

Bioethics and Personhood

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Bioethics: Why Should I Care?

Matthew Eppinette

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“What is bioethics?” Friends, family, acquaintances, and even complete strangers posed this question as my wife and I told people that we were moving so that I could attend school and study bioethics. In fact, the more people we told, the more obvious it became that very few people understood the term. Of course, it is one thing to be familiar with a specific, technical term and another to be knowledgeable of its underlying issues. However, I found that most people who are unfamiliar with the term *bioethics* have little more than a superficial knowledge of most of the issues with which bioethics deals.

Everyone has heard of abortion, cloning, stem cell research, advance medical directives, euthanasia, and the like; but a true understanding of these procedures, processes, and their far-reaching moral ramifications is sadly lacking. The harsh reality is that while bioethical issues are increasingly confronting us on the evening news, in the Sunday papers, and even in our own lives, few people grasp the science involved in the “bio,” or the moral dilemmas involved in the “ethics” of bioethics.

Allow me, then, to share with you five reasons for involvement in bioethics. The first is what I call the *fallacy of bioethical distance* or the “it can’t happen to me” syndrome. It may seem that the situations that arise in bioethics are classic cases of things that “can’t happen to me” and things that “don’t affect me.” *Other* people die slow painful deaths; *other* people have fertility problems; leftover embryos are not *my* problem. Yet all of us were born, most of us want children, and all of us will die. Given the fact of human frailty and the current state of medical technology, it is likely that bioethics will touch our lives or a life very near ours at some point. Perhaps a friend will experience an unexpected pregnancy and seek our advice. Perhaps a parent’s health will deteriorate to the point where decisions about feeding tubes or respirators must be made. Perhaps a sibling or friend will find that he or she is unable to have children and will wrestle with numerous reproductive technologies.

Second, the startling pace of biomedical advancement compels involvement in bioethics. In *Brave New Church: What the Future Holds*, Richard Kew states, “It would appear that research is advancing at such a pace that our ethical understanding of its consequences is unable to keep up with the moral outcome of our actions.”¹ Science’s outpacing of ethics places a burden on “the Christian community to step in and become society’s conscience in some way or another.”²

A third reason for bioethical involvement relates to our rights and responsibilities as citizens. As Americans, we have a right to participate in the political processes of our country, but that right carries with it the responsibility to inform ourselves on the issues of the day. This is a responsibility not to be taken lightly. Rather than shying away from controversial matters such as stem cell research and cloning, Christians must equip themselves to enter the debate effectively.

Additionally, our responsibilities as Christians have bearing on our involvement in bioethics. Not only will bioethics likely impact our personal lives, but the life of the Church is also touched by these issues. Bioethics affects areas of our lives that are deeply personal, often in times that are tremendously painful, times when we feel most vulnerable. Many of our brothers and sisters in Christ are struggling with bioethical issues in their lives right now. More than that, many outside of the Church seek out communities of faith for objective, reasoned, biblically sound guidance in times of personal bioethical crisis. As the Body of Christ in this world, we must be ready to respond to those who are hurting, to reach out to them, and to point them to Christ, whether through prayer, encouragement, or ethical advice.

Finally, wisdom demands that we be prepared, that we develop a carefully reasoned, biblically based approach to bioethics before it is “needed.” Bioethical quandaries often arise suddenly and in the midst of personal crises, and if we have not taken the time to prepare a Godly response, we can easily slip into the popular medical ethos of our time, which, as Richard Eyer writes, “is guilty of overvaluing choices that are likely to be “*practically* and *emotionally* satisfying.”³ A safeguard against such danger is provided by Proverbs 1:7, which says that, “The fear of the Lord is the beginning of knowledge; fools despise wisdom and instruction.” A proper fear of the Lord

requires that we are prepared to honor him in all that we do, especially in these important matters of life and death. CBHD

¹ Richard Kew, *Brave New Church: What the Future Holds* (Harrisburg, PA: Morehouse, 2001), 92.

² Kew, 96.

³ Richard C. Eyer, *Holy People Holy Lives: Law and Gospel in Bioethics* (St. Louis: Concordia, 2000), 13.

Abortion, Bioethics and Personhood: A Philosophical Reflection

Francis J. Beckwith

Abortion is the issue that first brought evangelical Christians and other cultural conservatives into the arena of bioethics. Although today bioethics is dominated by other issues that are perceived as more pressing, the answer to the philosophical question lurking behind abortion—Who and what are we?—turns out to be the key that unlocks the ethical quandaries posed by these other issues. After all, if human persons ought not to be either subjects of research or killed without justification, and if the fetus from conception is a human person,¹ then embryo experimentation, abortion, and cloning² are *prima facie* morally wrong.

However, some bioethicists have attempted to deal with the issue of human personhood by either sidestepping it or making a distinction between human beings and human persons, putting the fetus in the former category but not the latter. In this paper I will address both attempts.

Sidestepping the Issue: The Failure of Neutrality

Some bioethicists seek to sidestep the question of personhood by suggesting a neutral posture toward it. They maintain that bioethical decisions can be made apart from answering this question. Take, for example, the 1994 recommendations of the National Institutes of Health Embryo Research Panel, a body consisting of bioethicists across many disciplines including philosophy, theology, law, and medicine. Formed in 1993, this panel was commissioned to make recommendations about what types of research on the embryo prior to implantation and outside the women's uterus (*ex utero*) are appropriate or inappropriate for federal funding. The main ethical concern for the panel was the moral permissibility of creating human embryos for the sole purpose of experimenting on them. After hearing thousands of hours of testimony before experts on all sides of the debate, the panel concluded in its final report that some research was acceptable for federal support, some warranted further review, and some was unacceptable. But what is remarkable is how the panel attempted to sidestep the issue of personhood, apparently believing that it was possible to make policy without addressing it. In the first 300 words of the report's executive summary, the panel writes that "it conducted its deliberations in terms that were independent of a particular religious or philosophical perspective."³ Yet, the panel supported federal funding of research on the preimplanted embryo on the basis that "it does not have the same moral status as infants and children" because it lacks "developmental individuation . . . , the lack of even the possibility of sentience and most other qualities considered relevant to the moral status of persons, and the very high rate of natural mortality at this stage."⁴ Clearly, despite its earlier disclaimer that it would propose recommendations "independent" of any perspective, the panel affirmed (and argued for) a policy that is, by its own admission, *dependent* on a philosophical perspective, for it was employed by the panel to distinguish between those beings who are and who are not members of the moral community of persons. This is not a neutral perspective.

Courts have been no more successful at sidestepping the question of personhood, even though they claim (and perhaps even believe) they have successfully accomplished it. Consider, for example, Justice Harry Blackmun's often-quoted comments from *Roe v. Wade*: "We need not resolve the difficult question of when life begins. When those trained in the respective disciplines of medicine, philosophy, and theology are unable to arrive at any consensus, the judiciary, at this point in the development of man's knowledge, is not in a position to speculate."⁵

Hence, the state should remain "neutral" and not take one theory of life and force those who do not agree with that theory to subscribe to it, which is the reason why Blackmun writes in *Roe*, "In view of all this, we do not agree that, by adopting one theory of life, Texas may override the rights of the pregnant woman that are at stake."⁶ Thus

for the pro-life advocate to propose that non-pro-life women should be forbidden from having abortions, on the basis that individual human personhood begins at conception or at least sometime before birth, is, according to the Court, a violation of the rights of non-pro-life women.

But the problem with this reasoning is that it simply cannot deliver on it what it promises. For to claim, as Justices Blackmun does, that the Court should be “neutral” and not propose one theory of life over another, and that the decision to abort should be left exclusively to the discretion of each pregnant woman, *is* to propose a theory of life. For such a proposal has all the earmarks of a theory of life that legally segregates fetuses from full-fledged membership in the human community, since it in practice excludes fetuses from constitutional protection. Although verbally the Court denied taking sides, part of the theoretical grounding of its legal opinion, whether it admits to it or not, is that the fetus is not a human person worthy of protection in this society.

Thus, the Court actually did take sides on when life begins. It concluded that the fetus is not a human person, for the procedure permitted in *Roe*, abortion, is something that the Court itself admits it would not have ruled a fundamental right if it were shown to the satisfaction of the Court that the fetus is a human person: "If the suggestion of personhood [of the unborn] is established, the appellant's case, of course, collapses, for the fetus' right to life is then guaranteed specifically by the [Fourteenth Amendment]."⁷

But this conditional concession cuts both ways. For if, as Blackmun admits, the right to abortion is contingent upon the status of the fetus, then the allegedly disputed fact about life's beginning means that the right to abortion is disputed as well. For a conclusion's support—in this case, "abortion is a fundamental right"—is only as good as the truth of its most important premise—in this case, "the fetus is not a human person." So, the Court's admission that abortion-rights is based on a widely disputed fact, far from establishing a right to abortion, entails that it, not only does not know when life begins, but it does not know when, if ever, the right to abortion begins.⁸

Not All Human Beings Are Persons?

From a strictly scientific point of view, there is no doubt that individual human life begins at conception and does not end until natural death. At the moment of conception, when sperm and ovum cease to exist as individual entities, a new being with its own genetic code comes into existence. All that is need for its development is food, water, air, and an environment conducive to its survival.⁹

These facts typically are not denied by those who believe that abortion should be justified at some point during pregnancy.¹⁰ What is denied, however, is that the unborn is a human *person*. And what is affirmed by these advocates is that the unborn does not become a human person until some decisive moment after conception.

Some argue that personhood does not arrive until brain waves are detected (40 to 43 days).¹¹ Others, such as Mary Anne Warren,¹² define a person as a being who can engage in cognitive acts such as sophisticated communication, consciousness, solving complex problems, self-motivated activity and having a self-concept. This would put the arrival of personhood at some time after *birth*. Still others, such as L. W. Sumner,¹³ hold a more moderate position and argue that human personhood does not arrive until the fetus is sentient, the ability to feel and sense as a conscious being. This, according to Sumner, occurs possibly as early as the middle weeks of the second trimester of pregnancy and definitely by the end of that trimester.

Although these criteria differ from each other in important ways, they all have one thing in common: each maintains that if and only if an entity *functions* in a certain way are we warranted in calling that entity a person. Defenders of these criteria argue that once a human being, whether born or unborn, acquires a certain function or functions—whether it is brain waves, rationality, sentience, etc.—it is then and only then that a person actually exists. Those who defend these personhood criteria typically make a distinction between "being a human" and "being a person." They argue that although fetuses are members of the species *homo sapiens*, and in that sense are human, they are not truly persons until they fulfill a particular set of personhood criteria.

Problems with Personhood Criteria

Although functional definitions of personhood may tell us *some* conditions that are *sufficient* to say that a being is a person, they are not adequate in revealing to us all the conditions that are sufficient for a particular being to be called a person. For example, when a human being is asleep, unconscious, and temporarily comatose, she is not functioning as a person as defined by some personhood criteria. Nevertheless, most people would reject the notion that a human being is not a person while in any of these states. In other words, while personhood criteria, such as the ones presented by Warren can tell us that a being is a person, these criteria are not adequate to declare a being a non-person: The exercise of rational thought tells us that a being is a person; when that person is sleeping, and thus is not exercising rational thought, that lack of exercise of the thought function does not make her a non-person at that time. Consequently, it seems more consistent with our moral intuitions to say that personhood is not something that arises when certain functions are in place, but rather is something that grounds these functions, whether or not they are ever actualized in the life of a human being. Thus, defining personhood strictly in terms of function is inadequate.

In response, the abortion advocate, not wanting to abandon his personhood criteria, may argue that the analogy between sleeping/unconscious/comatose persons and fetuses breaks down because the former *at one time* in their existence functioned as persons and will probably do so in the future, while the latter did not. But this point seems to ignore the significant flaw in defining personhood strictly in terms of function. For to claim that a human being can be functional, become non-functional, and then return to a state of function is to assume that there is some underlying personal unity to this individual. Thus, it is intelligible for us to say that the person who has returned to functional capacity is the *same* person who was functional prior to being in a non-functional state and yet continued to exist while not functioning. If not, then we would have to make the absurd claim that a new “person” has popped into existence and that the original “person” ceased to exist upon the cessation of his personhood functions. If, however, we were to identify both the first person and the second person with the human organism from which these personal functions have arisen, then the human person *is* the human organism as long as the human organism exists.

Consider the following example. Suppose your Uncle Jed is in a terrible car accident that results in him being in a coma from which he may or may not wake. Imagine that he remains in this state for roughly two years and then awakens. He seems to be the same Uncle Jed that you knew before he went into the coma, even though he’s lost some weight, hair, and memories. Was he a person during the coma? Could the physicians have killed Uncle Jed’s body during that time because it was not functioning as a person? If one holds to the personhood criteria we reviewed above, it is difficult to see why it would be wrong to kill Uncle Jed while he is in the coma. Yet, it *would be* morally wrong to kill Uncle Jed while in this state.

Suppose you were to conclude that Uncle Jed’s life is valuable while in the coma because *at one time* prior to the coma he functioned as a person and probably will do so in the future after coming out of the coma. But this would be a mistake. For we can change the story a bit and say that when Uncle Jed awakens from the coma he loses virtually all his memories and knowledge including his ability to speak a language, engage in rational thought, and have a self-concept. It turns out that while in the coma he was in the exact same position as the standard fetus, for he had the same capacities as the fetus. He would still literally be the same person he was before the coma but he would be more like he was before he had a “past.” He would have the natural inherent capacity to speak a language, engage in rational thought, and have a self-concept, but he would have to develop and learn them all over again in order for these capacities to result, as they did before, in actual abilities.

Consider one more illustration. Imagine that there are two newborn twins, Larry and Ervin. Larry attains self-consciousness and then lapses into a coma for eight years, after which he will come out. Ervin is born in a coma, never attaining self-consciousness, and will come out of it the same moment as Larry. The only difference between Larry and Ervin is one of function—the former attained self-consciousness whereas the latter did not. Suppose one argues that it is permissible to kill Ervin but not Larry the day before they are set to come out of the coma. But this seems absurd. The difference between Larry and Ervin is functional only, not a difference in essence or nature, and thus not morally relevant, precisely the same kind of difference between the fetus and the five-year old. So, the unborn are not potential persons, but human persons with great potential.¹⁴

Consequently, what is crucial morally is the *being* of a person, not his or her functioning. A human person does not come into existence when human function arises, but rather, a human person is an entity who has the natural inherent capacity to give rise to human functions, whether or not those functions are ever attained. And since the unborn human being has this natural inherent capacity from the moment it comes into existence, she is a person as long as she exists. As theologian John Jefferson Davis writes, "Our ability to have conscious experiences and recollections arises out of our personhood; the basic metaphysical reality of personhood precedes the unfolding of the conscious abilities inherent in it."¹⁵

Philosopher J. P. Moreland clarifies this notion when he points out that "it is because an entity has an essence and falls within a natural kind that it can possess a unity of dispositions, capacities, parts and properties at a given time and can maintain identity through change." Moreover, "it is the natural kind that determines what kinds of activities are appropriate and natural for that entity."¹⁶ Moreland goes on to write:

[A]n organism . . . has second-order capacities to have first-order capacities that may or may not obtain (through some sort of lack). These second-order capacities are grounded in the nature of the organism. For example, a child may not have the first-order capacity to speak English due to a lack of education. But because the child has humanness it has the capacity to develop the capacity to speak English. The very idea of a defect presupposes these second-order capacities.

Now the natural kind "human being" or "human person" (I do not distinguish between these) is not to be understood as a mere biological concept. It is a metaphysical concept that grounds both biological functions and moral intuitions. . . .

In sum, if we ask why [certain functions are] . . . both possible and morally important, the answer will be that such [functions are] . . . grounded in the kind of entity, a human person in this case, that typically can have [those functions].¹⁷

What does Moreland mean by this? First, each kind of living organism, or *substance*, has a nature or essence that makes certain activities and functions possible. "A substance's *inner nature* 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."¹⁸ For example, a German Shepherd dog, because it has a particular nature, has the ultimate capacity to develop the ability to bark. It may die as a puppy and never develop that ability. Regardless, it is *still* a German Shepherd dog as long as it exists, because it possesses a particular nature, even if it never acquires certain functions that by nature it has the capacity to develop. In contrast, a frog is not said to lack something if it cannot bark, for it is by nature not the sort of being that can have the ability to bark. A dog that lacks the ability to bark *is still a dog* because of its nature. A human person 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, it makes sense to speak of a human being's lack *if and only if* she is an actual person.

Second, the German Shepherd remains the same particular German Shepherd over time from the moment it comes into existence. Suppose you buy this German Shepherd as a puppy and name her "Shannon." When you first bring her home you notice that she is tiny in comparison to her parents and lacks their intellectual and physical abilities. But over time Shannon develops these abilities, learns a number of things her parents never learned, sheds her hair, has her nails clipped, becomes ten times larger than she was as a puppy, and undergoes significant development of her cellular structure, brain and cerebral cortex. Yet, this grown-up Shannon is identical to the puppy Shannon, even though it has gone through significant physical changes. Why? Because living organisms, or substances, maintain absolute identity through change. If not, then you never were literally the person you were last week (or five minutes ago), a teenager, ten-year old, three-year old, infant, or newborn. But you know that you were, even though the physical differences between you as an infant and you as an adult are considerable. In fact, this same *you* was also once a fetus, an embryo, and a zygote. To be sure, you *have* changed. But it is *you* who has changed. That is the important thing to understand. *You* remain *you* through all the changes. Thus, if you are a valuable human person now, then you were a valuable human person at *every moment in your past* including when you were in your mother's womb.

Suppose the abortion advocate, in response to our case, denies that there is a substantial self that remains the same through all the accidental changes the human being undergoes, i.e., there is no absolute identity between any

stages in the existence of a human being. Proponents of this view maintain that personal identity consists in a series of experiences that do not require an underlying substance that has the experiences. My "personhood" is merely a string of psychological experiences connected by memory, beliefs, and/or character as well as causal, bodily and temporal continuity. And because this continuity does not extend to the fetal stages of existence, and perhaps not even to infancy, the unborn and perhaps the newborn are not persons.¹⁹ I will call this the *no-subject* view.²⁰ What can we say in response to it? ²¹

It is not clear how the unborn and newborn *are not* persons according to this view. That is to say, how does it follow that my fetal and neonatal "selves" are not persons just because they are not part of the continuity of my current psychological series of experiences? After all, I can easily imagine a scenario, similar to what happened to Uncle Jed above, in which the body that was the physical locus of Francis Beckwith existed as a continuity of a series of experiences from 1962 (two years after his birth) until 1990, lapsed into a coma, and then came out of the coma in 1992 with no sense of continuity or memory including everything he learned from 1964 until 1990. We will call the "person" that came out of the coma, Francis Beckwith *B*. Now, clearly Francis Beckwith was a person according to the no-subject view even though his experiences were never part of the series of experiences of what became Francis Beckwith *B*. So, even if we grant that I was never my fetal or neonatal selves (in terms of conscious psychological experiences), it does not follow from that alone that my fetal and neonatal selves were not persons in their own right.

But perhaps I have misunderstood the no-subject view. It is possible that the defender of this view will respond by biting the bullet and making the counterintuitive claim that Francis Beckwith and Francis Beckwith *B* are actually two persons, but that their fetal and neonatal selves were not persons since their existence did not consist of *psychological* experiences connected by memory, beliefs, and/or character. So, the absence of psychological experiences is enough for the no-subject proponent to (1) deny personal continuity between my current self and my neonatal self even if there is causal, temporal, and bodily continuity between the latter and the former, and (2) deny that my prenatal and neonatal selves were persons.²² Such a move, though consistent with the no-subject view, seems too high a price to pay for consistency. For it results in problematic beliefs and ignores the explanatory power of the substance view. Consider the following examples.

