” Front Royal, VA: Lifesitenews.com, February 23, 2009. <http://www.lifesitenews.com/ldn/2009/feb/09022301.html>. Accessed November 15 2010.
14. 550 U.S. 124 (2007).
15. Alan Guttmacher Institute, “State Bans on Partial Birth Abortion as of August 1, 2010.” Menlo Park, CA: The Henry J. Kaiser Family Foundation, August 1, 2010. <http://www.statehealthfacts.org/comparetable.jsp?cat=10&ind=461>. Accessed November 15 2010.
16. See *Ibid.*, and *Louisiana Revised Statute*, 14:87.5.
17. See *History of Born Alive Legislation in Illinois* (Chicago, IL: Planned Parenthood of Illinois) [publication date unknown]. <http://factcheck.barackobama.com/PP%20Born%20Alive%20History.pdf>. Accessed November 17 2010. See also, 5 ILCS 70/1.36.
18. “Born Alive Infant Protection Act,” 1 U.S.C. §8 (Pub. L. 107-207).
19. *Miller v. Am. Infertility Group of Ill.*, 386 Ill. App. 3d 141 (2008).
20. *Presley v Newport Hospital* (1976, RI) 365 A2d 748, 84 ALR3d 391.
21. 344 Ark. 627, 42 S.W.3d 508, 515, n. 2 (2001).
22. “An Overview of Abortion Laws,” New York: Guttmacher Institute, November 1, 2010. [www.guttmacher.org/statecenter/spibs/spib\\_OAL.pdf](http://www.guttmacher.org/statecenter/spibs/spib_OAL.pdf). Accessed November 13 2010.
23. “New York Times Magazine Examines Views About Fetal Pain, Effects On Abortion Policy,” *Medical News Today*, February 13, 2008. <http://www.medicalnewstoday.com/articles/97051.php>. Accessed November 14 2010. See also *Tex. Health & Safety Code* § 171.012(a)(2)(D), § 171.014, § 171.016, and *S.D. Codified Laws* § 34-23A-10.3.
24. See, *Unborn Child Pain Awareness Act of 2010*, [http://johanns.senate.gov/public/?a=Files.Serve&File\\_id=8af07d9a-ac74-4d0c-9207-08b5468d57ee](http://johanns.senate.gov/public/?a=Files.Serve&File_id=8af07d9a-ac74-4d0c-9207-08b5468d57ee). Accessed March 3, 2011.
25. S.B. 793, 95th Gen. Assem., 2d Reg. Sess. (Mo. 2010).

26. *Michigan Compiled Laws Section* § 333.17015(5). (2010).
27. *Michigan Compiled Laws*, 333.17015 (2010). Michigan Department of Community Health, "Abortion Procedures," [http://www.michigan.gov/mdch/0,1607,7-132-2940\\_4909\\_6437\\_19077-46328--,00.html](http://www.michigan.gov/mdch/0,1607,7-132-2940_4909_6437_19077-46328--,00.html). Accessed March 1 2011.
28. "LexisNexis 50 State Comparative Legislation/Regulation: Abortion," LexisNexis, 2010.
29. See, e.g. "Colorado: Refusal to Provide Medical Services," NARAL Pro-Choice America, 2010. <http://www.prochoiceamerica.org/government-and-you/state-governments/state-profiles/colorado.html?templateName=template-161602701&issueID=14&ssumID=2495>. Accessed November 18 2010. And *ORS* § 435.225; *K.S.A.* § 65-443 to § 65-444; *N.M. Stat. Ann.*, § 30-5-2; *Minn. Stat.*, § 145.42.
30. *Md. HEALTH-GENERAL Code Ann.*, § 20-214 (2011); *County Executive of Prince George's County v. Doe*, 291 Md. 676. But see *St. Agnes Hosp. v. Riddick*, 748 F. Supp. 319 (D. Md. 1990). (Teaching hospitals can lose their accreditation if they do not teach abortion and sterilization procedures).
31. *Abortion Control Act*, 18 *Pa.C.S.* § 3213 (d) and (f).
32. *Cal Health & Saf Code* § 123420 (2010).
33. 24 *Del. C.* § 1791 (2010).
34. *W. Va. Code* § 16-2F-7.
35. *Rev. Code Wash.* (ARCW) § 9.02.150.
36. In 2011, at the time of this writing, the Virginia General Assembly passed a law requiring that even first trimester abortions be performed at facilities meeting hospital standards. See Alissa Smith, *Bolling Breaks Tie Vote to Regulate Abortion Clinics as Hospitals*, Virginia Statehouse News, Feb. 24, 2011, at <http://www.virginia.statehousenewsonline.com/3011/bolling-breaks-tie-vote-to-regulate-abortion-clinics-as-hospitals>.
37. *Ohio Rev. Code Annotated*, § 3701.79(c)(2) Physician, hospital, and department abortion reports.
38. See Henshaw and Kost, 2008, esp. Table 2.d "Selected measures of abortion, by woman's marital status, 1997-2004."
39. See Moore et al., 1995, Figure II-b., and nn. 37 and 38.
40. See, WhiteHouse.gov, Office of Faith-based and Neighborhood Partnership, *Reducing Unintended Pregnancies, Supporting Maternal and Child Health, and Reducing the Need for Abortion*, at <http://www.whitehouse.gov/administration/eop/ofbnp/policy/commonground>.
41. Klick and Stratmann (2006).
42. See New, 2007.
43. *Ibid.*
44. *Ibid.*
45. *Ibid.*
46. See Ventura et al. (Oct. 14, 2009).
47. See <http://www.operationrescue.org/archives/alabama-abortion-mill-to-close-down-rather-than-clean-up/>; <http://www.operationrescue.org/archives/project-daniel-525-numbering-the-days-of-legal-abortion/>.
48. See *Griswold v. Connecticut*, 381 U.S. 479 (1965).
49. See generally, Edin and Kefalas (2005); England and Edin (2007).
50. Alan Guttmacher Institute, May, 2010. *In Brief: Facts on Induced Abortion in the United States*.
51. *Id.* at 3.
52. See Brief for Appellees, *Perry v. Schwarzenegger*, (Sept. 2010). U.S. Court of Appeals for the Ninth Cir., No. 10-166-96, at 41-50.
53. *Lawrence v. Texas* 539 U.S. 558, 567 (2003).
54. See e.g. Centers for Disease Control and Prevention, "Trends in Sexual Risk Behaviors Among High School Students—United States, 1991–2001," *Centers for Disease Control and Prevention Morbidity and Mortality Weekly Report*, September 27, 2002, pp. 856–859, at [www.cdc.gov/MMWR/preview/mmwrhtml/mm5138a2.htm](http://www.cdc.gov/MMWR/preview/mmwrhtml/mm5138a2.htm) (January 22, 2007).