First, if after Francis Beckwith lapsed into a coma and before Francis Beckwith *B* comes out of it, according to the no-subject view, it would not have been an act of homicide to kill the Francis Beckwith in the coma because in that state it was not part of a string of psychological experiences connected by memory, beliefs, and/or character. Yet, that seems wrong. It seems that killing Francis Beckwith while in the coma is an act of homicide. If, however, the no-subject proponent responds to this by saying that we have misunderstood his view and that it would be homicide to kill Francis Beckwith in the coma because there is causal, temporal, and bodily continuity between that Francis Beckwith and the ones prior to and following the coma, then the absence of a series of psychological experiences is not sufficient to say that a being is not a person. After all, there is causal, temporal, and bodily continuity between my prenatal self and my current self. Why, then, is not my prenatal self a person as well?

Second, although the no-subject view denies it, it still seems correct to say that Francis Beckwith and Francis Beckwith *B* are, in fact, the same person even though the latter has none of the memories and knowledge of the former. For suppose that five years after coming out of the coma, Francis Beckwith *B* unexpectedly recovers all the memories and knowledge of Francis Beckwith. Is there now a Francis Beckwith *C* or did Francis Beckwith *B* ever exist?

Third, because a human action involves thinking, reflection, deliberation, actualizing an intention, and bodily movement over time (e.g., proposing and carrying out a play in a basketball game, attending a four-year college for four years), and because the no-subject view denies that such human action requires an enduring substantial self, this would mean that, according to the no-subject view, the person thinking is literally a different person than the ones reflecting, deliberating, actualizing an intention and engaging in bodily movement. Even though these person-stages are strung together by experiences and bodily continuity, they are literally not the same person, for the no-subject view denies an enduring self over time.

Fourth, I have first person awareness of myself as a unified and enduring self over time. As Moreland points out, "Our knowledge that we are first person substantial, unified, enduring selves that have bodies and mental states but are not identical to them is grounded in our awareness of ourselves."²³ This is why, for example, I may fear

punishment in the future for deeds I committed years ago, have regrets for decisions in the past I ought not to have made, look back fondly on my childhood, and reflect upon what I have accomplished and whether I have fulfilled my potential.

It is clear from the above examples that the substance view, in comparison to the no-subject view, has far greater explanatory power in accounting for our common sense intuitions about personal continuity and moral obligation.²⁴

Conclusion

We have seen that the attempt to either sidestep the issue of personhood or to make a distinction between human beings and human persons fails. Concerning the latter, we have seen that because the functions of personhood are grounded in the essential nature of humanness, and because human beings are persons that maintain identity through time from the moment they come into existence, it follows that the unborn are human persons of great worth because they possess that nature as long as they exist.

No doubt much more can be said about the problem of what constitutes personhood,²⁵ but what is important to understand is that personhood criteria are riddled with serious problems and that the prolife advocate has been given no compelling reason to abandon her belief that the unborn are full-fledged members of the human community.²⁶

¹ I am using the term "fetus" in the popular sense as synonymous with "unborn." I am not using it in the technical sense of referring to the last stage in prenatal development after zygote and embryo. In other words, I am using the word fetus to refer to the unborn entity at all stages of its development prior to birth.

² In order to get to the point where science is capable of cloning adult human beings with relative ease, literally hundreds of thousands of human embryos will have to be brought into existence and then discarded. Contrary to what the public has been told in popular films (such as *Multiplicity* and *The Boys from Brazil*), cloning is not a routine procedure. For example, in the case of Dolly, the sheep cloned in 1997 by Scottish scientist Ian Wilmut, hundreds of implants were created before Dolly was produced. Thus, in order for adult human cloning to become commonplace, thousands of human embryos will have to be purposely brought into existence and then disposed of. These embryos will not be treated as intrinsically valuable human subjects, but rather, as things to be used to further the ends of science or the benefit of others.

³ National Institutes of Health, "Executive Summary", in *Final Report of the Human Embryo Research Panel* (27 September 1994), as reprinted in *Do the Right Thing: A Philosophical Dialogue on the Moral and Social Issues of Our Time*, ed. Francis J. Beckwith (Belmont, CA: Wadsworth, 1996) 285.

⁴ Ibid. I respond to these and similar criteria in greater detail in *Politically Correct Death: Answering the Arguments for Abortion Rights* (Grand Rapids: Baker, 1993) chapters 3 and 6. See also, Patrick Lee, *Abortion and Unborn Human Life* (Washington, DC: The Catholic University of America Press, 1996) chapters 1, 2, and 3.

⁵ *Roe v. Wade* 410 U.S. (1973) 113, 160.

⁶ Ibid., 163.

⁷ Ibid., 157-158.

⁸ I have argued in detail elsewhere that this appeal to ignorance (i.e., no one knows when life begins), far from establishing a right to abortion, actually leads to a prolife legal position. After all, if one killed without knowing whether the entity being killed is a human person with a right to life, it would be negligent to proceed with the killing. To use an illustration, if game hunters shot at rustling bushes with the same philosophical mind-set, the National Rifle Association's membership would become severely depleted. Ignorance of a being's status is certainly not justification to kill it. See Francis J. Beckwith, "Ignorance of Fetal Status as a Justification of Abortion: A Critical Analysis," in *The Silent Subject: Reflections on the Unborn in American Culture*, ed. Brad Stetson (Westport, CT: Praeger, 1996).

⁹ The facts of fetal development may be accessed from a number of different texts. In my research I found the following to be helpful: F. Beck, D. B. Moffat, and D. P. Davies, *Human Embryology*, 2nd ed. (Oxford: Blackwell, 1985); Keith L. Moore, *The Developing Human: Clinically Oriented Embryology*, 2nd ed. (Philadelphia: W.B. Saunders, 1977); Andre E. Hellegers, "Fetal Development", in *Biomedical Ethics*, eds. Thomas A. Mappes and Jane S. Zembatty (New York: Macmillan, 1981); Stephen M. Krason, *Abortion: Politics, Morality, and the Constitution* (Lanham, MD: University Press of America, 1984); Bart T. Hefferman, "The Early Biography of Everyman," in *Abortion and Social Justice*, eds. Thomas W. Hilgers, MD and Dennis J. Horan, Esq. (New York: Sheed & Ward, 1972), 3-25; *Motion and Brief Amicus Curiae of Certain Physicians, Professors, and Fellows of the American College of Obstetrics and Gynecology in Support of Appellees*, submitted to the Supreme Court of the United States, October Term, 1971, No. 70-18, *Roe v. Wade*, and No. 70-40, *Doe v. Bolton*, prepared by Dennis J. Horan, et al. (The list of amici contains the names of more than two hundred physicians), as quoted in Stephen D. Schwarz, *The Moral Question of Abortion* (Chicago: Loyola University Press, 1990) 2-6.

- ¹⁰ This has been challenged by C.A. Bedate and R.C. Cefalo in their essay, "The Zygote: To Be or Not to Be a Person," *Journal of Medicine and Philosophy* 14 (1989): 627-635. Their case, however, is seriously flawed, both factually and philosophically. See the following replies: Lee, *Abortion and Unborn Human Life*, 98-102; and Antoine Suarez, "Hydatidiform Moles and Teratomas Confirm the Human Identity of the Preimplantation Embryo," *Journal of Medicine and Philosophy* 15 (1990).
- ¹¹ See Baruch Brody, *Abortion and the Sanctity of Human Life: A Philosophical View* (Cambridge, MA: MIT Press, 1975).
- ¹² See Mary Anne Warren, "On the Moral and Legal Status of Abortion," in *Do the Right Thing*, 171-75. This article originally appeared in *The Monist* 57.1 (1973). Michael Tooley holds a view similar to Warren's. For a recent presentation of his perspective, see Tooley, "In Defense of Abortion and Infanticide," in *The Abortion Controversy 25 Years After Roe v. Wade: A Reader*, 2nd ed., ed. Louis P. Pojman and Francis J. Beckwith (Belmont, CA: Wadsworth, 1998) 209-33.
- ¹³ See L. W. Sumner, *Abortion and Moral Theory* (Princeton, NJ: Princeton University Press, 1981).
- ¹⁴ Schwarz provides a similar example in *The Moral Question of Abortion*, 90.
- ¹⁵ John Jefferson Davis, *Abortion and the Christian* (Phillipsburg, NJ: Presbyterian & Reformed, 1984) 57.
- ¹⁶ J.P. Moreland, "James Rachels and the Active Euthanasia Debate," *Journal of the Evangelical Theological Society* 31 (March, 1988) 86.
- ¹⁷ *Ibid.*, 87. For a fuller defense of this "substance" view of persons, see J.P. Moreland and Scott B. Rae, *Body and Soul* (Downers Grove, IL: InterVarsity Press, 2000).
- ¹⁸ J.P. Moreland, "Humanness, Personhood, and the Right to Die," *Faith and Philosophy* 12.1 (January 1995) 101.
- ¹⁹ See, for example, Peter McNerny, "Does a Fetus Already Have a Future-Like-Ours?," *The Journal of Philosophy* 87 (1990) 264-268; and Derek Parfit, *Reasons and Persons* (Oxford: Oxford University Press, 1984).
- ²⁰ This is a name coined by Lee in *Abortion and Unborn Human Life*, 37.
- ²¹ \ For a response more detailed than I can offer here, see *Ibid.*, 37-45; and Moreland and Rae, *Body and Soul*.
- ²² This is the position taken by McNerny in "Does a Fetus Already Have a Future-Like-Ours?"
- ²³ Moreland, "Humanness," 103.
- ²⁴ Why then is this view accepted by many philosophers and bioethicists? I believe that the primary motivation for maintaining the no-subject view in the face of such problems is a commitment to materialism. The dominant metaphysical view of intellectuals in the West, materialism maintains that all that exists is the physical world, that non-physical things like God, angels, natures, substances, souls, and morality do not actually exist. (Morality, some materialists argue, is *real*, only insofar as it is a social construction resulting from evolution, but it has no ontological status apart from the institutions, laws, and social contracts that have benefited human survival.) Materialist Paul Churchland writes: "The important point about the standard evolutionary story is that the human species and all of its features are the wholly physical outcome of a purely physical process. . . . If this is the correct account of our origins, then there seems neither need, nor room, to fit any nonphysical substances or properties into our theoretical account of ourselves. We are creatures of matter. And we should learn to live with that fact" (Paul Churchland, *Matter and Consciousness* [Cambridge, MA: M.I.T. Press, 1984] 12). It is interesting to note that Churchland's materialism entails determinism. Given that, it is difficult to understand his instruction that "we should learn to live with that fact." For if all my apparently free acts are determined, then there are no "shoulds." This, of course, is another reason to abandon the no-subject view.
- ²⁵ See Beckwith, *Politically Correct Death*; Gregory P. Koukl, *Precious Unborn Human Persons* (San Pedro, CA: Stand to Reason, 1999); Lee, *Abortion and Human Life*; Don Marquis, "Why Abortion Is Immoral," *The Journal of Philosophy* 86 (April 1989) 183-202; Don Marquis, "A Future Life Ours and the Concept of Person: A Reply to McNerny and Paske," in *The Abortion Controversy*; Moreland and Rae, *Body and Soul*; and Schwarz, *The Moral Question of Abortion*.
- ²⁶ There are some, though not many, who argue that the moral question of abortion is not contingent upon the status of the fetus. They include Judith Jarvis Thomson ("A Defense of Abortion," *Philosophy and Public Affairs* 1 [1971]); Frances M. Kamm (*Creation and Abortion: A Study in Moral and Legal Philosophy* [New York: Oxford, 1992]); Eileen McDonagh (*Breaking the Abortion Deadlock: From Choice to Consent* [New York: Oxford, 1996]); Laurence Tribe (*Abortion: The Clash of Absolutes* [New York: Norton, 1990], ch. 6); and David Boonin-Vail ("A Defense of 'A Defense of Abortion: On the Responsibility Objection to Thomson's Argument,'" *Ethics* 107.2 [January 1997] 286-313). Although this is an important and influential perspective, it falls outside the scope of this essay because the purpose of this essay is to reply to those who believe that (1) human personhood is doing the moral work in the abortion debate; (2) the unborn are not human persons; and/or (3) the issue personhood can be sidestepped. For replies to this perspective, see Francis J. Beckwith, "Personal Bodily Rights, Abortion, and Unplugging the Violinist," *International Philosophical Quarterly* 32 (1992) 105-118; Lee, *Abortion*, chapter 4; Keith Pavlischek, "Abortion Logic and Paternal Responsibilities: One More Look at Judith Thomson's Argument and a Critique of David Boonin-Vail's Defense of It," in *The Abortion Controversy*; and John T. Wilcox, "Nature as Demonic in Thomson's Defense of Abortion," *The New Scholasticism* 63 (Autumn 1989) 463-484.

Euthanasia

by Kerby Anderson

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Introduction

Debate over euthanasia is not a modern phenomenon. The Greeks carried on a robust debate on the subject. The Pythagoreans opposed euthanasia, while the Stoics favored it in the case of incurable disease. Plato approved of it in cases of terminal illness.⁽¹⁾ But these influences lost out to Christian principles as well as the spread of acceptance of the Hippocratic Oath: "I will neither give a deadly drug to anybody if asked for it, nor will I make a suggestion to that effect."

In 1935 the Euthanasia Society of England was formed to promote the notion of a painless death for patients with incurable diseases. A few years later the Euthanasia Society of America was formed with essentially the same goals. In the last few years debate about euthanasia has been advanced by two individuals: Derek Humphry and Dr. Jack Kevorkian.

Derek Humphry has used his prominence as head of the Hemlock Society to promote euthanasia in this country. His book *Final Exit: The Practicalities of Self-Deliverance and Assisted Suicide for the Dying* became a bestseller and further influenced public opinion.

Another influential figure is Jack Kevorkian, who has been instrumental in helping people commit suicide. His book *Prescription Medicide: The Goodness of Planned Death* promotes his views of euthanasia and describes his patented suicide machine which he calls "the Mercitron." He first gained national attention by enabling Janet Adkins of Portland, Oregon, to kill herself in 1990. They met for dinner and then drove to a Volkswagen van where the machine waited. He placed an intravenous tube into her arm and dripped a saline solution until she pushed a button which delivered first a drug causing unconsciousness, and then a lethal drug that killed her. Since then he has helped dozens of other people do the same.

Over the years, public opinion has also been influenced by the tragic cases of a number of women described as being in a "persistent vegetative state." The first was Karen Ann Quinlan. Her parents, wanting to turn the respirator off, won approval in court. However, when it was turned off in 1976, Karen continued breathing and lived for another ten years. Another case was Nancy Cruzan, who was hurt in an automobile accident in 1983. Her parents went to court in 1987 to receive approval to remove her feeding tube. Various court cases ensued in Missouri, including her parents' appeal that was heard by the Supreme Court in 1990. Eventually they won the right to pull the feeding tube, and Nancy Cruzan died shortly thereafter.

Seven years after the Cruzan case, the Supreme Court had occasion to rule again on the issue of euthanasia. On June 26, 1997 the Supreme Court rejected euthanasia by stating that state laws banning physician-assisted suicide were constitutional. Some feared that these cases (*Glucksburg v. Washington* and *Vacco v. Quill*) would become for euthanasia what *Roe v. Wade* became for abortion. Instead, the justices rejected the concept of finding a constitutional "right to die" and chose not to interrupt the political debate (as *Roe v. Wade* did), and instead urged that the debate on euthanasia continue "as it should in a democratic society."

Voluntary, Active Euthanasia

It is helpful to distinguish between mercy-killing and what could be called mercy-dying. Taking a human life is not the same as allowing nature to take its course by allowing a terminal patient to die. The former is immoral (and perhaps even criminal), while the latter is not.

However, drawing a sharp line between these two categories is not as easy as it used to be. Modern medical technology has significantly blurred the line between hastening death and allowing nature to take its course.

Certain analgesics, for example, ease pain, but they can also shorten a patient's life by affecting respiration. An artificial heart will continue to beat even after the patient has died and therefore must be turned off by the doctor. So the distinction between actively promoting death and passively allowing nature to take its course is sometimes

difficult to determine in practice. But this fundamental distinction between life-taking and death-permitting is still an important philosophical distinction.

Another concern with active euthanasia is that it eliminates the possibility for recovery. While this should be obvious, somehow this problem is frequently ignored in the euthanasia debate. Terminating a human life eliminates all possibility of recovery, while passively ceasing extraordinary means may not. Miraculous recovery from a bleak prognosis sometimes occurs. A doctor who prescribes active euthanasia for a patient may unwittingly prevent a possible recovery he did not anticipate.

A further concern with this so-called voluntary, active euthanasia is that these decisions might not always be freely made. The possibility for coercion is always present. Richard D. Lamm, former governor of Colorado, said that elderly, terminally ill patients have "a duty to die and get out of the way." Though those words were reported somewhat out of context, they nonetheless illustrate the pressure many elderly feel from hospital personnel.

The Dutch experience is instructive. A survey of Dutch physicians was done in 1990 by the Rummelink Committee. They found that 1,030 patients were killed without their consent. Of these, 140 were fully mentally competent and 110 were only slightly mentally impaired. The report also found that another 14,175 patients (1,701 of whom were mentally competent) were denied medical treatment without their consent and died.(2)

A more recent survey of the Dutch experience is even less encouraging. Doctors in the United States and the Netherlands have found that though euthanasia was originally intended for exceptional cases, it has become an accepted way of dealing with serious or terminal illness. The original guidelines (that patients with a terminal illness make a voluntary, persistent request that their lives be ended) have been expanded to include chronic ailments and psychological distress. They also found that 60 percent of Dutch physicians do not report their cases of assisted suicide (even though reporting is required by law) and about 25 percent of the physicians admit to ending patients' lives without their consent.(3)

Involuntary, Active Euthanasia

Involuntary euthanasia requires a second party who makes decisions about whether active measures should be taken to end a life. Foundational to this discussion is an erosion of the doctrine of the sanctity of life. But ever since the Supreme Court ruled in *Roe v. Wade* that the life of unborn babies could be terminated for reasons of convenience, the slide down society's slippery slope has continued even though the Supreme Court has been reluctant to legalize euthanasia.

The progression was inevitable. Once society begins to devalue the life of an unborn child, it is but a small step to begin to do the same with a child who has been born. Abortion slides naturally into infanticide and eventually into euthanasia. In the past few years doctors have allowed a number of so-called "Baby Does" to die--either by failing to perform lifesaving operations or else by not feeding the infants.

The progression toward euthanasia is inevitable. Once society becomes conformed to a "quality of life" standard for infants, it will more willingly accept the same standard for the elderly. As former Surgeon General C. Everett Koop has said, "Nothing surprises me anymore. My great concern is that there will be 10,000 Grandma Does for every Baby Doe."(4)

Again the Dutch experience is instructive. In the Netherlands, physicians have performed involuntary euthanasia because they thought the family had suffered too much or were tired of taking care of patients. American surgeon Robin Bernhoft relates an incident in which a Dutch doctor euthanized a twenty-six-year-old ballerina with arthritis in her toes. Since she could no longer pursue her career as a dancer, she was depressed and requested to be put to death. The doctor complied with her request and merely noted that "one doesn't enjoy such things, but it was her choice."(5)

Physician-Assisted Suicide

In recent years media and political attention has been given to the idea of physician-assisted suicide. Some states have even attempted to pass legislation that would allow physicians in this country the legal right to put terminally

ill patients to death. While the Dutch experience should be enough to demonstrate the danger of granting such rights, there are other good reasons to reject this idea.

First, physician-assisted suicide would change the nature of the medical profession itself. Physicians would be cast in the role of killers rather than healers. The Hippocratic Oath was written to place the medical profession on the foundation of healing, not killing. For 2,400 years patients have had the assurance that doctors follow an oath to heal them, not kill them. This would change with legalized euthanasia.

Second, medical care would be affected. Physicians would begin to ration health care so that elderly and severely disabled patients would not be receiving the same quality of care as everyone else. Legalizing euthanasia would result in less care, rather than better care, for the dying.

Third, legalizing euthanasia through physician-assisted suicide would effectively establish a right to die. The Constitution affirms that fundamental rights cannot be limited to one group (e.g., the terminally ill). They must apply to all. Legalizing physician-assisted suicide would open the door to anyone wanting the "right" to kill themselves. Soon this would apply not only to voluntary euthanasia but also to involuntary euthanasia as various court precedents begin to broaden the application of the right to die to other groups in society like the disabled or the clinically depressed.

Biblical Analysis

Foundational to a biblical perspective on euthanasia is a proper understanding of the sanctity of human life. For centuries Western culture in general and Christians in particular have believed in the sanctity of human life. Unfortunately, this view is beginning to erode into a "quality of life" standard. The disabled, retarded, and infirm were seen as having a special place in God's world, but today medical personnel judge a person's fitness for life on the basis of a perceived quality of life or lack of such quality.

No longer is life seen as sacred and worthy of being saved. Now patients are evaluated and life-saving treatment is frequently denied, based on a subjective and arbitrary standard for the supposed quality of life. If a life is judged not worthy to be lived any longer, people feel obliged to end that life.

The Bible teaches that human beings are created in the image of God (Gen. 1:26) and therefore have dignity and value. Human life is sacred and should not be terminated merely because life is difficult or inconvenient. Psalm 139 teaches that humans are fearfully and wonderfully made. Society must not place an arbitrary standard of quality above God's absolute standard of human value and worth. This does not mean that people will no longer need to make difficult decisions about treatment and care, but it does mean that these decisions will be guided by an objective, absolute standard of human worth.

The Bible also teaches that God is sovereign over life and death. Christians can agree with Job when he said, "The Lord gave and the Lord has taken away. Blessed be the name of the Lord" (Job 1:21). The Lord said, "See now that I myself am He! There is no god besides me. I put to death and I bring to life, I have wounded and I will heal, and no one can deliver out of my hand" (Deut. 32:39). God has ordained our days (Ps. 139:16) and is in control of our lives.

Another foundational principle involves a biblical view of life-taking. The Bible specifically condemns murder (Exod. 20:13), and this would include active forms of euthanasia in which another person (doctor, nurse, or friend) hastens death in a patient. While there are situations described in Scripture in which life-taking may be permitted (e.g., self-defense or a just war), euthanasia should not be included with any of these established biblical categories. Active euthanasia, like murder, involves premeditated intent and therefore should be condemned as immoral and even criminal.

Although the Bible does not specifically speak to the issue of euthanasia, the story of the death of King Saul (2 Sam. 1:9-16) is instructive. Saul asked that a soldier put him to death as he lay dying on the battlefield. When David heard of this act, he ordered the soldier put to death for "destroying the Lord's anointed." Though the context is not euthanasia per se, it does show the respect we must show for a human life even in such tragic circumstances.

Christians should also reject the attempt by the modern euthanasia movement to promote a so-called "right to die." Secular society's attempt to establish this "right" is wrong for two reasons. First, giving a person a right to die is tantamount to promoting suicide, and suicide is condemned in the Bible. Man is forbidden to murder and that includes murder of oneself. Moreover, Christians are commanded to love others as they love themselves (Matt. 22:39; Eph. 5:29). Implicit in the command is an assumption of self-love as well as love for others.

Suicide, however, is hardly an example of self-love. It is perhaps the clearest example of self-hate. Suicide is also usually a selfish act. People kill themselves to get away from pain and problems, often leaving those problems to friends and family members who must pick up the pieces when the one who committed suicide is gone.

Second, this so-called "right to die" denies God the opportunity to work sovereignly within a shattered life and bring glory to Himself. When Joni Eareckson Tada realized that she would be spending the rest of her life as a quadriplegic, she asked in despair, "Why can't they just let me die?" When her friend Diana, trying to provide comfort, said to her, "The past is dead, Joni; you're alive," Joni responded, "Am I? This isn't living."⁽⁶⁾ But through God's grace Joni's despair gave way to her firm conviction that even her accident was within God's plan for her life. Now she shares with the world her firm conviction that "suffering gets us ready for heaven."⁽⁷⁾

The Bible teaches that God's purposes are beyond our understanding. Job's reply to the Lord shows his acknowledgment of God's purposes: "I know that you can do all things; no plan of yours can be thwarted. You asked, 'Who is this that obscures my counsel without knowledge?' Surely I spoke of things I did not understand, things too wonderful for me to know" (Job 42:2-3). Isaiah 55:8-9 teaches, "For my thoughts are not your thoughts, neither are your ways my ways, declares the Lord. As the heavens are higher than the earth, so are my ways higher than your ways and my thoughts than your thoughts."

Another foundational principle is a biblical view of death. Death is both unnatural and inevitable. It is an unnatural intrusion into our lives as a consequence of the fall (Gen. 2:17). It is the last enemy to be destroyed (1 Cor. 15:26, 56). Therefore Christians can reject humanistic ideas that assume death as nothing more than a natural transition. But the Bible also teaches that death (under the present conditions) is inevitable. There is "a time to be born and a time to die" (Eccles. 3:2). Death is a part of life and the doorway to another, better life.

When does death occur? Modern medicine defines death primarily as a biological event; yet Scripture defines death as a spiritual event that has biological consequences. Death, according to the Bible, occurs when the spirit leaves the body (Eccles. 12:7; James 2:26).

Unfortunately this does not offer much by way of clinical diagnosis for medical personnel. But it does suggest that a rigorous medical definition for death be used. A comatose patient may not be conscious, but from both a medical and biblical perspective he is very much alive, and treatment should be continued unless crucial vital signs and brain activity have ceased.

On the other hand, Christians must also reject the notion that everything must be done to save life at all costs. Believers, knowing that to be at home in the body is to be away from the Lord (2 Cor. 5:6), long for the time when they will be absent from the body and at home with the Lord (5:8). Death is gain for Christians (Phil. 1:21). Therefore they need not be so tied to this earth that they perform futile operations just to extend life a few more hours or days.

In a patient's last days, everything possible should be done to alleviate physical and emotional pain. Giving drugs to a patient to relieve pain is morally justifiable. Proverbs 31:6 says, "Give strong drink to him who is perishing, and wine to him whose life is bitter." As previously mentioned, some analgesics have the secondary effect of shortening life. But these should be permitted since the primary purpose is to relieve pain, even though they may secondarily shorten life.

Moreover, believers should provide counsel and spiritual care to dying patients (Gal. 6:2). Frequently emotional needs can be met both in the patient and in the family. Such times of grief also provide opportunities for witnessing. Those suffering loss are often more open to the gospel than at any other time.

Difficult philosophical and biblical questions are certain to continue swirling around the issue of euthanasia. But in the midst of these confusing issues should be the objective, absolute standards of Scripture, which provide guidance for the hard choices of providing care to terminally ill patients.

Notes

1. Plato, *Republic* 3. 405.
 2. R. Finigsen, "The Report of the Dutch Committee on Euthanasia," *Issues in Law and Medicine*, July 1991, 339-44.
 3. Herbert Hendlin, Chris Rutenfrans, and Zbigniew Zylicz, "Physician-Assisted Suicide and Euthanasia in the Netherlands: Lessons from the Dutch," *Journal of the American Medical Association* 277 (4 June 1997): 1720-2.
 4. Interview with Koop, "Focus on the Family" radio broadcast.
 5. Robin Bernhoft, quoted in *Euthanasia: False Light*, produced by IAETF, P.O. Box 760, Steubenville, OH 43952.
 6. Joni Eareckson, *Joni* (Grand Rapids: Zondervan, 1976).
 7. Joni Eareckson, *A Step Further* (Grand Rapids: Zondervan, 1978).
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An Overview to Reproductive Technologies

by Daniel McConchie

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The inability to have a child is a true burden. Would-be parents often ask both God and themselves why their innate desire to have children continues to be unfulfilled. This kind of self examination reflects how deeply emotional and traumatic infertility can be. Sometimes a couple may even keep the situation secretive to avoid embarrassing themselves in front of family and/or friends.

Sadly, this response only serves to heighten the pain that many couples experiencing infertility feel. 15 % of couples in the United States cannot have children after one year of sexual relations. As a result, clinics specializing in aiding the reproductive process have sprung up all over the country. Couples spend many thousands of dollars to increase their *chances* of having a child.

There are several reproductive technologies which are currently in use, including fertility drugs, artificial insemination, in vitro fertilization (IVF), use of a surrogate mother, gamete intrafallopian transfer (GIFT), zygote intrafallopian transfer (ZIFT), and intracytoplasmic sperm injection (ICSI). Although these technologies are all different from each other, they all raise certain ethical issues which should concern anyone considering them. The issues as developed here should be nuanced by the fuller explanations in the book *Sexuality and Reproductive Technology*.

Care of Multiple Embryos

A crucial issue in reproductive technologies is the safety of the embryos whether they are inside of a mother's body or in a laboratory. Because human life begins at conception, all embryos should be treated with the utmost care. For example:

1. A couple using IVF should decide ahead of time how many embryos to implant and attempt to create only that number of embryos. If more than the ideal number of embryos are created, the extras may be implanted with the others or frozen (to be implanted later)--whichever option poses less risk to the lives of the mother and embryos. No embryos should ever be discarded.
2. Only a limited number of embryos should be implanted following in vitro fertilization. Such an approach will decrease the chance that too many embryos will implant, thereby risking the lives of all the embryos and/or the mother.
3. A couple considering fertility drugs should research the options carefully. Some drugs may cause multiple eggs to mature rather than merely putting the body back into a normal, healthy, fertile state. Potentially harmful multiple pregnancies can result. One drug, clomiphene citrate, does not carry the risk of multiple pregnancies that some of the other fertility drugs now available do. Also, the multiple pregnancy risk can be minimized with the use of ultrasound to monitor the maturing egg(s). With monitoring, multiple pregnancies can be avoided.

4. Selective reduction (abortion of some implanted, developing embryos so the others have a better chance to survive) is not an ethical option. However, selective reduction should not be necessary if an appropriate number of embryos are implanted in the first place.
5. A couple should only consider implantation procedures whose percentage of success is equal to or greater than that of unassisted natural implantation. Otherwise, embryos are being placed at greater risk than is normally the case in human reproduction.

Use of Donor Eggs/Sperm

It is not advisable to use donor eggs and/or sperm in any reproductive technologies for a variety of reasons:

1. Who are the parents? Are they the ones whose genetic material (sperm and egg) combine to form the child or the people who raise the child? This question might be a simple one for the parents caring for the child, but how simple is that question from the viewpoint of the child? Sometimes, legal battles even result between the sets of parents involved in one child's life.
2. Should children know that one or both of his or her (rearing) parents did not provide the egg or sperm which brought them into being? Should children have access to the donor(s) (genetic parents)? Should genetic parents have visitation rights?
3. A distinctive imbalance may be introduced into a marriage where donor eggs or sperm are used in place of one parents eggs or sperm. There is the possibility of resentment from the partner whose eggs or sperm were not used. ("You take care of her! She's your child.") Accusations of unfaithfulness can result because, in a real, genetic sense, one of the spouses has had a child with another person. Emotional attachment to the "mystery person" can also develop in the spouse who genetically had the child with the donor.
4. These and other difficulties flow from violating the "one flesh" model of marriage in Scripture, in which children are literally to be the result of the two married parents (and their eggs and sperm) becoming "one flesh".

Surrogate Motherhood

The most common form of surrogacy involves inseminating the surrogate with the husband's sperm--generally because the wife cannot carry a child through pregnancy. Such an arrangement should be avoided because a donor egg is involved, as explained above. Even when a donor egg is not involved--e.g., when the husband's sperm and wife's egg are joined *in vitro*--the bonding problems discussed below generally make such an agreement unwise. Particularly problematic are commercial arrangements in which surrogates receive payment for producing a child beyond expenses they incur. Like the selling of organs, such arrangements wrongly commercialize the body. In fact, financial contracts essentially entail the purchasing of the baby and imply an unacceptable form of ownership of human beings. Less problematic are altruistic surrogacies such as rescue surrogacies where a woman acts to save an embryo that would otherwise be destroyed.

Bonding

Whenever donor eggs/sperm or a surrogate are used, the question of bonding can affect all parties involved. Bonds can develop between child and genetic parent(s), between surrogate mother and child, and between the genetic parents. The risk that inappropriate bonds will be created through the reproductive process is very real and can cause many problems. On many occasions, surrogate mothers have sued the genetic parents for custody after the baby was born or for the right to abort a malformed fetus even though the genetic parents wanted the child to live.

Financial Implications

Undergoing reproductive treatments is very costly. *In vitro* fertilization costs between \$10,000 and \$20,000. Surrogacy can cost between \$20,000 and \$40,000. And these treatments do not guarantee that a child will result. In fact, clinics average only 20-40% live birth success rates. However, these success rates are most likely this high due to the implantation of multiple embryos and selective abortion which is very problematic ethically. Following ethical guidelines that protect human life from conception would probably make the percentage much lower.

Prudence

One serious consideration should be the prudence of seeking to have a child with reproductive technologies when the costs and/or risks are so great. There are two primary concerns:

1. The money could go towards meeting another great need. It can be difficult to imagine anything more important than the creation of life. However, we also have a responsibility to be concerned about those people already in the world today. There are people in many parts of the world without adequate medical care. For example, it costs just pennies per person to inoculate them against many of the world's greatest killers.
2. Adopting a child is often an option for people to consider. It's true that it is difficult to adopt in some countries, but international adoption is gaining popularity because of the number of orphaned children and speed with which the adoption process can often be completed. There are many children in the world in need of a home. In Cambodia, many children have been orphaned through years of war. In China where the government allows parents to have only one child, many female babies are left with orphanages by parents who want a boy. In Bulgaria, a reported average of 90% of the many children in orphanages will become criminals unless they are adopted. Those who are able should investigate the possibility of international adoption before ruling it out.

Conclusion

Many people experience a very natural urge to be parents. Some are seeking to satisfy this urge using reproductive technologies without fully understanding all their implications. Before using technological methods of reproduction, it is wise to study in-depth the available options, understand the ethical issues involved, and above all, seek the will of God before moving ahead. **CBHD**

The Challenges of Infertility: A Biblical Framework for Responding Appropriately

by C. Ben Mitchell

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There are as many as 2.5 million infertile couples in America--that's about the same size as the population of Phoenix. At the same time, there are at least 38 ways to make a baby, if you consider all the possible configurations and therapies. Infertile couples are confronted with an alphabet soup of options including AIH, AID, GIFT, ZIFT, IVF, surrogacy, and others. With so many couples desiring children, and with so many options, making decisions about reproductive technologies can be extraordinarily difficult.

It is important at the outset to understand exactly what constitutes infertility. The diagnosis of infertility is made when a couple fails to achieve pregnancy after 12 months of unprotected sexual intercourse. Even under the best of circumstances there is only a 15% to 20% likelihood of pregnancy for "normal" couples having sex regularly. In young women, the chance for pregnancy with unprotected intercourse is estimated at 20% each month, while for women above the age of 40, the chances are probably less than 5% each month.

The growing number of reproductive technologies raises an equal number of ethical concerns. Only those technologies that pass ethical muster should be used. Some of the concerns to be considered include the sanctity of human life and the biblical ideal of the family.

Sanctity of Human Life

An important biblical reality is the sanctity of every human life. At the moment human egg and sperm unite, a unique genetic individual is created. Individuals receive half their genetic identity from their biological mother and half from their biological father. Every human individual is created in God's image (Genesis 1:27) and is vested by God with inestimable value.

Some high-tech reproductive technologies do not by themselves violate the sanctity of human life. For example, IVF (in vitro fertilization), AIH (artificial insemination using the husband's sperm), GIFT (gamete intrafallopian transfer), and ZIFT (zygote intrafallopian transfer) do not require that embryos be destroyed. They can, however, place embryos at risk, especially if combined with embryo freezing. Also, any time more than two or three

embryos are implanted in a woman's uterus, there is a substantially higher likelihood that one or more of those embryos will be put at risk of dying.

A further problem with creating extra embryos has to do with the impossibility of couples knowing what might happen between the time the embryos are created and the time they are implanted. Some will recall the famous legal battle *Davis v Davis*. The Davises tried to use IVF and embryo freezing to achieve pregnancy. Before Mrs. Davis could get pregnant, the couple divorced. Mr. and Mrs. Davis disagreed vehemently about what should happen to the frozen embryos. After several very lengthy court battles going all the way to the Tennessee Supreme Court, the embryos were destroyed.

This case also highlights how important it is for couples to consider all the possible scenarios they might experience in the course of assisted reproduction. Couples should be encouraged to discuss their religious and moral commitments with their doctor before they begin therapy. Once embryos are created they cannot be uncreated.

Idea of the Family in the Bible

Just as procreation is part of the biblical ideal for the family, so too is monogamous marriage. The apostle Paul was being completely consistent with this ideal when he cited Genesis in his instructions on the family in the book of Ephesians: "For this reason a man will leave his father and mother and be united to his wife, and the two will become one flesh" (Ephesians 5:31). God's ideal for the family is one man, one woman, in a one-flesh kind of union, for life. We all know from painful experience personally, in our families, or those around us how traumatic it is when this ideal is violated by adultery, divorce, or even death. This ideal is to be preserved and practiced for the well-being of the family, including when considering reproductive technologies.

A number of the reproductive technologies violate God's ideal for the family and are, therefore, rife with difficulties. For instance, surrogate motherhood, one of the more controversial of the reproductive technologies, is contrary to the "nuclear" structure of the family. When a third party intrudes on the procreative relationship the divinely instituted structure of the family is altered.

Commercial surrogacy--where a woman is paid to carry a couple's child to term--is the most objectionable form of surrogacy. The practice reduces children and childbearing to a form of barter. This practice makes reproduction little more than a commercial relationship and the surrogate little more than a womb for rent.

Even altruistic surrogacy, where no money changes hands, is problematic. Surrogacy works best when the surrogate mother is emotionally detached from the child she is carrying in her body. Yet, a child is better off when a mother is invested emotionally in her child and in her pregnancy. The conflict of interest works against the best-interest of the child even in the case where a family member serves as a surrogate.

Furthermore, laws governing surrogacy arrangements are still evolving in many states. This fact makes surrogate motherhood far from ideal. Children need the very best environment for nurture, even *in utero*. Surrogacy fails to meet important criteria for compassionate child rearing. One possible exception to this is so-called "rescue surrogacy." In this arrangement, a woman agrees to carry and adopt an unwanted embryo who was frozen in a fertility clinic. At least one embryo adoption agency has been established to facilitate embryo adoptions (see www.snowflakes.org). Rescue surrogacy should not, however, be thought of as merely another form of reproductive technology. The practice would no longer be necessary once the unwanted embryos were all adopted.