55. The National Marriage Project & The Institute for American Values, *The State of Our Unions: Marriage in America 2010; When Marriage Disappears: The New Middle America* (Dec. 6, 2010), 19–20, at <http://stateofourunions.org/2010/SOOU2010.pdf>.
56. Centers for Disease Control and Prevention, *Key Statistics from the National Survey of Family Growth*, at <http://www.cdc.gov/nchs/nhanes.htm>.
57. See Campbell (2008).
58. Layte & McGee (2007).
59. See, e.g. Meier (2007).
60. Guzzo (2006).
61. Rindfuss and VandenHeuvel (1990) and Manning et al. (2007).
62. U.S. Census Bureau, *America's Families and Living Arrangements 2007*, Table C 3: Living Arrangements of Children Under 18 Years and Marital Status of Parents by Age, Sex, Race plus Hispanic Origin, and Selected Characteristics of the Child for All Children, <<http://www.census.gov/population/view/socdemo/hh-fam/cps2007.html>.> (January 2, 2009).
63. See Campbell (2008), and Meier (2007).
64. *Griswold v. Connecticut*, 381 U.S. 479 (1965).
65. Kenney and McLanahan, (Feb. 2006).
66. See e.g., Stanley et al. (2006).
67. Centers for Disease Control, *Marriage and Cohabitation in the United States: A Statistical Portrait Based on Cycle 6 (2002) of the National Survey of Family Growth, vital and health Statistics, Series 23, No. 28, Feb. 2010 at 21*, at [http://www.cdc.gov/nchs/data/series/sr\\_23/sr23\\_028.pdf](http://www.cdc.gov/nchs/data/series/sr_23/sr23_028.pdf).
68. See, Stevenson and Wolfers (2009).
69. See Hymowitz (2006).
70. The National Marriage Project & The Institute for American Values, *The State of Our Unions: Marriage in America 2010; When Marriage Disappears: The New Middle America* (Dec. 6, 2010), 19–20, at <http://stateofourunions.org/2010/SOOU2010.pdf>.
71. Buechler (1990), at: 19, 65, 70–75, 81, 83, 87, 113–15, 121, 151.
72. See e.g., Peterson (2005, pp. 27–55).
73. Brinig (2008).
74. See e.g., Regnerus (2007).
75. See e.g. Weaver et al. (July, 2002).
76. See, e.g., Buechler (1990, pp. 62–63).
77. Alvaré (2004) and (2011).
78. See Alvaré (2011, pp. 183–189).
79. Gallagher (1999, p. 11).
80. Ventura, (May, 2009, p. 2) and Guttmacher Institute, (May 2010).
81. See e.g. Carlos Cabezón et al. (2005, p. 67). Klaus, Dennehy and Turnbull, (Oct 21, 2001 – on file with the author).
82. U.S. Department of Health and Human Services, *Programs for Replication—Intervention Implementation Reports (2010)*, at <http://www.hhs.gov/ash/oah/prevention/research/programs/index.html>.

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