Egg donation and artificial insemination using donor sperm also violate God's ideal for the family by creating a child who results from the union of the husband or wife and another person outside of the marriage. Unlike adoption--which "redeems" a child who would otherwise not have a family--these arrangements create a situation where the parents are not equally related to a child they bring into the world for just such purposes. They also expose children and adults to intensely traumatic challenges, both legal and otherwise.

A Theology of Infertility

When making procreative decisions, Christians have more than technological questions to ask. Reproductive technologies are not value-neutral. That is, just because these technologies are available does not mean that they

ought to be used or that they pass ethical muster. Like other decisions, decisions concerning reproductive technology should be informed by a Christian worldview. What does the Bible say about infertility?

First, bearing children is good and parenthood when possible is to be celebrated. From the beginning, God blessed procreation. In Genesis 1:28, God said: "Be fruitful and increase in number; fill the earth and subdue it." Similarly, the psalmist says: "Behold, children are an heritage from the Lord. The fruit of the womb is his reward. Like arrows in the hand of the warrior, so are the children of one's youth. Happy is the man who has his quiver full of them . . ." (Psalm 127:3-5a). Not insignificantly, "God sent his Son, born of a woman, born under law, to redeem those under law, that we might receive the full rights of sons" (Galatians 4:4). That is, God chose to use the procreative process to bring his Son into the world, albeit through the virgin giving birth. Not only that, but children occupied a special place in Jesus's ministry (see Matthew 18:1-6; Mark 10:13-16). Furthermore, the believer's relationship to God is defined as a parent-child relationship: "The Spirit himself testifies with our spirit that we are God's children. Now if we are children, then we are heirs--heirs of God and co-heirs with Christ . . ." (Romans 8:16-17).

Second, it is equally clear that the sovereign Lord is the one who opens and shuts the womb (1 Samuel 1:5-6). While children are clearly a blessing from God, the ability to bear them is subject to the mystery of his providence. In fact, the apostle James warns Christians not to be presumptuous about their lives. Rather than brazenly following our own desires, we are taught, "Instead . . . to say, 'If it is the Lord's will, we will live and do this or that'" (James 4:15).

God's providence should not be a dark and foreboding reality for believers. As our Father, he always has his own glory and our best interest at heart--and there is never any conflict between the two. While we ought not cite the verse flippantly to people who are suffering, it is nonetheless true that "we know that in all things God works for the good of those who love him, who have been called according to his purpose" (Romans 8:28). God is able to work good through our tragedies and traumas. One of the most assuring realities of the Christian faith is the purposefulness of God. He never makes mistakes, commits errors of judgment, or acts capriciously.

In some cases, it may not be God's will for a couple to have children. Infertile couples should not be made to feel like second-class humans because they cannot conceive. God may well have other good and gracious purposes for them. Sadly, many couples assume that infertility is always a sign of God's disfavor or a means of punishment. That is not necessarily the case. On the other hand, God's will may be to bring a couple through the experience of infertility before they conceive. Of one thing we can be certain, God has promised never to place more of a burden on us than we can bear (1 Corinthians 10:13).

Finally, trials, including infertility, are sometimes brought into believers' lives as an encouragement to pray. 1 Samuel 1 is a powerful reminder that prayer is often God's appointed means of fulfilling his purposes for us. Hannah was an infertile woman who desperately wanted a child. She was extremely depressed over her inability to conceive. She prayed so intensely that the priest thought she might be drunk (1 Samuel 1:11-15). Hannah responded to his allegation by saying: "I am a woman who is deeply troubled. I have not been drinking wine or beer; I was pouring out my soul to the Lord." In time, Hannah conceived. She had a son she named Samuel ("heard of God" in Hebrew). God answered Hannah's prayers just as he answers all his children's prayers, by accomplishing his loving purposes in their lives.

Conclusion

Infertility can be very traumatic for couples. The array of reproductive technologies offered can be confusing. Decisions about which technologies to use take a great deal of mental, emotional, and spiritual effort. There are several important ways family and friends can help couples deal with infertility.

Be informed. Learn the facts about infertility. Infertility is not necessarily a life-long condition. Some couples may experience years of infertility before having children. Do not give unsolicited advice or repeat old fables. Stories about a family member or friend who was infertile but recently had a baby may not bring comfort to couples in the throes of dealing with their own infertility. There are a number of groups that specialize in helping infertile couples. Hannah's Prayer is a Christian support network for infertile couples. Stepping Stones Ministry in Wichita, Kansas publishes a newsletter for infertile couples.

Be sensitive. Special occasions, like Mother's Day, may be very difficult for infertile couples. Understand why they might not feel comfortable participating on those occasions. When you learn that a couple is experiencing infertility, do not ask "Whose fault is it?" Sometimes couples feel guilty about infertility in the first place. Additional feelings of guilt--either real or imagined--are unlikely to help.

Be supportive. Support infertile couples by praying for them, pointing them to good resources, and just bearing their sense of burden with them as they seek help for their infertility. **CBHD**

Adapted from [Does God Need Our Help? Cloning, Assisted Suicide, & Other Challenges in Bioethics](#). John F. Kilner and C. Ben Mitchell. Wheaton, IL: Tyndale, 2003. 236 pages.

Abortion

"Many people are very, very concerned with children in India, with the children of Africa where quite a few die of hunger, and so on. Many people are also concerned about all the violence in this great country of the United States. These concerns are very good. But often these same people are not concerned with the millions who are being killed by the deliberate decision of their own mothers. And this is what is the greatest destroyer of peace today – abortion, which brings people to such blindness."

Mother Teresa, quoted in Cal Thomas, "Meek Mother Teresa delivers a verbal knockout punch," Colorado Springs Gazette Telegraph, 9 February 1994, B7.

"The nurses have to look at the ultrasound picture to gauge how far along the baby is for an abortion, because the larger the pregnancy, the more you get paid. It was very important for us to do that. But the turnover definitely got greater when we started using ultrasound. We lost two nurses – they couldn't take looking at it. Some of the other staff left also.' What about the women having the abortions? Do they see the ultrasound? 'They are never allowed to look at the ultrasound because we knew that if they so much as heard the heartbeat, they wouldn't want to have the abortion.'"

Dr. Joseph Randall, who performed over 32,000 abortions, quoted in David Kupelian and Mark Masters, "Pro-Choice 1991: skeletons in the closet," New Dimensions, September/October 1991, 43.

"A nurse who had worked in an abortion clinic for less than a year said her most troubling moments came not in the procedure room but afterwards. Many times, she said, women who had just had abortions would lie in the recovery room and cry, 'I've just killed my baby. I've just killed my baby.' 'I don't know what to say to these women,' the nurse told the group. 'Part of me thinks 'Maybe they're right.'"

Diane M. Gianelli, "Abortion providers share inner conflicts," American Medical News, 12 July 1993, 36.

1. DEFINITION OF ABORTION: "The term 'abortion' actually refers to any premature expulsion of a human fetus,

whether naturally spontaneous, as in a miscarriage, or artificially induced, as in a surgical or chemical abortion. Today, the most common usage of the term 'abortion' applies to artificially induced abortion...

Approximately 93% of all induced abortions are done for elective, non-medical reasons..." ("Abortion: Some Medical Facts," available online at <http://www.nrlc.org/abortion/ASMF/asmf.html>).

2. METHODS OF ABORTION ("Abortion: Some Medical Facts," available online at <http://www.nrlc.org/abortion/ASMF/asmf.html>).

First Trimester

- A. Suction Aspiration: Suction aspiration, or "vacuum curettage," is the abortion technique used in most first trimester abortions. A powerful suction tube with a sharp cutting edge is inserted into the womb through the dilated cervix. The suction dismembers the body of the developing baby

and tears the placenta from the wall of the uterus, sucking blood, amniotic fluid, placental tissue, and fetal parts into a collection bottle.

- B. Dilation and Curettage: In this technique, the cervix is dilated or stretched to permit the insertion of a loop shaped steel knife. The body of the baby is cut into pieces and removed and the placenta is scraped off the uterine wall. Blood loss from D & C, or "mechanical" curettage is greater than for suction aspiration, as is the likelihood of uterine perforation and infection.
- C. RU 486: While many people focus solely on RU 486, the so-called " French abortion pill," the RU 486 technique actually uses two powerful synthetic hormones with the generic names of mifepristone and misoprostol to chemically induce abortions in women five-to-nine weeks pregnant. The RU 486 procedure requires at least three trips to the abortion facility. In the first visit, the woman is given a physical exam, and if she has no obvious contra-indications ("red flags" such as smoking, asthma, high blood pressure, obesity, etc., that could make the drug deadly to her), she swallows the RU 486 pills. RU 486 blocks the action of progesterone, the natural hormone vital to maintaining the rich nutrient lining of the uterus. The developing baby starves as the nutrient lining disintegrates. At a second visit 36 to 48 hours later, the woman is given a dose of artificial prostaglandins, usually misoprostol, which initiates uterine contractions and usually causes the embryonic baby to be expelled from the uterus. Most women abort during the 4-hour waiting period at the clinic, but about 30% abort later at home, work, etc., as many as 5 days later. A third visit about 2 weeks later determines whether the abortion has occurred or a surgical abortion is necessary to complete the procedure (5 to 10% of all cases). There are several serious well documented side effects associated with RU 486/prostaglandin abortions, including prolonged (up to 44 days) and severe bleeding, nausea, vomiting, pain, and even death. At least one woman in France died while others there suffered life-threatening heart attacks from the technique. In U.S. trials conducted in 1995, one woman is known to have nearly died after losing half her blood and requiring emergency surgery.
- D. Methotrexate: The procedure with methotrexate is similar to the one using RU 486, though administered by an intramuscular injection instead of a pill. Originally designed to attack fast growing cells such as cancers by neutralizing the B vitamin folic acid necessary for cell division, methotrexate apparently attacks the fast growing cells of the trophoblast as well, the tissue surrounding the embryo that eventually gives rise to the placenta. The trophoblast not only functions as the "life support system" for the developing child, drawing oxygen and nutrients from the mother's blood supply and disposing of carbon dioxide and waste products, but also produces the hCG (human chorionic gonadotropin) hormone which signals the corpus luteum to continue the production of progesterone necessary to prevent breakdown of the uterine lining and loss of the pregnancy. Methotrexate initiates the disintegration of that sustaining, protective, and nourishing environment. Deprived of the food, oxygen, and fluids he or she needs to survive, the baby dies.

Second and Third Trimester

- A. Dilation and Evacuation: Used to abort unborn children as old as 24 weeks, this method is similar to the D&C. The difference is that forceps with sharp metal jaws are used to grasp parts of the developing baby, which are then twisted and torn away. This continues until the child's entire body is removed from the womb. Because the baby's skull has often hardened to bone by this time, the skull must sometimes be compressed or crushed to facilitate removal.
- B. Instillation Methods:

Salt Poisoning: A needle is inserted through the mother's abdomen and 50-250 ml (as much as a cup) of amniotic fluid is withdrawn and replaced with a solution of concentrated salt. The baby breathes in, swallowing the salt, and is poisoned. The chemical solution also causes painful burning and deterioration of the baby's skin. Usually, after about an hour, the child dies. The

mother goes into labor about 33 to 35 hours after instillation and delivers a dead, burned, and shriveled baby. About 97% of mothers deliver their dead babies within 72 hours.

Prostaglandins: Prostaglandins are naturally produced chemical compounds which normally assist in the birthing process. The injection of concentrations of artificial prostaglandins prematurely into the amniotic sac induces violent labor and the birth of a child usually too young to survive. Often salt or another toxin is first injected to ensure that the baby will be delivered dead, since some babies have survived the trauma of a prostaglandin birth and been born alive. This method is used during the second trimester.

- C. **Partial-Birth Abortion**: This procedure is used to abort women who are 20 to 32 weeks pregnant -- or even later into pregnancy. Guided by ultrasound, the abortionist reaches into the uterus, grabs the unborn baby's leg with forceps, and pulls the baby into the birth canal, except for the head, which is deliberately kept just inside the womb. (At this point in a partial-birth abortion, the baby is alive.) Then the abortionist jams scissors into the back of the baby's skull and spreads the tips of the scissors apart to enlarge the wound. After removing the scissors, a suction catheter is inserted into the skull and the baby's brains are sucked out. The collapsed head is then removed from the uterus. For more information see <http://www.nrlc.org/abortion/pba/diagram.html>
- D. **Hysterotomy**: Similar to the Caesarean Section, this method is generally used if chemical methods such as salt poisoning or prostaglandins fail (see pp. 12-14). Incisions are made in the abdomen and uterus and the baby, placenta, and amniotic sac are removed. Babies are sometimes born alive during this procedure, raising questions as to how and when these infants are killed and by whom.

3. STAGES OF DEVELOPMENT (Source: *The First Nine Months*. Pamphlet LF177. Colorado Springs: Focus on the Family, 1993).

- Day 1- Sperm and egg are joined. The cell contains the genetic blueprint for development.
- Day 21- The embryo is implanted in the lining of the uterus. The heart begins to beat.
- Day 28- Backbone, arms, legs, eyes and ears have begun to form.
- Day 40- Brain activity can be detected.
- Week 8- The body is basically complete. The fetus is sensitive to touch
- Week 9- Fingerprints are evident.
- Week 11- The fetus is about 2 inches long. It is now able to move.
- Week 13- The fetus sleeps and breathes amniotic fluid to develop its respiratory system. The sex can be determined.
- Month 5- The baby can hear and the mother can now feel the baby move.
- Month 6- Babies born at this stage can survive outside of the womb.
- Month 7- The baby can recognize his mother's voice.

4. TURNING POINTS IN THE ABORTION DEBATE

- E. **Roe v. Wade (1973)**- The Supreme Court ruled (7-2) that, "all state laws that prohibit or restrict a woman's right to obtain an abortion during her first three months of pregnancy" is no longer valid. This decision allows restrictions (limited to the 'life or health' of the mother) as the pregnancy progresses. Unrestricted abortions are within the first 6 months of pregnancy, and then states could restrict abortions after that when the 'life or death' of the mother are threatened." *(Source: "Doe: The Exception that Swallowed the Rule." *Life Insight*. Vol. 2, No. 12, Dec. 1991)

*Note: Some articles will say that abortions are unrestricted within the first 3 months and other 6 months. The difference is a matter of interpretation and state residence. In the first 3 months of pregnancy, abortion decisions are left to the discretion of the woman and her physician. Between 3 and 6 months, states may restrict abortions, but not prohibit them. In the last 3 months of pregnancy, states may regulate or prohibit abortions. (Source: Jerry Goldman. "A

Case of Privacy.” [Online] Available <http://cnn.com/SPECIALS/1998/roe.wade/stories/privacy/> June 28, 2001.)

- B. ***Doe vs. Bolton (1973)*** – Handed down at the same time as the *Roe vs. Wade* decision, the Supreme Court defined maternal health. Maternal health was defined as ‘all factors physical, emotional, psychological, familial, and the woman’s age’ relevant to the well-being of the patient. All these factors relate to health. This broadly defines the reasons a mother can have an abortion. (Source: “Doe: The Exception that Swallowed the Rule.” *Life Insight*. Vol. 2, No. 12, Dec. 1991.)
- C. **Result** – “It is safe to say, therefore, that in the first six months of pregnancy a woman can have an abortion for no reason, but in the last three months she can have it for any reason. This is abortion on demand.” (Source: Beckwith, Francis J. “Answering the Arguments for Abortion Rights, Part One: The Appeal to Pity.” *Christian Research Journal*. Fall 1990, p. 23.)

5. REFUTING ARGUMENTS FOR ABORTION

- A. **Virtually all arguments for abortion center on the issue of personhood.** For information regarding this, please see *Abortion, Bioethics and Personhood: A Philosophical Reflection*, by Dr. Francis J. Beckwith in the Bioethics section of this notebook.
- B. **“A woman has the right to make a decision about her own body.”**
1. “The question of when life begins can be settled by science—and it has been. Biologically, the human zygote is a separate organism from the time of conception—genetically unique and distinct from its parents, developing according to its own genetic ‘blueprint.’” Chuck Colson, *Breakpoint*
 2. “Although the unborn entity is *attached* to its mother, it is not *part* of her. To say that the unborn entity is part of its mother is to claim that the mother possesses four legs, two heads, two noses, and -- with the case of a male conceptus -- a penis and two testicles... Hence, abortion is not justified, since no one's right to personal autonomy is so strong that it permits the arbitrary execution of others.” (Source: Beckwith, Francis J. “Answering the Arguments for Abortion Rights, Part Two: Arguments from Pity, Tolerance, and Ad Hominem.” *Christian Research Journal* (1991): 27-32.)
- C. **“If abortion is outlawed, then mothers will be forced to care for unwanted or handicapped children; otherwise the children will have to suffer.”** (Source: Beckwith, Francis J. “Answering Arguments for Abortion Rights.” *Christian Resource Journal*. (1991).)
1. Abortion is the worst sort of child abuse imaginable, if that is the point of eliminating the unwanted (to avoid abuse). There is no proof that unwanted children are linked with child abuse.
 2. Human value is not based on whether someone wants or cares for them. How can we determine if another persons’ life is worth living?
 3. What is to stop the murder of handicapped people?
 4. This shows our selfishness in not wanting to care for the defenseless. A damaged human is not a *nonhuman*.
- D. **“If abortion is outlawed, we will once again find women dying from self-induced abortions or ‘back-alley butchers.’”** There is a debate over the actual numbers of illegal abortions and the number of women that died because of them. Leaders in the abortion

movement admit that the number of women who died from illegal abortions is a lie. There are no statistics to support this claim. Even the ‘back-alley butchers’ are misleading. Before abortion was legalized, Dr. Mary Calderone, president of Planned Parenthood, states that 90% of all illegal abortions were done by physicians. (Source: Beckwith, Francis J. “Answering Arguments for Abortion Rights.” *Christian Research Journal*. (1991).)

6. ADDITIONAL RESOURCES

- Alcorn, Randy** *Pro-Life Answers to Pro-Choice Arguments* Portland, OR: Multnomah, 1992.
- Ankerberg, John, and John Weldon** *When Does Life Begin?* Brentwood, TN: Wolgemuth and Hyatt, 1989.
- Gianelli, Diane M.** "Abortion providers share inner conflicts." *American Medical News*, 12 July 1993, pp. 3, 36-37.
- Grant, George** *Grand Illusions: The Legacy of Planned Parenthood. 2nd ed.* Franklin, TN: Adroit Press, 1988, 1992.
- Kasun, Jaqueline** *The War Against Population: The Economics and Ideology of Population Control* San Francisco, CA: Ignatius Press, 1988.

7. SOURCES FOR HELP

- National Right to Life Committee, <http://www.nrlc.org>
- Pro-Life Action League, <http://www.prolifeaction.org>
- Care Net Pregnancy Center Locator, 800-395-HELP, <http://www.care-net.org>
- Bethany Christian Services, Crisis Pregnancy, 1-800-BETHANY, <http://www.bethany.org>
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A Short Defense of the Pro-Life Position

By Scott Klusendorf

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Let me be clear. I am vigorously “pro-choice” when it comes to women choosing a number of moral goods. I support a woman’s right to choose her own health care provider, to choose her own school, to choose her own husband, to choose her own job, to choose her own religion, and to choose her own career, to name a few. These are among the many choices that I fully support for the women of our country. But some choices are wrong, like killing innocent human beings simply because they are in the way and cannot defend themselves. No, we shouldn’t be allowed to choose that.

Pro-life advocates contend that elective abortion unjustly takes the life of a defenseless human being. This simplifies the abortion controversy by focusing public attention on just one question: Is the unborn a member of the human family? If so, killing him or her to benefit others is a serious moral wrong. Conversely, if the unborn are not human, elective abortion requires no more justification than having a tooth pulled.

This is not a debate about privacy or trusting women to make their own responsible choices. For example, does the right to make one’s own responsible choices include the rights of parents to abuse children in the privacy of the home? Therefore, if the unborn are human like other children, killing them in the name of privacy is a clear moral wrong. Hence, debate over abortion is really about one question: What is the unborn? Is he or she a member of the human family? Everything comes back to that one question.

Pro-life advocates contend that the unborn are, in fact, members of the human family. They defend that claim with science and philosophy, offering public reasons for their view.

The Stubborn Facts of Science

Scientifically, we know that from the earliest stages of development, the unborn are distinct, living, and whole human beings. Leading embryology textbooks confirm this.¹ Prior to advocating abortion, former Planned Parenthood President Dr. Alan Guttmacher was perplexed that anyone, much less a medical doctor, would question

¹ See T.W. Sadler, *Langman’s Embryology*, 5th ed. (Philadelphia: W.B. Saunders, 1993) p. 3; Keith L. Moore, *The Developing Human: Clinically Oriented Embryology* (Toronto: B.C. Decker, 1988) p. 2; O’Rahilly, Ronand and Muller, Pabiola, *Human Embryology and Teratology*, 2nd ed. (New York: Wiley-Liss, 1996) pp. 8, 29.

these basic scientific facts. "This all seems so simple and evident that it is difficult to picture a time when it wasn't part of the common knowledge," he wrote in his book *Life in the Making*.²

Ronald Bailey of *Reason* magazine insists that we gain no real knowledge from these scientific facts. Bailey argues that embryonic human beings are biologically human only in the sense that every cell in the body carries the full genetic code, meaning that each of our somatic (bodily) cells has as much potential for development as any human embryo. Put simply, Bailey would have us believe that there is no difference in kind between a human embryo and each of our cells.³

This is bad biology. Bailey is making the rather elementary mistake of confusing parts with wholes. The difference in kind between each of our cells and a human embryo is clear: An individual cell's functions are subordinated to the survival of the larger organism of which it is merely a part. The human embryo, however, is already a whole human entity. Robert George and Patrick Lee say it well. It makes no sense to say that you were once a sperm or somatic cell. However, the facts of science make clear that you were once a human embryo. "Somatic cells are not, and embryonic human beings are, distinct, self-integrating organisms capable of directing their own maturation as members of the human species."⁴

Three common objections

1) *Twining*. Cloning advocates sometimes claim that because an early embryo may split into twins (up until 14 days after conception), there is no reason to suppose that it's an individual human being prior to that time. Hence, early embryo research (prior to day 14) is morally permissible. The flaw in this argument is easy to spot. How does it follow that because an entity may split (or even recombine) that it was not a whole living organism prior to the split? We can take a Flatworm, cut it in half, and get two flatworms.⁵ Would advocates of destructive embryo research argue that prior to the split, there was no distinct flatworm? I agree that twining is a mystery. We don't know if the original entity dies and gives rise to two new organisms or if the original survives and simply engages in some kind of asexual reproduction. Either way, this does nothing to call into question the existence of a distinct human organism prior to splitting.

2) *Miscarriage*. Cloning advocates cite the high number of miscarriages as proof that a) embryos are not individual human organisms, and b) destructive research is morally permissible. Suppose miscarriages are common: How does this fact refute the claim that embryos are human beings? Many Third-World countries have high infant mortality rates. Are we to conclude that those infants who die early were never whole human beings? Moreover, how does it follow that because nature may *spontaneously* abort an embryo that I may *deliberately* kill one? Admittedly, these miscarriages are tragic events. But as journalist Andrew Sullivan points out, just because earthquakes happen doesn't mean massacres are justified.⁶

3) *Ignorance*. David Boonin discounts the pro-lifer's claim that the newly conceived zygote is a distinct, living, and whole human organism. How can this be, he argues, when we don't know the precise moment during the conception process at which the new zygotic human being comes into existence? Here Boonin is both right and wrong. True, we don't know exactly when during the conception process that the zygote comes to be. Some embryologists argue that it happens when the sperm penetrates the ovum while others point to syngamy, when the maternal and parental chromosomes crossover and form a diploid set.

But as Francis Beckwith points out, although Boonin raises an important *epistemological* question (When do we know that sperm and egg cease to be and a new organism arises?), he's mistaken that his skepticism successfully undermines the pro-lifers strongly supported *ontological* claim that the zygote is distinct, living, and whole human being. "It may be that one cannot, with confidence, pick out the precise point at which a new being comes into existence between the time at which the sperm initially penetrates the ovum and a complete and living zygote is

² A. Guttmacher, *Life in the Making: the Story of Human Procreation* (New York: Viking Press, 1933) p. 3

³ Ronald Bailey, "Are Stem Cells Babies?" *Reason*, July 11, 2001.

⁴ Robert George and Patrick Lee, "Reason, Science, and Stem Cells," *National Review On-Line*, 7-20-01.

⁵ Illustration taken from Patrick Lee, *Abortion and Unborn Human Life* (Washington, D.C. Catholic University Press in America, 1996) p. 93

⁶ Andrew Sullivan, "Only Human," *The New Republic*, July 19, 2001.

present. But how does it follow from this acknowledgment of agnosticism that one cannot say that zygote X is a human being?"⁷ Boonin, writes Beckwith, commits the fallacy of the beard: Just because I cannot say when stubble ends and a beard begins, does not mean I cannot distinguish between a clean-shaven face and a bearded one.

Moreover, Boonin's skepticism cuts both ways and serves to undermine his own case. Abortion advocates typically claim that until a fetus has value-giving properties such as self-awareness, rationality, and sentience, it does not have a right to life. But since when can we know the precise moment that those properties come to be in the fetus? That is, at what *exact* point in the pregnancy does the unborn become rational enough to warrant a right to life? No one can say, though abortion advocates suggest that it's somewhere between 24 weeks to 30 weeks. Despite their lack of certitude on these questions, few abortion advocates are willing to surrender their views. However, if the pro-life position is refuted by a lack of certitude, so is the pro-abortion one.⁸

Philosophy: Are humans valuable by nature or function?

Philosophically, pro-life advocates argue that there is no morally significant difference between the embryo you once were and the adult you are today. Differences of size, level of development, environment, and degree of dependency are not relevant in the way that abortion advocates need them to be. The simple acronym **SLED** can be used to illustrate these non-essential differences.⁹

Size: True, embryos are smaller than newborns and adults, but why is that relevant? Do we really want to say that large people are more valuable than small ones? Men are generally larger than women, but that doesn't mean they deserve more rights. Size doesn't equal value.

Level of development: True, embryos and fetuses are less developed than you and I. But again, why is this relevant? Four year-old girls are less developed than 14 year-old ones. Should older children have more rights than their younger siblings? Some people say that the immediate capacity for self-awareness makes one valuable. But if that is true, newborns do not qualify as valuable human beings. According to the scientific journal *Nature*, infants do not acquire conscious memories until nine months *after birth*.¹⁰ Best case scenario, infants acquire limited self-awareness three months after birth, when the synapse connections increase from 56 trillion to 1,000 trillion. As abortion advocate and philosopher Dean Stretton writes, "Any plausible pro-choice theory will have to deny newborns a full right to life. That's counterintuitive."¹¹

Environment: Where you are has no bearing on *who* you are. Does your value change when you cross the street or roll over in bed? If not, how can a journey of eight inches down the birth-canal suddenly change the essential nature of the unborn from non-human to human? If the unborn are not already valuable human beings, merely changing their location can't make them so.

Degree of Dependency: If viability bestows human value, then all those who depend on insulin or kidney medication are not valuable and we may kill them. Conjoined twins who share blood type and bodily systems also have no right to life.

Put simply, although humans differ immensely with respect to talents, accomplishments, and degrees of development, these difference are non-essential to their being.

Humans without rights?

⁷ Francis J. Beckwith, "Defending Abortion Philosophically," unpublished as of October 2004.

⁸ Beckwith, *Ibid*.

⁹ SLED test initially developed by Stephen Schwarz but modified significantly and explained here by Scott Klusendorf. Stephen Schwarz, *The Moral Question of Abortion* (Chicago: Loyola University Press, 1990) pp. 17-18.

¹⁰ Conor Liston & Jerome Kagan, "Brain Development: Memory Enhancement in Early Childhood," *Nature* 419, 896 (2002).

¹¹ Correspondence between Scott Klusendorf and Dean Stretton, October 2002. While I do not share Stretton's views, I admire his candor. Stretton goes on to argue that the pro-life view that zygotes have a right to life is equally counterintuitive. I disagree. While it's counterintuitive at first pass, it's really a naive intuition that easily changes when informed with the facts (like the scientific and philosophic ones noted above). This isn't on par with the counterintuitiveness of killing a newborn.

Abortion advocates like Mary Anne Warren claim that a "person" is a living entity with feelings, self-awareness, consciousness, and the ability to interact with his or her environment. Because a human fetus has none of these capabilities, it cannot be a person.¹² Warren makes two assumptions here, neither of which she defends. First, she doesn't say why should anyone accept the idea that there can be such a thing as a human being that is not a human person. What's the difference? I've never met a human that wasn't a person, have you? Second, even if Warren is correct about the distinction between human being and human person, she fails to tell us *why* a person must possess self-awareness and consciousness in order to qualify as fully human. In other words, she merely *asserts* that these traits are necessary for personhood but never says why these alleged value-giving properties are value-giving in the first place.

In his article "Why Libertarians Should be Pro-Choice Regarding Abortion," Libertarian philosopher Jan Narveson makes points similar to Warren.¹³ His larger purpose is to tell us who is and is not a subject of libertarian rights. He argues that humans have value (and hence, rights) not in virtue of the kind of thing they are (members of a natural kind or species), but only because of an acquired property, in this case, the immediate capacity to make conscious, deliberate choices. Because fetuses lack this acquired property, they have no rights. A woman's choice to abort, then, does not negatively effect the fetus or deny it any fundamental liberties.

But this can't be right. Newborns, like fetuses, lack the immediate capacity to make conscious, deliberate choices, so what's wrong with infanticide?¹⁴ What *principled* reason can Narveson give for saying, "No, you can't do that?" Peter Singer in *Practical Ethics* bites the bullet and says there is none, that arguments used to justify abortion work equally well to justify infanticide.¹⁵ For example, if the immediate capacity for self-consciousness makes one valuable as a subject of rights, and newborns like fetuses lack that immediate capacity, it follows that fetuses and newborns are both disqualified. You can't draw an arbitrary line at birth that spares newborns. Hence, infanticide, like abortion, is morally permissible.

Lincoln raised a similar point with slavery, noting that any argument used to disqualify blacks as subjects of rights works equally well to disqualify many whites.

You say 'A' is white and 'B' is black. It is color, then: the lighter having the right to enslave the darker? Take care. By this rule, you are a slave to the first man you meet with a fairer skin than your own.

You do not mean color exactly—You mean the whites are intellectually the superiors of the blacks, and therefore have the right to enslave them? Take care again: By this rule you are to be a slave to the first man you meet with an intellect superior to your own.

But you say it is a question of interest, and, if you can make it your interest, you have the right to enslave another. Very well. And if he can make it his interest, he has the right to enslave you.¹⁶

In short, if humans have value only because of some acquired property like skin color or self-consciousness and not in virtue of the kind of thing they are, then it follows that since these acquired properties come in varying degrees, basic human rights come in varying degrees. Do we really want to say that those with more self-consciousness are more human (and valuable) than those with less? As Lee and George point out, this relegates the proposition that all men are created equal to the ash heap of history.¹⁷ Philosophically, it's far more reasonable to argue that although humans differ immensely with respect to talents, accomplishments, and degrees of development, they are

¹² Mary Anne Warren, "On the Moral and Legal Status of Abortion," in *The Problem of Abortion*, Joel Feinberg, ed. (Belmont, CA: Wadsworth, 1984).

¹³ Article is posted on Narveson's website at <http://www.arts.uwaterloo.ca/~jnarveso/abortion.htm>

¹⁴ Conor Liston & Jerome Kagan, "Brain Development: Memory Enhancement in Early Childhood," *Nature* 419, 896 (2002). See also O'Rahilly, Ronand and Muller, Pabiola, *Human Embryology and Teratology*, 2nd ed. (New York: Wiley-Liss, 1996) p. 8.

¹⁵ Peter Singer, *Practical Ethics* (Cambridge, UK: Cambridge University Press, 1997) pp. 169-171.

¹⁶ *The Collected Works of Abraham Lincoln* (Rutgers University Press, 1953) vol. II, p. 222.

¹⁷ Robert P. George, "Cloning Addendum," *National Review on-Line*, July 15, 2002; Patrick Lee, "Human Embryos and Fetuses are Subjects of Rights." (See note #2 above.)

nonetheless equal because they share a common human nature. Humans have value simply because they are human, not because of some acquired property that they may gain or lose during their lifetimes. If you deny this, it's difficult to say why objective human rights apply to anyone.

Natural rights versus legal (positive) rights

Put differently, pro-life advocates, echoing Lincoln, argue that we must distinguish between *natural* rights and *legal* ones. Natural rights are those rights that you have simply because you are human. They are grounded in your human nature and you have them from the moment you begin to exist.¹⁸ For example, you have a natural right not to be harmed without justification as well as a natural right not to be convicted of a crime without a fair trial. Government does not grant these basic rights. Rather, government's role is to protect them. In contrast, legal (or positive) rights are those rights you can only acquire through accomplishment or maturity. These rights originate from the government and include the right to vote at your eighteenth birthday and a right to drive on your sixteenth. But your *natural* right to live was there all along. It comes to be when you come to be.

To cash this out further, I do not have a legal (positive) right to vote in the next Canadian election for the simple reason that I am not a Canadian citizen. But just because I lack the right to vote in Canada does not mean I lack the right to basic protections whenever I visit that country. Likewise, just because a fetus may not have the positive right to drive a car or vote in the next election does not mean he lacks the *natural* right not to be harmed without justification. Elective abortion unjustly robs the unborn of his or her natural right to life, as Hadley Arkes explains:

No one would suggest that a fetus could have a claim to fill the Chair of Logic at one of our universities; and we would not wish quite yet to seek its advice on anything important; and we should probably not regard him as eligible to vote in any state other than Massachusetts. All of these rights and privileges would be inappropriate to the condition or attributes of the fetus. But nothing that renders him unqualified for these special rights would diminish in any way the most elementary right that could be claimed for any human being, or even for an animal: the right not to be killed without the rendering of reasons that satisfy the strict standards of "justification."¹⁹

Do women have a natural (fundamental) right to abort?

Secular liberals insist that abortion is a fundamental human right the State should not infringe upon. In reply, I borrow a question from Hadley Arkes and ask, "Where did that right to an abortion come from?" In other words, is it a natural right that springs from our nature as human beings or is it a positive (legal) right granted by government? If the latter, the abortion advocate cannot really complain that she is wronged if the State does not permit her to abort. After all, the same government that grants rights can take them away. On the other hand, if the right to an abortion is a natural right—a right one has in virtue of being human—then the abortion-advocate had that right from the moment she came to be, that is, from conception!²⁰ Thus, we are left with this amusing paradox: According to the logic of many abortion-advocates, unborn women do not have a right to life while in the womb but they do have a right to an abortion! Absurd! In short, liberals cannot tell us where rights come from or why anyone should have them. As Arkes points out, they have talked themselves out of the very natural rights upon which their freedoms are built.

Conclusion

Sadly, opponents of the pro-life view believe that human beings that are in the wrong location or have the wrong level of development do not deserve the protection of law. They assert, without justification, the belief that strong and independent people deserve the protection of law while small and dependent people do not. This view is elitist and exclusive. It violates the principle that once made political liberalism great: a basic commitment to protect the most vulnerable members of the human community.

¹⁸ Hadley Arkes, *Natural Rights and the Right to Choose* (Cambridge: Cambridge University Press, 2002) pp. 13-14.

¹⁹ Hadley Arkes, *First Things: An Inquiry into the First Principles of Morals and Justice* (Princeton: Princeton University Press, 1986) p. 366.

²⁰ Hadley Arkes develops this paradox in detail in *Natural Rights and the Right to Choose*. I owe the observation to his excellent analysis.

We can do better than that. In the past, we used to discriminate on the basis of skin color and gender, but now, with elective abortion, we discriminate on the basis of size, level of development, location, and degree of dependency. We've simply exchanged one form of bigotry for another.

In sharp contrast, the position I have defended is that no human being, regardless of size, level of development, race, gender, or place of residence, should be excluded from the moral community of human persons. In other words, the pro-life view of humanity is inclusive, indeed wide open, to all, especially those that are small, vulnerable and defenseless.²¹

Stem Cell Research and "Therapeutic" Cloning: A Christian Analysis

by Linda K. Bevington

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<http://www.cbhd.org/resources/stemcells/overview.htm>

In November of 1998, scientists reported that they had successfully isolated and cultured human embryonic stem cells—a feat which had eluded researchers for almost two decades. This announcement kicked off an intense and unrelenting debate between those who approve of embryonic stem cell research and those who are opposed to it. Some of the most prominent advocates of the research are scientists and patients who believe that embryonic stem cell research will lead to the development of treatments and cures for some of humanity's most pernicious afflictions (such as Alzheimer's disease, Parkinson's disease, heart disease, and diabetes). Among the most vocal opponents of the research are those who share the desire to heal, but who object to the pursuit of healing via unethical means. CBHD's view is that because human embryonic stem cell research necessitates the destruction of human embryos, such research is unethical—regardless of its alleged benefits. Ethical alternatives for achieving those benefits are available and should be actively pursued.

1. What are human embryonic stem cells and how are they obtained?

Human embryonic stem cells are the cells from which all 200+ kinds of tissue in the human body originate. Typically, they are derived either from human embryos—usually those from fertility clinics who are left over from assisted reproduction attempts (e.g., in vitro fertilization). When stem cells are obtained from living human embryos, the harvesting of such cells necessitates destruction of the embryos.

2. How are adult stem cells different from embryonic stem cells?

Adult stem cells (also referred to as "non-embryonic" stem cells) are present in adults, children, infants, placentas, umbilical cords, and cadavers. Obtaining stem cells from these sources does not result in certain harm to a human being.

3. Is it ethical to obtain stem cells from human fetuses and umbilical cords?

Fetal stem cell research may ethically resemble either adult or embryonic stem cell research and must be evaluated accordingly. If fetal stem cells are obtained from miscarried or stillborn fetuses, or if it is possible to remove them from fetuses still alive in the womb without harming the fetuses, then no harm is done to the donor and such fetal stem cell research is ethical. However, if the abortion of fetuses is the means by which fetal stem cells are obtained, then an unethical means (the killing of human beings) is involved. Since umbilical cords are detached from infants at birth, umbilical cord blood is an ethical source of stem cells.

4. Have scientists been successful in using *non-embryonic* stem cells to treat disease?

Yes. In contrast to research on embryonic stem cells, non-embryonic stem cell research has already resulted in numerous instances of actual clinical benefit to patients. For example, patients suffering from a whole host of afflictions—including (but not limited to) Parkinson's disease, autoimmune diseases, stroke, anemia, cancer, immunodeficiency, corneal damage, blood and liver diseases, heart attack, and diabetes—have experienced improved function following administration of therapies derived from adult or umbilical cord blood stem cells. The long-held belief that non-embryonic stem cells are less able to differentiate into multiple cell types or be

²¹ I'm indebted to Frank Beckwith for the wording of this paragraph.

sustained in the laboratory over an extended period of time—rendering them less medically promising than embryonic stem cells—has been repeatedly challenged by experimental results that have suggested otherwise. (For updates on experimental advances, access www.stemcellresearch.org.)

5. Have scientists been successful in using embryonic stem cells to treat disease?

Though embryonic stem cells have been purported as holding great medical promise, reports of actual clinical success have been few. Instead, scientists conducting research on embryonic stem cells have encountered significant obstacles—including tumor formation, unstable gene expression, and an inability to stimulate the cells to form the desired type of tissue. It may indeed be telling that some biotechnology companies have chosen not to invest financially in embryonic stem cell research and some scientists have elected to focus their research exclusively on non-embryonic stem cell research.

6. What is the relationship between embryonic stem cell research and "therapeutic" cloning?

Another potential obstacle encountered by researchers engaging in embryonic stem cell research is the possibility that embryonic stem cells would not be immunologically compatible with patients and would therefore be "rejected," much like a non-compatible kidney would be rejected. A proposed solution to this problem is to create an embryonic clone of a patient and subsequently destroy the clone in order to harvest his or her stem cells. Cloning for this purpose has been termed "therapeutic" cloning—despite the fact that the subject of the research—the clone—is not healed but killed.

7. Why should we value the human embryo?

Underlying the passages of Scripture that refer to the unborn (Job 31:15; Ps. 139:13-16; Isa. 49:1; Jer. 1:5; Gal. 1:15; Eph. 1:3-4) is the assumption that they are human beings who are created, known, and uniquely valued by God. Genesis 9:6 warns us against killing our fellow human beings, who are created in the very image of God (Gen. 1:26-27). Furthermore, human embryonic life—as well as all of creation—exists primarily for God's own pleasure and purpose, not ours (Col. 1:16).

8. Shouldn't it be ethical to allow the destruction of a few embryos in order to help the millions of people who suffer from diseases such as Parkinson's and heart disease?

Many proponents of human embryonic stem cell research argue that it is actually wrong to protect the lives of a few unborn human beings if doing so will delay treatment for a much larger number of people who suffer from fatal or debilitating diseases. However, we are not free to pursue gain (financial, health-related, or otherwise) through immoral or unethical means such as the taking of innocent life (Deut. 27:25). The medical experiments in Nazi Germany should serve as just one reminder of the consequences of doing evil in the name of science. We must not sacrifice one class of human beings (the embryonic) to benefit another (those suffering from serious illness). Scripture resoundingly rejects the temptation to "do evil that good may result" (Rom. 3:8).

9. What does the law say and can I have a voice?

No forms of stem cell research or cloning are prohibited by federal law, though some states have passed partial bans. Private funds can support any practice that is legal, whereas federal funds cannot be used for research on embryonic stem cell lines unless they existed before August 9, 2001. You can express your objection to the creation and subsequent destruction of human embryos in order to obtain their stem cells by writing, telephoning, or e-mailing your U.S. Senators and Representatives. Contact information for Congress is available at www.senate.gov or www.house.gov, and through the Capitol switchboard at (202) 224-3121. Also contact your state legislators. You can stay informed via the web sites www.cbhd.org and www.stemcellresearch.org. **CBHD**

Designer Babies: One Step Closer

by Samuel D. Hensley

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A recent *USA Today* article describes the difficulties of Joe Fletcher and his family in Northern Ireland. Joe's son, Joshua, has Diamond-Blackfan anemia, a condition that usually occurs as a spontaneous genetic mutation.¹ If the

affected individual reaches reproductive age, the trait is usually heritable as an autosomal dominant disease. Joshua must receive repeated blood transfusions to counteract his inability to produce red blood cells, which carry oxygen to various parts of the body. The only cure for this condition is a stem cell transplant from a compatible donor. Joshua's older brother is not a compatible donor and the chance of any other future siblings being compatible is one in four. The Fletchers hope to improve those odds significantly by using a technique known as *pre-implantation genetic diagnosis* (PGD). The process requires in vitro fertilization. Eggs and sperm from the parents are mixed in a petri dish, and the resulting embryos undergo DNA analysis. Embryos compatible with Joshua could be inserted into the mother's womb to produce compatible siblings. Alternatively, if only a few embryos are compatible, they could be cloned to produce additional embryos in case the first attempt fails to result in implantation and fetal development.

This procedure is illegal in Great Britain and is regarded as unethical. Why? Before exploring the British objection, let me add an additional concern from a Christian perspective that regards these embryos as early human life, made in the image of God, possessing unique genes and the capability of continued human development. An important question for Christians is what will happen to the healthy embryos that are incompatible with Joshua. Will they be implanted later and given an equal chance at continued life or will they be discarded? Embryos not selected may be destroyed directly or by destructive embryo research, which is contrary to an understanding of human life being sacred. The *USA Today* article does not mention what plans the parents have for these other offspring.

The British concern expressed previously by the Human Fertilization and Embryology Authority (HFEA) is that human life would be created for the purpose of benefiting others, in this case a brother and the parents. This is a serious ethical concern. Should a child be created specifically to save another person's life, or should a child be welcomed and loved unconditionally regardless of his or her instrumental value in helping someone else? This is important not just from a Christian perspective. Immanuel Kant, the prominent philosopher of rationalism, felt that human beings should always be treated as ends in themselves and not as the means for another person to attain his or her ends. In the Fletcher case, it does not seem that the embryos would be screened to test for known genetic defects. If Diamond-Blackfan anemia is a spontaneous mutation, and no known genetic anomalies are detectable in the parents (such as a mutation for RPS 19 on chromosome 19), then genetic screening is not a helpful option.² The decision on life or death then would be made solely on whether a particular embryo, at a later stage of life, might be useful in helping Joshua. This pushes the issue of creating life to serve our needs and wants to a new level, and raises the issue of designer babies.

Prenatal genetic testing allows scientists to test established pregnancies for genetic defects that then could be avoided by aborting the pregnancy. Pre-implantation genetic diagnosis allows multiple embryos to be tested and inserted into the mother only if certain *desirable* traits are present. This possibility was recently discussed by Dr. Francis Collins, director of the National Human Genome Research Institute, when he noted that the time may soon arrive when pre-implantation screening will be used to pick desirable traits even in the absence of particular genetic disorders.³ In the coming years, human genome research will delineate gene clusters associated with increased intelligence, athletic ability, and musicality to name a few. The temptation to redefine parenthood to include choosing particular characteristics in their children, as opposed to unconditionally accepting offspring as a gift of God, seems fraught with perils beyond the scope of this article. For the sake of reflection, let us briefly consider a few issues.

Blastomere biopsy, the process by which a single cell is taken from the embryo for genetic testing, seems safe, but no long-term studies are available to exclude later problems from the procedure itself. In medical research, when new therapies are tested on human subjects, the welfare of the patient is a paramount concern. However, with in vitro fertilization, blastomere biopsy, and genetic screening, the embryos are not considered human subjects even though they are the earliest forms of childhood development and the beginning of lives whose health and well-being will later be a concern to all. Safety for the embryo must be a vital concern.

Our culture has generally considered parents to be the best judges of the welfare of their offspring, but even this has limits. Children are weak and vulnerable; they require protection from abuse and negligence. The ability for parents to choose which offspring die and which live and what traits they will manifest is an awesome responsibility. The President's Council of Bioethics recently noted that

With genetic screening, procreation begins to take on certain aspects of the *idea*—if not the practice—of manufacture, the making of a product to a specified standard. The parent—in partnership with the IVF doctor or genetic counselor—becomes in some measure the master of the child’s fate, in ways that are without precedent . . . Today, parents using PGD take responsibility for selecting for birth children who will not be chronically sick or severely disabled; in the future, they might also bear responsibility for picking and choosing which “advantages” their children shall enjoy. Such an enlarged degree of parental control over the genetic endowments of their children cannot fail to alter the parent-child relationship. Selecting against disease merely relieves the parents of the fear of specific ailments afflicting their child; selecting for desired traits inevitably plants specific hopes and expectations as to how their child might excel. More than any child does now, the “better” child may bear the burden of living up to the standards he was “designed” to meet. The oppressive weight of his parents’ expectations—resting in this case on what they believe to be undeniable biological facts—may impinge upon the child’s freedom to make his own way in the world.⁴

These concerns for tomorrow begin with Joshua’s parents today. The proposal is to select purposefully a child solely for his ability to provide a donor source for another child.⁵ Creating life primarily to serve someone else, especially when the other life may be rejected and destroyed for the simple reason that it did not meet the parents’ needs, is an action that should always be condemned. **CBHD**

¹ Wickramasinghe SN, McCullough J: *Blood and Bone Marrow Pathology*. Churchill-Livingstone, 2003.

² See Willig TN, Gazda H, Sieff CA: Diamond Blackfan Anemia. *Curr Opin Hematol*. 2000 Mar; 7(2): 85-94. Da Costa L, Willig TN, Fixler J, Mohandas N, Tchernia G: Diamond Blackfan Anemia *Curr Opin Pediatr*. 2001 Feb; 13(1): 10. Dianzani I, Garelli E, Ramenghi U: Diamond Blackfan Anemia. *Paediatr Drugs* 2000 Sep-Oct; 2(5): 345-55.

³ Collins F: *Genetic Enhancements: Current and Future Prospects*. Presentation at the December 2002 meeting of the President’s Council on Bioethics, Washington, D.C. Transcript available on Council’s web site at www.bioethics.gov.

⁴ President’s Council on Bioethics: *Beyond Therapy—Biotechnology and the Pursuit of Happiness*. Available at Council web site at www.bioethics.gov.

⁵ Verlinsky Y, Rechitsky S, Sharapove T, Kuliev A, et al.: Preimplantation Genetic Testing. *JAMA* 2004 May 5; 291(17): 2125-6.

Human Cloning

John F. Kilner

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We live in a brave new world in which reproductive technologies are ravaging as well as replenishing families. Increasingly common are variations of the situation in which “baby’s mother is also grandma—and sister.”¹ Sometimes extreme measures are necessary in order to have the kind of child we want.

This new eugenics is simply the latest version of the age-old quest to make human beings—in fact, humanity as a whole—the way we want them to be: perfect. It includes our efforts to be rid of unwanted human beings through abortion and euthanasia. It more recently is focusing on our growing ability to understand and manipulate our genetic code, which directs the formation of many aspects of who we are, for better and for worse.

We aspire to complete control over the code, though at this point relatively little is possible. This backdrop can help us understand the great fascination with human cloning today. It promises to give us a substantial measure of power over the genetic makeup of our offspring. We cannot control their code exactly, but the first major step in that direction is hugely appealing: You can have a child whose genetic code is exactly like your own. And you didn’t turn out so badly, did you?

Admittedly, in our most honest moments we would improve a few things about ourselves. So the larger agenda here remains complete genetic control. But human cloning represents one concrete step in that direction, and the forces pushing us from behind to take that step are tremendous. These forces are energized, as we will see, by the very ways we look at life and justify our actions. But before examining such forces, we need a clearer view of human cloning itself.

The Rising Prospect of Human Cloning

It was no longer ago than 1997 when the president of the United States first challenged the nation and charged his National Bioethics Advisory Commission² to give careful thought to how the United States should proceed regarding human cloning. Attention to this issue was spurred by the reported cloning of a large mammal—a sheep—in a new way. The method involved not merely splitting an early-stage embryo to produce identical twins. Rather, it entailed producing a nearly exact genetic replica of an already existing adult.

The technique is called nuclear transfer or nuclear transplantation because it involves transferring the nucleus (and thus most of the genetic material) from a cell of an existing being to an egg cell in order to replace the egg cell's nucleus. Stimulated to divide by the application of electrical energy, this egg—now embryo—is guided by its new genetic material to develop as a being who is genetically almost identical to the being from which the nucleus was taken. This process was reportedly carried out in a sheep to produce the sheep clone named Dolly³ but attention quickly shifted to the prospects for cloning human beings (by which I will mean here and throughout, cloning by nuclear transfer).

Quickly people began to see opportunities for profit and notoriety. By 1998, for example, scientist Richard Seed had announced intentions to set up a Human Clone Clinic—first in Chicago, then in ten to twenty locations nationally, then in five to six locations internationally.⁴ While the U.S. federal government was pondering how to respond to such initiatives, some of the states began passing legislation to outlaw human cloning research, and nineteen European nations acted quickly to sign a ban on human cloning itself.⁵ However, the European ban only blocks the actual implantation, nurture, and birth of human clones, and not also cloning research on human embryos that are never implanted. Such research has been slowed in the United States since the president and then Congress withheld federal government funds from research that subjects embryos to risk for non-therapeutic purposes.⁶ Moreover, a United Nations declaration co-sponsored by eighty-six countries in late 1998 signaled a broad worldwide opposition to research that would lead to human cloning.⁷

Yet there are signs of this protection for embryos weakening in the face of the huge benefits promised by stem cell research. Stem cells can treat many illnesses and can have the capacity to develop into badly needed body parts such as tissues and organs. One way to obtain stem cells is to divide an early stage embryo into its component cells—thereby destroying the embryonic human being. Under President Clinton, the National Institutes of Health decided that as long as private sources destroyed the embryos and produced the stem cells, the federal government would fund research on those cells.⁸ During 2001, President Bush prohibited federally-funded research on embryonic stem cells produced after the date his prohibition was announced. In 2002, his newly-formed Council on Bioethics raised serious questions about even this form of embryonic stem cell research, through the Council was divided on this matter.⁹ These developments underscore that there are a number of technological developments that are closely interrelated and yet have somewhat different ethical considerations involved. While embryo and stem cell research are very important issues, they are distinct ethically from the question of reproducing human beings through cloning. Reproduction by cloning is the specific focus of this essay.

While no scientifically verifiable birth of a human clone has yet been reported, the technology and scientific understanding are already in place to make such an event plausible at any time now. There is an urgent need to think through the relevant ethical issues. To begin with, is it acceptable to refer to human beings produced by cloning technology as “clones”? It would seem so, as long as there does not become a stigma attached to that term that is not attached to more cumbersome expressions like “a person who is the result of cloning” or “someone created through the use of somatic cell nuclear transfer.” We call someone from Italy an Italian, no disrespect intended. So it can be that a person “from cloning” is a clone. We must be ready to abandon this term, however, if it becomes a label that no longer meets certain ethical criteria.¹⁰

Why Clone Human Beings?

In order to address the ethics of human cloning itself, we need to understand why people would want to do it in the first place. People often respond to the prospect of human cloning in two ways. They are squeamish about the idea—a squeamishness Leon Kass has argued we should take very seriously.¹¹ They also find something alluring about the idea. Such fascination is captured in a variety of films, including “The Boys from Brazil” (portraying the attempt to clone Adolf Hitler), “Bladerunner” (questioning whether a clone would be more like a person or a machine), and “Multiplicity” (presenting a man’s attempt to have enough time for his family, job, and other pursuits by producing several live adult replicas of himself). Popular discussions center on the wonderful prospects of creating multiple Mother Teresas, Michael Jordans, or other notable figures.

The greatest problem with creative media-driven discussions like this is that they often reflect a misunderstanding of the science and people involved. The film “Multiplicity” presents human replicas, not clones in the form that we are discussing them here. When an adult is cloned (e.g., the adult sheep from which Dolly was cloned), an embryo is created, not another adult. Although the embryo’s cells contain the same genetic code as the cells of the adult being cloned, the embryo must go through many years of development in an environment that is significantly different from that in which the adult developed. Because both our environment and our genetics substantially influence who we are, the embryo will not become the same person as the adult. In fact, because we also have a spiritual capacity to evaluate and alter either or both our environment and our genetics, human clones are bound to be quite different from the adults who provide their genetic code. If this popular fascination with hero-duplication is not well founded, are there any more thoughtful ethical justifications for human cloning? Many have been put forward, and they cluster into three types: utility justifications, autonomy justifications, and destiny justifications. The first two types reflect ways of looking at the world that are highly influential in the United States and elsewhere today, so we must examine them carefully. They can readily be critiqued on their own terms. The third, while also influential, helpfully opens the door to theological reflection as well. I will begin by explaining the first two justifications. In the following sections I will then assess the first two justifications and carefully examine the third.

Utility

Utility justifications defend a practice based on its usefulness, or benefit. As long as it will produce a net increase in human well-being, it is warranted. People are well acquainted with the notion of assessing costs and benefits, and it is common to hear the argument that something will produce so much benefit that efforts to block it must surely be misguided.

Utility justifications are common in discussions of human cloning. Typical examples include:

- A. By having clones, people can, in some measure, have more of themselves in the world and thereby make a bigger impact.
- B. Parents can replace a dying child with a genetically identical new one.
- C. Parents can produce a clone of a sick child to provide bone marrow or other lifesaving bodily elements that can be provided with relatively modest risk to the clone.
- D. Parents, both of whom have a lethal recessive gene, can produce a child by cloning rather than risk the one-in-four chance that their child will face an early death.
- E. Clones could be produced to provide organs for transplants admittedly, transplants that could jeopardize or even end a clone’s life.
- F. Other clones could be produced with unusually high or low mental capacities that would suit them well to do socially needed tasks, for example, challenging problem solving or menial labor.

Autonomy

The second type of justification appeals to the idea of autonomy, an increasingly popular appeal in this postmodern age, in which people’s personal experiences and values play a most important role in determining what is right and true for them. According to this justification, we ought to respect people’s autonomy as a matter of principle. People’s beliefs and values are too diverse to adopt any particular set of them as normative for everyone. Society should do everything possible to enhance the ability of individuals and groups to pursue what they deem most important.

Again, there are many forms that autonomy justifications can take. However, three stand out as particularly influential in discussions of human cloning:

- A. “Personal freedom.” There is a strong commitment in many countries, the United States in particular, to respecting people’s freedom. This commitment is rooted in a variety of religious and secular traditions. Respect for people entails allowing them to make important life decisions that flow from their own personal values, beliefs, and goals, rather than coercing them to live by a burdensome array of social requirements. “Reproductive choice.” Reproductive decisions are especially private and personal matters. They have huge implications for one’s future responsibilities and well being. Social intrusion in this realm is particularly odious.
- B. “Scientific inquiry.” A high value has long been placed on protecting the freedom of scientific inquiry. More knowledge and better understanding enhance our capacity to make good decisions and accomplish great things in the world.

Utility and autonomy are important ethical justifications. However, they do not provide a sufficient ethical basis for human cloning. We will examine them here carefully in turn.

Understanding Utility

While the concern for utility is admirable, there are many serious problems with this type of justification. Most significantly, it is “unworkable” and it is “dangerous.” It is unworkable because knowing how much utility cloning or any other practice has, with a reasonable level of precision, is simply impossible. We cannot know all of the ways that a practice will affect all people in the world infinitely into the future. For example, it is impossible to quantify accurately the satisfaction of every parent in future centuries who will choose cloning rather than traditional sexual reproduction in order to spare their children from newly discovered genetic problems that are now unknown. In fact, as sheep cloner Ian Wilmut was widely quoted as observing, shortly after announcing his cloning of Dolly, “Most of the things cloning will be used for have yet to be imagined.” The difficulty of comparing the significance of every foreseeable consequence on the same scale of value—including comparing each person’s subjective experiences with everyone else’s—only adds to the unworkability. What happens in real life is that decision makers intuitively compare only those consequences they are most aware of and concerned about. Such an approach is an open invitation to bias and discrimination, intended and unintended. Even more dangerous is the absence of limits to what can be justified. There are no built-in protections for weak individuals or minority groups, including clones. People can be subjected to anything, the worst possible oppression or even death, if it is beneficial to the majority. Situations such as Nazi Germany and American slavery can be justified using this way of thinking.

When utility is our basis for justifying what is allowed in society, people are used, fundamentally, as mere means to achieve the ends of society or of particular people. It may be appropriate to use plants and animals in this way, within limits. Accordingly, most people do not find it objectionable to clone animals and plants to achieve products that will fulfill a purpose—better milk, better grain, and so forth. However, it is demeaning to “use” people in this way.

This demeaning is what bothers us about the prospect of producing a large group of human clones with low intelligence so that society can have a source of cheap menial labor. It is also what is problematic about producing clones to provide spare parts, such as vital transplantable organs for other people. Both actions fail to respect the equal and great dignity of all people by making some, in effect, the slaves of others. Even cloning a child who dies to remove the parents’ grief forces the clone to have a certain genetic makeup in order to be the parents’ child, thereby permanently subjecting the clone to the parents’ will. The irony of this last situation, though, is that the clone will not become the same child as was lost—both the child and the clone being the product of far more than their genetics. The clone will be demeaned by not being fully respected and accepted as a unique person, and the parents will fail to regain their lost child in the process.

To summarize: The utility justification is a substantially inadequate basis for defending a practice like cloning. In other words, showing that a good benefit, even a great benefit, will result is not a sufficient argument to justify an action. Although it is easy to forget this basic point when enticed by the promise of a wonderful benefit, we intuitively know it is true. We recognize that we could, for example, cut up *one* person, take her or his various organs for transplant, and save *many* lives as a result. But we do not go around doing that. We realize that if the action we take to achieve the benefit is itself horrendous, beneficial results are not enough to justify it. As significant a critique as this is of a utility justification for human cloning, there is more to say. For even if it were an adequate type of justification, which it is not, it is far from clear that it would justify human cloning. To justify human cloning on the basis of utility, all the consequences of allowing this practice have to be

considered, not only the benefits generated by the exceptional situations commonly cited in its defense. What are some of the consequences we need to be concerned about? There is only space here to note two of the many that weigh heavily against human cloning.

First, as suggested earlier, to allow cloning is to open the door to a much more frightening enterprise: genetically engineering people without their consent, not for their own benefit, but for the benefit of particular people or society at large. Cloning entails producing a person with a certain genetic code because of the attractiveness or usefulness of a person with that code. In this sense, cloning is just the tip of a much larger genetic iceberg. We are developing the genetic understanding and capability to shape the human genetic code in many ways. If we allow cloning, we legitimize in principle the entire enterprise of designing children to suit parental or social purposes. As one researcher at the U.S. Council on Foreign Relations has commented, Dolly is best understood as a drop in a towering wave (of genetic research) that is about to crash over us. The personal and social destructiveness of large-scale eugenic efforts (including but by no means limited to Nazi Germany's) has been substantial, but at least it has been restricted to date by our limited genetic understanding and technology.¹² Today the stakes are much higher.

The second of the many additional considerations that must be included in any honest utilitarian calculus involves the allocation of limited resources. To spend resources on the development and practice of human cloning is to not spend them on other endeavors that would be more beneficial to society. For many years now there have been extensive discussions about the expense of health care and the large number of people (tens of millions), even in the United States, that do not have health insurance.¹³ It has also long been established that such lack of insurance means that a significant number of people are going without necessary health care and are suffering or dying as a result.¹⁴ Another way of observing similar pressing needs in health care is to survey the specific areas that could most benefit from additional funds.¹⁵ In most of these areas, inadequate funding yields serious health consequences because there is no alternative way to produce the basic health result at issue. Not only are the benefits of human cloning less significant than those that could be achieved by expending the same funds on other health care initiatives, but there are alternative ways of bringing children into the world that can yield at least one major benefit of cloning children themselves. If there were enough resources available to fund every technology needed or wanted by anyone, the situation would be different. But researching and practicing human cloning will result in serious suffering and even loss of life because other pressing health care needs cannot be met.

An open door to unethical genetic engineering technologies and a misallocation of limited resources, then, are among the numerous consequences of human cloning that would likely more than outweigh the benefits the practice would achieve. As previously argued, we would do better to avoid attempting to justify human cloning simply based on its consequences. But if we are tempted to do so, we must be honest and include all the consequences and not be swayed by exceptional cases that seem so appealing because of the special benefits they would achieve.

Assessing Autonomy

Many people today are less persuaded by utility justifications than they are by appeals to autonomy. While the concern for freedom and responsibility for one's own life in this way of thinking is admirable, autonomy justifications are as deeply flawed as utility justifications. More specifically, they are *selfish* and they are *dangerous*.

The very term by which this type of justification is named underscores its selfishness. The word autonomy comes from two Greek words, *auto* (meaning "self") and *nomos* (meaning "law"). In the context of ethics, appeals to autonomy literally signify that the self is its own ethical law that it generates its own standards of right and wrong. There is no encouragement in this way of looking at the world to consider the well-being of others, for that is irrelevant as long as it does not matter to me. Although in theory I should respect the autonomy of others as I live out my own autonomy, in practice an autonomous mindset predisposes me to be unconcerned about how my actions will affect others.

As long as the people making autonomous choices happen to have good moral character that predisposes them to be concerned about the well-being of everyone else, there will not be serious problems. In the United States to date, the substantial influence of Christianity—with its mandate to love others sacrificially—has prompted

people to use their autonomous choices to further the interests of others alongside of their own. As Christian influences in public life, from public policy to public education, continue to be eradicated in the name of separation of church and state, the self-centeredness of an autonomy outlook will become increasingly evident. Consciously or unconsciously, selfish and other base motives arise within us continually, and without countervailing influences, there is nothing in an autonomy outlook to ensure that the well-being of others will be protected.

When autonomy rules, then, scientists, family members, and others are predisposed to act on the basis of their own autonomous perspectives, and the risk to others is real. Herein lies the danger of autonomy-based thinking, a danger that is similar to that attending a utility-oriented outlook. Protecting people's choices is fine as long as all people are in a comparable position to make those choices. But if some people are in a very weak position economically or socially or physically, they may not be able to avail themselves of the same opportunities, even if under more equitable circumstances they would surely want to do so. In an autonomy-based approach, there is no commitment to justice, caring, or any other ethical standards that would safeguard those least able to stand up for themselves.

An autonomy justification is simply an insufficient basis for justifying a practice like human cloning. In other words, showing that a freedom would otherwise be curtailed is not a sufficient argument to justify an action. We have learned this lesson the hard way, by allowing scientific inquiry to proceed unfettered. The Nuremberg Code resulted from research atrocities that were allowed to occur because it was not recognized that there are other ethical considerations that can be more important than scientific and personal freedom (autonomy).¹⁶ While the autonomy justification itself is flawed, there is more to say about it as a basis for defending human cloning. For even if it were an adequate type of ethical justification—which it is not—it is far from clear that it would actually justify the practice. An honest, complete autonomy-based evaluation of human cloning would have to consider the autonomy of all persons involved, including the people produced through cloning, and not just the autonomy of researchers and people desiring to have clones. Of the many considerations that would need to be taken into account if the autonomy of the clones were taken seriously, space will only permit the examination of two here.

First, human cloning involves a grave risk to the clone's life. There is no plausible way to undertake human cloning at this point without a major loss of human life. In the process of cloning the sheep Dolly, 276 failed attempts occurred, including the death of several so-called "defective" clones. An alternative process used to clone monkeys added the necessary destruction of embryonic life to these other risks. It involved transferring the genetic material from each of the cells in an eight-celled embryo to other egg cells in order to attempt to produce eight so-called clones (or, more properly, identical siblings). Subsequent mammal cloning has continued the large-scale fatalities and deformities that unavoidably accompany cloning research. Were these experimental technologies to be applied to human beings, the evidence and procedures themselves show that many human embryos, fetuses, and infants would be lost—and many others deformed—whatever the process. This tragedy would be compounded by the fact that it is unlikely human cloning research would be limited to a single location. Rather, similar mistakes and loss of human life would be occurring almost simultaneously at various private and public research sites.

Normally, experimentation on human beings is allowed only with their explicit consent. (Needless to say, it is impossible to obtain a clone's consent to be brought into existence through cloning.) An exception is sometimes granted in the case of a child, including one still in the womb, who has a verifiable medical problem which experimental treatment may be able to cure or help. However, human cloning is not covered by this exception for two reasons. First, there is no existing human being with a medical problem in the situation in which a human cloning experiment would be attempted. Second, even if that were not an obstacle, there is typically no significant therapeutic benefit to the clone in the many scenarios for which cloning has been proposed. For the experiment to be ethical, there would need to be therapeutic benefit to the clone so huge as to outweigh the substantial likelihood of the death or deformity that occurred in the Dolly experiment. To proceed with human cloning at this time, then, would involve a massive assault on the autonomy of all clones produced, whether they lived or died.

There is also a second way that human cloning would conflict with the autonomy of the people most intimately involved in the practice, that is, the clones themselves. Human cloning would radically weaken the family

structure and relationships of the clone and therefore be fundamentally at odds with their most basic interests. Consider the confusion that arises over even the most basic relationships involved. Are the children who result from cloning really the siblings or the children of their “parents”—really the children or the grandchildren of their “grandparents”? Genetics suggests one answer and age the other. Regardless of any future legal resolutions of such matters, child clones (not to mention others inside and outside the family) will almost certainly experience confusion. Such confusion will impair their psychological and social well being—in fact, their very sense of identity. A host of legal entanglements, including inheritance issues, will also result.

This situation is problematic enough where a clearly identified family is involved. But during the experimental phase in particular, identifying the parents of clones produced in a laboratory may be even more troublesome. Is the donor of the genetic material automatically the parent? What about the donor of the egg into which the genetic material is inserted? If the genetic material and egg are simply donated anonymously for experimental purposes, does the scientist who manipulates them and produces a child from them become the parent? Who will provide the necessary love and care for the damaged embryo, fetus, or child that results when mistakes are made and it is so much easier just to discard them?

As the U.S. National Bioethics Advisory Commission’s report has observed (echoed more recently by the report of the President’s Council on Bioethics), human cloning “invokes images of manufacturing children according to specification. The lack of acceptance this implies for children who fail to develop according to expectations, and the dominance it introduces into the parent-child relationship, is viewed by many as fundamentally at odds with the acceptance, unconditional love, and openness characteristic of good parenting.”¹⁷ “It just doesn’t make sense,” to quote Ian Wilmut, who objected strenuously to the notion of cloning humans after he succeeded in producing the sheep clone Dolly.¹⁸ He was joined by U.S. President Clinton, who quickly banned the use of federal funds for human cloning research, and by the World Health Organization, who summarily labeled human cloning ethically unacceptable.¹⁹ Their reaction resonates with many, who typically might want to “have” a clone, but would not want to “be” one. What is the difference? It is the intuitive recognition that while the option of cloning may expand the autonomy of the person producing the clone, it undermines the autonomy of the clone.

So the autonomy justification, like the utility justification, is much more problematic than it might at first appear to be. We would do better not even to attempt to justify human cloning by appealing to this type of justification because of its inherent shortcomings. But if we are to invoke it, we must be honest and pay special attention to the autonomy of the person most intimately involved in the cloning, the clone. Particular appeals to “freedom” or “choice” may seem persuasive. But if only the autonomy of people other than clones is in view, or only one limited aspect of a clone’s autonomy, then such appeals must be rejected.

The Destiny Justification

As noted near the outset of the chapter, there is a third type of proposed justification for human cloning which moves us more explicitly into the realm of theological reflection: the destiny justification. While other theological arguments against cloning have been advanced in the literature to date,²⁰ many of them are somehow related to the matter of destiny. According to this justification, it is part of our God-given destiny to exercise complete control over our reproductive process. In fact, Richard Seed, in one of his first in-depth interviews after announcing his intentions to clone human beings commercially, made this very argument.²¹ No less a theologian, President Clinton offered the opposite view when he issued the ban on human cloning. Rather than seeing cloning as human destiny, he rejected it as “playing God.”²² Whether or not we think it wise to take our theological cues from either of these individuals, what are we to make of the proposed destiny justification itself? Is human cloning in line with God’s purposes for us?

To begin with, there are indeed problems with playing God the way that proponents of human cloning would have us do. For example, God can take utility and autonomy considerations into account in ways that people cannot. God knows the future, including every consequence of every consequence of all our actions, people do not. God loves all persons equally, without bias, and is committed and able to understand and protect the freedom of everyone, people are not. Moreover, there are other ways that the pursuit of utility and autonomy are troubling from a theological perspective.

The utility of human cloning, first of all, is that we can gain some benefit by producing clones. But using other people without their consent for our ends is a violation of their status as beings created in the image of God. People have a God-given dignity that prevents us from using them as mere means to achieve our purposes. Knowing that people are created in the image of God (Gen. 1:26-27), biblical writers in both the Old and New Testaments periodically invoke this truth to argue that human beings should not be demeaned in various ways (e.g., Gen. 9:6; James 3:9). Since plants and animals are never said to be created in God's image, it is not surprising that they can be treated in ways (including killing) that would never be acceptable if people were in view (cf. Gen. 9:3 with 9:6).

An autonomy-based justification of human cloning is no more acceptable than a utility-based justification from a theological perspective. Some Christian writers, such as Allen Verhey, have helpfully observed that autonomy, understood in a particular way, is a legitimate biblical notion. As he explains, under the sovereignty of God, acknowledging the autonomy of the person can help ensure respect for and proper treatment of people made in God's image.²³ There is a risk here, however, because the popular ethics of autonomy has no place for God in it. It is autonomy "over" God, not autonomy "under" God. The challenge is to affirm the critical importance of respect for human beings, and for their freedom and responsibility to make decisions that profoundly affect their lives, but to recognize that such freedom requires God. More specifically, such freedom requires the framework in which autonomy is under God, not over God, a framework in which respecting freedom is not just wishful or convenient thinking that gives way as soon as individuals or society as a whole have more to gain by disregarding it. It must be rooted in something that unavoidably and unchangeably "is." In other words, it must be rooted in God, in the creation of human beings in the image of God.

God is the creator, and we worship God as such. Of course, people are creative as well, being the images of God that they are. So what is the difference between God's creation of human beings, as portrayed in the book of Genesis, and human procreation as happens daily all over the world (also mandated by God in Genesis)? Creation is "ex nihilo," out of nothing. That means, in the first sense, that God did not just rearrange already existing materials. God actually brought into being a material universe where nothing even existed before. However, God's creation "ex nihilo" suggests something more. It suggests that there was no agenda outside of God that God was following—nothing outside of God that directed what were acceptable options. When it came to the human portion of creation, God created us to be the way God deemed best.

It is no accident that we call what we do when we have babies "procreation." "Pro" means "for" or "forth." To be sure, we do bring babies "forth." But the deeper meaning here is "for." We bring new human beings into the world "for" someone or something. To be specific, we continue the line of human beings for God, in accordance with God's mandate to humanity at the beginning to "be fruitful and multiply" (Gen. 1:28). We also create for the people whom we help bring into being. We help give them life, and they are the ones most affected by our actions. What is particularly significant about this "procreation," this "creation for," is that by its very nature it is subject to an outside agenda, to God's agenda primarily, and secondarily to the needs of the child being created. In this light, the human cloning mindset is hugely problematic. With unmitigated pride it claims the right to create rather than procreate. It looks neither to God for the way that he has intended human beings to be procreated and raised by fathers and mothers who are the secondary, that is, genetic source of their life; nor does it look primarily to the needs of the one being procreated. As we have seen, it looks primarily to the cloner's own preferences or to whatever value system one chooses to prioritize (perhaps the "good of society," etc.). In other words, those operating out of the human cloning mindset see themselves as Creator rather than procreator. This is the kind of aspiring to be God for which God has consistently chastised people, and for which God has ultimately wreaked havoc on many a society and civilization.

Leon Kass has observed that we have traditionally used the word "procreation" for having children because we have viewed the world, and human life in particular, as created by God. We have understood our creative involvement in terms of and in relation to God's creation.²⁴ Today we increasingly orient more to the material world than to God. We are more impressed with the gross national product than with the original creation. So we more commonly talk in terms of re"production" rather than pro"creation." In the process, we associate people more closely with things, with products, than with the God of creation. No wonder our respect for human life is deteriorating. We become more like that with which we associate. If we continue on this path, if our destiny is to clone ourselves, then our destiny is also, ultimately, to lose all respect for ourselves, to our peril.

Claims about utility, autonomy, or destiny, then, are woefully inadequate to justify human cloning. In fact, a careful look at any of these types of justification shows that they provide compelling reasons instead to reject human cloning. To stand up and say so may become more and more difficult in our "brave new world." As the culture increasingly promotes production and self-assertion, it will take courage to insist in the new context of cloning that there is something more important. But such a brave new word, echoing the Word of old, is one that we must be bold to speak. CBHD

¹ Bette-Jane Crigger, ed., *Cases in Bioethics*, 2nd ed. (New York: St. Martin's Press, 1993).

² See National Bioethics Advisory Commission, *Cloning Human Beings: Report and Recommendations of the National Bioethics Advisory Commission*, June 1997.

³ Ian Wilmut et al., "Viable Offspring Derived from Fetal and Adult Mammalian Cells," *Nature* 385 (1997): 810-13.

⁴ Peter Kendall, "Image of Human Cloning Proponent: Odd and Mercurial," *Chicago Tribune*, 11 January 1998, p. 6.

⁵ "Europe Moves to Ban Human Cloning," *Bulletin of Medical Ethics*, January 1998, pp. 3-5.

⁶ President Clinton issued his directive to the National Institutes of Health on 2 December 1994, and congressional action (PL104-91/PL104-208) took effect with the fiscal year 1996 budget.

⁷ United Nations Commission on Human Rights, *Universal Declaration on the Human Genome and Human Rights* (approved on 19 November 1998).

⁸ Rick Weiss, "NIH to Fund Controversial Research on Human Stem Cells," *Washington Post*, 20 January 1999, p. A2. See ethical critique at www.stemcellresearch.org

⁹ The President's Council on Bioethics. *Human Cloning and Human Dignity: An Ethical Inquiry*. July 2002.

¹⁰ Labels "must be precisely and relevantly defined. They must be accurately applied. And they must lead to treatment and serves the welfare of those that are labeled." See Ralph B. Potter, "Labeling the Mentally Retarded: The Just application of Therapy," in *Ethics in Medicine*, ed. Stanley J. Reiser et al. (Cambridge, Mass.: M.I.T. Press, 1977), pp.626-31.

¹¹ Leon R. Kass, "The Wisdom of Repugnance: Why We Should Ban the Cloning of Humans," *Valparaiso University Law Review* 32 (spring 1998): 679-705.

¹² See Arthur J. Dyck, "Eugenics in Historical and Ethical Perspective," in *Genetic Ethics: Do the Ends Justify the Genes?* ed. John F. Kilner et al. (Grand Rapids: Eerdmans, 1997) pp. 25-39.

¹³ See discussions in John F. Kilner et al., eds., *The Changing Face of Health Care: A Christian Appraisal of Managed Care, Resource Allocation, and Patient-Caregiver Relationships* (Grand Rapids: Eerdmans, 1998).

¹⁴ Office of Technology Assistance, Congress of the United States, *Does Health Insurance Make a Difference?* (Washington, D.C.: U.S. Government Printing Office, 1992).

¹⁵ Numerous reports available from the World Health Organization, and UNICEF in particular, document current unmet needs. Projections of U.S. health care expenditures suggest that significant needs in the United States and other countries will persist well into the future. See Office of the Actuary, U.S. Health Care Financing Administration, "The Next Ten Years of Health Spending: What Does the Future Hold?" *Health Affairs* (September-October 1998).

¹⁶ Arthur J. Dyck, "Lessons from Nuremberg," in *Ethics in Medicine*, ed. Jay Hollman and John Kilner (Carol Stream, Ill.: Bridge Publications, 1999). See also the classic discussion in Leo Alexander, "Medical Science under Dictatorship," *New England Journal of Medicine* 241 (July 14, 1949): 40-46; cf. Arthur L. Caplan, ed., *When Medicine Went Mad: Bioethics and the Holocaust* (Totowa, N.J.: Humana Press, 1992).

¹⁷ National Bioethics Advisory Commission, p. 69.

¹⁸ He later expanded on his concerns about human cloning in his article "Cloning for Medicine," *Scientific American* 279 (December 1998): 58-63.

¹⁹ "WHO Adopts Resolution Against Cloning Humans," Reuters News Service, 16 May 1997.

²⁰ See, for example, the 1998 essays in the journal *Ethics & Medicine*—including those by C. Ben Mitchell (vol. 14:1) and John Grabowski (vol. 14:3). See also the collection of essays in the spring 1998 issue of the *Valparaiso University Law Review* (vol. 32:2), featuring articles by such people as Gilbert Meilaender and Daniel Heimbach.

²¹ On the ABC program *Nightline*, 7 January 1998.

²² This language was explicitly affirmed in his 1998 State of the Union address.

²³ Allen D. Verhey, "Playing God," in *Genetic Ethics: Do the Ends Justify the Genes?* pp. 60-74.

²⁴ Leon Kass, *Toward a More Natural Science* (New York: Free Press, 1985), p. 48.

Bioethics in the New Millennium: Ethical Challenges Ahead

C. Ben Mitchell

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By any method of reckoning, we have entered an age of nearly unbridled biotechnological expansion. Futurists almost universally claim that the 21st century will be what Jeremy Rifkin has called "The Biotech Century." Richard Oliver, professor of business management at Vanderbilt University, has announced that "The Bioterials Age will complete the triumph of economics over politics, which was begun in the Information Age. It will unleash forces stronger than nationalism and more powerful than the combined armies of the world." To coin a

word, Oliver's characterization of this new age sounds extraordinarily "Technopian," and the list of technologies which are of concern is daunting:

- The ability to clone humans.
- Pre-determination of the sex of children and their genetic make-up.
- Pharmacogenomics, which directs and tailors drugs to the genetic make-up of individual patients.
- Genetically-derived therapies for the prevention and cure of most cancers, heart disease, AIDS, and other diseases, including new strains of vaccine-resistant ones such as malaria.
- The ability to "program" out of human genes the propensities to contract various diseases and illnesses.
- Repair of damaged brain cells, spinal cords, and other diseased or damaged human tissues.
- Animals that grow replacement organs for the 50 percent of humans who die before getting a transplant organ from a human donor.
- A "smart mouse" that points the way to eliminating aging in humans.

Clearly, the future may reap great benefits from biotechnologies such as genetic engineering, cloning, cybernetics, nanotechnology, and a litany of other neologisms yet to be invented; but the future may also portend human tragedy, a loss of human dignity, and a world which is increasingly hostile to concerns which transcend the world of contemporary scientific research.

Are Christians even aware of these issues? Certainly some are. Does the Church have anything to say about biotechnology? If so, what? If not, why not? Can we afford not to speak to these issues? Can we afford to misspeak on these issues? These are sober questions for Christians who are witnesses to the dawn of the biotech age. These are issues which ought to cause us all to lay awake at night. They are issues which demand our most careful attention. And they are matters which will require a multi-disciplinary collaboration if we are to hope to get a hearing.

One of the challenges which we will increasingly face as new technologies arise is the determination of what it means to be human. In her volume, *How We Became Posthuman*, Katherine Hayles argues that mortal human beings are rapidly becoming an endangered species. And even if only a portion of robotics pioneer Hans Moravec's vision of the future is realized, human beings as we know them will have to fight for their own survival, but with an unlikely enemy. Says Moravec:

Humans can be enhanced by both biological and hard robotic technologies. Such present-day examples as hormonal and genetic tuning of body growth and function, pacemakers, artificial hearts, powered artificial limbs, hearing aids, and night-vision devices are faint hints of future possibilities. Mind Children speculated on ways to preserve a person while replacing every part of body and brain with superior artificial substitutes. A biological human . . . could grow into something seriously dangerous once transformed into an unbounded superintelligent robot.

One may take these as the musings of a lunatic, but it should be noted that Moravec is founder of the world's largest robotics program at Carnegie Mellon University. He is not unintelligent! Even if he were, a lunatic with the world's largest erector set would be a formidable power. I can assure you that Bill Joy, co-founder and chief scientist at Sun Microsystems, does not think these are ludicrous ideas. He writes of his own concern about the ethical challenges ahead in his article in *WIRED* magazine, "Why the Future Doesn't Need Us." And Joy does not discount the prognostications of Moravec at all. In fact, he laments the fact that they might prove to be right.

Certainly, we must re-establish what, exactly, it means to be human. If being human is all about the brain, then supercomputers might be able to contain all the information in the brain and thus be designated as "human." The biblical text, however, puts forth different criteria for humanhood. According to Scripture, being human means being the offspring of human parents. Furthermore, beings which are human are not so because they possess certain functional capacities like reason, volition and self-awareness, which can be gained or lost. Humanness is neither gained nor lost; it either is or it is not. Human beings are either imagers of God, or they are not human beings. Imagers of God are either human beings, or they are not imagers of God. The mistake some of our systematic theologians have made, in my estimation, is in unpacking the *imago Dei* in terms of functional capacities. This is doubly deadly. First, it is contrary to biblical revelation. The passages that speak to the image of God (e.g., Genesis 1:27, 5:1, 9:6) never divide the *imago Dei* into constituent parts. Second, as soon as one delineates a list of functions, capacities, or activities which are necessary for humanness, one capitulates to those

who want to say that some humans do not have lives worth living. We have been there before. It smells like smoke and it is right from the pit.

The implications of the question of what it means to be human are huge. They span nearly every biotechnology, including cybernetics and transgenics. A related question raised anew in the biotech era is the question of what it means to be a "good" human. Of focus here are not matters of personal ethics, but the complex ethical dilemmas raised by eugenics. The completion of the map of the human genome brings ever closer the possibility of using this potentially wonderful technology as a weapon against the genetically undesirable and as a greenhouse for the genetically desirable. The eugenics movement in the 1920's took the shape of the "fitter family" contests in the nation's heartland. In these contests, prizes were awarded to the families with the "best genes." The "best heredity" was awarded to families having the purest lineage, heartiest stock, and fewest mental or physical disabilities. One such contest brochure read: "The time has come when the science of human husbandry must be developed, based on principles now followed by scientific agriculture, if the better elements of our civilization are to dominate or even survive." In other words, we practice eugenics for our livestock, why not for our children? With the human genome fully mapped, we are now closer than ever to creating "better humans through biology." In fact, it is already happening.

In 1993, a New York Times article reported that 11% of Americans would abort a fetus whose genome was predisposed to obesity. About four out of five said they would abort a fetus who would grow up with a disability. And 43% of respondents to a March of Dimes poll said they would engage in genetic engineering simply to enhance their children's looks or intelligence. In 1994, Singapore rewarded college graduates for allegedly producing children with a greater array of social benefits than non-graduates who produced children. And in 2000, "optimal" college women at universities across America were being solicited for their eggs to the tune of \$80,000. This brings us to our next challenging question: Shall we commodify the human body?

The term "commodification" is used to refer to the application of economic modes of valuation to items which traditionally have been the objects of non-economic modes of valuation. Commodification is based upon two assumptions of market value: (1) "that there exists some scale into which every value inhering in a good can be translated" and (2) "that this scale is money." That is, commodification entails that all modes of valuation are commensurate with economic valuation.

Margaret Jane Radin, professor of law at Stanford University, has done seminal work on commodification theory. She denies that all values or modes of valuation are commensurable with market values. In fact, the burden of her work is to demonstrate that some forms of commodification are clearly wrong. For instance, a market in babies is immoral in Radin's view. When a baby is bought and sold in the marketplace (i.e., becomes a commodity) her personal traits or attributes (sex, eye color, I.Q., predicted height, etc.) also become commodified. Furthermore, according to Radin, commodification of the infant is ipso facto a form of commodification of the future person (e.g., the academic, the homemaker, the career woman, etc.) the baby will become.

In 1980, the United States Supreme Court upheld the patenting of organic life. In 1986, the U. S. Patent and Trademark Office issued 37 patents on genes. Incyte Pharmaceuticals holds about 500 gene patents (the largest private holdings in the nation) and Celera Genomics, the firm that helped map the human genome, recently applied for patents on 7,000 SNPS (bits of genes). Since patents are limited monopoly rights to control the sales, use, and manufacture of the genes or any products made from those genes, patenting is commodification, pure and simple. Economic values are not commensurate with the way we ought to value human genes. They are God's donation to us all. They are not to be the objects of private, commercial biotechnology.

In addition to questions about humanhood and commodification of the human body, many other questions will be posed by the new biotech century. Grappling with these matters will be a truly daunting task and the stakes are extraordinarily high. However, our confession is that God has not left us without sufficient revelation which may be applied to matters such as those before us. **CBHD**

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Bible Study: What Does it Mean to Be Made in the Image of God?

- A. The phrase “image of God,” or *imago Dei*, is only rarely mentioned in the Bible (see Genesis 1:26, 1:27, 9:6). This phrase appears in a few New Testament passages as well (see 1 Corinthians 11:7, 2 Corinthians 4:4, and Colossians 1:15). What do these passages say about the image of God?
- B. There has been significant controversy regarding the proper interpretation of the phrase “image of God” throughout much of the history of Christendom. Part of this is due to the fact that the Bible does not speak about the physical form of God. Even with respect to Jesus Christ, there are no descriptions of what He looked like—no descriptions of His height or weight or hair color. Rather, what the Bible focuses on is God’s character (e.g., Exodus 34:6-7). What terms define the character/personality of God? Use your Bible’s concordance and give references:
- C. How does the Genesis 1-3 account discuss the differences between humans and animals? Are there other differences that this passage does not explicitly discuss?
- D. In what ways are human beings like God? What does it mean to you to be made in God’s image? What responsibilities does this entail?

Dónal O’Mathúna states it this way, “It is not that humans are the images of God because they have certain rational or spiritual capacities. It is because humans are images of God that spiritual and rational activity is part of what it means to be human. Similarly, it is because humans are the images of God that each one can have a relationship with him. By implication, any human who does not have a relationship with God remains an image of God, with all the value and responsibility that goes with that privilege.”

- E. What impact did the fall have on how humans bear the image of God? (See Genesis 3)
- F. If the “image of God” is understood as describing God’s intention and desire for humanity, there are many passages that describe what it means to be in the image of God. Indeed, God’s intention and desire for humanity is a theme that dominates the Bible. According to the following passages, in what ways does God wish to be imitated?
 - a. Deuteronomy 30:15-16, Jeremiah 7:23, Ezekiel 20:11, John 10:10
 - b. Micah 6:8 and Matthew 22:36-40
- G. The Bible declares in several passages that Christ is the true image of God (such as 2 Corinthians 4:4 and Colossians 1:15). What does it mean that Christ is the true image of God?
- H. How does Romans 8:29 add to your understanding of what the image of God means? According to this passage, can humans ever be the true image of God?
- I. What is the difference between being conformed to the image of God and mirroring that image? How does 2 Corinthians 3:18 help you answer this question?

Supplemental Reading List

The supplemental reading list has been included to guide teachers and students to core material that will equip them to respond in greater depth to the questions raised by the movies. These readings include material from the newspaper, as well as from major medical literature. Hopefully, this broad range of reading will allow those using this curriculum to engage it at whatever level of technical expertise they have. These bioethical issues are in the news regularly, so teachers may therefore also wish to utilize articles from current newspapers. Most of the material included in the supplemental reading list should be accessible to almost everyone. Although many of these issues have technical aspects (which are important), the recommended readings focus more heavily on the growing discussion of the ethical issues.

Human and Animal Cloning

- Annas, G.J. (1998). "Why We Should Ban Human Cloning". *New England Journal of Medicine* 339(2), 122-125.
- _____. (2002). "Cloning and the US Congress". *New England Journal of Medicine* 346(20), 1599-1602.
- Barinaga, M. (2000). "Fetal Neuron Grafts Pave the Way for Stem Cell Therapies." *Science* 287(5457), 1421-1422.
- Boyce, N. (2002). "Here's Kitty Kitty." *US News and World Report*, February 25.
- Evers, K. (2002). "European Perspectives on Therapeutic Cloning." *New England Journal of Medicine* 346(20), 1579-1582.
- Kass, L.R. (2001). "Why we should ban human cloning now." *Preventing a Brave New World. The New Republic Online*, May 21.
- Lanza, R.P., Caplan, A.L., Silver, L.M., Cibelli, J.B., West, M.D., & Green, R.M. (2000). "The ethical validity of using nuclear transfer in human transplantation." [see comments]. *JAMA* 284(24), 3175-3179.
- Robertson, J.A. (1998). "Human cloning and the challenge of regulation." *New England Journal of Medicine* 339(2), 119-122.
- The Council for Biotechnology Policy. *Biotech Policy Update—May 2002—"Special Cloning Report."* 2002.
- The President's Council on Bioethics. "Human Cloning and Human Dignity: An Ethical Inquiry." July 2002.
- Designing Humans: Genetic Engineering, Embryonic Stem Cell Technology, and Eugenics*
- Damewood, M.D. (2001). "Ethical implications of a new application of preimplantation diagnosis." *JAMA* 285(24), 3143-3144.
- Fischer, Joannie. (2002, August 16). "A brotherly donation." *US News and World Report*, 60.
- Lenoir, N. (2000). "Europe confronts the embryonic stem cell research challenge." *Science* 287(5457), 1425-1427.
- Perry, D. (2000). "Patients' voices: the powerful sound in the stem cell debate." *Science* 287(5457), 1423.
- Regalado, A. (2002). "'Supercell' controversy sets off a scientists' civil war." *Wall Street Journal*, June 21.
- Sofair, A.N., & Kaldjian, L.C. (2000). "Eugenic sterilization and a qualified Nazi analogy: the United States and Germany, 1930-1945." *Annals of Internal Medicine* 132(4), 312-319.
- Verlinsky Y., Rechitsky S., Schoolcraft W., Strom C., Kuliev A. "Preimplantation diagnosis for Fanconi anemia combined with HLA matching." *JAMA* 285(24):3130-3, June 27, 2001.
- Weissman, I.L. (2000). "Translating stem and progenitor cell biology to the clinic: barriers and opportunities." *Science* 287(5457), 1442-1446.
- Weissman, I.L. (2002). *Stem cells—scientific, medical, and political issues.* *New England Journal of Medicine* 346(20), 1576-1579.
- Young, F.E. (2000). "A time for restraint." *Science* 287(5457), 1424.
- ### Robotics and Artificial Intelligence
- Craeli, W. (2002). "The bionic man: restoring mobility." *Science* 295(5557), 1018-1021.
- Garcia, R.K. (2002). "Artificial Intelligence and Personhood." in J. F. Kilner, C. C. Hook, & D. B. Uustal (eds.), *Cutting-Edge Bioethics* (pp. 39-51). Grand Rapids: Eerdmans.
- Gomes, L. (2002). "No Need to Worry, Your Computer Isn't After Your Job." *Wall Street Journal*, June 10.
- Vogel, G. (2002). "Part man, part computer: researcher tests the limits." *Science* 295 (5557), 1020.
- ### Theology and the Image of God
- Moreland J.P. (2001). "Body and Soul Part 1." *Facts and Faith* 2, 15-23.
- _____. (2001). "Body and Soul Part 2." *Facts and Faith* 4, 42-49.
- _____. (2002). "Body and Soul Part 3." *Facts and Faith* 1, 38-44.

- O'Mathúna, D.P. (1995). "The Bible and Abortion: What of the Image of God?" In J. F. Kilner, N. M. de Cameron, & D. L. Schiedermayer (eds.), *Bioethics and the Future of Medicine* (pp. 199-211). Grand Rapids: Eerdmans.
- Pauls, D. (2001). "When is a person a person?" *Crux*, 1-4. CBHD

Additional Resources:

Books:

- Cameron, Nigel M. de S., et al. (eds.) *Bioengagement: Making a Christian Difference Through Bioethics Today* (Grand Rapids, MI: Eerdmans Publishing Co., 2000).
- Feinberg, John S. and Paul D. Feinberg, *Ethics for a Brave New World* (Crossway Books, 1994).
- Kilner, John F., et al. (eds.) *Cutting-Edge Bioethics: A Christian Exploration of Technologies and Trends* (Grand Rapids, MI: Eerdmans Publishing Co., 2000).
- Kilner, John F., Arlene B. Miller and Edmund D. Pellegrino (eds.) *Dignity and Dying: Christian Appraisal* (Grand Rapids, MI: Eerdmans Publishing Co., 1996).
- Kilner, John F., Rebecca D. Pentz, and Frank E. Young, (ed.). *Genetic Ethics: Do the Ends Justify the Genes?* (Grand Rapids, MI: Eerdmans, 1997).
- Lester, Lane P. and James C. Hefley, *Human Cloning: Playing God or Scientific Progress?* (Grand Rapids, MI: Fleming H. Revell, 1998).
- Schaeffer, Francis A., and C. Everett Koop. *Whatever Happened to the Human Race?* (Old Tapan, NJ: Fleming H. Revell, 1979).
- Stewart, Gary P. et al. *Basic Questions on End of Life Decisions: How Do We Know What's Right?* (Grand Rapids: Kregel, 1998).

Websites:

- Americans to Ban Cloning – www.cloninginformation.org
- Do No Harm: Coalition of Americans for Research Ethics – www.stemcellresearch.org
- National Right to Life Committee – www.nrlc.org
- American Journal of Bioethics – www.bioethics.net
- Bioethics, Inc. – www.bioethicsinc.com
- Ethics and Medicine Journal – www.ethicsandmedicine.com
- Journal of the American Medical Association – <http://jama.com>
- American Collegians for Life – www.aclife.org
- Americans United for Life – www.unitedforlife.org
- Christian Legal Society – www.clsnet.org
- Christian Medical and Dental Associations – www.cmdahome.org
- The President's Council on Bioethics – <http://bioethics.gov>

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